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# 1 The University

The University of Hyderabad, a premier institution of postgraduate teaching and research in the country, was established by an Act of Parliament (Act No. 39 of 1974) on 2nd October, 1974 as a Central University, wholly financed by the University Grants Commission.

The "objects of the University" as envisaged in the Act are:

"to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit and by the example of its corporate life, and, in particular, to make special provisions for integrated courses in humanities and science in the educational programmes of the University and to take appropriate measures for promoting interdisciplinary studies and research in the University".

The University's scenic, and serene campus is spread over a vast stretch of land measuring about 2,000 acres, 20 kms from the city of Hyderabad on the old Hyderabad-Bombay road. Amidst the picturesque environment of the campus, several buildings catering to the academic needs, support facilities and residential requirements of the campus community have been constructed over the years. The University also has a city campus "The Golden Threshold" the residence of the late Sarojini Naidu which was bequeathed to the University by her daughter, the late Padmaja Naidu.

#### **Schools of Study**

- School of Mathematics and Computer / Information Sciences
- 2. School of Physics
- 3. School of Chemistry
- 4. School of Life Sciences
- 5. School of Humanities
- 6. School of Social Sciences
- 7. Sarojini Naidu School of Arts and Communication
- 8. School of Management Studies
- 9. School of Medical Sciences Sciences
- 10. School of Engineering Sciences and Technology

The Schools of Physics, Chemistry, Management Studies, and Engineering Sciences & Technology are single discipline schools and the others are multi-department schools.

### **Departments / Centres of Study**

The School of Mathematics and Computer / Information Sciences has the following Departments:

- 1. Department of Mathematics & Statistics
- 2. Department of Computer and Information Sciences

The **School of Life Sciences** has the following Departments and a Centre:

- 1. Department of Biochemistry
- 2. Department of Plant Sciences
- 3. Department of Animal Sciences
- 4. Department of Biotechnology
- 5. UoH DBT Centre for Research and Education

The **School of Humanities** has the following Departments, Centres, and a Cell:

- 1. Department of English
- 2. Department of Philosophy
- 3. Department of Hindi
- 4. Department of Telugu
- 5. Department of Urdu
- 6. Centre for Applied Linguistics & Translation Studies
- 7. Centre for Comparative Literature
- 8. Department of Sanskrit Studies
- 9. Centre for the Study of Foreign Languages
- 10. English Language Teaching Cell

The **School of Social Sciences** has the following Departments and Centres:

- 1. Department of Economics
- 2. Department of History
- 3. Department of Political Science3
- 4. Department of Sociology
- 5. Department of Anthropology
- 6. Centre for Regional Studies
- 7. Centre for Folk Culture Studies
- 8. Centre for Social Exclusion and Inclusive Policy



### The University of Hyderabad

- 9. Centre for the Study of Indian Diaspora
- 10. Centre for Knowledge, Culture & Innovation Studies
- 11. Centre for Gandhian Economic Thought
- 12. Centre for Human Rights

The **S.N. School of Arts and Communication** has the following Departments:

- 1. Department of Dance
- 2. Department of Theatre Arts
- 3. Department of Fine Arts
- 4. Department of Communication

The **School of Medical Sciences** has the following Centre:

Centre for Physical Fitness and Sports Sciences

# Stand-alone Centres offering Academic Programmes

- 1. Centre for Integrated Studies (CIS)
- 2. University Centre for Earth and Space Sciences (UCESS)
- 3. Advanced Centre of Research in High Energy Materials (ACRHEM)
- 4. Centre for Health Psychology

- 5. Centre for Neural and Cognitive Sciences
- 6. Centre for Women's Studies
- 7. Centre for Buddhist Studies
- 8. Centre for Modelling Simulation and Design (CMSD)

All the Schools of the University, Departments and Centres are located on the main campus in Gachibowli. Several of the Schools and Departments of the University have obtained financial support from the University Grants Commission under the Special Assistance Programme and COSIST for excellence in teaching and research.

Over the years, the teaching and research programmes of the University have been firmly established. The students are selected through a nationwide entrance test. About 30% of the students are Ph.D. scholars and more than 32% of the students are women. Till 28.2.2010, over 17626 students of the University had been awarded various degrees through formal education, which consists of 1,506 Ph.Ds., 3,228 M.Phils. 1,275 M.Techs. and 11,617 postgraduate Degrees and Diplomas. The Faculty of the University include 156 Professors, 82 Readers and 112 Lecturers.

The Faculty of the University have published widely and have obtained research support from several funding agencies. Several Faculty members have won national and international awards and honours in recognition of their out-standing work in their respective fields.

# About Hyderabad

Founded by Quli Qutub Shah in 1591, this large metropolis is unique in its rich architectural glory and blend of diverse linguistic, religious and ethnic groups and is an ideal place indeed to locate a Central University. The weather for most part of the year is pleasant except for the months of April and May when the temperature is likely to go up to 40°C. The intellectual climate is vibrant. Hyderabad is home to nine major Universities and several research institutions, laboratories and libraries.



### 2

# Courses, Criteria for Admission and Entrance Examinations

### **Courses Of Study**

Admissions during 2010-11 are open for the following courses:

### 5-year Integrated M.A. / M.Sc. Courses

I.M.Sc. Courses 10 (Semesters)

Mathematical Sciences Optometry & Vision

Physics Sciences

Chemical Sciences Nursing Sciences

Systems Biology Health Psychology

### I.M.A. Courses in Humanities (10 Semesters)

Languages: Hindi, Telugu and Urdu

LanguageScience

I.M.A. in Social Sciences (10 Semesters)

### **Postgraduate Courses**

M.Sc. courses	(4 Semesters)
M.SC. COUISES	14 Schlesters)

Mathematics Plant Biology & Biotechnology

Applied Mathematics Molecular Microbiology
Statistics-OR Animal Biotechnology
Physics Health Psychology
Chemistry Biotechnology\*

Biochemistry

M.C.A. (6 Semesters)

M.B.A. Health Care and (4 Semesters) Hospital Management

M.B.A. (4 semesters)\* The selection process for admissions to this MBA course for the academic year 2010-11 has been completed based on the percentile scores obtained in CAT 2009 followed by an Interview / Group Discussion.

### M.A. courses (4 Semesters)

English Applied Linguistics

Philosophy Economics Hindi History

Functional Hindi (Translation) Political Science

Telugu Sociology
Urdu Anthropology

Communication (Communication & Media Studies, Print Journalism &

New Media, and Television & Radio)

#### M.P.A. Dance (4 Semesters)

(Kuchipudi, Bharatanatyam, and Folk)

M.P.A. Theatre Arts (6 Semesters)

M.F.A. Courses (4 Semesters)

Painting, Print Making and Sculpture

Art History

#### Adv. P.G. Diploma Courses (2 Semesters)

Mineral Exploration (This course is offered in collaboration and cooperation with National Geophysical Research Institute (NGRI), Atomic Minerals Directorate (AMD), National Remote Sensing Agency (NRSA), and National Mineral Development Corporation (NMDC).

Folk Culture studies

### P.G. Diploma Courses (2 Semesters)

Counseling Psychology

Health Fitness and Life Style Management

### M.Tech. Courses (4 Semesters)

Computer Science

Artificial Intelligence

Information Technology - (The course is offered in collaboration with IDRBT, an Institute established by the Reserve Bank of India)

Computational Techniques (CT) - (a post M.Sc (Physics) course offered by the School of Physics and the Department of Computer and Information Sciences).

Integrated Circuit Technology (I.C.T.)

<sup>\*</sup> The admissions for M.Sc. Biotechnology course during the year 2010-11 will be based on the allotment made by the Jawaharlal Nehru University (JNU), New Delhi which will conduct a common entrance test on 20.5.2010.



Bioinformatics - (The course is offered in collaboration with the Centre for DNA Fingerprinting and Diagnostics [CDFD], Hyderabad)

Mineral Exploration - (The course is offered in collaboration and cooperation with National Geophysical Research Institute (NGRI), Atomic Minerals Directorate (AMD), National Remote Sensing Agency (NRSA), and National Mineral Development Corporation (NMDC).

### M.Phil. Courses (2 Semesters)

English Economics
Philosophy History

Hindi Political Science

Telugu Sociology

Urdu Anthropology
Applied Linguistics Regional Studies

Translation Studies Social Exclusion &

Comparative Literature Inclusive Policy

Shabdabodha Systems & Language Technologies

Cognitive Science Gender Studies

Indian Diaspora

### Ph.D. Programmes (2 to 5 years)

Mathematics Philosophy
Applied Mathematics Hindi
Statistics Telugu
Operations Research (OR) Urdu

Computer Science Applied Linguistics

Physics Translation Studies

Electronics Science Comparative Literature

Chemistry Sanskrit Studies
Biochemistry Economics
Plant Sciences History

Animal Sciences Political Science

Biotechnology Sociology
ACRHEM Anthropology
Earth & Space Sciences Regional Studies
Neural and Cognitive Sciences Folk Culture Studies
Materials Engineering Social Exclusion &

Inclusive Policy

English Indian Diaspora

Science Technology and Management Studies

Society Studies

Human Rights Gandhian Economic -

Thought

Communication Gender Studies

Dance Psychology

Theatre Arts Buddhist Studies

### Integrated M.Tech / Ph.D. (2 to 5 years)

Materials Engineering

Nano Science and Technology

### Integrated M.Sc./Ph.D. (2 to 5 years)

Biotechnology

**Note:** Candidates seeking admission to any of the Ph.D. programmes listed above should note that it may not be possible to work under a supervisor of her/his choice if the supervisor is already guiding more students than the number prescribed by the respective Board of Studies of the Schools.

#### Criteria For Admission

1. The University offers facilities for Postgraduate, Advanced PG/PG Diploma, 5 -Year Integrated Master's Degree Courses, and Research Studies in several major areas in Sciences, (including Medical Sciences, Engineering Sciences & Technology), Humanities, Social Sciences, Performing Arts, Fine Arts, Communication and Management Studies.

2. Admission to the University is open to all who fulfill the prescribed qualifications without any distinction of race, caste, creed, language or sex. The selection is made strictly on the basis of merit at the entrance examination except the admission into:

M.Tech CS/AI/IT, which is based on only the GATE percentile scores in Computer Science and Information Technology. (No written test or interview will be conducted)

# Admission to M.Tech. I C Technology, Computational Techniques and Bioinformatics

**M.Tech. IC Technology:** Shortlisiting of candidates for interview is based on the GATE percentile scores in the order of merit, in one of the following subjects: (1) Electronics and Communication Engineering (2) Instrumentation Engineering (3) Physics.

**M.Tech. Computational Techniques:** Shortlisiting of candidates for interview is based on the GATE scores in the



order of merit in Physics or being qualified in UGC-CSIR NET for JRF.

M.Tech. Bioinformatics: Shortlisitng of candidates for interview is based on the percentile score obtained in GATE in the following subjects: Biotechnology – BT; Chemistry – CY; Mathematics - MA; Physics – PH; Agricultural Engineering – AG; Electronics & Communication Engg. – EC; Computer Science and Information Technology – CS; Chemical Engineering -CH. Upto half of the total number of seats may be filled with candidates having background other than Biotechnology.

3. No student shall be eligible for admission to the Postgraduate Degree/Diploma Courses unless S/he has successfully completed a three year Undergraduate Degree through an examination conducted by a University/ Autonomous College. However, as a transitory measure, a candidate who has passed a two year degree course may also be considered for admission provided S/he has undergone a further one year bridge course and passed the same.

# 4. The minimum eligibility requirements for admission to the above courses are given in a tabular form at the end of this chapter.

The eligibility of candidates passing their qualifying examinations from Universities following the letter grading system / CGPA will be determined on the basis of percentage equivalent to the letter grade/ CGPA obtained by the candidates according to the conversion formula adopted by the University concerned. In the absence of any such formula, the decision of the University shall be final and binding on the candidates.

# 5. Candidates whose result of the qualifying degree examination is not declared may also apply for admission.

Candidates who have completed all the formalities viz., written the theory examinations, completed practical examinations, submitted Project reports, completed vivavoce exams etc. and are waiting for the results of the qualifying degree examination and those who are due to appear in the qualifying degree examination in the above stated aspects and expecting their results to be declared and are getting their certificates before 31 July, 2010 will also be allowed to appear for the entrance test. The condition is that, in case of their selection to a course in the University, they should submit the certificates of the qualifying degree examination and other earlier examinations positively at the time of completion of the admission. In exceptional cases, the University may give extension of time up to 31.8.2010 to

submit the certificates of the qualifying degree examination. Such students will be given conditional admission up to 31.8.2010 only. However, this facility will not be extended to those who are taking regular or supplementary or improvement examinations of the qualifying degree after 31.07.2010 and awaiting the results. In the event of the concerned students failing to (i) submit their result and certificates by 31.8.2010, and (ii) not passing the qualifying degree examination with the prescribed percentage of marks, they will not be allowed to attend classes any further and their conditional admission shall be cancelled forthwith. No request will be entertained for extension of time to submit the certificates under any circumstances beyond 31.8.2010.

In case of non-submission of other certificates like Transfer Certificate, Migration Certificate and any other academic certificate other than the qualifying degree examination certificates, students may be allowed time upto 30.9.2010, failing which the Provisional admission of such candidates shall also be cancelled forthwith.

In the case of candidates admitted into Ph.D. programmes under the result awaited category those who have completed all the formalities including the viva voce of their M.Phil./M.Tech. courses before 31.7.2010 and are awaiting their results may be allowed to submit their M.Phil or M.Tech results and certificates within a maximum period of one year from the date of their admission. During this period, they will not be paid any scholarship or fellowship. Once they submit the certificates, proving their eligibility for admission into the Ph.D., their scholarship/fellowship will be paid with retrospective effect from the date of their admission. If they fail to submit the results and the certificates within one year, their admission shall stand cancelled forthwith.

# 6. All courses at the Master's Degree level, 5-Year Integrated Master's Degree, Advanced PG/PG Diploma, M.Phil.; M.Tech.; Integrated M.Sc./Ph.D. and M.Tech./Ph.D. are full time regular courses.

For Ph.D. programmes, the candidates are encouraged to join as regular students. However, for those who are not in a position to do research on full time basis, a limited provision exists for part time research. Facility is also available for external registration to Ph.D. on regular basis at the recognized Centres of the University. The details are given in subsequent paragraphs of this chapter.

Students admitted to the regular courses are not allowed to pursue any other course except part time evening Certificate/Diploma Course of a Professional nature



with prior permission of the School /Department /Centre concerned of the University. They are also not allowed to take up any employment during the period of their studies in the University. Those employed, if selected for admission, are required to submit at the time of completion of their admission, a "No Objection Certificate" besides orders from the competent authorities sanctioning leave covering the entire duration of the course, failing which, the provisional selection for admission for such candidates will be cancelled.

#### Reservation of seats

#### 1. Reservation of seats for SC and ST candidates:

In accordance with the policy of the Government of India and the guidelines of the University Grants Commission, the University has reserved 15% of seats in each course for candidates belonging to the Scheduled Castes and 7.5% for those belonging to the Scheduled Tribes, with a provision for inter changeability between these categories, wherever necessary. Candidates should submit along with the application a copy of the certificate of their caste/tribe from a Revenue Officer not below the rank of Tahsildar / Mandal Revenue Officer. Remedial courses in English and other subjects are conducted for such students depending upon the actual need.

Note: SC/ST candidates belonging to the State of Andhra Pradesh should submit an Integrated Community Certificate issued by the competent revenue authority.

For admission to all Postgraduate Courses, viz., M.A., M.Sc., M.C.A., M.F.A., M.P.A., Adv. P.G. Diploma; PG Diploma Courses and 5-Year Integrated Master's Degree Courses, the minimum eligibility condition for SC/ST candidates is "Pass" in the minimum qualifying examination.

For admission to M.Phil., M.Tech., and Ph.D. a relaxation of only 5% marks in the minimum eligibility condition is provided to SC/ST candidates.

#### 2. Reservation of seats for OBC candidates

In accordance with the policy of the Govt. of India and the guidelines of the University Grants Commission, 27% of the seats in each course are reserved for OBC (non-creamy layer category) candidates. There is no relaxation in minimum qualifications for admission and no concession in the cost of Prospectus-cum-Application forms for OBCs. However, there is a concession in the cut off marks in the entrance examination (both written and interview put together) which

is 10% lower than the cut off prescribed for admission for General category candidates in any course. Candidates claiming reservation under this category must enclose an attested copy of the OBC (non-creamy layer) certificate issued by a competent authority without which their claim will not be considered under OBC category.

## 3 Reservation of seats for the physically challenged candidates:

3% of seats on approved intake in each course are provided as supernumerary seats for the physically challenged candidates having minimum degree of disability to the extent of 40% provided that their physical disability does not come in the way of pursuing the course. This is split into: 1% for visually handicapped (VH), 1% for hearing impaired (HI) and 1% for orthopedically handicapped (OH) candidates with a provision of interchangeability. The minimum eligibility requirements prescribed are relaxed in their cases as in the cases of SC / ST candidates. The candidates under this category should take the entrance examination for admission. Physically Challenged candidates are required to submit a certificate from a Civil Surgeon of a Govt. Hospital indicating the extent of visual/physical disability and also the extent to which the disability hampers the candidate in pursuing her/his studies.

### The candidates under this category may have to undergo a fresh medical examination, if so prescribed by the University, before being admitted.

Visually challenged candidates appearing for the entrance examinations will be given extra time of 20 minutes for two hour papers and will also be allowed the use of a personal typewriter during the examination. The University will provide scribes for such students. They will not be allowed to bring their own scribes.

# 4. Reservation of seats to the wards/dependants of Defence personnel

Upto 5% of seats on the approved intake in each course are provided as supernumerary seats for the wards/dependants of Defence Personnel. The candidates should enclose a copy of the certificate issued by a competent authority in support of their claim without which their claim will not be considered. The candidates under this category should take the entrance examination for admission and fulfill all other requirements of admission.

# 5. Reservation of seats are provided to Kashmiri migrants as per the norms of the Government of India/UGC.



# 6. Reservation of seats for candidates from the Union Territories / North-Eastern States:

One seat in each of the Departments/Centres in multi-departmental Schools of the University is reserved for the nominees from the following States/Union Territories: Tripura, Sikkim, Andaman & Nicobar Islands, Manipur, Mizoram, Nagaland, Arunachal Pradesh, Lakshadweep, Dadra and Nagar Haveli. Further, in the event of non-availability of nominated candidates for a particular department, other departments in the multi-departmental Schools may be permitted to admit up to two students provided that the total number of nominated candidates in a multi-departmental School shall not exceed the total number of departments/centres in the school. In the Schools having no departments, there is a provision of a maximum of two nominated seats in each School.

The nominations of the candidates belonging to the above Union Territories / States should reach the University through the respective UT / State Government by 31st May, 2010. (The candidates should fulfill the minimum eligibility requirements prescribed). Reservations are made for candidates of all the above mentioned States and Union Territories as a whole on the basis of the candidate's performance in the qualifying degree, and the seats so filled shall be over and above the approved intake (supernumerary seats) for the year.

Note: Applications received directly from the candidates without routing them through the respective Directorate of the Higher Education of the UT/NE state and nominations received after 31.5.2010 will not be considered.

# Weightage for distinction in sports/cultural activities:

With a view to encourage admission of candidates with an excellent record in Sports and Cultural activities, the University provides a weightage of upto two marks in the entrance examinations - two marks for distinctions achieved at national level and one mark for distinctions at the state level (but not both), for admission to various Post-Graduate courses, and 5-year Integrated Master's Degree courses provided the candidates satisfy the prescribed qualifications for admission. (Candidates seeking weightage for distinctions in sports / cultural activities must furnish along with their applications, attested/Xerox copies of certificate/s in support of their claim, failing which no weightage would be considered).

### Admission of foreign nationals:

Foreign nationals will be admitted over and above the approved intake in each course up to a maximum of 15% of the sanctioned seats in each course, depending upon the availability of adequate infrastructure. Foreign nationals seeking admission through ICCR or other governmental agencies may apply to the University in the prescribed form through the respective bodies. However, self supporting foreign nationals may apply directly to the University for admission in the prescribed form latest by 15th April, 2010 for the July 2010 session. The University may consider admission of foreign nationals 'in absentia', on the basis of their desire "to be considered in absentia" if they possess a valid foreign passport at the time of applying to the University, irrespective of from where they have passed the qualifying examination, subject to the condition that they are found suitable for admission by the Admission Committee of the concerned School / Department / Centre. Those who have passed the qualifying examination from Universities outside India should enclose with their application, copies of relevant certificates, marks sheets together with the English version of such copies duly attested, if they are in a different language.

Foreign nationals seeking admission to the University will be required to produce a medical certificate of fitness from a recognized hospital in their country. Those offered admission may also be required to undergo a comprehensive medical examination as prescribed by the university. Proficiency in English is a pre-condition for admission of foreign nationals. No foreign national will be admitted without a student visa. Foreign nationals selected for Ph.D. programmes will be allowed to complete the admission only after obtaining a research visa from the Indian Embassy abroad. There is a different fee structure for foreign nationals, as indicated on subsequent pages of this chapter. Accommodation in the University hostels may be provided if available.

Non-Resident Indians (NRIs): NRIs will also be considered for admission in different courses in accordance with the rules in vogue. NRIs may apply directly to the University for admission in the prescribed form latest by 15th April 2010. They may be considered for admission, if they are found suitable for admission by the Admission Committee of the concerned School / Department / Centre in accordance with the rules. Candidates who take admission under this category shall pay the tuition and other fees as payable by foreign nationals.



#### **Entrance Examinations**

- 1. The Entrance Examinations for various P.G. Degree Courses, other than those offered by the Sarojini Naidu School and M.Sc Mathematics, Statistics-OR, Physics, Chemistry and Health Psychology will consist of only a written test of 100 marks.
- 2. The entrance examinations in the case of MPA, MFA, and M.A. in Communication in the Sarojini Naidu School will consist of a written test and a practical test/interview. The weightage for the written test and practical test/interview will be in the ratio of 60:40 for M.A. Communication and 50:50 for other courses in the S.N. School. Only such candidates who are found successful in the written test will be called for the practical test/interview at Hyderabad. The schedule for the written test, practical test/ interview for all the courses is given in a tabular form at the end of this chapter.
- 3. The entrance examination for the 5-year integrated M.A., M.Sc. in different disciplines, M.Sc. Mathematics, Statistics-OR, Physics, Chemistry and Health Psychology, M.Phil, Integrated M.Sc./Ph.D. Biotechnoogy; M.Tech. / Ph.D. Materials Engineering, Nano Science and Technology and Ph.D. in different subjects will consist of a written test and an interview (after qualifying in the former). The written test will carry 75 marks and the interview 25 marks.

Admissions in M.Tech Computer Science, Artificial Intelligence, and Information Technology, will be granted only on the basis of GATE scores in Computer Science and Information Technology.

Admission in **M.Tech IC Technology** is based on the GATE scores in the order of merit in one of the following:

1) Electronics and Communication Engineering, 2) Instrumentation Engineering and 3) Physics followed by an interview for the short listed candidates. There is no written test for admission to this course.

Admission in **M.Tech. Computational Techniques** is based on the GATE scores in the order of merit in Physics or being qualified in UGC-CSIR NET for JRF will be the criterion for shortlisting candidates for interview. No written test will be conducted.

Admission in **M.Tech. Bioinformatics** is based on the percentile score obtained in GATE examination and followed by an interview. GATE in following subjects will be considered: Biotechnology – BT; Chemistry – CY;

Mathematics - MA; Physics – PH; Agricultural Engineering – AG; Electronics & Communication Engg. – EC; Computer Science and Information Technology – CS; Chemical Engineering – CH.

**4.** The question paper should be answered only in English except in the case of admission to language courses for which the question paper should be answered in the language concerned.

The performance of the candidates in the written test in some of the courses as listed below is in objective or multiple choice questions and will be evaluated using the OMR technology. The candidates will be required to mark the answers in the OMR Sheet with blue or black ballpoint or sketch pen during the test. Necessary instructions will be given in the relevant question papers.

The question paper for the following subjects shall be answered on OMR Sheet:

5-year Integrated M.Sc. and M.A. in different disciplines: M.Sc. - Mathematics/Applied Mathematics, Statistics-OR, Physics, Chemistry, Biochemistry, Plant Biology & Biotechnology, Molecular Microbiology, Animal Biotechnology, Health Psychology; M.C.A., M.A. - Telugu, Economics; M.Phil. - Telugu, Economics; Integrated M.Tech./Ph.D. - Materials Engineering, Nano Science and Technology; Ph.D. - Materials Engineering, Physics, Electronics Science, ACRHEM, Biotechnology, Plant Sciences, Animal Sciences, Economics; Integrated M.Sc./Ph.D. Biotechnology; PG Diploma in Counseling Psychology and Health Fitness & Life Style Management.

- 5. The written tests for all the courses will be held from 1st to **7th June 2010** at 25 different Centres in the country, as listed in this chapter.
- 6. The duration of the written test for all courses will be two hours.
- 7. A candidate is free to apply for admission to as many courses as S/he wishes after ensuring from the schedule for the Entrance examination that there is no clash in the subjects of his/her choice. The University has made the best possible efforts to avoid overlap in the schedule of examinations of related subjects to the extent possible. The candidates are advised to study the examination schedule carefully before deciding on their choice of subjects.

### 8. Please read the following carefully:

The question paper for the entrance test for all courses (except for Ph.D. in some subjects - please see the Chapter on

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'Schools of Study' for further details) shall consist of two parts - Part-'A' and Part- 'B'.

Part-'A' of the question paper shall necessarily consist of objective type questions preferably of one mark each for a total of 25 marks. The marks obtained by the candidates in Part'A' will be used for resolving tie cases.

All the Schools/Departments/Centres will follow negative marking for Part- 'A' of the question paper. There will be negative marking of 0.33 mark for every wrong answer.

Those Schools/Departments/Centres, which may set the entire paper as "objective type", may follow negative marking for Part-'B' of the question paper as well.

The following criteria shall be followed, in sequence to resolve ties, where candidates secure the same marks in the written test:

- (a) **First criterion:** Marks obtained in Part A of the written test.
- (b) **Second criterion:** Marks obtained by the candidates in the qualifying degree/other examination. If the final result is not available, then the marks up to the 2nd year will be taken into account.
- (c) Third criterion: Marks obtained in the degree

- examination immediately preceding the qualifying degree examination.
- (d) **Fourth criterion:** Marks obtained in the next lower public examination.
- 9. Interviews for candidates short-listed for admission to M.Phil., M.Tech., and Ph.D. on the basis of written test and those exempted from written test (on the basis of UGC/CSIR JRF(NBHM, in the case of Ph.D. for Maths, ICMR/ ICAR/DBT Fellowship for Ph.D. in the School of Life Sciences), and ICMR Fellowship for Ph.D. in the School of Social Sciences, RGNFs, 5-year Integrated M.A., M.Sc. in different disciplines, Integrated M.Tech./Ph.D. Materials Engineering, Nano Sceince and Technology, Integrated M.Sc./Ph.D. Biotechnology, M.Sc Mathematics, Statistics-OR, Physics, Chemistry, Health Psychology and the courses offered by the S.N. School are tentatively scheduled to be held between 6th July to 12th July 2010, in the respective Schools/Departments/Centres. However, exact dates of the interview/practical test will be communicated to the short listed candidates.
- 10. Candidates called for the entrance examinations (Both written and practical test / interview) will appear for the examinations at their own expense.

### Schedule for notification of the entrance examination results etc.

Particulars of the scheduled event	Adv. PG Dip. / PG Degree Courses in Sciences(except M.Sc in Maths, Statistics-OR, Physics, Chemistry and Health Psycology), Humanities, and Social Sciences; M.Tech. CT, IC Technology and Bioinformatics	Adv. PG Dip. / M.Tech. Mineral Exploration, Ph.D, P.G. courses of S.N. School, M.Sc. in Maths, Statistics-OR, Physics, Chemistry and Health Psychology, 5-year Integrated M.A./ M.Sc. P.G. Dip. in Counseling Psychology and Health Fitness and Life Style Management	M.Tech CS/AI/IT			
Notification of short-listed candidates for interviews / practical tests	-	25.6.2010	-			
Notification of list of selected candidates (Main & waiting lists)	30.6.2010	22.7.2010	22.5.2010			
Last date for completion of admission by the Main-list candidates/candidates called for counseling	15.7.2010	7.8.2010	17.6.2010			
Date for completion of admission by the wait-listed candidates	17.7.2010	9.8.2010	-			
Closure of all admissions	16.8.2010					



**Note:** (i) The Entrance results will be made available on the internet: http://www.uohyd.ernet.in; http://www.indiaresults.com; www.schools9.com. Intimation to the successful candidates will be sent by ordinary post to their mailing addresses. The University will not be responsible for any postal delay.

- (ii) No request for extension of time for interview/practical test or for completion of admission will be entertained on account of postal delay or any other reasons whatsoever.
- iii) Lists will be notified at the Office of the Controller of Examinations, Administration Building, University Campus, Hyderabad, and also at the city campus "The Golden Threshold (GT)", Abids, Nampally Station Road, Hyderabad. The notifications will also be available on the University's web site: http://www.uohyd.ernet.in.

It is the responsibility of the candidates to ascertain information on their selection by visiting the University's website.

#### Commencement of classes

- a) For all PG courses in Sciences (except M.Sc Maths, Statistics-OR, Physics Chemistry, and Health Psychology), Humanities, Social Sciences, MBA; M.Tech CS/AI/IT; M.Tech. Integrated Circuit Technoogy/ Computational Techniques/Bioinformatics: 16.7.2010
- b) For M.Phil., Adv. PG Dip/ M.Tech. Mineral Exploration, Integrated M.Tech./Ph.D.; M.Sc./Ph.D.; PG Courses offered by the S.N. School, M.Sc in Mathematics, Statistics-OR, Physics, Chemistry, Health Psycology and 5-year Integrated M.A. & M.Sc. courses: **7.8.2010**

# Cut off marks for admission to M.Phil., M.Tech., M.Tech./Ph.D. and Ph.D. programmes

1) The following cut-off marks will be followed in respect of the entrance examination (both written and interview put together) for admission to M.Phil., M.Tech., Integrated M.Tech./Ph.D., Integrated M.Sc./Ph.D. and Ph.D. programmes:

Course		Cut off marks
	For General category	For OBC (10% less than the cut off for General category
M.Phil and M.Tech	50%	45%
Ph.D.	55%	49.5%
Integrated M.Tech/Ph.D. and M.Sc./Ph.D.	55%	49.5%

Note: Dynamic cut off will be followed in the case of SC, ST and PH categories.

- 2) a) Candidates qualified in **UGC/Joint UGC-CSIR** National level test for **JRF, RGNFs, NBHM Fellowships test** (for the purpose of admission to Ph.D. in Mathematics/Statistics), **ICMR/ICAR/DBT** Fellowship test (for the purpose of admission to Ph.D in the School of Life Sciences), and **ICMR Fellowship** test (for the purpose of admission to Ph.D in the School of Social Sciences) are exempted from appearing in the written test of the entrance examination for admission to **M.Phil or Ph.D.** in the concerned subject, in lieu of which they will be given a weightage of 45 out of 75 marks in the written tests. They will, however, have the option to appear in the written tests to secure more than 45 out of 75 marks.
- b) As the UGC-CSIR JRF holders are expected to avail of the Fellowship within one year from the date of the award, such candidates may be exempted from the written test for admission to Ph.D. if they have been holding the Fellowship for not more than two years before their application for Ph.D admission. No candidate will be allowed to avail of this facility more than once.
- c) KVPY scholars, Science Olympiad and 1st rankers of different Boards of +2 level of education seeking admission in Post Graduate or 5-year Integrated M.Sc. in Sciences, Health Psychology and M.A. in Humanities/Social Sciences courses are exempted from the written test in lieu of which they will be given a weightage of 45 out of 75marks in the written test. However, they have the option to appear in the written test to secure more than 45 marks out of 75 marks.

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**Note:** - (i) Candidates qualified in UGC-CSIR National level test for Lectureship alone and those who have qualified in GATE, wherever these are prescribed as one of the eligible conditions for admission are not exempted from appearing in the written test for admission to M.Phil./Ph.D. Therefore such candidates should appear in the written test also.

- (ii) Candidates possessing M.Phil./M.Tech. degree and seeking admission to the Ph.D. Programme for which they are otherwise eligible to apply, are also not exempted from appearing in the written test of the entrance examination. Therefore, they must note that they have to take the written test also. However candidates possessing M.Tech degree and seeking admission to the Ph.D. in Materials Engineering are exempted from the written test in lieu of which a weightage of 45 marks will be given. They have to appear for the interview.
- (iii) The GATE qualified candidates may be given some preference/weightage in the interview for admission to the concerned subject of study, as may be decided by the concerned School/Department/Centre.
- 3) Part time registration to Ph.D.: Facilities exist to a limited extent for part time registration for Ph.D. Programmes. Persons engaged in teaching and research in reputed institutions of higher learning are eligible for admission under this category, provided they fulfill the minimum eligibility requirements and are found successful in

the entrance examination as prescribed. This facility is limited to those working in the twin cities (Hyderabad and Secunderabad) in respect of Science Schools (except Mathematics) and anywhere in Andhra Pradesh for the remaining Schools (except the Department of Computer and Information Sciences). Part-time Registration to Ph.D in Computer Science is only for teacher candidates who are teaching in UGC/AICTE approved Universities or P.G colleges or Engineering Colleges within Andhra Pradesh.

**4)** External Registration to Ph.D.: The University also provides facility for admission to the Ph.D. under External Registration category. The external candidate shall work at the recognised institution. The admission procedure is the same as in the case of regular admissions to Ph.D. Candidates will be under joint supervision viz., one from the University and the other from the recognised institution.

In the case of External Registration to Ph.D in Computer Science, the candidates who are working in the following Institutes in the twin cities alone are allowed to register under this category. Candidates who register under external registration should have a recognised guide (recognised by the University) from the parent organization listed below, and also a guide from the Department of Computer / Information Sciences.

\* NRSA \*CMC \*ADRIN \*ANURAG \*RCI \*IDRBT \* NGRI \*CDAC \*ATC of TCS.

### List of Institutions recognized as External Centres

The following Institutions in the twin cities of Hyderabad and Secunderabad have been recognised by the University for external registration to Ph.D. in the subjects indicated against them.

S.No.	Name of the Institution	Subject/s of Research
1	National Remote Sensing Agency	Computer Science, Physics, Earth & Space Sciences
2	Computer Maintenance Corporation Ltd	Computer Science
3	Defence Metallurgical Research Laboratory	Physics
4	Centre for Economic and Social Studies	Economics, Political Science, Anthropology, and Regional Studies
5	National Institute of Small Industry Extension Training	Economics and Anthropology
6	Institute of Public Enterprise	Economics
7	Advanced Data Processing Research Institute	Computer Science
8	Directorate of Rice Research	Life Sciences
9	Directorate of Oil Seeds Research	Life Sciences
10	Bhagwan Mahavir Medical Research Centre	Life Sciences





11	Advanced Numerical Research and Analysis Group (ANURAG)	Computer Science
12	Dr. Reddy's Research Foundation	Chemistry and Life Sciences
13	International Crops Research Institute for Semi Arid Tropics (ICRISAT)	Life Sciences
14	Research Centre Imarat (RCI)	Computer Science
15	Centre for DNA Fingerprinting and Diagnostics (CDFD)	Life Sciences
16	National Institute of Rural Development (NIRD)	Economics, Political Science, Sociology, Anthropology, Regional Studies
17	Institute for Development and Research in Banking Technology (IDRBT)	Computer Science, Information Technology, Management Studies
18	Indian Institute of Chemical Technology	Chemistry
19	L.V. Prasad Eye Research Institute	Biochemistry, Animal Science, and Communication
20	Shantha Biotechnics	Animal Sciences
21	Indian Immunologicals	Animal Sciences
22	Administrative Staff College of India (ASCI)	Management Studies
23	Blue Peter Research Centre	Animal Sciences
24	National Geophysical Research Institute (NGRI)	Computer Science, Artificial Intelligence, Physics, Chemistry and Earth & Space Sciences
25	National Institute of Nutrition (NIN)	Biochemistry
26	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI)	Engineering Sciences & Technology, ACRHEM and Physics
27	Non-ferrous Materials Technology Development Centre(NFTDC)	Engineering Sciences & Technology
28	Institute of Life Sciences (ILS)	and Life Sciences
29	Centre for Development of Advanced Computing (CDAC)	Computer/Information Sciences
30	Advanced Technology Centre (ATC) of TCS	Computer/InformationSciences, Life Sciences
31	Bharat Biotech Foundation	Life Sciecnes

#### **Associate Institution Status**

In order to boost partnerships for mutual benefit, the University has granted Associate Institution Status to the following Institutions. These Institutions are entitled to admit Ph.D. students based on their infrastructure and logistics strictly complying with the guidelines approved by the University in this regard and also complying with the other rules and regulations on admissions of the University which will change from time to time.

- 1. Indian Institute of Chemical Technology (IICT)
- 2. L.V. Prasad Eye Research Institute (LVPEI)
- 3. Institute of Life Sciences (ILS)

# 6) Ph.D. admissions for October 2010, January 2011, and April 2011 sessions

After completion of the regular admissions in July, 2010, vacant seats if any, in the Ph.D. programmes may be filled from among the JRF qualified candidates. CSIR JRFs may join an interested Faculty member of the University at any



time before the time lapse of the award for the sake of claiming their fellowship. However, they may be considered for admission in accordance with the norms of the University for which the candidates have to apply in the prescribed application form. Interviews will be conducted and selections for admission will be made based on the performance of the candidates in the interview, also considering the weightage for their JRF qualification in accordance with the following schedule:

- i) First week of October 2010
- ii) First week of January 2011
- iii) First week of April 2011

The University will not issue any press notification in this regard. However, information indicating the likely number of seats to be filled in each School/Department/Centre, will be available at the University's web site: www.uohyd.ernet.in

Note: Candidates for admission to Ph.D during the above sessions should possess the certificates of their qualifying degree examination by the date of their interview. Selected candidates must submit all their academic certificates and other certificates required at the time of admission. Extension of time will not be granted for submission of any of the certificates during these sessions and the provisional selection for admission will automatically stand cancelled in the case of those who are unable to submit the certificates required for admission on the date of completion of the admission formalities.

### Semester-wise Registration System

In order to maintain an effective enrolment of students and their progress in their studies/research, the University has introduced a system of student registration at the beginning of each semester for all the courses offered on regular basis including part time/external/associate registration Ph.D. A schedule for semester-wise registration is on the inside page of the back cover of the prospectus-cum-application form. However, a schedule for semester wise registration will be notified by the Academic Section from time to time. Students of all the courses (P.G./Integrated Master's Degree/Adv. PG/PG Dip./ M.Phil./ M.Tech./ Ph.D./M.Sc./Ph.D.), are required to clear their dues of the earlier semester/s in all respects before registering for the following semester of the course.

Every Ph.D. student (regular/part-time/external/associate) should enclose a copy of the report of the doctoral committee of the previous semester to the requisition form of the semester registration, without which ongoing semester registration will not be done.

Note: In the case of post-matric scholarship holders belonging to the SC/ST/OBC categories from the State of Andhra Pradesh, semester-wise registration for the winter semester will be done without insisting on the clearance of mess and tuition fee dues of the monsoon semester, if the same are reimbursable by the Social Welfare/Backward Classes Welfare Department of the State Government. However, they should clear all the dues of the winter semester before registering for the monsoon semester.

### Implementation of Credit System for all the courses

The credit system has been implemented for all the PG / Adv.PG / PG Diploma, all the M.Phil and M.Tech courses from the academic year 2004-05. The necessary guidelines for evaluation of students under this system are available in Chapter 6 of this brochure.

#### General

- 1) Before filling the Application Form and the Basic Data Form, candidates are advised to read the instructions carefully and complete the form accordingly, particularly about their performance in the qualifying degree or earlier examinations. This is necessary since the performance of the candidates in the qualifying degree and earlier examinations shall be used in determining relative positions in the merit list for those candidates involved in a tie in the written test.
- 2) The last date for receiving the completed applications for admissions for the July session is **May 3, 2010**. Applications received after the closing date will not be considered. For further details, please refer to the "Instructions to the Candidates for filling the application form".
- 3) The University will not be responsible for any postal delay. Candidates are therefore advised to apply for admission well in time.
- 4) All disputes are subject to Hyderabad jurisdiction.

### Issue of Hall Tickets for the Entrance Examinations:

a) The Hall Tickets will be dispatched by ordinary post 10 days before the commencement of the examination.

# Note: It may be noted that issue of Hall Tickets on the spot at the University campus is withdrawn.

b) In the case of non-receipt of the hall tickets before the commencement of the examinations, the candidates may download a copy of the hall ticket and appear for the examination at the Centre opted for. Candidates





- will not be permitted to write the entrance exam at any other Centre except the Centre mentioned in the hall tickets downloaded.
- c) It may be noted that all those who apply may be issued Hall Tickets without verifying whether or not they satisfy the eligibility criterion for admission to a course. This will be examined at the time of final admission, if granted. The candidates are therefore advised to go through the Prospectus-cum-application 2010-2011 carefully and judge their eligibility before submitting their application forms. Despite this caution, in case the candidates do not meet the minimum eligibility criteria and still apply for the entrance examination, they will do so at their own risk and cost. Mere issue of Hall Ticket and allowing a candidate for entrance exam including interview / practical test will not entitle a candidate for
- any claim on admission if S/he does not fulfill the required eligibility conditions for admission as prescribed in the Prospectus-cum-application form 2010-11. This will be thoroughly verified at the time of admission, if granted. At any stage if it is found that any candidate does not fulfill the minimum eligibility requirements, the admission if granted, shall be cancelled forth with.
- d) Use of cell/mobile phones in the Examination Hall is strictly prohibited.
- e) Candidates will be required to produce the Hall Ticket at the time of the entrance examination/interview/ practical test and completion of admission, if granted.



### **List of Examination Centres**

S.No.	Name of the Centre	Code	Venue
1.	Ahmedabad	AHM	Physical Research Laboratory (PRL), Navrangpura, Ahmedabad - 380009
2.	Aizawl	AIZ	Pachhunga University College, Aizawl, Mizoram-796 00.1
3.	Bangalore	BAN	Rashtreeya Vidyalaya Teachers College, Jayanagar, Bangalore – 560 011
4.	Bhopal	BPL	Barkatullah University Institute of Technology, Barkatullah University, Hoshalgabad Road, Bhopal 462026 (MP)
5.	Bhubaneswar	BNR	Department of Political Science, Old Arts Block, Utkal University, Bhubaneswar 751004
6.	Chennai	CNI	Ramanujan Auditorium, The Institute of Mathematical Sciences, 4 <sup>th</sup> Cross Road, CIT, Campus, Taramani, Chennai – 600 113
7.	Cochin	CHN	Department of Polymer Science and Rubber Technology, Cochin University of Science & Technology, KOCHI – 682022
8.	Delhi	DEL	Available shortly on the University's website.
9.	Dharwad	DWD	University College of Law, College Road, Dharwad – 580 001 – Karnataka State
10.	Dimapur	DIM	Dimapur Government College, Oriental colony, Dimapur – 797112, Nagaland.
11.	Guwahati	GHT	Arts Building, Gauhati University, Guwahati - 14
12.	Jammu	JAM	Government Gandhi Memorial Science College, Canal Road, Jammu
13.	Kolkatta	KOL	Available shortly on the University's website.
14.	Lucknow	LCK	School for Ambedkar Studies, B.B. Ambedkar University, Rae- Bareli Road, Lucknow - 226 025
15.	Madurai	MDR	School of Historical Studies, Madurai Kamaraj University, Palkalai Nagar, Madurai 625 021
16.	Nagpur	NPR	Laxminarayan Institute of Technology (L.I.T.), Amaravati Road, Nagpur - 400 033
17.	Patna	PAT	Pariksha Bhavan, B.N. College, Patna
18.	Pune	PNE	Arts Faculty Building, Near Golay Hall, Class Room No.4 & 5, Pune
19.	Raipur	RPR	College of Agriculture, Indira Gandhi Krishi Vishwavidyalaya, NH-6, Krishak Nagar, PO – Ravigram Raipur (CG)
20.	Ranchi	RNC	Available shortly on the University's website.
21.	Srinagar	SNR	Examination Block, The University of Kashmir, University Campus, Srinagar 190006
22.	Tirupati	TPT	Sri Govinda Raja Swamy Arts College, (T.T.D.), Tiruchanoor Road, Tirupati – 517502
23.	Vijayawada	VIJ	P.B. Siddhartha College of Arts & Science, Mogalrajpuram, Siddhartha Nagar, Vijayawada - 520 010.
24.	Visakhapatnam	VSP	Department of Commerce and Management Studies, Andhra University Campus, Visakhapatnam 530003
25.	Hyderabad	HYD	University of Hyderabad Campus, Gachibowli, Hyderabad - 500 046.

Note: (1) The University reserves the right to cancel any of these Centres and allot another Centre closed to the Centre cancelled.

(2) Based on the number of candidates, the venues at the centres may be increased



### Fees Payable by Students (Indian Nationals) admitted during 2010-11

Course	Admission Fee	Otl	ner Fee	Tuition Fee (Per Sem)	Lab Fee (Per Sem)	Library Fee (Per Sem)	Exam Fee (Per Sem)	Sports Fee (Per Sem)	Internet Charges (Per Sem)	Students Welfare Union Fund (Per Sem)	Medical Fee (Per annum)	Students aid Fund (Per Sem)	Total Cols. (2-12)	Deposits (Refundable)	Grand Total Col (13-14)
(1)	(2)	(a) (	(3) (b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
IMA,M.A. Courses in Humanities & Social Sciences	220	250		350		180	140	110	160	300	500	60	2270	1000	3270
M.Sc Maths/ Statistics/ Physics M.P.A Dance/ Theatre Arts M.F.A Painting/PrintMaking/ Sculpture/Art History Adv.P.G. Diploma In Folk Culture Stud.	220	250		350	600	180	140	110	160	300	500	60	2870	1200	407
M.Sc. Biotechnology	220	250		2390	1160	180	140	110	160	300	500	60	5470	1200	6670
5 - Year Int. <b>M.Sc.</b> in Optometry & Vision Sciences, Nursing Sciences	220	250	5000*	6100	1060	180	140	110	250	300	500	60	14170	1800	15970
M.Sc. Animal Biotechnology	220	250	4500**	350	600	180	140	110	160	300	500	60	7370	1800	9170
M.Sc. Chemistry/ Biochemistry/Plant Biology & Biotechnology, I.M.Sc. (Sciences)/ Health Psychology	220	250		350	600	180	140	110	160	300	500	60	2870	1800	4670
M.Sc. Health Psychology	1460	250	5000**	1140	1160	180	200	110	160	300	500	60	10520	1800	1232
M.C.A.	220	250+ 13000		7200	1950	180	140	110	160	300	500	60	24070	1200	2527
M.B.A.	1950	250+ 13000		14970	3900	180	140	110	160	300	500	60	35520	2550	3807
M.B.A. Health Care and Hospital Management	2020	250+ 16000		20000	5000	180	200	110	250	300	500	60	44870	2400	4727
P.G.Diploma in Health Fitness and Life Style Management	220	250		6200	2000	180	200	110	250	300	500	60	10270	1800	1207
M.A. Communication	220	250	4500**	350	1200	180	140	110	160	300	500	60	7970	1200	917
P.G. Diploma in Counseling Psychology	220	250		350	1200	180	140	110	160	300	500	60	3470	1200	467
M.Tech (CS/AI/IT)*	220	250+ 13000		7150	1950	180	200	110	250	300	500	60	24170	1200	2537
M.Phil Courses in Humanities and Social Sciences/ Gender Studies	220	250		550	-	180	200	110	250	300	500	60	2620	1200	382
M.Phil. Cognitive Science/ M.Tech. Comp. Tech. / M.Tech IC Technology	220	250		550	600	180	200	110	250	300	500	60	3220	1200	442
M.Tech. Bioinformatics	1460	250	12000**	1140	1160	180	200	110	160	300	500	60	17520	1800	1932

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(1)	(2)	(	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Ph.D. (Full - time) Humanities/Social Sciences/ Gender Studies/Buddhist Studies	220	250		750		180		110	250	300	500	60	2620	1000	3620
Maths/Statistics/ Computer Science/ Physics/Electronics Science/Dance/Theatre Arts/Management Studies/Communication /Folk Culture Studies/Neural & Cognitive Sciences	220	250		750	600	180		110	250	300	500	60	3220	1200	4420
Chemistry/Biochemistry / Plant Sciences/Animal Sciences/Biotechnology ACRHEM/Earth & Space Science/Int.M.Sc/ Ph.D. Bio Technology	220	250	-	750	600	180		110	250	300	500	60	3220	1800	5020
Int. M.Tech/Ph.D. Materials Engineering/ Nano Science & Technology /Ph.D. Materials Engineering	220	250	5000*	3600	1500	180	200	110	250	300	500	60	12170	1800	13970
Ph.D. Part -Time / External Registration Humanities/Social Sciences/ Gender Studies/Buddhist Studies	220	250		1300		180		110	250	300	500	60	3170	1000	4170
Maths/Statistics/ Computer Science/ Physics/Electronics Science/Dance/Theatre Arts/Management Studies/Communication /Folk Culture Studies /Neural & Cognitive Sciences/Psychology	220	250	1	1350	600	180		110	250	300	500	60	3820	1200	5020
Chemistry/Biochemistry /Plant Sciences/Animal Sciences/Biotechnology ACRHEM/Earth & Space Science/Int.M.Sc/ Ph.D. Bio Technology	220	250		1350	600	180		110	250	300	500	60	3820	1800	5620
Int. M.Tech/Ph.D. MaterialsEngineering/ Nano Science & Technology/Ph.D. Materials Engineering	220	250	5000 #	3600	1500	180	200	110	250	300	500	60	12170	1800	13970

**Note:** Other Fee (a) Rs. 250/- towards alumni fund and one time payment at the time of admission for some courses as indicated (b) \* Fee per Semester; \*\*Fee per Year

### Mess deposit to be paid at the time of Hostel admission

	General. Category Rs	SC/ST Scholarship holders Rs.
Mess Deposit (At the time of admission)(refundable):	5000 *	1500
5-Year Integrated coursesFor all other courses	2500	
Room rent (per semester)	500	-Nil-
Crockery fees (per year)	250	250
Hostel Caution Money Deposit	600	400
(refundable except service charge of Rs.200/-)		

<sup>\*</sup> To be collected in tow installments @ 2500/- at the time of admission and Rs.2500/- at the beginning of their 3rd year of study.



### Fees payable by the foreign national/NRI students

Sl. No.	Course	Fees per semester (in US \$)
1	MCA, M.Tech.(CS / AI / IT) and M.A. Communication	900
2	MBA For the candidates from developed countries For the candidates from developing countries	4,500 2,000
3	PG Courses in Sciences, 5-Year Integrated Master's Degree courses in Sciences, M.Tech. in CT, IC Technology and Bioinformatics	900
4	PG Courses in other than Sciences and 5-year Integrated M.A. Courses in Humanities and Social Sciences	550
5	M.Phil Programmes in Humanities and Social Sciences	725
6	Ph.D. Programmes in Sciences, Computer Science and Management Studies	900
7	Ph.D. Programmes in Humanities, Social Sciences and S.N. School	725
8	M.Phil/Ph.D. Programmes in all subjects for the candidates from SAARC countries	360

- Note: 1. Foreign nationals / NRIs are required to pay the above specified semester fees and the fees as shown against columns 9 to 11 and 14 of the fees structure and Rs. 250 towards the Alumni fund in Indian Rupees.
  - 2. Candidates who are granted admission in MBA, MCA and M.Tech (CS/AI/IT), M.Tech Bioinformatics, M.Sc Animal Biotechnology, Health Psychology, Integrated M.Tech/Ph.D. in Materials Engineering/Nano Science and Technology, 5-year Integrated M.Sc, in Optometry & Vision Sciences / Nursing Sciences, M.Sc. Health Psychology, MBA in Health Care and Hospital Management and M.A. communication are also required to pay in Indian Rupees an amount equivalent to US\$825 as one time payment towards Development Fee at the time of admission.



# Minimum qualifications for admission to various courses and schedule for the entrance examinations during the year 2010-11

### Postgraduate courses

Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
M.Sc.	Mathematics/ Applied Mathematics	54	Bachelor's degree with a minimum of 60% marks in the aggregate of optional subjects with Mathematics / Statistics as one of the subjects; <b>OR</b> with at least 55% of marks for those students who have done B.A. /B.Sc. (Hons) course in Maths / Statistics	2.6.2010 2.00 p.m.	6.7.2010 & 7.7.2010 10.00 a.m.
M.Sc.	Statistics-OR	34	Same as above	1.6.2010 2.00 p.m.	6.7.2010 & 7.7.2010 10.00 a.m.
M.Sc.	Physics	45	B. Sc. with a minimum of 60% marks in the aggregate of science subjects with Physics as one of the main subjects in combination with Mathematics <b>OR</b> with atleast 55% marks in B.E./B.Tech. degree with a minimum of 60% in the aggregate of science related subjects: Physics, Mathematics and Electronics.	4.6.2010 2.00 p.m.	6.7.2010 &7.7.2010 10.00 a.m.
M. Sc.	Chemistry	45	B.Sc. with a minimum of 60% marks in the aggregate of Science subjects with Chemistry as one of the subjects, preferably in combination with Physics and Mathematics	6.6.2010 2.00 p.m.	6.7.2010 & 7.7.2010 10.00 a.m.
M.Sc.	Biochemistry	26	B. Sc. with a minimum of 60% marks in the aggregate of Science subjects with Chemistry or Biochemistry as one of the subjects	1.6.2010 2.00 p.m.	-
M.Sc.	Plant Biology &Biotechnology	18	B. Sc. with a minimum of 60% marks in the aggregate of Science subjects with at least one of the following subjects: Chemistry, Botany, Genetics, Microbiology, Biochemistry, Biotechnology.	5.6.2010 10.00 a.m.	-
M.Sc.	Molecular Microbiology	12	B. Sc. with a minimum of 60% marks in the aggregate of Science subjects with at least one of the following subjects: Zoology, Genetics, Biotechnology, Biochemistry, Botany, Microbiology, Life Sciences.	1.6.2010 10.00 a.m.	-
M.Sc.	Animal Biotechnology	18	B. Sc. with a minimum of 60% marks in the aggregate of Science subjects with at least one of the following subjects: Zoology, Genetics, Biotechnology, Biochemistry, Botany, Microbiology, Life Sciences.	2.6.2010 10.00 a.m.	-
M.Sc.	Health Psychology	08	Bachelor's degree with atleast 60% marks in aggregate in any discipline with Psychology as one of the subjects for three years	3.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
M.C.A.		60	Bachelor's degree with at least 60% marks in aggregate, in any discipline with mathematics as a compulsory subject at the Higher Secondary (10+2) level.	6.6.2010 10.00 a.m.	-
M.A.	English	45	At least 50% marks in the Bachelor's degree with at least 50% marks in English as optional subject; <b>OR</b> at least 50% marks in the Bachelor's degree with at least 55% marks in English as compulsory subject.	4.6.2010 10.00 a.m.	-
M.A.	Philosophy	23	Bachelor's degree in any subject/s with at least 50% marks in aggregate.	5.6.2010 10.00 a.m.	-
M.A.	Hindi	38	With at least 50% marks in the Bachelor's degree with at least 50% marks in Hindi as optional (Elective) subject; <b>OR</b> with at least 50% marks in the Bachelor's degree with at least 55% marks in Hindi as compulsory Language subject (second language). Bachelor Degree holders who do not possess 55% marks in compulsory Note: (Second language)Hindi or 50% marks in optional (elective) Hindi will also be considered for admission provided they pass the certificate examination with 50% marks (equivalent to B.A. in Hindi) approved by the Government of India.	3.6.2010 10.00 a.m.	-
M.Sc.	Biotechnology*	15*	Bachelor/s degree in Physical, Biological, Agricultural, Veterinary and Fishery Sciences, Pharmacy, Engineering/Technology, 4 years B.Sc. (Physician Assistant Course) or medicine (MBBS) or BDS with atleast 55% marks.		

<sup>\*</sup> The admissions will be based on the allotment made by Jawaharlal Nehru University (JNU), New Delhi which will conduct a common entrance test on 20.5.2010.

Note: 1. For calculating the prescribed percentage of marks for admission to M.Sc./MCA courses the marks obtained in the language papers of the qualifying degree will be excluded.

<sup>2.</sup> The marks in Hons/Core subjects of B.A. (Hons), B.Sc. (Hons) degrees will only be taken into account for calculating the prescribed percentage of marks.



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
M.A.	Functional Hindi (Translation)	14	With at least 50% marks in the Bachelor's degree with at least 50% marks in Hindi as optional (Elective) subject; <b>OR</b> with at least 50% marks in the Bachelor's degree with at least 55% marks in Hindi as compulsory subject (second Language); <b>OR</b> M.A. in Hindi language and literature; <b>OR</b> M.A. in any of the following allied subjects: Linguistics/Comparative Literature (with Hindi as one of the subjects at the Bachelor's degree level).  Note: Bachelor Degree holders who do not possess 55% marks in compulsory (Second language) Hindi or 50% marks in optional (elective) Hindi will also be considered for admission provided they pass the certificate examination with 50% marks (equivalent to B.A. in Hindi) approved by the Government of India.	3.6.2010 10.00 a.m.	
M.A.	Telugu	45	With at least 50% marks in the Bachelor's degree with at least 50% marks in Telugu as optional subject; <b>OR</b> with at least 50% marks in the Bachelor's degree with at least 55% marks in Telugu as the compulsory subject.	5.6.2010 2.00 p.m.	
M.A.	Urdu	25	With at least 50% marks in the Bachelor's degree or equivalent with at least 50% marks in Urdu, Persian or Arabic as optional papers; <b>OR</b> Bachelor's degree or equivalent with at least 55% marks in Urdu, Persian or Arabic as compulsory subject i.e. as second language.	5.6.2010 2.00 p.m.	
M.A.	Applied Linguistics	23	At least 50% marks in the Bachelor's degree with at least 50% marks in Linguistics / any language as an optional/honours subject; <b>OR</b> with at least 55% marks in the Bachelor's degree in any other discipline.	3.6.2010 2.00 p.m.	
M. A.	Economics	60	With at least 50% marks in the Bachelor's degree and at least 50% marks in Economics; <b>OR</b> Bachelor's degree with at least 60% marks in any of the allied subjects viz. Commerce, Statistics, Mathematics, Engineering or any of the Social Sciences subjects.	3.6.2010 2.00 p.m.	
M.A.	History	52	With at least 50% marks in the Bachelor's degree and at least 50% marks in History; <b>OR</b> with at least 50% marks in the Bachelor's degree and at least 55% marks in aggregate in the allied subjects viz. Political Science, Public Administration, Economics, Sociology, Anthropology, Indology, Archaeology, Ancient Indian History and Culture; <b>OR</b> Bachelor's degree in any subject(s) with at least 60% marks in aggregate.	3.6.2010 10.00 a.m.	
M.A.	Political Science	52	Bachelor's degree with atleast 50% marks <b>OR</b> Equivalent Grade in Social Sciences or Humanities subjects <b>OR</b> 55% marks in any other subjects.	5.6.2010 10.00 a.m.	
M.A.	Sociology	52	With at least 50% marks in the Bachelor's degree and at least 50% marks in the subject concerned <b>OR</b> with at least 50% marks in the Bachelor's degree and at least 55% marks in aggregate in the allied subjects viz., all Social science subjects, Philosophy, Communication, Linguistics; OR Bachelor's degree in any subject (s) with 60% marks in aggregate.	5.6.2010 2.00 p.m.	
M.A.	Anthropology	30	With at least 50% marks in the Bachelor's degree in Social Sciences /Humanities / Commerce subjects <b>OR</b> Bachelor's degree with at least 55% marks in any other subject.	2.6.2010 2.00 p.m.	
Adv.PG Diploma	Folk Culture Studies	19	Any Master's degree with a minimum of 55% aggregate Marks in Social Sciences, Humanities, Fine Arts, Performing Arts and Communication	7.6.2010 10.00 a.m.	
P.G. Diploma	Counseling Psychology	22	Master's Degree with at least 50% marks in aggregate in Psychology/ Social Work, Sociology, Home Science/ Nursing or MBBS	2.6.2010. 10.00 a.m	6.7.2010 10.00 a.m.
P.G. Diploma	Health Fitness & Life Style Management	30	Bachelor's degree in any subject	4.6.2010 2.00 p.m.	6.7.2010 & 7.7.2010 10.00 a.m.

Note: 1. For calculating the prescribed percentage of marks for admission to M.A. Courses in Economics, History, Political Science, Sociology and Anthropology marks obtained in the language papers of the qualifying degree will be excluded.

2. The marks in Hons/Core subjects of B.A. (Hons), B.Sc. (Hons) degrees will only be taken into account for calculating the prescribed percentage.



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
M.P.A.	Dance (Kuchipudi) (Bharata -	06	Bachelor's degree in dance; <b>OR</b> Bachelor's degree in any subject with a professional diploma or certificate in dance recognised by the University; <b>OR</b> Bachelor's degree in any subject with a certificate from a reputed Guru	2.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.
	natyam)		recognised by the University to the effect that the candidate has undergone training ance under him/her for a period not less than five years.  (The experience/ training certificate should be furnished during the practical test.)  OR  A candidate with 10+fulltime 4 year diploma / certificate from a nationally recognized institution + 1 year practical work in the same institution;  OR A candidate with 10+2+fulltime 3 year diploma from a nationally		
M.P.A.	Dance(Folk)	06	recognized institution.  Bachelor's Degree in any subject with practical exposure and training in any traditional dance form for at least 3 years (certificate of training should be produced) <b>OR</b> a traditional folk artiste having Bachelors Degree in any subject (a proof of the traditional origins need to be produced).	2.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.
M.P.A.	Theatre Arts	23	Bachelor's degree in any subject with an aptitude for theatre which will be tested at the time of viva.	1.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.
M.F.A.	Painting Print making Sculpture	14 08	Bachelor's degree in Painting / Printmaking / Sculpture	5.6.2010 2.00 p.m.	6.7.2010 & 7.7.2010 10.00 a.m.
M.F.A.	Art History	08	BA/BFA/BVA/BPA in subjects of Arts, Humanities or Social Sciences with 55% marks.Bachelor's degree in Fine Arts, Visual Arts, Architecture, Applied are eligible to apply, with a minimum of 55% marks. Students from design, film and media studies, Performing Arts, humanities and Social Sciences will also be considered. All candidates must demonstrate adequate linguistic and interpretative skills in English and another Indian language to demonstrate conceptual thinking capacity.	4.6.2010 10.00 a.m.	8.7.2010 10.00 a.m.
M. A.	Communi-cation	40*	Bachelor's degree with at least 55% marks in Communication / Journalism;  OR Bachelor's degree in any subject with at least 55% marks in aggregate.  * Communication & Media Studies 10 Print Journalism & New Media 15 Television & Radio 15	1.6.2010 10.00 a.m.	6.7.2010 to 8.7.2010 10.00 a.m.
MBA	Health Care & Hospital Management	20	Three or four year Bachelor's degree with a minimum of 60% marks or equivalent grade of any University recognized by AIU/AICTE. Preference will be given to those who have an academic background/experience relating to health care management/administration areas.	7.6.2010 2.00 p.m.	7.7.2010 & 8.7.2010 10.00 a.m.
MBA**		60	A three year Bachelor's degree (or its equivalent) in any discipline recognized by the Association of Indian Universities/AICTE, obtained before July 2010.		

<sup>\*\*</sup> The admission process of candidates into MBA for the year 2010-11 has been completed based on the percentile scores of the applicants in CAT 2009 followed by Group Discussion/Interview.

### M.Tech. Courses

Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
M.Tech.	Computer Science	45	With a minimum of 60% marks in the Bachelor's degree examination in Engineering /Technology (B.E./B.Tech); <b>OR</b> in MCA or M.Sc. in Computer Science / Information Sciences/ Electronics.	-	-
	Artificial Intelligence	30	Only the GATE percentile scores, in Computer Science / Information Technology in order of merit, will be the criteria for admission (No written test or interview will be conducted).		
	Information Technology	30			
M.Tech.	Computational Techniques	23	With at least 55% marks in the Master's degree in Physics or a closely related area with at least one computer related course either in M.Sc. or more than one computer course at the B.Sc. level.  Note: Valid GATE scores in the order of merit in Physics or qualified in UGC-CSIR NET for JRF will be the criterion for shortlisting candidates for interview. No written test will be conducted.		16.6.2010 10.00 a.m.
M.Tech.	IC Technology	15	With at least 55% marks in the Master's degree in Electronics, or in Physics with Electronics Specialisation <b>OR</b> B.E. / B.Tech., with a minimum of 60%, with Electronics as one of the subjects  Note: Valid GATE percentile scores in the order of merit, in one of the following: (1) Electronics and Communication Engineering (2)  Instrumentation Engineering (3) Physics, will be the criterion for shortlisting candidates for interview. No written test will be conducted.	1	17.6.2010 10.00 a.m.
M.Tech.	Bioinformatics	23	Masters degree with a minimum of 55% aggregate Marks in Biological or Agricultural or Physical or Chemical Sciences <b>OR</b> Statistics or Mathematics or Computer Sciences; <b>OR</b> B.Tech. with a minimum of 60% marks.Note: The admission is based on the percentile score obtained in GATE examination and followed by an interview. GATE scores will be computed to 75% and Interview carries 25% of marks. GATE in following subjects will be considered: Biotechnology – BT; Chemistry – CY; Mathematics - MA; Physics – PH; Agricultural Engineering – AG; Electronics & Communication Engg. – EC; Computer Science and Information Technology – CS; Chemical Engineering – CH. Upto half of the total number of seats may be filled with candidates having background other than Biotechnology.	-	16.6.2010 10.00 a.m.
M.Tech.	Mineral Exploration	15#	With at least 55% Marks in the Masters degree in any branch of Science with Mathematics as one of the subjects at the B.Sc. level.	5.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
Adv. PG Diploma	Mineral Exploration	15#	With at least 55% Marks in the Masters degree in any branch of Science with Mathematics as one of the subjects at the B.Sc. level.	5.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Tech./ Ph.D	Materials Engineering	12	BE/B.Tech., or equivalent degree in Metallurgy, Mechanical/ Production / Manufacturing Engineering, Materials Engineering, Mining Engineering, Chemical Engineering, Ceramic Engineering/Technology, Polymer Engineering / Technology or Engineering Physics OR B.Sc. or equivalent degree with Mathematics, Physics & Chemistry followed by AMIE in Chemical Engineering, Materials & Metallurgical Engineering, Mining Engineering, Mechanical Engineering, Production Engineering or AMIIM OR Diploma in Mechanical Engineering, Metallurgical Engineering, Mining Engineering and Production Engineering followed by AMIE in Chemical Engineering, Materials and Metallurgical Engineering, Mining Engineering, Mechanical Engineering, Production Engineering or AMIIM or Master's degree in Physics, Chemistry, Geology, Mineral Processing or Materials ScienceCandidates should have at least 60% marks in the respective qualifying exam.	7.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.



### M.Phil. Courses

Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
M.Phil.	English	23	Master's degree in English with at least 55% marks	4.6.2010 10.00 a.m.	6.7.2010 &7.72010 10.00 a.m.
M.Phil.	Philosophy	14	Master's degree in Philosophy with at least 55% marks	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Hindi	23	Master's degree in Hindi with at least 55% marks	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Telugu	20	Master's degree in Telugu with at least 55% marks	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Urdu	30	Master's degree in Urdu with at least 55% marks	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Applied Linguistics	09	Master's degree in the subject concerned (Linguistics/ Applied Linguistics / Translation) with at least 55% marks; <b>OR</b> Master's degree in allied subjects with at least 55% marks and a post-graduate diploma in Linguistics / Applied Linguistics or an equivalent field in Linguistics. Allied subjects for Applied Linguistics include all language and literature disciplines, Philosophy, Anthropology, Sociology, Psychology, Computer Science, Mathematics, Statistics and Communication Studies.	3.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Translation Studies	09	Master's degree in any subject with a minimum of 55% marks with proficiency in two languages reflected either in previous qualification or at the entrance examination for this M. Phil.	5.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
M.Phil.	Comparative Literature	08	Master's degree in Comparative Literature with at least 55% marks; <b>OR</b> Master's degree in any language/literature or in linguistics with at least 55% marks, whatever the M.A., the candidate must present documentary evidence of knowledge of two literatures.	2.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.
M.Phil.	Shabdabodha Systems and Language Technologies	12	Master's Degree in Sanskrit or equivalent with at least 55% marks	3.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.
M.Phil.	Economics	30	Master's degree in Economics, <b>OR</b> any of the allied subjects with at least 55% of marks. (Allied subjects: Applied Economics, Statistics, Mathematics, Agricultural Economics, Applied Statistics, Operations Research, Econometrics, Applied Econometrics, Mathematical Economics, Quantitative Economics, Business Economics, Financial Economics, Commerce and Management and Engineering)	1.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	History	14	Master's degree in History with at least 55% marks or equivalent grade; OR Master's degree in allied subjects with at least 60% marks or Equivalent Grade (Allied subjects: Political Science, Public Administration, Economics, Sociology, Anthropology, Indology, Archaeology, Ancient Indian History and Culture, Literature, Religious Studies, Environmental Studies and Science Policy.)	5.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.
M.Phil.	Political Science	15	Master's degree in Political Science or Public Administration or in any Social Science subjects including Humanities with at least 55% marks or Equivalent Grade	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Sociology	14	Master's degree in Sociology or Social Anthropology with at least 55% marks.	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
M.Phil.	Anthropology	08	Master's degree in Anthropology with at least 55% marks; <b>OR</b> Master's degree in an allied subject with at least 60% marks (Allied subjects: Sociology, Social Work, Social & Preventive Medicine, History, Political Science, Economics, Archaeology, Linguistics, Environmental Sciences and Development Studies including Rural and Regional Development)	4.6.2010 10.00 a.m.	8.7.2010 10.00 a.m.
M.Phil.	Regional Studies	06	Master's degree with at least 55% marks or equivalent grade in any of the Social Science subjects.	2.6.2010 2.00 p.m.	9.7.2010 10.00 a.m.
M.Phil.	Social Excl. &Incl. Policy	12	Master's degree with at least 55% marks in any of the Social Science or Humanities subjects.	1.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
M.Phil.	Cognitive Science	08	Master's degree in any discipline in humanities or social or natural sciences with at least 55% marks.	1.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
M.Phil.	Gender Studies	06	Master's degree with a minimum of 55% marks in aggregate in Social Sciences, Humanities, Management, Natural sciences, Performing Arts and Communication.	5.6.2010 2.00 p.m.	11.7.2010 10.00 a.m.
M.Phil.	Indian Diaspora	06	Master's degree in any subject in Social Sciences or Humanities with at least 55% of marks. Also should have some exposure to migration and diaspora studies either in the form of a course in Indian diaspora during their M.A. degree or have some research experience.	3.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.

# Ph.D. programmes

Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph. D.	Mathematics/ Applied Maths/	06	Master's degree in concerned or related subjects with at least 55% marks or equivalent grade.	2.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.
Ph.D.	Statistics/OR			1.6.2010 2.00 p.m.	8.7.2010 2.00 p.m.
Ph. D.	Computer Science	22	Masters Degree in any Engineering/Technology; <b>OR</b> M.Phil. in Mathematics or Statistics or Electronics; <b>OR</b> in BE/B.Tech.; <b>OR</b> Master's degree in Computer Applications / Mathematics / Statistics / Electronics / Information Systems / Internet Technology / GeoInformatics / BioInformatics with a minimum of 60% marks in the above stated qualifications	4.6.2010 10.00 a.m.	6.7.2010 & 7.7.2010 10.00 a.m.
Ph. D.	Physics	30	M.Sc. degree with at least 55% marks in Physics or a closely related area <b>OR</b> with atleast 60% marks in B.E. / B.Tech degree in an appropriate area with strong aptitude in Physics.  Note: For B.E./B.Tech. candidates, the admission is subject to qualifying in the stipulated course work.	1.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.
Ph.D.	Electronics Science	06	M.Sc. degree with at least 55% marks in Electronics or Physics <b>OR</b> B.E./B.Tech degree with a minimum of 60% marks, with Electronics as one of the subjects.Note: For B.E./B.Tech. candidates, the admission is subject to qualifying in the stipulated course work.	5.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
Ph. D.	Chemistry	34	M.Sc OR equivalent degree with at least 55% marks (Note: B.Tech, B.Pharm. etc., are also treated as equivalent to M.Sc for this purpose.)	3.6.2010 10.00 a.m.	8.7.2010 & 9.7.2010 10.00 a.m.
Ph.D.	Biochemistry	15	Master's degree in Biochemistry or in a closely related area with at least 55% marks <b>OR</b> an M.B.B.S. degree with a minimum of 55% marks. Note: NET qualified candidates for JRF will only be shortlisted for interview for admission during 2010-11. (There will be no written test).	-	7.7.2010 10.00 a.m.
Ph.D.	Plant Sciences	18	Master's degree in Plant Sciences or in a closely related area with at least 55% marks	1.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.
Ph. D.	Animal Sciences	09	Master's degree in Animal Sciences or in a closely related area of Life Scioences with atleast 55% marks; <b>OR</b> M.Pharm, M.V.Sc. degree with a minimum of 55% marks.	3.6.2010 2.00 p.m.	9.7.2010 10.00 a.m.
Ph.D.	Biotechnology	06	Master's degree in Biotechnology or in a closely related area with atleast 55% marks <b>OR</b> an M.D., M.Tech., M.Pharm, M.V.Sc., with a minimum of 55% marks	1.6.2010 10.00 a.m.	8.7.2010 10.00 a.m.
Integra- ted M.Sc/ Ph.D.	Biotechnology	06	Bachelor degree in Physical and Biological Sciences, Pharmacy, Engineering /Technology, MBBS with 60% marks. Degree should be awarded not later than 2 years from the year of examination	1.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
Ph.D.	ACRHEM	20	Same as above in the case of Ph.D. Mathematics/ Applied Maths/Statistics/ OR, Computer Science; Physics/Electronics Science; and Chemistry	2.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
Ph.D.	Neural and Cognitive Sciences	03	Master's degree in any discipline in humanities or social or natural sciences with at least 55% marks.	1.6.2010 10.00 a.m.	9.7.2010 2.00 p.m.

Note:

<sup>1.</sup> The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.

 $<sup>2. \</sup>quad Candidates \ possessing \ M.Phil/M.Tech./UGC-NET \ for \ Lectureship \ alone \ should \ also \ appear \ for \ the \ written \ test \ as \ they \quad are \ not \ exempted \quad from \ written \ test \ for \ admission \ to \ Ph.D \ courses.$ 



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph. D.	English	08	M. Phil degree in the subject concerned and Master's degree in the subject concerned with at least 55% marks;  OR  Master's degree in the subject concerned with at least 55% marks with two years teaching experience in a degree college or two years of teaching/research experience in the subject concerned in a University department or a recognised institute of higher learning or qualified in UGC JRF;  OR  Master's degree with at least 60% marks in any subject with 2 years of teaching experience in a degree college or two years of teaching/research experience in the subject concerned or closely related area in a University department or recognized institute of higher learning or a minimum of 3 publications in a recognized refereed journal in the subject in which admission is sought.	3.6.2010 10.00 a.m.	8.7.2010 10.00 a.m.
Ph.D.	Dance	03	Same as aboveNote: The concerned subjects are Dance and related areas.	2.6.2010 10.00 a.m.	5.7.2010 10.00 a.m.
Ph.D.	Communi-Cation	04	Same as aboveNote: The concerned subjects are Communication or Journalism.	1.6.2010. 2.00 p.m	9.7.2010 10.00 a.m.
Ph.D.	Theatre Arts	04	Master's degree or equivalent in the subject concerned with at least 55% marks with practical experience in three major productions after the Master's programme OR  Master's degree in the subject concerned with at least 55% marks with two years teaching experience in a degree college or two years of teaching/research experience in the subject concerned in a University department or a recognised institute of higher learning or qualified in UGC JRF;  OR  Master's degree with at least 60% marks in any subject with 2 years of teaching experience in a degree college or two years of teaching/research experience in the subject concerned or closely related area in a University department or recognized institute of higher learning or a minimum of 3 publications in a recognized refereed journal in the subject in which admission is sought.  Note: The concerned subjects are Theatre Arts.	1.6.2010 2.00 p.m.	6.7.2010 2.00 p.m.
Ph. D.	Philosophy	09	M. Phil degree in the subject concerned and Master's degree in the subject concerned with at least 55% marks; <b>OR</b> Master's degree in the subject concerned with at least 55% marks with two years teaching experience in a degree college or two years of teaching/research experience in the subject concerned in a University department or a recognised institute of higher learning or qualified in UGC National level test for JRF/or for Lectureship; <b>OR</b> Master's degree in any subject with 2 years of teaching experience in a degree college or two years of teaching/research experience in the subject concerned or closely related area in a University department or recognised institute of higher learning or a minimum of 3 publications in a recognised refereed journal in the subject in which admission is sought.	4.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
Ph. D.	Hindi	14	Same as above	4.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
Ph.D	Telugu	12	Same as above	4.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
Ph. D.	Urdu	14	Same as above	2.6.2010 2.00 p.m.	7.7.2010 10.00 a.m.
Ph.D.	Comparative Literature	04	Same as above Note: The concerned subject is Comparative Literature OR English OR Indian Language / Literature; furthermore a candidate without any earlier Comparative literature degree must present documentary evidence of knowledge of two literatures.	4.6.2010 2.00 p.m.	8.7.2010 2.00 p.m.

- Note: 1. The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.
  - $2. \quad \text{Candidates possessing M.Phil/M.Tech./UGC-NET for Lecture ship alone should also appear for the written test as they \\ \text{are not exempted} \quad \text{from written test for admission to Ph.D courses.}$



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph.D.	Economics	23	M.A. in the subject concerned (with at least 55% marks) or Equivalent Grade Or Masters degree in the allied subjects(as mentioned for M.Phil Economics) (with at least 60% marks) or Equivalent Grade with M.Phil. Degree /UGC JRF qualification /Two years of teaching/research/relevant administrative governance experience in the subject concerned in a recognised institution of higher learning or three publications in the subject concerned in recognised refereed journals. OR  With at least 60% marks Or Equivalent Grade in Master's degree in any subject with two years teaching experience in a degree college in the subject concerned or a closely related area or two years teaching/research/relevant administrative governance experience in the subject concerned or in a closely related area in a University/Department or a recognised institute of higher learning or a minimum of three publications in recognised refereed journals in the subject in which admission is sought.	1.6.2010 2.00 p.m.	7.7.2010 10.00 a.m.
Ph. D.	History	12	M.A. in the subject concerned (with at least 55% marks) or Equivalent Grade Or M.A. in allied subjects (with at least 60% marks) or Equivalent Grade with M.Phil. Degree /UGC JRF /Two years of teaching/research experience in the subject concerned in a recognised institution of higher learning or three publications in the subject concerned in recognised refereed journals.  OR  With at least 60% marks Or Equivalent Grade in Master's degree in any subject with two years teaching experience in a degree college in the subject concerned or a closely related area or two years teaching/research experience in the subject concerned or in a closely related area in a University Department or a recognised institute of higher learning or a minimum of three publications in recognised refereed journals in the subject in which admission is sought.	3.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
Ph. D.	Political Science	12	M.A. in the subject concerned (with at least 55% marks) or Equivalent Grade OR M.A. in allied subjects (with at least 60% marks) or Equivalent Grade with M.Phil. Degree /UGC JRF /Two years of teaching/research experience in the subject concerned in a recognised institution of higher learning or two publications in the subject concerned in recognised journals.  OR  With at least 60% marks Or Equivalent Grade in Master's degree in any subject with two years teaching experience in a degree college in the subject concerned or a closely related area or two years teaching/research experience in the subject concerned or in a closely related area in a University/Department or a recognised institute of higher learning or a minimum of two publications in recognised refereed journals in the subject in which admission is sought.  Note: The concerned subjects are Political Science or Public Administration	4.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
Ph.D.	Regional Studies	04	M.A. in any of the Social Science subjects with at least 55% marks or Equivalent Grade Or M.A. in allied subjects (with at least 60% marks) or Equivalent Grade with M.Phil. Degree in a Social Science subject/UGC JRF/Two years of teaching/esearch experience in any Social Science subject in a recognised institution of higher learning or three publications in any Social Science subject in recognised refereed journals.	2.6.2010 2.00 p.m.	9.7.2010 2.00 p.m.
Ph. D.	Sociology	12	M. Phil degree in the subject concerned and Master's degree in the subject concerned with at least 55% marks; <b>OR</b> Master's degree in the subject concerned with at least 55% marks with two years teaching experience in a degree college or two years of teaching/research experience in the subject concerned in a University department or a recognised institute of higher learning or qualified in UGC National level test for JRF Note: The concerned subjects are Sociology or Social	5.6.2010 2.00 p.m.	7.7.2010 10.00 a.m.

- Note: 1. The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.
  - $2. \quad Candidates \ possessing \ M.Phil/M.Tech./UGC-NET \ for \ Lectureship \ alone \ should \ also \ appear \ for \ the \ written \ test \ as \ they \ are \ not \ exempted \ from \ written \ from \ written \ for \ from \ written \ from \ writt$ test for admission to Ph.D courses.



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph. D.	Anthropology	06	M.A./M.Sc in Anthropology with a minimum 55% marks <b>OR</b> M.A. in allied subject with at least 60% marks; <b>AND</b> M.Phil degree in Anthropology or allied subjects <b>OR</b> UGC-JRF or equivalent qualification <b>OR</b> Two years of teaching/research experience in the subject concerned in a recognized institution of higher learning/degree college with three publications in recognized and referred research journals, in the subject in which admission is sought.	4.6.2010 10.00 a.m.	8.7.2010 2.00 p.m.
Ph.D.	Social Excl. Incl. Policy	03	M.A. in Social Sciences or Humanities subjects (with at least 55% marks) or equivalent Grade <b>OR</b> M.A. in allied subjects (with at least 60% marks) or Equivalent Grade with M.Phil Degree/UGC JRF or NET qualification for Lectureship/Two years of teaching/research experience in the subject concerned in a recognized refereed journals.	5.6.2010 10.00 a.m.	10.7.2010 10.00 a.m.
Ph. D.	Applied Linguistics	08	M.A. in the subject concerned (with at least 55% marks) or M.A. / M.Sc. in allied subjects (with at least 60% marks) with M.Phil. Degree/UGC JRF or NET qualification for Lecturership/Two years of teaching/ research experience in language / literature/translation/comparative literature/ linguistics in a recognised institution of higher learning or three publications in the subject concerned in recognised refereed journals.  OR  With at least 60% marks Or Equivalent Grade in Master's degree in any subject with two years teaching experience in a degree college in the subject concerned or a closely related area or two years teaching/research experience in the subject concerned or in a closely related area in a University/Department or a recognised institute of higher learning or a minimum of three publications in recognised refereed journals in the subject in which admission is sought.	1.6.2010 2.00 p.m.	6.7.2010 2.00 p.m.
Ph. D.	Translation Studies	08	M.A. in any subject (with at least 55% marks) with M.Phil. Degree/ UGC JRF or NET qualification for Lectureship/ Two years of teaching/ research experience in language/literature/ translation/comparative literature/linguistics in a recognised institution of higher learning or three publications in the subject concerned in recognised refereed journals.  OR  With at least 60% marks Or Equivalent Grade in Master's degree in any subject with two years teaching experience in a degree college in the subject concerned or a closely related area or two years teaching/research experience in the subject concerned or in a closely related area in a University/Department or a recognised institute of higher learning or a minimum of three publications in recognised refereed journals in the subject in which admission is sought.	3.6.2010 2.00 p.m.	7.7.2010 2.00 p.m.
Ph.D.	Sanskrit Studies	06	M.A. in Sanskrit with at least 55% marks or P.G. Diploma in Sanskrit from a recognized Institution and M.Phil Degree or qualified in UGC JRF OR M.A. in Natural Language Processing OR PG Diploma in Computational Linguistics OR PG Diploma in Linguistics OR P.G. Diploma in Manuscriptology or B.A.M.S. OR Master's degree with at least 60% marks in any subject with 2 years of teaching experience in a degree college, OR Two years of teaching/research experience in the subject concerned or closely related area in a University department or recognized institute of higher learning, OR a minimum of 3 publications in a recognized refereed journal in the subject in which admission is sought.	5.6.2010 10.00 a.m.	6.7.2010 2.00 p.m.
Ph.D	Folk Culture Studies	04	Master's degree with at least 55% marks in any of the subjects in Social Sciences, Humanities, Fine Arts, Performing Arts, and Communication with any one of the following qualifications:a) M.Phil in any of the above subjects with Folklore/Folk Culture related topicb) Qualified in UGC-NET for JRF or for Lectureship in any of the above subjects.c) 2years teaching experience in any of the above subjects in a Degree College or equivalent experience of teaching or research in a University Department or a recognized institute of higher learning.d) A minimum of three publications in any of the above subjects in a refereed journal.	7.6.2010 10.00 a.m.	6.7.2010 10.00 a.m.

- Note: 1. The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.
  - $2. \quad \text{Candidates possessing M.Phil/M.Tech./UGC-NET for Lectureship alone should also appear for the written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as they \quad are \quad not exempted \quad from written test as the following test as the followi$ test for admission to Ph.D courses.



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph.D	Management Studies	12	With at least 55% marks in Master's degree or its equivalent in Management or Commerce or Accounting (MBA, M.Com, C.A, ICWA)	4.6.2010 2.00 p.m.	6.7.2010 10.00 a.m.
Ph.D.	Psychology	04	Post Graduation Degree in Psychology or allied subjects with atleast 55% marks <b>OR</b> Qualification in UGC JRF exam in these subjects.	2.6.2010 10.00 a.m.	10.7.2010 10.00 a.m.
Ph.D.	Earth and Space Sciences	06	Master's degree in Earth / Ocean / Atmospheric Sciences, Remote Sensing or a closely related area with atleast 55% marks	3.6.2010 2.00 p.m.	7.7.2010 2.00 p.m.
Ph.D.	Materials Engineering	08	M.E./M.Tech. or equivalent Master's degree in Metallurgy, Mechanical/Production / Manufacturing Engineering, Materials Engineering, Mining Engineering, Chemical Engineering, Ceramic Engineering/ Technology, Polymer Engineering/Technology or Engineering Physics <b>OR</b> Master's degree in Science or atleast 60% in Bachelor's degree in Engineering/Technology in any of the above disciplines Candidates should have at least 60% marks in the respective qualifying exam.	7.6.2010 2.00 p.m.	9.7.2010 10.00 a.m.
M.Tech./ Ph.D.	Nano Science & Technology	08	B.E./B.Tech. or equivalent degree in Metallurgy, Mechanical/Production/ Manufacturing Engineering, Materials Engineering, Mining Engineering, Chemical Engineering, Ceramic Engineering/ Technology, Polymer Engineering/ Technology, Nano Science and Engineering/Technology or Engineering Physics OR B.S.c. or equivalent degree with Mathematics, Physics, & Chemistry followed by AMIE in Chemical Engineering, Materials & Metallurgical Engineering, Mining Engineering, Mechanical Engineering, Production Engineering or AMIIM OR Diploma in Mechanical Engineering, Metallurgical Engineering, Mining Engineering and Production Engineering followed by AMIE in Chemical Engineering, Material and Metallurgical Engineering, Mining Engineering, Mechanical Engineering, Production Engineering or AMIIM OR Master's degree in Physics, Chemistry, Geology, Mineral Processing or Materials Science.  Candidates should bave atleast 60% marks in the respective qualifying exam.	7.6.2010 10.00 a.m.	10.7.2010 10.00 a.m.
Ph.D.	Gender Studies	03	An M.A., MBA or M.Sc. in Social Sciences, Humanities, Performing Arts, Communication, Management and the Natural Sciences, with at least 55% marks, or an equivalent grade with any one of the following qualifications:  1. M.Phil degree in any of the above subjects with women's issue or gender related topics.  2. UGC JRF or NET qualification for lecturership 3. Two years of teaching/research experience in a recognized institution of higher learning 4. Minimum of three publications in a recognized, refereed Journal.	3.6.2010 2.00 p.m.	11.7.2010 2.00 p.m.
Ph.D.	Indian Diaspora	04	M.Phil degree in any subject in Social Sciences or Humanities and a Master's degree with at least 55% marks OR two years teaching experience in a degree college OR two years of teaching/research experience in the subject in migration and diaspora studies in a recognized institute of higher learning and/or research or qualified in UGC National level test for JRF. Also should have some exposure to migration and diaspora studies either in the form of a course in Indian diaspora during their M.A. degree or have some research experience.	7.6.2010 10.00 a.m.	8.7.2010 2.00 p.m.

Note:

- 1. The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.
- 2. Candidates possessing M.Phil or M.Tech,, or UGC-NET for lectureship alone should also appear for the written test as they are not exempted from written test for admission to Ph.D courses. However, candidates with ME/M.Tech. Degree are exempted from written test for admission to Ph.D in Materials Engineering.

## The University of Hyderabad

# हैदराबाद विश्वविद्यालय



Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
Ph.D.	Science, Technology, and Society Studies	04	An M.Phil. degree in the area of Social Studies of Science from the following disciplines: Sociology, Political Science, History, Economics, Anthropology and Philosophy;  OR  M.Sc degree in all branches of sciences and B.E./B.Tech.in all branches of Engineering with 60% of marks provided they submit a sample of written work of 2000 words or a published research paper in a peer reviewed journal in any area of Social Studies of Science and Technology along with the application form;  OR  Master's degree in any discipline of the Social Sciences and Philosophy with 55% marks and in any branch of Sciences and Engineering with 60% marks and have worked in an Industry/Research Organisation for atleast 3 years provided they submit a sample of written work of 2000 words or a published research paper in a peer reviewed journal in any area of Social Studies of Science and Technology along with the application form;  OR  UGC CSIR JRF holders in any of the Social Science disciplines mentioned above, Philosophy with 55% of marks or in any discipline of Physical or Biological Sciences and Engineering with 60% of marks who have done atleast one course in the area of science studies or who submit a sample of written work of 2000 words along with the application form or a published paper in a peer reviewed journal in the area of Social Studies of Science and Technology along with the application form.	7.6.2010 10.00 a.m.	9.7.2010 10.00 a.m.
Ph.D.	Buddhist Studies	05	With atleast 60% marks in Master's Degree in Buddhist Studies with at least 4 paper in Pali <b>OR</b> with alteast 60% marks in Master's Degree in Pali; <b>OR</b> M.A. in Philosophy/History with minimum of 'A' grade from University of Hyderabad with specialization in Advanced course in Buddhism; <b>OR</b> Master's Degree in Buddhist Studies or equivalent with evidence of having passed the Dhammacariya exam conducted by Government of Myanmar or Bali Sanam Luang examination conducted by Government of Thailand Under Royal Patronage or equivalent; <b>OR</b> UGC NET qualified for JRF and Eligibility for Lecturership in Buddhist Studies/Pali/Philosophy/History	2.6.2010 2.00 p.m.	8.7.2010 10.00 a.m.
Ph.D.	Gadhian Economic Thought	02	M.A. in Economics with atleast 55% marks or Equivalent Grade, <b>OR</b> M.A. with at least 60% marks or Equivalent Grades in allied subjects such as any of Social Sciences, mathematics, statistics	7.6.2010 2.00 p.m.	9.7.2010 10.00 a.m.
Ph.D.	Human Rights	02	M.A. with 55% marks in any branch of Social Sciences OR 60% marks in allied subjects (Philosophy, Psychology, Management, Education and Literature) with M.Phil. degree/ UGC JRF/two years teaching/research experience in the subject concerned in a recognized institute of higher learning or two publications in the subject concerned in recognized journals <b>OR</b> candidates with any branch of science with 60% marks in Masters degree with proven interest in Human Rights will also be considered (in the form of publications, research reports etc.)	2.6.2010 10.00 a.m.	8.7.2010 10.00 a.m.

Note:

- 1. The approved intake for Ph.D. is expected to be filled over four sessions in July 2010, October 2010, January 2011, and April 2011. Therefore, all the seats need not necessarily be filled in July 2010 alone.
- 2. Candidates possessing M.Phil or M.Tech,, or UGC-NET for lectureship alone should also appear for the written test as they are not exempted from written test for admission to Ph.D courses.

## 5-year Integrated Master's degree courses

Course	Subject	Intake	Minimum Qualifications for admission	Date and time of written test	Date and time of interview
I.M.Sc. in Sciences	Mathematical Sciences/ Physics/ Chemical Sciences/ Systems Biology	64	With a minimum of 60% marks at +2 level of education (Intermediate/CBSE/ICSE/HSC or equivalent) with Science subjects <b>Note</b> : The candidates who have come from KVPY, Science Olympiad (those who have atleast attended the training progrmame), and IIT JEE main list qualified candidates may be exempted from the written test. They may be given in lieu of the written test marks, equal to the average of the first 64 students from our entrance examination. First Rankers of different State/Central Boards at +2 level will also be exempted from the written test.	7.6.2010 10.00 a.m.	10.7.2010 to12.7.2010 10.00 a.m.
I.M.A. in Humanities	Languages (Hindi, Telugu, Urdu)/Language Sciences,	74	With a minimum of 60% marks at +2 level of education (Intermediate/CBSE/ICSE/HSC or equivalent)	4.6.2010 10.00 a.m.	10.7.2010 to 12.7.2010 10.00 a.m.
I.M.A. in Social Sciences	Economics/ History/ Political Science/ Sociology/ Anthropology	74	With a minimum of 60% marks at +2 level of education (Intermediate/CBSE/ICSE/HSC or equivalent)	7.6.2010 2.00 p.m.	10.7.2010 to 12.7.2010 10.00 a.m.
I.M.Sc.	Health Psychology	12	With a minimum of 60% marks at +2 level of education or equivalent (Intermediate/ CBSE/ ICSE/ HSC or equivalent) in Arts and Sciences	2.6.2010 10.00 a.m.	7.7.2010 10.00 a.m.
I.M.Sc.	Optometry and Vision Sciences	20	With a minimum of 60% aggregate marks in Intermediate/CBSE/ICSE/HSC or equivalent Board Examination with Science subjects	5.6.2010 2.00 p.m.	10.7.2010 10.00 a.m.
I.M.Sc.	Nursing Sciences	20	With a minimum of 60% aggregate marks in Intermediate/CBSE/ICSE/HSC or equivalent Board Examination with Science Subjects	4.6.2010 2.00 p.m.	11.7.2010 10.00 a.m.

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# Schools of Studies

# School of Mathematics and Computer/Information Sciences

The School offers facilities for intensive training and research in the basic areas of Mathematics (including Applied Mathematics), Statistics, Operations Research, and Computer and Information Sciences. The School has two constituent departments, namely:

- 1) Department of Mathematics & Statistics
- 2) Department of Computer and Information Sciences

**Prof. T. Amaranath,** Dept. of Mathematics and Statistics is the Dean of the School.

### Department of Mathematics & Statistics

The Department aims to train people who are oriented towards research and teaching in advanced areas of Mathematics and Statistics. Special attention is given to foundational topics.

The Department offers research facilities in the following areas:

- Algebra, Analysis (Complex Analysis, Functional Analysis, Global Analysis), Algebraic Geometry, Topology, Algebraic Number Theory, Dynamical Systems.
- Fluid Mechanics.
- Statistical Inference, Outliers, Regression Diagnostics, Order Statistics, Reliability, Operations Research.

### Programmes of study

The Department offers M.Sc. and Ph.D. Programmes.

The **M.Sc.** Programme is offered in three streams namely, Mathematics, Applied Mathematics and Statistics-Operations Research. This programme is spread over a period of four semesters. For each stream, there are separate core courses and electives.

The Department offers **Ph.D.** programmes in Mathematics, Applied Mathematics, Statistics and Operations Research. Admission to the Ph.D. Programme is open to both M.Phil. and M.Sc. Students. Students admitted to this programme are required to pass a few courses recommended by the Department in the first year and have to face a comprehensive viva at the end of the 1st year. Only those candidates who

qualify in the viva are eligible to continue their registration in the Ph.D. programme of the Department. They are also expected to take part in the weekly Colloquium / Seminar of the School.

#### **Entrance** examination

The entrance examinations for admission to various courses are aimed at assessing the candidate's understanding of the concepts rather than capacity for memorization.

Admission to M.Sc. (Maths/Applied Maths and Statistics-OR) is based on a written test followed by an interview. The written test consists of objective type questions only.

A majority of the questions for M.Sc. Mathematics/ Applied Mathematics will be on the following topics: Sets, sequences, series, limits, continuity, differentiation, integration, graphs of functions, coordinate geometry of two and three dimensions, group theory, vector spaces, matrices, determinants, linear transformations, rank, nullity, eigen values, system of linear equations, elementary probability and logical reasoning.

A majority of the questions for M.Sc. Statistics – OR will be on the following topics:

- Sets, Sequences, Series, Limits, Continuity, Differentiation, Integration, Graphs of Functions, Vector Spaces, Matrices, Determinants, Linear Transformations.
- Elementary Probability Events, Independent Events, Conditional Events, Bayes' Theorem, Chebyshev's Inequality.
- Random Variables and their Distributions Binomial, Poisson, Geometric, Negative Binomial, Uniform, Normal, Exponential, Gamma, Beta.
- Inference Methods of Moments and ML Estimation, Test for Mean and Variance of the normal distribution, Contingency Tables, Simple Linear Regression.
- Linear Programming Problem- Graphical Solution.

The admission will be made separately for M.Sc. Mathematics (including Mathematics and Applied Mathematics) and M.Sc. Statistics-Operations Research. At the end of the first year, the students of M.Sc. Mathematics will be given the option to choose either Mathematics or Applied Mathematics.

Note: Change of option between Mathematics and Statistics-OR is not allowed.



There will be separate entrance tests for programmes in Ph.D. Mathematics (including Applied Mathematics) and Statistics/Operations Research.

Only those who qualify on the basis of their performance in the written examination will be called for interview. Those candidates who have a UGC-CSIR/NBHM fellowship are exempted from the written exam, but have to appear for the interview. These candidates will be given a weightage of 45 marks out of 75 in lieu of the written exam. A majority of questions in the written test for admission to **Ph.D. Programme (Mathematics, Applied Mathematics)** will be at the level of M.Sc. in the areas: Real Analysis, Complex Analysis, Algebra, Linear Algebra, Topology, Functional Analysis, Ordinary and Partial differential equations, Calculus of Variations, Classical Mechanics, Numerical Analysis.

For **Ph.D.** (Statistics/**OR**) the questions will be at the level of M.Sc. in the areas: Probability theory, Statistical Inference, Sampling techniques, Stochastic Processes, Linear Models, Design & Analysis of experiments, Multivariate analysis, Linear Programming, Combinational Optimization.

The questions need not only be of the objective type and may require writing out answers. Credit will be given more to the understanding of concepts rather than to mechanical proofs of the results.

For a **Ph.D.** in **OR**, a person may appear for the admission test either in Applied Mathematics or Statistics/OR.

#### Infrastructure facilities

The Department has good computing facilities. There are four labs. A Statistics lab with 15 PCs and 2 UGC (SAP) labs with 25 Pentium –IV and another Lab with 10 Pentium IV.

These labs have licensed versions of Mathematica, SPSS 17.0 and SYSTAT 12

The University Library has been recognized as a Regional Library by the National Board for Higher Mathematics (NBHM).

### **Faculty**

#### **Professors**

**V.Kannan,** Ph.D.(Madurai) F.A.Sc., F.N.A. - Topology and Analysis (**Pro-Vice-Chancellor - 1**)

**R.Tandon,** Ph.D.(Yale) - Algebraic Number Theory, Cryptology (Head of the Department)

**T.** Amaranath, Ph.D. (I.I.T.Madras) F.N.A.Sc. - Fluid Mechanics (**Dean of the School**)

Mirza Iftekhar Beg, Ph.D. (AMU) - Order Statistics

V. Suresh, Ph.D. (TIFR, Mumbai) F.A.Sc. – Algebra & Algebraic Geometry

**S. Kumaresan,** Ph.D. (TIFR, Mumbai) – Differential Geometry, Analysis, Pedagogy

B.Sri Padmavati, Ph.D. (Hyderabad) - Fluid Dynamics

Jaya N. Iyer, Ph.D. (Mumbai) - Algebraic Geometry

#### Readers

**Sajal Kumar Ray,** Ph.D. (I.I.T.Kanpur) - Functional Analysis and Applications

**Sushma M.Bendre,** Ph.D. (Pune) - Outliers and Regression Diagnostics

**G.Lakshma Reddy,** Ph.D. (Madras) - Complex Analysis and Applications

R. Radha, Ph.D. (IIT, Bombay) – Fluid Dynamics

**B.Shobha,** Ph.D. (I.I.T.Delhi) - Statistical Inference and Reliability

**M.Sumanth Datt,** Ph.D. (Hyderabad) - Hopf Algebras, Algebraic Groups

#### Lecturers

Saroj Panigrahi, Ph.D. (Berhampur) – Differential Equations

Usha Mohan, Ph.D. (ISI, Bangalore) – Operations Research

**Vishnu Namboothiri K,** Ph.D. (Hyderabad) – Algebraic Number Theory

**T.K.S. Moothathu,** Ph.D. (Hyderabad) – Topological Dynamics

Sudheesh Kumar Kattumannil, Ph.D. (Cochin) Reliability

#### Honorary Professor

M.S.Raghunathan, F.R.S. – Lie groups and algebraic groups

### Dr. Homi J. Bhabha Chair Professor

**B.L.S. Prakasa Rao,** Ph.D. (MSU, USA) F.A.Sc; F.N.A; F.N.A.Sc. – Probability, Inference & Stochastic Processes

### Adjunct Professor

**Prof. P. Bhimasankaram,** Ph.D. (ISI, Calcutta) -Applied Analysis Linear Models, Multivariate Analysis, Linear Algebra



# Department of Computer and Information Sciences

The Department of Computer and Information Sciences offers high quality post-graduate teaching and research programmes in all major areas of Computing, Information Science and Artificial Intelligence. The department has the unique distinction of offering M.Tech. programmes in Artificial Intelligence, and in Information Technology with specialisation in Banking Technology and Information Security. The current research areas include Computer Networks and Distributed Processing, Data Base Management Systems, Software Engineering, Computer and Network Security, Mobile Computing, Logic, Decision Support Systems, Enterprise Resource Planning, E-Commerce, Geographical Information Systems, Data Warehousing and Data Mining, Bioinformatics, Artificial Intelligence, Machine Learning, Cognition, Natural Language Engineering, Speech Processing, Image Processing, Pattern Recognition, Vision, Parallel & Grid Computing. The department has a very vibrant Ph.D programme with more than 65 registered students as on date.

The Department maintains active contacts with both industry and research labs and participates in developing state-of-art computing systems. Department of Science and Technology (DST), Govt. of India has recognized the Department's research contribution by funding it under FIST programme.

For strengthening research, it has initiated academic collaboration with United Nations University/International Institute of Software Technology, Macau and University of Trento, Italy. Recently, the Department has signed MoUs with NISG (National Institute for Smart Government), Anna University, IBM (ISTL), Sierra Atlantic and Altair Engineering to promote research and teaching programme in Business Processes Re-engineering and Middleware Technology.

The Department currently executes several research projects (funded by MIT, UGC, ISRO, DRDO, MHA, DST, INCOIS etc.) on Content-Based Image Retrieval, Natural Language and Speech Processing, Grid Computing, Neural Networks, Formal Methods in Software Engineering, Business Process Re-engineering, Forensic Document Analysis, System Security and Grid Middleware etc. Ph.D. students may have opportunity to work at University of Trento, Italy; National University of Singapore; Freie University, Berlin etc. As the department always has a high priority for research, it strongly encourages fresh and brilliant students to participate in the above exciting research programmes as full-time Ph.D. students.

GATE fellowships may be considered for the eligible M.Tech students by the UGC/AICTE as per their norms. In addition, financial assistance is available for all the students admitted to various programmes. Conditions apply.

The quality of education in the department not only attracts high calibre students from different parts of our country but also a good number of international students.

### **Programmes of Study**

The Department offers different programmes of study leading to: M.C.A., M.Tech. (Computer Science), M.Tech. (Artificial Intelligence), M.Tech. (Information Technology) with specialization in Banking Technology & Information Security in collaboration with IDRBT and Ph.D. in Computer Science.

In addition, the department also participates in the **M.Tech.** programme in Computational Techniques run by School of Physics, **M.Tech.** (Bio-Informatics) of School of Life Sciences and 5-year Integrated **M.A.** and **M.Sc.**, courses.

In all the courses, classroom teaching is supplemented with seminars, term papers, minor projects and assignments.

The **M.C.A.** Programme aims to prepare graduates in all the major areas of computer science, relevant aspects of mathematics and management so that they can take up both technical and managerial positions in industry. The training is rigorous and involves five semesters of course work and one semester of project work.

M.Tech. (Computer Science) is a four-semester course including two semesters of course work and two semesters of project work. This programme is meant for graduates in engineering disciplines and postgraduates in related sciences and as such it includes both fundamental topics and advanced topics for specialisation.

M.Tech. (Artificial Intelligence) is also a four-semester course including two semesters of course work and two semesters of project work. This programme is meant for students already well equipped in computing sciences and as such imparts advanced training in all the major areas of artificial intelligence and other emerging technologies, such as machine learning, data mining, etc.

M.Tech. (Information Technology) is a four-semester programme including two semesters of course work and two semesters of project work meant for graduates in engineering discipline and postgraduates in related sciences. This unique M.Tech. programme in Information Technology with specialization in Banking Technology and Information



Security aims at imparting in-depth knowledge and state-ofart expertise to the students through innovative learning supported by high calibre research and technology leadership to create a pool of responsible and resourceful IT professionals, in particular, for the financial-banking sector.

The general information on admission of sponsored candidates and Foreign nationals in M.Tech. is as follows:

Sponsored candidates: Employees with a minimum 2 years of work experience in IT companies registered with STPI or NASSCOM or Central Government Organisations can apply for M.Tech. admission in CS/AI. For M.Tech. (IT) those working in Banks/Financial institutions with a minimum of 3 years work experience will be considered. Candidates should have requisite qualifications for admission. Sponsored candidates are required to appear in interview only. A candidate seeking admission in this category into M.Tech. (CS/AI) must submit (along with application) the organizations willingness to pay One Lakh Rupees per candidate (one time) to the development fund of the department. Candidates are required to pay usual tuition and other fees as prescribed by the University for other students.

**Foreign candidates:** Foreign nationals and the Non Resident Indians seeking admission in M.Tech. programme should have required qualification. Candidates should have ability to communicate in English. In order to support this ability, a good score in TOEFL is to be submitted at the time of admission. In addition, students should submit a letter of reference.

Note: Sponsored and foreign candidates seeking admission in the M.Tech. (CS/AI/IT) programmes are exempted from the GATE qualification.

The **Ph.D.** programme offered on full time, part time and external will be based on the approved norms of the University. An idea about the areas of research can be obtained from the departmental objectives and faculty profile. A few fellowships are provided by IDRBT for selected research scholars admitted to the Ph.D. programme. Conditions apply.

**Foreign candidates:** Foreign nationals seeking admission in Ph.D. programme should have required qualification. Candidates should have ability to communicate in English. Following are the guidelines for admission to Ph.D.

 Students residing in India have to appear for Interview, otherwise ■ Both GRE and TOFEL scores are to be submitted at the time of admission

### **Entrance examination**

Admission to the **MCA** programme is based on the written test conducted by the University. The written test consists of objective type questions in two parts. Part 'A' and Part 'B'. Part 'A' deals with general mental ability (consisting of items on reasoning, analysis, comprehension and synthesis). Part 'B' deals with mathematical topics such as Sets, Relations, Integration, Differentiation, Analytical Geometry, Trigonometry, Vectors, Matrices, Determinants, Differential Equations, Elementary Probability and Statistics, Number Systems, Data Representation, Algorithms and Flowcharts.

Admission to **M.Tech.** in Computer Science, Artificial Intelligence and Information Technology courses is based on only the GATE scores in Computer Science and Information Technology. **No written examination or any interview will be conducted.** GATE scores, in order of merit, will be the basis for admission.

Division of students between Computer Science, Artificial Intelligence and Information Technology is based on the options they have exercised at the time of applying. Request for change of option will not be entertained. Fees structure for all the three streams of M.Tech. programme is uniform.

The written test for admission to the **Ph.D.** programme will have objective type questions, short answer questions, descriptive questions and technical comprehension. The written test covers the areas of Computer Organisation, Computer Programming, Discrete Mathematics, Data Structures, Algorithms, Operating Systems, Database Management Systems, Graph Theory, Computer Networks, Automata. The number of candidates called for interview is four times the available seats. Candidates must indicate their research interest. Foreign students are required to submit past academic records, three reference letters, and statement of purpose. They must have good ability to communicate in English. In order to support the claim for admission into Ph.D. following guidelines are stipulated:

- Students residing in India have to appear for Interview, otherwise
- Both GRE and TOFEL scores are to be submitted at the time of admission

At the time of interview, candidates must come prepared with a tentative research plan (a write-up of a maximum size of 4 pages).



### Course work for Ph.D. programme

The candidates admitted to Ph.D. programme in the department will be governed by the following rules:

- 1. All candidates admitted to Ph.D. in the department, whether full time, part time or external, are required to pass the course work prescribed including comprehensive viva within a period of 1 year from the date of admission. Initial admission is provisional and subject to candidate passing the course work including comprehensive examination. In case a candidate is unable to pass the course work comprehensive exam within 1 year which may be extended for another spell of 1 year in exceptional cases, his/her admission stands automatically cancelled.
- 2. The comprehensive exam will be a written examination and will consist of four papers (2 core papers and 2 elective papers), to be decided by the Doctoral Committees of the candidates concerned.
- 3. Passing the comprehensive examination means passing each of the papers with a minimum of 50% marks.
- 4. Comprehensive exams will be conducted twice a year, ie. in January and July. All the four papers can be cleared in a single sitting or can be cleared in two different sittings.
- 5. Supplementary examination will be conducted once in a year say before 20th of August every year. Students of the last year can take supplementary examination for the course he/she has failed.

On successful completion of the four papers, the candidate will be allowed to continue the registration for Ph.D.

### Infrastructural facilities

The facilities at the Department include a variety of computing machines such as SUN Workstations, High Speed Pentium based Multi-Media Personal Computers with high precision Graphics Cards, network support and cluster systems; running Linux, Windows NT, Windows 98 etc., all equipped with the latest software packages. Image Processing equipment such as flat-bed scanners, 20" high resolution monitors, CCD-Cameras, CD-writers, Lasers and Deskjet Printers is also available to students.

Under DST-FIST programme, the Department has set up Software Engineering lab, Spoken Language Processing lab, Network & Security Systems lab besides Embedded Systems Lab, Computer Vision and Image Processing Lab. It also hosts a resource Center for Telugu Language funded by MCIT, Govt. of India.

Software such as 3D-Studio Max, Adobe Premiere, Dragon Naturally speaking software, multi-lingual text, MS Windows NT Back office, MS Visual Studio 6.0, MS Office 2000, Red Hat Linux etc. are available in the department. These acilities are also continually augmented through funded research projects as well as industrial consultancy projects. Apart from the departmental facilities, there is also a well-equipped University Computer Centre and state-of-the-art high performance computing facilities at CMSD.

## **Faculty**

### **Professors**

**Arun Kumar Pujari,** Ph.D. (I.I.T.Kanpur) - Combinatorial Algorithms, Data Mining, Logic and Reasoning. (on EOL as Vice-Chancellor, Sambalpur University)

**Arun Agarwal,** Ph.D. (I.I.T, Delhi) B.Tech. (I.I.T Delhi), SMIEEE, FIETE, Image Processing, Computer Vision, Pattern Recognition and Neural Networks, Grid Computing. (Head of the Department).

**Hrushikesha Mohanty,** Ph.D. (I.I.T.Kharagpur) - Distributed Computing, Software Engineering, Business Process Re-engineering, Mobile Computing. (on Sabbatical Leave)

**P.N. Girija,** Ph.D. (SVU) — Speech Synthesis, Speech Rcognition, Spoken Dialog Systems, Human Computer Interaction, Intelligent Agents

**K.Narayana Murthy,** Ph.D. (Hyderabad) - Natural Language Engineering, Speech Technologies. (on EOL).

**Chakravarthy Bhagvati,** Ph.D. (RPI, USA) - Image Processing, Computer Vision, Pattern Recognition.

**C. Raghavendra Rao,** Ph.D. (Osmania University), - Simulation & Modeling, Knowledge Discovery.

**Bapi Raju Surampudi,** Ph.D. (UTA, USA) - Neural Networks, Cognitive Modeling, Pattern Recognition.

### Readers

**P.R.K. Murti,** Ph.D. (I.I.T.Kharagpur) M.B.A (KUL, Belgium), L.L.M.- Decision Support Systems, e-commerce, Finance & Legal Info Systems.

**Atul Negi,** Ph.D. (Hyderabad) M.S.(I.I.Sc., Bangalore) - Pattern Recognition and its Applications, Computer Networks.

**Rajeev Wankar,** Ph.D. (DAVV, Indore) – Parallel & Grid Computing.





**S. Durga Bhavani,** Ph.D. (University of Hyderabad) - Analysis of Algorithms, Fractal Geometry, Mathematical Modeling

**Alok Singh,** D.Phil. (University of Allahabad) - Combinatorial Optimization using Heuristic & Metaheuristic technoiques

**Siba Kumar Udgata,** Ph.D. (Berhampur) - Mobile Computing, Networks and Architecture

### Lecturer (Senior scale)

**T. Sobha Rani,** M.Tech. (JNTU) - Bioinformatics, Machine Learning Techniques, Language Processors.

### Lecturers

**Y.V. Subba Rao,** M.Tech. (ISI, Kolkata) Cryoptography, Theory of Computation, DBMS, Data Forensics.

**Wilson Naik,** M.Tech.(JNTU), Network Forensics, Systems Security, Networking.

- **P. Anupama,** M.S., (UMBC, USA), Networking, Systems Security, Operating Systems. (on Study Leave)
- **K. Swarupa Rani,** MCA(SKU), M.Phil(CS) Incremental Mining, Time-Variant Databases
- **M. Nagamani,** MTech (CS) (JNTU, Hyderabad) Speech Processing, Information Retrieval, Intelligent tutoring system, Cognitive psychology, Embeded Systems.

**PSVS Sai Prasad,** M.Tech (Sri Satya Sai University, Prasanthi Nilayam) – Neural Networks, Speech Recognition, Unix Internals

**Rajendra Prasad Lal,** M.Tech (Computer Applications, IIT-Delhi) – Graph Algorithms, Mathematical Programming,

Computational Geometry.

**N. Rukma Rekha,** M.Tech (CSE), (Andhra University) – Object Oriented Design with UML, Cryptography, Pervasive Computing.

**Vineet C. P. Nair,** Ph.D. (Griffith University, Australia) – Knowledge Representation and Reasoning, Multi-Agent Systems, Logics in Artificial Intelligence.

### Faculty of IDRBT

**V.N. Sastry,** Ph.D. (IIT, Kharagpur), Networks, Multiple Criteria Optimization, Risk Modeling, Fuzzy Control.

**V. Radha,** Ph.D (University of Hyderabad), Computer Applications, Multimedia, Databases and Internet.

**M.V. Sivakumaran,** MBA (IGNOU), Customer Relationship Management, Internet and Intranet Technology, Total Branch Automation Packages.

**Mahil Carr,** Ph.D. (University of Hong Kong), Software Engineering, Programming Languages, Research Methodology.

**M.V.N.K. Prasad,** Ph.D. (B.H.U., Varanasi), Image Processing and Security.

**Vadlamani Ravi,** Ph.D. (Osmania University), Fuzzy Optimization & Fuzzy Rule based classification models and applications.

### **Visiting Professors**

**B.L. Deekshatulu,** Ph.D. (IISc, Bangalore, Fellow IEEE) – Remote Sensing, Digital Image Processing & Pattern Recognition



# **School of Physics**

The School of Physics is a centre of excellence for multi-disciplinary and interfacial research and teaching in diverse fields ranging from nonosciences to cosmology, photonics to spintronics, quantum computing to complex systems and biology. The School has been selected by the UGC as the Centre of Advanced Study (CAS) to strengthen its teaching and research programmes. The School of Physics has been chosen for level II funding under the FIST scheme of DST in a nation wide competition. The DST recognized the School as one of the five founding centres in the country for the Theoretical Physics Seminar Circuit (TPSC). The School has been recognized as the 'Centre for Excellence' by the Third World Academy of Sciences, Trieste, Italy.

The School of Physics has developed high quality teaching programmes at the M.Sc., M.Tech. and Ph.D. levels with student-teacher ratio highly favourable for individual attention.

The School has vigorous research programmes to train Ph.D. scholars and has achieved national and international recognition in the areas of condensed matter physics, high energy physics, non-linear optics, quantum optics and laser physics, materials science, Nanosciences and electronics science. The areas of research include high Tc superconductivity, magnetism, phase transitions, critical phenomena, glasses and ceramics, liquid crystals, thin films, ion-solid interactions, semiconductors and super lattices, nanostructured materials, low-dimensional systems, localization, percolation, molecular dynamics, neural networks, quantum field theory, quantum chromo dynamics, CP violation, heavy quarks, non-linear dynamics, quantum computing, stochastic-quantization, modern quantum optics including Femto second laser experiments and theory, VLSI and Signal processing, ferroelectrics and microwave devices.

### Prof. C. Bansal is the Dean of the School.

### **Programmes of Study**

The School offers Integrated M.Sc. (Physics), M.Sc. (Physics), M.Tech. in Computational Techniques, M.Tech. in IC Technology, Ph.D. in Physics, and Ph.D. in Electronics Science.

Integrated M.Sc. (Physics): This programme is of five years (10 semesters) duration. The courses taken by the students during the first six semesters are Mechanics and Properties of Matter, Kinetic Theory and Thermodynamics. Waves and Optics, Electromagnetic Theory and Modern Physics, and Atomic / Molecular Physics. Emphasis is on tutorials and problem solving.

M.Sc (Physics): This programme is of four semesters duration. The first three semesters cover the fundamentals of the subject. The courses taken by all the students include Classical Mechanics, Quantum Mechanics, Mathematical Methods, Nuclear Physics, Introductory Particle Physics, Solid State Physics, Laser Physics, Computer Applications, Electronics, Electrodynamics, Statistical Mechanics, besides laboratory courses in Electronics, Solid State Physics, Digital Electronics, Lasers, Microwaves, Modern Physics and Nuclear Physics. There is a strong emphasis on problem solving and learning experimental techniques.

During the fourth semester, students may opt for one of the following specializations:

- a) Particle Physics and Field Theory
- b) Condensed Matter Physics
- c) Laser Physics and Modern Optics

In addition, a student can opt for a course of 100 maximum marks among the current topics run in any inter-disciplinary subject/department of the University. Each student also has to do a project work of 6 credits in the fourth semester.

M.Tech. in Computational Techniques: This is a four semester programme open to students with Master's degree in Physics or related areas. The objective of this programme is to train physicists in modern areas of computational techniques suitable for solving physics problems using simulation methods. The first two semesters involve formal instructions, while the third and fourth semesters are devoted to project work. The subjects covered include: numerical techniques, mathematical methods, computer organization, data structures, programming methodology, Monte Carlo techniques and molecular dynamics. The second semester offers four electives to be chosen from: evolutionary computing, disorder, wavelet transforms, quantum computing, cellular automata, direct discrete methods, file structures, image processing, pattern recognition, speech recognition, algorithms and computer graphics. programme is being offered with the participation of the Department of Computer and Information Sciences of the University.

The project work in the third and fourth semesters may be carried out in School of Physics or Department of Computer and Information Sciences, or other recognised R & D centres in Hyderabad.

M.Tech. (I.C. Technology): This is a four semester programme with two semesters of course work and two



semesters of project work. The programme is designed to impart broad based knowledge in Integrated Circuit Technology. All cutting edge technology aspects involving design techniques, fabrication techniques, numerical techniques required in the field of I.C. Technology will be covered. The curriculum involves theory courses covering semiconductor physics, digital systems design, special IC design (such as DSP), rf/microwave IC's, IC fabrication techniques, MEMS, nano-devices, integrated optics and computer simulation techniques. The curriculum also includes laboratory courses covering all the above subjects. In addition to existing Faculty, experts in this area from both Govt. and private laboratories / industries will be participating in this programme, both in teaching as well as in the project work.

**Ph.D.:** Admission to the Ph.D. programme is open to M.Sc, M.Phil., and B.E./B.Tech. graduates. All students admitted into the Ph.D programme are required to undergo course work. Satisfactory completion of course work with at least 50% marks is a prerequisite for confirmation of Ph.D registration. This is a research programme with students undertaking research under the supervision of a Faculty member, on a topic approved by the School. The student is required to show satisfactory progress throughout the period of research as well as fulfill other requirements prescribed by the School. The Ph.D. requirements include prescribed course work and submission of research results in the form of a thesis and defense of the thesis in a viva voce.

### **Entrance examination**

The test for **M.Sc.** (**Physics**) will mainly be in Physics (mechanics, general properties of matter, kinematics, heat and thermodynamics, wave motion, electricity and magnetism, light, modern physics, electronics and measurements) and mathematics (algebraic equations, differential and integral calculus including limits, vectors, matrices and determinants, elementary differential equations and elementary functions and their graphs). Short listed candidates from among those who qualify in the written test have to appear for an interview.

For admission to **M.Tech.** in Computational Techniques, a valid GATE score in Physics would be taken as a qualifying examination. Candidates would be called for interview based on these scores and selections would be made based on the GATE score and interview. NET qualified candidates for JRF would also be eligible to appear for interview for admission to this course.

For admission to **M.Tech. in IC Technology,** the eligibility criterion will be a valid GATE score in one of the following

subjects: Electronics and Communication Engineering, Instrumentation Engineering and Physics. Short listed candidates will be called for interview.

There will be two separate entrance examinations – one for Ph.D. (Physics) and another for Ph.D. (Electronics Science).

For admission to the **Ph.D.** in Physics, there will be a written test and an interview. The material covered in the written test will be based on the typical M.Sc. syllabi of Indian Universities i.e., Classical Mechanics, Relativity, Thermodynamics and Statistical Mechanics, Electromagnetic Theory, Quantum Mechanics, Modern Physics, Solid State Physics, Electronics, Complex Numbers and Integration, Matrices, Calculus and Differential Equations. The examination will consist of objective type questions. The written test will be followed by an interview for the short listed candidates.

For admission to **Ph.D.** in **Electronics Science**, the written test will be based on syllabi at M.Sc. and B.E./B.Tech. level covering electronics and physics such as Basic Mathematics, Electromagnetic theory, Solid State Physics, Quantum Mechanics, Optics, Heat & Thermodynamics, Semiconductor Devices, Circuits, Digital Electronics, microprocessors, microwaves, Control Systems, Signal Processing, Communications, Numerical Analysis, error estimates, graphs, etc. The examination will consist of objective type questions. The written test will be followed by an interview for the short listed candidates.

### Infrastructural facilities

Materials preparation and characterization facilities including Nanocluster deposition systems, pulsed laser deposition system, Nano Indenter, C- V & I- V measurement system, Wafer inspection microscope, Rheometer, Micro-Raman Spectrometer, Scanning Probe Microscope, crystal growth equipment, cutting and surface polishing equipment, high vacuum coating machine, RF sputtering units, arc-melting furnace and RF induction furnace, temperature controlled ovens, continuous flow cryostat and electronic equipment for measurement of electrical and thermal transport properties, facilities to investigate field cycling NMR spectrometer, pulsed NMR, simultaneous measurement of electro optic and dielectric properties, vibrating sample magnetometer, closed cycle helium refrigerator, INEL X-ray diffractometer with wide angle position sensitive detector, atomic force microscope, vector network analyzer are some of the facilities available. Laser spectroscopy using pulsed Nd-YAG high power helium-neon and nitrogen lasers, dye laser and Femto second laser facilities, CW tunable Ar ion



laser, ESR, NMR, Mossbauer and laser Raman spectrometers are also available. Varieties of EDA tools (complete VLSI tools from FPGA implementation, PCB layout design tools) are also available. Microfabrication facilities, including mask aligner, scriber, wire bonder, profiler, spin coater, have recently been set up. A liquid Helium plant has been commissioned. A Carl Lewis Scanning Electron Microscope and X-ray reflectometry system is being set up. Physical Properties Measurement System & Magnetic Properties measurement system are available in the Centre for Nanotechnology.

### Computer facilities

A number of PCs are networked through LAN with the Computer Centre so that internet and E-Mail facilities are directly accessible from laboratories and Faculty offices. The School attracts substantial funding from agencies such as UGC, CSIR, DST, DAE, DRDO, ISRO and DOE for research work. The school has a teaching laboratory with 15 terminals connected to a Pentium server.

CMSD/HPCF computer facility is used for simulation work.

### **Faculty**

### **Professors**

- **A.P. Pathak,** Ph.D.(I.I.T.Kanpur), F.N.A.Sc., F.Inst.P. (London), C.Phys. -Atomic Collisions in Solids, Radiation Damage, Surface Physics, Superlattices & Heterostructures (T&E)
- **S.N. Kaul,** D.I.I.T., Ph.D. (I.I.T.Kharagpur), F.N.A., F.A.Sc., C.Phys., F.Inst. P (London) -Condensed Matter Physics, Phase Transitions, Magnetism, Critical and Re-entrant Phenomena (E)
- **V.S.S. Sastry,** Ph.D.(I.I.Sc., Bangalore) -Condensed Matter Physics, Magnetic Resonance, Computer Simulations (E)
- **A.K. Kapoor,** Ph.D. (I.I.T.Kanpur) -Elementary Particles, Quantum Field Theory, Path Integrals (T)
- **Vipin Srivastava,** Ph.D. (Roorkee) -Condensed Matter Physics, Neural Networks, Brain Function Modeling (T)
- **C. Bansal,** Ph.D. (TIFR, Bombay) Condensed Matter Physics, Phase Transformations, Mossbauer Spectroscopy, Nanomaterials (E) (**Dean of the School**)
- **S.P. Tewari,** Ph.D. (Delhi) Quantum Optics, Nonlinear Optics (T)
- **S. Chaturvedi,** Ph.D. (Waikato, NZ) F.A.Sc. F.N.A.Sc. Space Quantum Field Theory, Stochastic Processes, Non-Equilibrium Phenomena (T).

**C.S. Sunandana,** Ph.D. (I.I.T.Madras) -Condensed Matter Physics (E)

**Rajender Singh,** Ph.D. (Delhi) -Condensed Matter Physics, Ultrasonics, Superconductivity and Magnetism (E)

- S. Dutta Gupta, Ph.D. (Moscow) Nonlinear Optics (T)
- **D. Narayana Rao,** Ph.D. (I.I.T.Kanpur) -Non-linear Laser Spectroscopy (E)

**Bindu A Bambah,** Ph.D. (Chicago) – Particle Physics, Non Linear Dynamics (T)

**V. Seshubai,** Ph.D. (I.I.T.Madras) -Condensed Matter Physics, Magnetism and Superconductivity (E)

**Ashok Chatterjee,** Ph.D. IACS, (Jadavpur) -Condensed Matter Physics (T)

- M. Siva Kumar, Ph.D. (Madras) Quantum Field Theory (T)
- **G. Rajaram,** Ph.D. (TIFR, Bombay) -Condensed Matter Physics, Magnetism and Superconductivity, Device Fabrication.
- **K.P.N. Murthy,** Ph.D. (Hyderabad) Equilibrium and non-Equilibrium Statistical Physics, Monte Carlo Simulation (T)

#### Readers

P. Ananta Lakshmi, Ph.D. (Hyderabad) - Quantum Optics (T)

Suneel Singh, Ph.D. (Hyderabad) - Quantum Optics (T)

- **K.C. James Raju,** Ph.D. (IIT, Madras) Microwave Electronics, Feroelectric thin films, RF MEMS, Microwave materials and characterization techniques (E)
- **M.** Ghanashyam Krishna, Ph.D. (IISc, Bangalore) Nanostructured Materials, Thin Films and Sensors (E)
- P.K. Suresh, Ph.D. (Cochin) Cosmology (T)

**Janaki Balakrishnan,** Ph.D. (Delhi)— Dynamical systems, stochastic processes, problems motivated by biology, quantum field theory (T)

Nirmal K Viswanathan, Ph.D. (Hyderabad) – Photonics Devices – Fiber optic devices, Polymer optic devices – Optical interferometry (E)

Rukmani Mohanti, Ph.D. (Utkal)-High Energy Physics (T)

### Lecturers

**Samrat L. Sabat,** Ph.D. (Berhampur) – Embedded Systems, Digital Signal Processing (E & T)



**Ashok Vudayagiri,** Ph.D. (Hyderabad) – Quantum Optics, Laser Cooling, Quantum Information (E)

Surajit Dhara, Ph.D. (RRI Bangalore)-Liquid Crystals) (E & T)

**S. Srinath,** Ph.D. (Hyderabad) – Condensed matter physics, Magnetic nanostructures, Multilayers/thin films, Magnetic oxides, Multiferroics (E)

**E.Harikumar,** Ph.D. (Hyderabad) – Quantum field theory and gravity (T)

**S. Sanyal** (IOP, Bhubaneswar) - Cosmology, Heavy – ion Collisions (T)

### **Guest Faculty**

**P.A.** Govindacharyulu, Ph.D. (I.I.Sc.) – Semiconductor Device, Physics, IC Technologies. Professor, ECE Dept., Vasavi Engineering College, Hyderabad.

### **Distinguished Faculty**

S.Chandrasekhar Chair Professor

**A.K. Bhatnagar,** Ph.D. (Maryland) – Materials Science (E)

### **Honorary Professors**

**Professor Horst Hahn,** Director, Institute of Nanotechnology, Karlsruhe, Germany

Professor T.V. Ramakrishnan, FRS



## **School of Chemistry**

School of Chemistry is a dynamic centre for research in the frontier areas of chemical sciences. The emphasis at the curricular level is to give a broad coverage of all branches of chemistry in keeping with the interdisciplinary nature of the subject today.

The M.Sc. degree course has no specialization; however students take elective courses and a research project in a chosen area in the IV semester. This gives students completing the M.Sc. degree course freedom to take up research in a variety of specialized fields including those areas where Chemistry intersects with biology on the one hand and with physics on the other. Within the mainstream, there is an emphasis on areas such as synthetic, supramolecular and materials chemistry, bioorganic and medicinal chemistry, computational chemistry and chemical physics, and a wide variety of subjects within the inorganic domain.

The School of Chemistry has made notable impact on the chemical research scene and is widely acclaimed at the international and national levels. The School receives support from a large number of research grants from funding agencies like DST and CSIR, international collaborative projects and industrial projects. The School has been identified by DST for support under the new FIST programme at Level II. UGC has selected the School of Chemistry as a Centre for Advanced Studies under Special Assistance Programme effective from 1.4.2004.

UGC has selected School of Chemistry to establish the UGC-Networking centre to facilitate short term visits for 50-60 researchers (research scholars and teachers) and students (M.Sc. and B.Sc.) from other Universities. Further information and details of the program can be obtained from the School website.

The School website can be reached at http://202.41.85.161/ or www.chemistry.uohyd.ernet.in

### Prof. D. Basavaiah is the Dean of the School.

### Programmes of study

The School admits students to the **M.Sc.** and **Ph.D.** Programmes

The **M.Sc.** programme lasting four semesters comprises 3 courses each in Organic, Inorganic, Physical and Theoretical Chemistry, 2 laboratory courses each in Organic, Inorganic and Physical Chemistry and elective courses. The syllabus lays emphasis on current developments in chemical science. Some of the unique features of the programme are special

courses in Instrumentation and Computer Applications, Mathematics for Chemists, Materials Chemistry, Biological Chemistry and also project work by each student in the IV semester. The syllabus is upgraded continuously. The School also participates in the five year Integrated M.Sc. programme run by the Centre for Integrated Studies.

The **Ph.D.** programme is entirely research-oriented in which a student undertakes research under the guidance of the Faculty of the School in an area chosen by him/her and approved by the School. The specific research areas of the individual Faculty members are mentioned against their names. Students admitted to the Ph.D. programme are required to undergo course work or take some remedial courses depending on their background and the demands of their research. Candidates who have passed the **NET** of the **CSIR/UGC** with a **JRF** qualification may join for research with an interested member of the Faculty of the School at any time of the year for claiming the fellowship. However, admission will be considered as per the rules of the University four times in a year according to an approved schedule.

### Financial Support

M.Sc. and Ph.D. students who do not receive any other financial support, will be provided scholarships by the University.

### Infrastructure facilities

The School is well equipped with a wide range of sophisticated analytical equipment such as infrared and UVvisible spectrometers, spectrofluorimeters, single photon counting spectrofluorimeter, GC-MS and LC-MS chromatographic systems, CHNS elemental analyzer, polarimeter, electrochemistry equipment, isothermal titration calorimeter, high sensitivity differential scanning calorimeter laser flash photolysis setup, atomic force microscope and dynamic light scattering apparatus, Confocal Raman Microscope and small and wide angle x-ray diffractometer. The NMR facility in the School consists of 200, 400 and 500 MHz spectrometers. A single crystal X-ray diffractometer facility was established in 1997; it is now supplemented with two CCD detector based diffractometer. The School also uses the facilities at the Central Instrumentation Laboratory, (Xband ESR spectrometer, circular dichroism spectrometer, powder X-ray diffractometer, scanning electron microscope, differential scanning calorimeter, confocal microscope and vibrating sample magnetometer) and Centre for Nanotechnology (transmission electron microscope, rapid thermal annealing and Scaning near field optical microscope). The School has ample computing facility consisting of a large number of workstations and personal computers; the state-



of-the-art high performance computing facility available at the Centre for Modeling, Simulation and Design is also extensively used by the School. The internet and email facility provided by the University is effectively utilized by the School for scientific correspondence work. Access to most of the important journals is available online.

### **Entrance Examinations**

The written test for admission to the **M.Sc.** degree course consists of objective type questions. Candidates are expected to have sound knowledge of **B.Sc.** level general Chemistry and basic Mathematics. The question paper for the test consists of two parts. **Part I** carries 25 marks and **Part II** carries 75 marks. The paper consists of multiple choice questions and negative marks are imposed for wrong answers.

The written test for **Ph.D.** consists of two parts, Part I contains objective type questions and carries 25 marks. This part consists of multiple choice questions and negative marks are imposed for wrong answers. Part II contains short answer questions and numerical problems and carries 50 marks. Part II contains 30 questions (10 each from Organic, Inorganic and Physical Chemistry) at the M.Sc. level; the candidate is required to answer any 10 questions.

For admission to M.Sc. and Ph.D., the short listed candidates among those who qualify in the written test have to appear for an interview.

## **Faculty**

### **Professors**

**Kalidas Sen,** Ph.D. (IIT, Kanpur) – Confined quantum systems, Eigenspectral, information theoretical and complexity studies

**Gautam R. Desiraju,** Ph.D. (Illinois), F.A.Sc., F.N.A.Sc., F.N.A., F.T.W.A.S. – Structural Chemistry (On leave)

- **M. Periasamy,** Ph.D. (IISc, Bangalore), F.A.Sc., F.N.A.—Organic Chemistry, Organometallics and Chiral Reagents
- **D.** Basavaiah, Ph.D. (BHU) F.A.Sc., F.N.A. Organic Chemistry: The Baylis Hillman Chemistry, Chiral Catalysis (Dean of the School)
- **M.V. Rajasekharan,** Ph.D. (IIT, Madras) Inorganic Chemistry
- **M. Durga Prasad,** Ph.D. (Calcutta) Theoretical Chemistry: Quantum Dynamics and Many Body Theories
- **T.P. Radhakrishnan,** Ph.D. (Princeton) F.A.Sc., F.N.A. Materials Chemistry, Computational Chemistry

**Ashwini Nangia,** Ph.D. (Yale), F.A.Sc., F.N.A.Sc., F.N.A. – Supramolecular Chemistry, Crystal Engineering, Cocrystals and Polymorphism

**K.C. Kumara Swamy,** Ph.D. (IISc, Bangalore) F.A.Sc., F.N.A. - Organophosphorus Chemistry, Main Group Chemistry

**Anunay Samanta,** Ph.D. (Jadavpur) F.A.Sc., F.N.A.Sc. F.N.A. - Physical Chemistry, Photochemistry, Fluorescence Spectroscopy, Time-resolved Spectroscopy

**Samudranil Pal,** Ph.D. (Jadavpur) – Coordination and Organometallic Chemistry

**Musti J. Swamy,** Ph.D. (IISc, Bangalore) F.A.Sc., F.N.A.Sc. – Biophysical Chemistry

**Susanta Mahapatra,** Ph.D. (IIT, Kanpur) – Theoretical Chemical Dynamics, Non-adiabatic Chemistry (Professor – ACRHEM)

**Abani K. Bhuyan,** Ph.D. (Univ. of Pennsylvania) - NMR Spectroscopy, Physics and Biology of Biological Molecules (Professor–ILS)

**Samar Kumar Das,** Ph.D. (IIT, Kanpur), F.A.Sc. – Inorganic and Supramolecular Chemistry

### Readers

**K. Lalitha Guruprasad,** Ph.D. (Osmania) – Structural Biology

**Tushar Jana,** Ph.D. (Jadavpur) – Polymer Chemistry and Materials Science, Polymer Gels, Sensor Materials and Fuel Cell

- **D.B. Ramachary,** Ph.D. (IISc, Bangalore) Synthetic Organic Chemistry, Engineering Asymmetric Organocatalysis, Theoretical Aspects of Organocatalysis and engineering multi-catalysis cascade (MCC) reactions
- **R. Nagarajan,** Ph.D. (Madras) Organic Chemistry: Synthesis of Heterocycles and Catalytic Organic reactions

### Lecturers

**Pradeepta Kumar Panda,** Ph.D. (IISc, Bangalore) – Bio-Inorganic, Bio organic and supramolecular Chemistry: Synthesis and Exploration of Chemical, Biological and Material Aspects of Porphyrinoids.

Rangarajan Balamurugan, Ph.D. (IIT, Kanpur) – Synthetic Organic Chemistry, Development of Inhibitors for Biological Functions

# हैदराबाद विश्वविद्यालय



**K. Muralidharan,** Ph.D. (IIT, Kanpur) – Synthetic Main Group Chemistry and Polymers

**Viswanathan Baskar,** Ph.D. (IIT, Kanpur) – Clusters: Main group, Transition and Lanthanides

Ramu Sridhar, Ph.D. (IISc, Bangalore) – Synthetic Carbohydrate Chemistry

**Akhil Kumar Sahoo,** Ph.D. (NCL, Pune) – Organic Chemistry, Material/Medicinal Chemistry, Organometallic Chemistry

**R. Chandrasekhar,** Ph.D. (Max-Planck) - Materials Chemistry



### School of Life Sciences

The School of Life Sciences has been established with an emphasis on interdisciplinary teaching and research in modern biology.

The School consists of the following four departments:

- 1. Department of Biochemistry
- 2. Department of Plant Sciences
- 3. Department of Animal Sciences
- 4. Department of Biotechnology

Each of the four departments offers M.Sc. and Ph.D. programmes of study. M.Sc Biotechnology and M.Tech Bioinformatics courses offered by the Department of Biotechnology are organised with the participation of Faculty of all the departments of the School as well as the School of Mathematics and Computer / Information Sciences and School of Chemistry. Under Distance Education mode, the School participates in P.G. Diploma programme in "Medicinal Botany".

# UoH-DBT Centre for Research and Education in Biology and Biotechnology (CREBB)

A UoH-DBT Centre for Research and Education in Biology and Biotechnology (CREBB) has been established in the School of Life Sciences at a total cost of Rs.2656.80 lakhs. The Department of Biotechnology (CREBB) has contributed Rs.1856.80 lakhs towards this project. This Centre (CREBB) would be the nucleus of research and teaching in diverse areas of Biology and Biotechnology. The activities of this centre include teaching and training programmes, while creating state-of-the-art research facilities in the area of Biology and Biotechnology. The innovative component of this centre is to provide training opportunities in Biology and Biotechnology to not only Ph.D students of our University but also to the teachers and students working at state-of-the-art labs for teaching M.Sc. and M.Tech. programmes, with the final goal of increasing significantly the number of M.Sc., Ph.D. and post-doctoral researchers over a period of 5 years. The School of Life Sciences has also set up 'state-of-the-art' facilities for Proteomics and Functional Genomics including Microarray facilities, with a total cost of approximately Rs.6.00 crores. This facility complements very well with the activities of the UoH-DBT Centre. Prof. A.S. Raghavendra is the Coordinator of UoH-DBT-CREEB and Prof. S. Dayananda is the Deputy Coordinator.

### **Adjunct Professors**

The following eminent scientists are appointed as Adjunct Professors in the School of Life Sciences and their specializations are indicated in parentheses:

- 1. Prof. Seyed E. Hasnain (Biochemistry)
- 2. Prof. E.A. Siddiq (Plant Sciences)
- 3. Prof. Rajender Kumar (Biochemistry)

Special Assistance from U.G.C. and DST: The School has been a recipient of UGC Special Assistance Programme since 1990. The Phase III of UGC-Special Assistance (DSA) operated during 2002-2007, with the following thrust areas for teaching and research: 1. Animal Biotechnology; 2. Plant Biotechnology, and; 3. Molecular Biology & Neurochemistry.

The School was granted assistance also under COSIST program of UGC for a duration of five years from 1999. Three Departments of the School viz., Biochemistry (Level-I), Plant Sciences (Level-II) & Animal Sciences (Level-I) are supported by Department of Science and Technology under FIST programme.

### **UGC-SAP Centre for Advanced Studies**

The University Grants Commission has sanctioned the status of "Centre for Advanced Studies (UGC-SAP-CAS-I)" to the School of Life Sciences for a period of five years (2008-2013) with a financial outlay of Rs.128 lakhs. Prof. A.S.Raghavendra is the Programme Co-ordinator and Prof. Manjula Sritharan is the Dy. Coordinator. The thrust areas identified under this programme are Bioresources, Novel Biomolecules and Functional Genomics. The School of Life Sciences would be receiving under this grant sophisticated equipment for research and also for the teaching labs for PG and Ph.D. programmes. The grant would also have items of recurring expenses including the costs of consumables, travel, visiting fellows, seminars, books and journals, besides the contingency.

**Prof. M. Ramanadham,** Dept. of Biochemistry is the **Dean** of the **School**.

### Department of Biochemistry

The Department of Biochemistry offers two highly competitive programmes: two year or four-semester M. Sc Biochemistry, and Ph.D., by experienced Faculty who have considerable research experience. The importance of biochemical basis of the living organisms is emphasized and supported by meticulous training in experimental skills to enable the students to pursue research in frontier areas of Biology. At present, the Department carries out research in the areas of Molecular Biology, Cancer Biology, Neurobiology, Immunology, Molecular Biophysics, Bioenergetics, Protein Biochemistry, Infectious Diseases, Molecular Virology, Molecular Genetics and Drug Design and Nanobiotechnology.



### **Programmes of Study**

**1. M.Sc. Biochemistry:** The course is offered to students with a B.Sc qualification (with 60% aggregate and with Chemistry or Biochemistry as one of the subjects) and is a four-semester programme that is evaluated based on credit system. A total of 12 theory courses (36 credits), four elective courses (8 credits), four practical courses (20 credits) and a project (8 credits) have to be completed successfully by the students in the four semesters.

The courses offered by the department during the four semesters are as follows. Semester I: Intermediary Metabolism-I, Biophysical Chemistry Genetics and Microbiology, and two laboratory courses viz., Computer Applications in Biology, and Basic Methodology and Instrumentation. The courses of Genetics and Microbiology are offered by the Department of Plant Sciences. Semester II: Intermediary Metabolism-II, Enzymology, Molecular Biology-I, Structural Biology and a Lab course. Semester III: Basic Immunology, Molecular Biology-II, Bioenergetics and Biomembranes, and two elective courses of 4 credits and a lab course of 5 credits. Semester IV: Nutritional and Clinical Biochemistry, two electives (2 credits each), lab course (3 credits) and a Project work of 8 credits. The Department offers elective courses such as Endocrine biochemistry, Biostatistics, Neurochemistry, Molecular Virology, Genomics and Proteomics (III semester) and Immunochemistry, Protein Phosphorylation and Signal Transduction, Microbiology, Genetic Disorders, Protein-DNA Interactions (IV Semester). The project work in the fourth semester has to be carried out under the supervision of a Faculty member.

2. Ph.D. Biochemistry: Students admitted to Ph.D programme have to carry out course work of 16 credits for one semester and should pass the examination with at least 50% marks. The courses are: Research Methodology (4 credits), Scientific Writing (1 credit), Seminar (1 credit) and two optional courses (4 credits) offered by any Department of the School Life Sciences and a Laboratory Course of 6 credits. Each credit is 25 marks. The students carry out their work under the supervision of a Faculty member and are periodically advised by the doctoral committee and have to actively participate in journal clubs, research work seminars and submit monthly progress reports of research work. The scholar presents the research work in a comprehensive seminar before the submission of the thesis. Award of Ph.D is based on the reports of three examiners and performance in the Viva-voce examination.

### **Entrance Examination**

1. M.Sc Biochemistry entrance examination question paper

consists of 100 objective type questions of B.Sc standard. The questions are drawn from Bio-chemistry, Chemistry, and other areas of Biology including Biophysics.

**Ph.D.** admission in Biochemistry during the current year (2010-11) will be confined to the candidates who are qualified in the NET examination for JRF conducted by CSIR/UGC DBT, or ICMR who are entitled for a fellowship. Such candidates are required to appear for an interview. There is no written test.

### Course work for Ph.D.

There will be course work for Ph.D. scholars which is mandatory. The course work will comprise of theory sessions in Research Methodology, Scientific Writing and any two electives offered by the four departments of the School of Life Sciences. In addition, the candidates will be evaluated for seminar presentation and undergo lab course on bioanalytical techniques.

### Research Achievements

The Departmental Faculty is engaged in highly active and productive research in several frontier areas of modern biology. You may visit the University website to know their research work. The Faculty conducts their research with funding from several National and International funding agencies in the form of research-grants. In recognition of the research accomplishments, the UGC has sanctioned previously a Special Assistance Programme (DSA Phase III 2002-2007) and COSIST. The Department has also been supported by a grant from the Department of Science and Technology for Infrastructure facilities under the 'FIST' programme. In addition the School of Life Sciences (all departments) got a DBT research grant to establish several model teaching laboratories.

### Infrastructural facilities

In addition to the Central Instrumentation facility at the University level and Proteomics and Genomic platforms at the School of Life Sciences, the Department has tissue culture facilities, several modern equipment such as ultra centrifuges, high speed centrifuges, spectrophotometers, spectroflourometers, HPLC, liquid scintillation counter, PCR machines, deep freezers, gel documentation system, phosphorimager, etc. The Faculty have been continuously upgrading their individual laboratory facilities by obtaining the latest equipment required for their independent research work.



# Faculty Professors

**T.Suryanarayana,** Ph.D. (BHU) - Molecular Biology: Ribosome Structure and Function, Structural and Functional aspects of DNA Protein interactions.

**C.K.Mitra,** Ph.D. (TIFR) - Electrochemistry of Immobilized Enzymes (Biosensors), Studies on Protein and Nucleic Acid Sequences (Bioinformatics) and Nanobiotechnology.

M. Ramanadham, Ph.D. (Osmania)-Cellular Immunology: Mechanism of B-Lymphocyte Activation, Studies on Multiple Myeloma and Immunotoxicity of Nanoparticles (Dean, School of Life Sciences) (Coordinator of the School of Medical Sciences and Head I/c, Centre for Physical Fitness and Sports Sciences).

**K.V.A.Ramaiah,** Ph.D. (JNU) FNASc., FAS – AP - Gene Expression, Protein Synthesis and Regulation in Eukaryotes, Protein Phosphorylation, ER Stress and Apoptosis. (**Head, Department of Biochemistry , School Coordinator,** Systems Biology, CIS).

**O.H.Setty,** Ph.D. (Delhi) - Bioenergetics, Clinical Biochemistry, Role of Free radicals in Diseases and Antioxidant Properties of Plant Extracts.

**N. Siva Kumar,** Ph.D. (Mysore) FAS-AP — Protein Biochemistry, Cell and Molecular Biology, Glycobiology, Structure Function Relationships of Plant and Animal Lectins, Evolution of Mannose 6-Phosphate Receptors and Lysosomal Enzyme Targeting Proteins

### Readers

**Mrinal Kanti Bhattacharyya,** Ph.D. (TIFR) – DNA - Repair, and Recombination, Gene-silencing, Telomere Biology, Parasite Functional Genomics and Epigenomics.

Naresh Babu V Sepuri, Ph.D. (UH) – Mitochondrial Biogenesis and Disease, Protein and tRNA Import into Mitochondria and Role of Mitochondria in Cancer Cells.

**Krishnaveni Mishra,** Ph.D. (JNU) – Functional Organization of the Eukaryotic Nucleus, Telomere Biology, Epigenetics and Gene Silencing.

### Lecturers

**S. Rajagopal,** Ph.D. (SVU) – Structural Biology, Protein Biochemistry, Proteomics and Site-directed Mutagenesis.

**Sharmishta Banerjee,** Ph.D. (UH) –Molecular Biology and Immunology, Molecular Pathogenesis of Mycobacterium tuberculosis and HIV Coinfections.

**Bramanandam Manavathi,** Ph.D. (SKU) – Signal Transduction, and Molecular and Cellular Oncology.

### Joint Faculty

#### **Professor**

Anand K. Kondapi, Ph.D. (Andhra) - Molecular Biology, Drug Development and Delivery, Functional Characterization of DNA Topoisomerases in Oncogenesis, HIV infection, Neurotoxicity and Brain Aging (Head, Department of Biotechnology).

### **Department of Plant Sciences**

The Department has been supported under UGC Centre for Advanced Studies in Life Sciences, the DST-Funds for Infrastructure in Science and Technology (FIST) Level-II and DBT under UoH-DBT-CREBB programme. The foundations for the rapid growth of the Department in the last fifteen years have been laid with its philosophy to provide a well-balanced training to the students in modern Plant Sciences & Microbiology to enable them to choose careers in both advanced teaching and high quality research. The Department offers two master's programmes i.e., Plant Biology & Biotechnology, and Molecular Microbiology, and an independent Ph.D. programme.

The Department has set up State-of-the-art laboratories for M.Sc. teaching with the DBT support. Under DST-FIST II, the Department procured Electrophoretic equipment for DGGE, French Press, Fermentor, Incubator Shaker, Advanced Gel Documentation System, real time-PCR, PAM Fluorimeter etc. to stregthen teaching and research activities of the Department, while few more are being added.

All national and international funding agencies like DBT, MNES, CSIR, DST, INSA, UGC, NATP-ICAR, DAE, DOD, IAR, MoE, AP-Netherlands Biotechnology Programme, Humboldt Foundation, International Atomic Energy Agency, Rockefeller Foundation, Volkswagen Foundation, USDA, Indo-French Centre for Promotion of Advanced Research, the European Union, Third World Academy of Sciences are supporting the research activities of the Department.

The individual research laboratories are well equipped, apart from the availability of major equipment in central facilities of the Department, sister Departments in the School, and also at Central Instrumentation Lab of the University. The Faculty from the Department of Plant Sciences have the track record of consciously publishing in journals of repute like Nature, Plant Physiology, Trends in Plant Sciences, Plant Cell



and Environment, Molecular Breeding, TAG, MGG, Phytopathology, Molecular Plant Microbe Interactions, Plant Molecular Biology, Plant Cell Physiology, BBRC, Molecular Genetics and Genomics, International Journal of Systematic and Evolutionary Microbiology, Phytochemistry etc.

The Department is supported by DST-FIST programme at level-II.

### **Programmes of Study**

**1. M.Sc. Plant Biology & Biotechnology:** The course is a four semester programme that is evaluated based on credit system. A total of 11 core courses, four elective courses, three practical courses and a project have to be completed successfully by the students in the four semesters.

### **Course Content**

Cell & Molecular Biology \* Macromolecular Structure & Function \* Genetics \* Microbiology \* Environmental Biotechnology \* Molecular Biology & Genetic Engineering \* Molecular Plant Pathology \* Plant Biochemistry \* In vitro Plant Biology \* Genomics & Proteomics \* Plant Physiology \* Plant Systematics \* Viral Pathogenesis \* Natural Plant Products \* Phytotechnologies \* Plant Developmental Biology \* Plant Biotechnology \* Biodiversity \* Medicinal Botany \* Phytomedicine \* Microbial Technology

**2. M.Sc. Molecular Microbiology:** The course is a four semester programme that is evaluated based on credit system. A total of 11 core courses, four elective courses, three practical courses and a project have to be completed successfully by the students in the four semesters.

### **Course Content**

Cell & Molecular Biology \* Macromolecular Structure & Function \* Genetics \* Microbiology \* Molecular Biology & Genetic Engineering \* Molecular Plant Pathology \* Microbial Physiology & Biochemistry \* Enzymology \* Molecular Virology \* Genomics & Proteomics \* Bioprocess Engineering & Technology \* Viral Pathogenesis \* Microbial Genetics \* Basic Immunology \* Antibiotics & Chemotherapy \* Microbial Metabolomics \* Microbial Ecology \* Microbial Technology \* Prokaryotic Systematics.

**3. Ph.D. Plant Sciences:** The Ph.D. programme requires a minimum of 2 years pursuance from the date of confirmation of admission. At the end of I semester, the Ph.D. students would take examination for four theory and one lab courses (Scientific Writing, Research Methodology, Seminar, Optional and Bio-Analytical Techniques) for a total of 16 credits. The requirement for the award of Ph.D. includes the submission of a thesis on an approved topic of

research under the guidance of a Faculty member. The scholar presents the research work in a comprehensive seminar before the submission of the thesis and faces an oral examination in defence of the thesis. The average time required for Ph.D. is about 4 years.

### **Entrance Examination**

- **4. M.Sc. Plant Biology** & **Biotechnology** entrance examination question paper consists of 100 objective type questions of B.Sc. standard and all are to be answered. Broadly, the question paper will consist of 40 questions in Botany, 20 questions each in Biochemistry/Chemistry, Microbiology and Genetics. **Negative marking is applicable for wrong answers.**
- **5. M.Sc. Molecular Microbiology** entrance examination question paper consists of 100 objective type questions of B.Sc. standard and all are to be answered. Broadly, the question paper will consist of 25 questions each in Botany, Zoology, Biochemistry/Chemistry, and Genetics/Microbiology. **Negative marking is applicable for wrong answers.**
- **6. Ph.D. Plant Sciences** admission will be based on an entrance examination and an interview conducted by the Department. The question paper will consist of 75 objective type questions of M.Sc. standard and all to be answered. Broadly, the questions will be from the areas of Plant Biology, General Biology, Microbiology, Molecular Biology, Genetics and Biochemistry. **Negative marking is applicable for wrong answers.** The ICMR, DBT, ICAR, CSIR-UGC JRF candidates can directly appear for interview without taking the entrance examination as per the guidelines of the University.

### Course work for Ph.D.

There will be course work for Ph.D. scholars that is mandatory from the academic year 2010-11. The course work will comprise of theory sessions in Research Methodology, Scientific Writing and any two electives offered by the four departments of the School of Life Sciences. In addition, the candidates will be evaluated for seminar presentation and undergo lab course on bioanalytical techniques.

### Infrastructural facilities

The Faculty and students of the Department have access to a range of sophisticated equipment dealing with diverse research topics. These include Ultra-centrifuge, High Speed Centrifuge, Infra-red gas analyzer, Atomic Absorption Spectrophotometer, HPLC, lyophilizer, PCR machine, UV-



VIS-NIR spectrophoto-meter, Liquid scintillation counter, Laser scanner, Gel documentation system, Transilluminators, Inverted Microscope, electroporator, internet, green house and Amersham DNA sequencer (megabase), Fluorescence Microscope, Imaging system/Microarray reader etc. Further the facilities developed under UoH-DBT Centre for Teaching and Research in Biology and Biotechnology are also accessible. The Department is adding more infrastructural facilities under the newly granted FIST Level II programme.

University's Central facilities include Confocal Microscope, Scanning Electron Microscope, Peptide Sequencer etc. In addition, the individual Faculty members have their own well equipped laboratories, computers and access to internet.

### **Faculty**

### **Professors**

- **A. Ramachandra Reddy,** Ph.D. (Osmania) FASc. Genetics, Plant Molecular Biology, Genomics (on EOL as Vice-Chancellor, Yogi Vemana University, Kadapa)
- **R.P. Sharma,** Ph.D. (JNU) Plant Molecular Physiology and Developmental Biology
- **A.S. Raghavendra,** Ph.D. (SVU), FNA, FASc, FNASc, FNASc, FNAS, FTWAS, JC Bose Fellow Photosynthesis, Signal Transduction, Medicinal Plants & Plant Biochemistry: Plant Molecular Physiology
- **M.N.V. Prasad,** Ph.D. (Lucknow), FLS (London), FNIE, D.Sc. (h.c.; Colombo) Environmental Biotechnology, Plant Ecophysiology, Heavy Metal Stress in Plants, Bioresource Technology, Medicinal Plants
- **P.B. Kirti,** Ph.D. (Andhra), FNAAS Plant Molecular Biology, Plant Genetic Engineering
- **Appa Rao Podile,** Ph.D. (SPU), FNASc, FAP-AS, FPSI–Molecular Plant Microbe Interactions
- **Attipalli R. Reddy,** Ph.D. (SVU), FAP-AS Climate Change and Photosynthesis, Oxidative Stress in Crop Plants, Biofuels (Head of the Deparatment)
- Kottapalli Seshagirirao, M. Phil.. & Ph.D., F.R.A.S. Plant Systematics, Biodiversity & Conservation, Protein Biochemistry, Glycobiology, Botanical Sanskrit, Telugu & Latin, Indian Medicine, Medicinal & Pharmaceutical Botany.
- **Ch. Venkata Ramana,** Ph.D. (Osmania) Diversity and Metabolomics of Anoxygenic Phototrophic Bacteria

### Readers

- **G. Padmaja,** Ph.D. (Osmania) Plant Genetics, Plant Tissue Culture and Genetic transformation
- **Sarada Devi,** T. Ph.D. (UH) Molecular basis for Phytomedicine Prevention of Human Cardio Vascular Inflammation
- **K. Gopinath,** Ph.D. (SVU) Plant Molecular Virology, Trafficking & Viral Vectors
- **Ragiba Makandar,** Ph.D. (IARI) Plant Molecular Genetics, Host-Pathogen Interactions, Functional Genomics & Genetic Engineering

### Lecturers

- **K.P.M.S.V. Padmasree,** Ph.D. (UH) Plant Physiology, Biochemistry and Molecular Biology
- **J.S.S. Prakash,** Ph.D. (Hamdard University) Molecular Biology of Cyanobacteria, Functional Genomics, Molecular Mechanisms of Abiotic Stress Response
- **Irfan A. Ghazi,** Ph.D. (Hamdard University) Functional Genomics, Disease Resistance in Rice, Medicinal Plants
- Y. Sreelakshmi, Ph.D. (UH) Functional Genomics, Plant development

### **Department of Animal Sciences**

The Department of Animal Sciences came into existence in March 1993 as a part of academic and administrative restructuring of School of Life Sciences. The department has been supported by the Department of Science and Technology under Funds for Infrastructure in Science and Technology (FIST) programme. The department offers M.Sc. course in Animal Biotechnology and possesses reputed faculty and strong infrastructure to conduct research and train talented young brains in frontier areas of Biology and Biotechnology.

Currently 50 students have enrolled for Ph.D. course and working in the research programmes funded by various National (DST, DBT, DRDO, CSIR, ICMR, UGC) and International funding agencies and Biotech Industries. In recognition of the department's contribution to the biotechnology research the premier biotech industry, the Shantha Biotechnics, Hyderabad offers every year Shantha Research Fellowship to one Ph.D. student.

### **Programmes of Study**

The Department offers a four-semester M.Sc. course and Ph.D. program.



M.Sc. Animal Biotechnology: The course is a four semester program that is evaluated based on credit system. A total of 11 core courses, 4 elective courses, 3 practical courses and a project have to be completed successfully by the students in four semesters. The students are offered common courses in the first semester such as Genetics, Cell & Molecular Biology, Macromolecular Structure & Function and Microbiology along with students admitted to Postgraduate programs of the School. In the second semester, Animal Reproduction, Breeding & Transgenic Technology, Developmental Biology, Enzymology and Molecular Biology & Genetic Engineering are offered. The contents of the third and fourth semester include: Bioproces Engineering & Technology, Stem Cell Technology & Tissue Engineering, Basic Immunology and optional courses like Vaccinology, Cancer Biology, Infection Biology, Cellular and Molecular Neurosciences, Immune Cell Development, Oxidative Stress in health and disease.

Aquaculture: Nutraceutical and Pharmaceutical Applications etc. While students are in their third semester, they will be allotted to various labs to undertake research work on a well designed project. In addition to this in-house training, the students will have an option to choose electives from other departments of School of Life Sciences or from other Schools.

**Doctoral Programme:** The Ph.D. programme requires its pursuance for a minimum period of 2 years from the date of confirmation of admission. The requirements for Ph.D. include a compulsory course work and a thesis submitted on an approved topic under faculty guidance, and an oral examination in defense of the thesis. Normally, a Ph.D. student spends about four-five years to complete the thesis.

#### **Entrance examination**

Admission to **M.Sc.** program will be given on the basis of performance in entrance examination.

The question paper for entrance examination for **M.Sc.** admission will consist of 100 questions of **B.Sc.** standard. The candidate has to answer all 100 questions. Broadly the paper consists of questions in Zoology, Botany, Chemistry Biochemistry, Microbiology, Biotechnology and Genetics.

Admissions into **Ph.D.** program will be given on the basis of performance of the candidate in the written test followed by an interview. Candidates who have qualified for JRF of CSIR-UGC /ICMR /DBT are exempted from written test. The entrance examination will consist of 75 objective questions of M.Sc. standard with emphasis in animal biotechnology, cancer biology, immunology, molecular

biology, biochemistry, physiology, parasitology, neurobiology, cell biology, endocrinology, reproductive biology, developmental biology, microbiology etc. and the candidate has to answer all questions.

### Infrastructural facilities

The Department is constantly improving its teaching and research facilities through grants received from various The students have access to the funding agencies. instrumentation facility of the School which consists of high refrigerated centrifuges, ultra-centrifuges, flow cytometer, spectrofluorometer, spectrophotometers, gel documentation system, phosphor-imager, HPLC, PCR machine, liquid scintillation counters, luminometer, oxygraph, bioreactors, French press, lyophilisers etc. The School of Life Sciences also has a centralised Proteomics and Genomics & Microarray facilities which include 2D electrophoresis set up, MALDI-TOF/TOF and Q-TOF, Real-Time PCR, Chip maker, Spot picker, scanners etc. In addition, the research student can utilize the facilities at Central Instrumentation Laboratory of the University, which contains amino acid analyzer, scanning electron microscope, SPR spectrometer, confocal microscope etc. Recently, well equipped laboratories have been developed under UOH-DBT Centre for Teaching and Research in Biology and Biotechnology. Further, various individual research laboratories of faculty members have equipments depending on their needs of research work. In recognition of the research accomplishments, UGC has recognised the school as centre for Advance studies in Life Sciences.

Under FIST program, Department of Science and Technology recently provided a Special grant for acquiring a new state of the art Flow Cytometer.

## **Faculty**

### **Professors**

**Aparna Dutta Gupta,** Ph.D., (BHU) FASc. FNASc, FAP-AS- Molecular Physiology and Biotechnology, Biointensive-integrated insect pest management.

- **P.** Reddanna, Ph.D (SVU) Biochemical Toxicology and Drug Discovery: Eicosanoids, Inflammation, and Cancer.
- **S. Dayananda,** Ph.D., (SVU) FAP-AS Environmental Biotechnology: Catabolomics, Metabolic Engineering, Biotransformation and Biodegradation. (Head of the Department)

**Manjula Sritharan,** Ph.D. (Hull, U.K.) – Infection Biology: Iron acquisition in pathogenic mycobacteria and Leptospira



spp. and development of diagnostics for tuberculosis and leptospirosis.

**Balasubramanian Senthilkumaran,** M. Phil. Ph.D., (BHU) – Fish Molecular Endocrinology, Molecular Reproductive Biology, Neuroendocrinology and Molecular mechanisms of sex differentiation in fish.

**Jagan Pongubala,** Ph.D. # (University of Bombay), Molecular Genetics of hematopoietic lineage differentiation.

#### Reader

Anita Jagota, Ph.D. (JNU) – Neurobiology, Neurodegeneration, Brain Aging, Molecular chronobiology the Cellular and Molecular Mechanisms underlying postembryonic Neural development.

#### Lecturers

**Suresh Yenugu,** Ph.D. (OU) - Reproductive immunology and toxicity, polyunsaturated fatty acids and prostaglandins in diabetes mellitus.

**Kota Arun Kumar,** Ph.D. (UH) – Biology of Malaria Sporozoites and Liver stages, Mechanism of Immunity & Infection.

Radheshyam Maurya, Ph.D. (BHU) - Parasite and host macrophage Interactions, Macrophage defense mechanism, Modulation of T-cell Immune Response, Induction of functionally distinct T-cell subsets and Role of Regulatory T cells in Human Visceral Leishmaniasis (VL).

## Joint faculty

### **Professor**

**P. Prakash Babu,** Ph.D (UH) – Neurochemistry, Cerebral ischemia (stroke), stem cell therapy, Celebral malaria, Glioma and Meningioma, brain cancer, cell death (apoptosis/necrosis). (Department of Biotechnology).

### Department of Biotechnology

The Department of Biotechnology offers application oriented and most-sought after courses in Biotechnology and Bioinformatics. Innovation based training will be imparted to the students with a special emphasis on understanding the basic concepts of biological processes in pursuing research in frontier areas of biotechnology and bioinformatics. At present, the Department carries research in the frontier areas of biology such as biophysics, molecular therapeutics, stem cell therapy, biology of HIV, HCV, dengue and chukun gunia viruses and cancer, molecular aspects of neurochemistry, neurodegenerative diseases, molecular insights into

adaptation of chronic pathogens and functional genomics. The thrust area in which the research in Department focus is "Molecular therapeutics for infectious and neurodegenerative diseases"

The programmes of the Department are supported by special grants from the Department of Biotechnology for M.Sc. Biotechnology and UGC for M.Tech. Bioinformatics under Innovation program.

### **Programmes of Study:**

1. M.Sc. Biotechnology: This course was introduced in the year 1990 under the nation-wide post-graduate program by the Department of Biotechnology, Govt of India. This course is a four semester program with credit system of evaluation. The program consists of DBT recommended syllabi, and the course structure may change from time to time at the recommendations of the DBT. The current syllabus is available at http://dbtindia.nic.in/uniquepage.asp?id\_pk=666

Industrial visits: Students will be visiting biotech industries to learn various aspects of product development.

**2. M. Tech. Bioinformatics** (Sponsored by the UGC under Innovative program and approved by AICTE): M.Tech Bioinformatics is a state-of-art course, designed to train students in theory and techniques in genomics, proteomics, and computer aided modeling and drug design, including hands-on practice using statistical packages. The students has obtained attractive placements from reputed software and bioinformatics companies. The course is offered jointly by four Schools of the University viz., the School of Life Sciences, School of Chemistry, School of Physics and School of Mathematics & Computer Information Sciences, and the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad.

### **Course Coordinating Committee:**

**Prof. M. I. Beg,** - Order Statistics (Department of Mathematics and Statistics, MCIS).

**Dr. K. Lalitha Guruprasad** – Structural Biology (School of Chemistry)

**Dr. P. Anantha Lakshmi** – Quantum Optics (School of Physics)

**Dr. T. Sobha Rani** - Bioinformatics, Machine Learning Techniques, Language Processors (Department of Computer and Information Sciences, MCIS).

Dr. Shekhar Mande, Structural Biology (CDFD)

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The course structure includes Computational Techniques, Proteomics, Basic Statistics, Basic Mathematics and Introduction to Molecular Modeling in the First semester; Genomics, Databases, Bioinformatics, Introduction to Molecular Mechanics in the Second semester, and Drug Design and Advanced Bioinformatics in the third semester. Students are encouraged to choose one elective course in second and third semesters from other Schools. The students will carry out a project work during 3rd & 4th semesters under the guidance of a faculty member either at University of Hyderabad or CDFD. The programme also offers remedial courses in the first semester to bring all the new students, who may not have sufficient experience with computers or biology, to a common level.

- 3. Integrated M.Sc./Ph.D. Biotechnology: Initial 2 years students will be involved in an extensive course work, which required to be completed by end of 2 years before continuation for the Ph.D. degree. Student who could not secure adequate credits and must have completed 86 credits may be opted to exit the course with degree in M.Sc Biotechnology. The students carry out their work under the supervision of the faculty member and are periodically advised by the Doctoral Committee. They have to actively participate in Journal clubs, research work presentation. The research students have to present their research work in a comprehensive seminar before submission of the thesis.
- **4. Ph.D Biotechnology:** In the first two semesters there will be course work, which required to be completed before the comprehensive seminar. The students carry out their work under the supervision of the faculty member and are periodically advised by the Doctoral Committee. They have to actively participate in Journal clubs, research work presentation. The research students have to present their research work in a comprehensive seminar before submission of the thesis.

### **Entrance Examination**

- **5. M.Sc. Biotechnology:** Selection is based on National Entrance Test conducted by the Jawaharlal Nehru University, New Delhi as part of the Biotechnology program supported by the Department of Biotechnology, Govt of India. (www.jnu.ac.in/Admission/M.Sc Biotech07.htm)
- **6. M. Tech. Bioinformatics:** The admission is based on score obtained in GATE examination and followed by an interview. GATE scores will be computed to 75% and Interview carries 25% of marks. GATE in the following subjects will be considered: Biotechnology BT; Chemistry CY; Mathematics MA; Physics PH; Agricultural Engineering AG; Electronics & Communication Engg. –

- EC; Computer Science and Information Technology CS; Chemical Engineering CH. Upto half of the total number of seats may be filled with candidates having background other than Biotechnology.
- 7. Integrated M.Sc./Ph.D. Biotechnology: Admission is based on an entrance examination and interview conducted by the Department. The question paper will carry 75 objective type questions (75 marks) at degree standard questions drawn from Mathematics, Physics, Chemistry, Biology and quantitative aptitude. Based on the order of merit in the written examination, the candidates will be called for an interview (25 marks).
- **8. Ph.D. Biotechnology:** Admission is based on an entrance examination and interview conducted by the Department. Candidates who are qualified in the NET examination (under Junior Research Fellowship category only) conducted by the CSIR/UGC or ICMR or DBT are exempted from the entrance examination. However, they are required to appear for the interview. The question paper will carry 75 objective type questions (75 marks) of M.Sc standard drawn from the areas of Biotechnology and Bioinformatics. Based on the order of merit in the written examination, the candidates will be called for an interview (25 marks).
- **9. Research Achievements:** The Department faculty is engaged in high impact innovative research in the frontier areas of modern biology. The faculty conducts their research with the support from several national and international funding agencies in the form of research grants. The faculty of the department is credited with several patents and research publications relating to biotechnology.
- 10. Infrastructure facility: The Department has HIV culture facility, neuronal and neuroglial culture facility, & stem cell culture facility. Further, several essential equipments such as centrifuges, spectrophotometers, PCR machines, HPLC, shaker, incubators etc. The Bioinformatics infrastructure facility funded by the Department of Biotechnology, Govt. of India is a well equipped facility that is used by the students. Students also have access to high performance computing facility and Centre for Modeling, Simulation and Design for regular training as well as project works. Software training given to students in the lab include AccelRys, MAT Lab, SYBYL, Gold etc. In addition, the students have access to the computation facilities at the Centre for DNA Fingerprinting and Diagnostics for teaching and project works.





# **Faculty** Professors

**Abani K. Bhuyan,** Ph.D. (Univ. of Pennsylvania) - NMR Spectroscopy, Physics and Biology of Biological Molecules (Professor–ILS)

Anand K. Kondapi, Ph.D. (Andhra) -Molecular Therapeutics, Functional characterization of DNA Topoisomerases in oncogenesis, HIV infection, neurotoxicity and Brain aging. (Professor-ILS; Joint faculty in Dept. of Biochemistry) (Head of the Department and Coordinator, M.Tech., Bioinformatics Programme)

**P. Prakash Babu,** Ph.D. (UH, Hyderabad) – Neurochemistry, Cerebral ischemia (stroke), stem cell therapy, Glioma and Meningioma, cerebral malaria, cell death (apoptosis/necrosis).

### Reader

**Niyaz Ahmed,** Ph.D. (Manipal) — Pathogen Biology, Molecular Epidemiology, Biology of chronic infections.

### Lecturers:

**Musturi Venkataramana,** Ph.D. (SVU) - Molecular studies on viruses causing Dengue and Chicken guinea fever in Andhra Pradesh, India.

**Vaibhav Vindal,** Ph.D (Manipal) – Generegulatory network, Functional Genomics of pathogens. Analysis of protein sequence, structure and function

**N. Prakash Prabhu,** Ph.D. (UH, Hyderabad) –Protein structure, folding, dynamics

Sunanda Bhattacharya, Ph.D. (Bose Institute, Kolkata) – Role of Chaperones in genome stability and chromatin remodeling. Role of topoisomerase in Plasmodium and Toxoplasma biology

### Joint Faculty:

**Dr. Mrinal Kanti Bhattacharyya,** Dr. Krishnaveni Mishra, Dr. S. Rajagopal, Dr. Sharmistha Banerjee (Department of Biochemistry).

**Prof. M N V Prasad,** Prof. P. B. Kirti, Prof. P. Appa Rao, Prof. A. R. Reddy, Dr. K. Seshagiri Rao, Dr. Ch. Venkata Ramana, Dr. G. Padmaja, Dr. Ragiba Makandar, Dr. J. S. S. Prakash, Irfan Ahmed Ghazi (Department of Plant Sciences).

**Prof. Aparna Datta Gupta,** Prof. S. Dayanand, Dr. Manjula Sritharan, Dr. B. Senthilkumaran, Dr. Anita Jagota, Dr. Y. Suresh, Dr. K. Arun Kumar (Department of Animal Sciences).

**Prof. M. Durga Prasad,** Prof. M. J. Swamy and Dr. Lalitha Guruprasad (School of Chemistry).



### **School of Humanities**

The School of Humanities comprises the following Departments / Centres and Cell:

- 1. Department of English
- 2. Department of Philosophy
- 3. Department of Hindi
- 4. Department of Telugu
- 5. Department of Urdu
- 6. Centre for Applied Linguistics and Translation Studies
- 7. Centre for Comparative Literature
- 8. Department of Sanskrit Studies
- 9. English Language Teaching Cell
- 10. Centre for the Study of Foreign Languages

The School of Humanities is founded on the conviction that the Humanities give purpose, direction and value to education and to life, and that they are no less important to society than scientific and technological disciplines. The School aims at providing a centre of common awareness and a sense of human responsibility, making the University more than a complex of specialist departments. In addition, it is committed to the achievement of academic and linguistic excellence, creativity and all-round development of students. The courses offered in the School reflect these objectives and concerns

**Prof. Mohan G Ramanan,** Department of English, is the **Dean of the School.** 

### **Department of English**

The Department admits into its M.A. programme graduates from ANY basic discipline. It aims at providing instruction and carrying out research in both traditional and current areas of English Studies. In addition to core English Literature and American Literature components, it encourages work in New Literatures in English, Comparative Studies, Translation, Culture, Language Studies and Pedagogy.

### **Programmes of Study**

The **M.A.** programme extends over four semesters. It is a 70-credit programme, with 50 credits for mandatory courses and 20 credits for optional courses, 4 of which may be obtained from other departments. Students may take further courses, up to a maximum of 80 credits, keeping in mind the department schedule.

The M.A. programme covers different areas of English Studies (Language and Literature) like Shakespeare and the Seventeenth Century; Eighteenth Century, Romantic, Victorian and Modern British Literature; American Literature; New Literatures; Indian Writing in English; Literary Criticism and Theory; Structure of English Language and other aspects of language study like Stylistics, Sociolinguistics and English Language Teaching. Whenever possible, instruction is provided in small classes through discussion and individual work.

The **M.Phil.** is a two semester programme which includes course work of 18 credits and a dissertation. The courses relate to each candidate's area of interest in which the dissertation will be written, and to core areas of study. The programme includes written examinations for the course work. The dissertation is written on a topic approved by the Department and under the supervision of a Faculty member. Candidates are expected to give a pre or post-submission seminar on their research topics. The dissertation is examined by both internal and external examiners.

For admission to the M.Phil programme, applicants must submit, along with the application, a brief description (about 500 words) of their proposed topic of research.

The **Ph.D.** programme normally extends over a minimum period of two years from the date of admission. The programme comprises mandatory course work for 6 credits in the first semester and a 4 credit course each in the second and third semesters, geared to individual requirements. Students are required to write a dissertation on an approved topic under Faculty guidance and take an oral examination.

Applicants for admission to the Ph.D. programme must submit, along with the application, a brief description (about 1000 words) of their proposed topic of research and a copy of their M.Phil. dissertation, which will be returned in due course.

The Department enrolls students for research both at the M.Phil. and at the Ph.D. levels in all major areas of English Studies i.e., Literature, Language, Cultural Studies, Comparative Literature and Translation. The choice of research topic is dependent on the availability of Faculty and expertise. The Department Research Committee will help both M.Phil. and Ph.D. students choose their topics and supervisors.



# The University of Hyderabad

### Entrance examination

**M.A. entrance examination** (written) comprises 3 (three) sections:

Section I Language (Objective) 25 Marks
Section II Essay on general topics 40 Marks
Section III Poetry Comprehension 35 Marks

**M.Phil.** entrance examination (written) comprises 3 (three) sections. Sections II & III consist of separate sets of questions for language and literature.

Candidates are expected to write their dissertations only in the broad area in which they choose to write their answers, i.e. Literature or Language

Section I Language (Objective) 25 Marks

Section II Literature

Essay (on literary topics) 25 Marks

Language

Essay (on English

language: ELT/English Linguistics topics)

Section III Literature

Poetry Comprehension 25 Marks Language

- (i) A practical exercise testing analysis of linguistic data\* OR
- (ii) A question testing ability to devise specified teaching tasks using a given passage

\*Question (i) may contain further options within it to take care of different areas of linguistics.

In addition, there is an Oral Test worth 25% marks for short listed candidates.

**Ph.D.** entrance examination (written) comprises 3 (three) sections. All sections consist of separate sets of questions for language and literature.

Candidates are expected to write their dissertations only in the broad area in which they choose to write their answers, i.e. Literature or Language

Section I Litereature 25 Marks
A Poem for analysis

Language

- (i) A practical exercise testing analysis of linguistic data\* OR
- (ii) A question testing ability to devise specified

teaching tasks using a given passage

\*Question (i) may contain further options within it to take care of different areas of

linguistics.

Section II Literature

Essay (on literary topics) 35 Marks Language 35 Marks

Essay (on English language: ELT/English Linguistic topics)

Section III Literature 15 Marks

Questions (s) testing Research aptitude

Language

Question(s) testing research aptitude

In addition, there is an Oral Test worth 25% marks for short listed candidates.

### Infrastructural facilities

The Department has been supported by a UGC-DRS (SAP) programme. The UGC has also sanctioned the programme, "Assistance for Strengthening of Infrastructure for Humanities and Social Sciences (ASIHSS)" for five years, beginning April 1, 2006. The Department has xerox machines, audio-visual equipment, and a substantial textbook library built up purely on the strength of donations from Faculty, students and other well-wishers. Some PCs have been set aside for the use of Research Scholars and the visually challenged. The Department's Multimedia Laboratory is used for the study of language, drama, media and contemporary images.

Several donors have contributed financially to the Department. They include Rita Nair, Linda Dittmar and the Chanduri family. The Department gives an annual prize in the name of Prof. Dorothy Deering.

### **Special Features**

Language Intensive Study Programme (LISP) 2-credit, compulsory course for Semester I M.A. students to enable them to enhance their English language skills.

## **Faculty**

### **Professors**

Mohan G. Ramanan, Ph.D. (BITS, Pilani); Modern British and American Literature, Indo British Literary and Cultural Relations, Indian Literature and Culture (Dean of the School).



**K. Narayana Chandran,** Ph.D. (IIT-Bombay); American Literature, Contemporary Poetry and Theory, English - History and Pedagogy of the Discipline in India; Reading Theories and Translation; Intertextuality and Intergenres.

**Alladi Uma,** Ph.D. (SUNY, Buffalo); Women's Writing, Indian Literatures, African American Literature, Comparative Studies and Translation.

Sachidananda Mohanty, Ph.D. (IIT Kanpur); D.H. Lawrence and 20th Century Fiction, Intellectual History, Canon Formation, Nineteenth Century Literature, Regional Writing, Translation, Women's Writing, Culture Studies. (Head of the Department).

**Pingali Sailaja,** Ph.D. (CIEFL, Hyderabad); General Linguistics, Phonetics, Generative Phonology and Morphology, English Language Teaching, English in India.

**Syed Mujeebuddin,** Ph.D. (Kent, U.K.); Commonwealth and Postcolonial Literature, Indian Fiction in English, Shakespeare Studies, Victorian and Twentieth Century English Literature (on leave till 14.10.2010)

**M. Sridhar,** Ph.D. (Hyderabad); Literary Criticism and Theory, English in India, Cultural Studies, Comparative Studies and Translation.

Hoshang Merchant, Ph.D. (Purdue); Twentieth Century American Literature, Renaissance Literature, Continental Literature (in translation), Gay Literature and Poetry.

### Reader

**K. Suneetha Rani,** Ph.D. (Hyderabad); New Literatures in English, Cultural Studies, Women's Studies, Comparative Literature, Translation.

### Lecturers

**D. Murali Manohar,** B.Ed., M.Phil., Ph.D. (Hyderabad); Indian Writing in English, Indian English Women's Fiction, Dalit Studies and Women's Studies.

Sunita Mishra, Ph.D. (CIEFL, Hyderabad); English Language and Literature Teaching, Sociolinguistics, Stylistics, Gender Studies, Literary Criticism.

Anna Kurian James, Ph.D. (CIEFL, Hyderabad); Children's Literature, Popular Culture, Indian Writing in English.

**Pramod K Nayar,** Ph.D. (Hyderabad); English Colonial Writing on India, Cultural Studies, Postcolonial Studies, Literary and Cultural Theory.

**Sindhu Menon,** Ph.D. (Hyderabad); Post Colonial Theory, Romantic Literature, Children's Literature, Shakespeare Studies, Indo-British Literary and Cultural Transactions, Early Indian Literature in Translation with focus on drama and poetry, Literary Criticism and Theory.

**Kolluri Lavanya,** Ph.D. (AU); Language Studies, Indian Writing in English. (on leave)

### Department of Philosophy

The Department is eminently known in the country for research in diverse fields of philosophy. It has been recognised by the UGC as a Department of Special Assistance since 1987. The thrust areas of research under this programme are (1) Philosophy of Language: Indian and Western: (2) Cognitive Science (including Logic and Philosophy of Mind). The Department has also received grants under ASIHSS for a period of five years since April 2006 to March 2011. The thrust areas under this scheme are (1) Philosophy of Science and (2) Moral and Political Philosophy – both from Indian and Western Perspectives. In addition to these, the Department also carries on research in Philosophy of Wittgenstein, Contemporary Western Philosophy, and systems of Indian Philosophy like Nyaya and Buddhism.

### Programmes of study

### M.A. Programme

In this programme the Department offers courses at two levels. At the basic level it offers core courses in the classical schools of Indian and Western Philosophy, Ethics and Logic. At the advanced level it offers optional courses in the various fields of philosophy such as Advanced courses in Indian Philosophy, Political Philosophy, Philosophy of Science, Philosophy of Language, Wittgenstein, Nyaya and Buddhism etc.

### M.Phil. Programme

In this programme emphasis is laid on generating aptitude for independent research. It requires both course work and the writing of a dissertation. The course work consists of studying Contemporary Indian and Western philosophical problems. In addition, the students are required to do a course related to their respective dissertations. Interdisciplinary research is encouraged, where two or more departments/schools are involved.

### Ph.D. Programme

The Ph.D. Programme aims at developing original research in diverse fields of philosophy. It encourages interdisciplinary research. The research scholars are required to write a



dissertation on a topic of their choice in consultation with the supervisor. Interdisciplinary research is encouraged, where two or more departments/schools are involved.

#### **Entrance examination**

The entrance (written) examination for admission to the M.A., M.Phil. and Ph.D. will have two parts - Part 'A' and Part 'B'. Part 'A' consists of 25 objective (multiple choice) type questions of one mark each. Part 'B' is for 75 marks for M.A., and 50 marks for M.Phil. and Ph.D. It consists of short and long essay type questions. The qualified candidates for M.Phil. and Ph.D. will have an oral test for 25 marks.

### Infrastructural facilities

The Department offers facilities of xerox and computers to all students, apart from the centralized facilities.

### **Faculty**

### **Professors**

**Amitabha Das Gupta,** Ph.D. (IIT Kanpur) - Philosophy of Language, Moral Philosophy **(SAP Coordinator)** 

**R.C. Pradhan,** Ph.D. (BHU) - Philosophy of Language, Wittgenstein

**S.G. Kulkarni,** Ph.D. (IIT, Kanpur) - Epistemology, Philosophy of Science

**A. Raghurama Raju,** Ph.D. (IIT, Kanpur) - Social and Political Philosophy, Contemporary Indian Philosophy (Head of the Department)

#### Readers

**K. Siddeswara Prasad,** Ph.D. (SVU) - Nyaya, Indian Philosophy

**Prajit Kumar Basu,** Ph.D. (IISc, Bangalore), Ph.D. (Iowa) – History and Philosophy of Science

**Chandra B. Varma,** D.Litt (Ranchi University) – Buddhism, Indian Philosophy, Phenomenology, Translation of the Philosophical Works from Pali, Prakrit and Sanskrit into English

### Lecturers

**Ananda V Wazalwar,** M.Phil. (Rajasthan) - Moral Philosophy, Epistemology

Abhijeet Joshi, M.A. (Pt. R.S. University) – Advaita Vedanta

**B. Ananda Sagar,** Ph.D. (University of Hyderabad) – Epistemology and Analytical Philosophy

### Department of Hindi

The Department of Hindi aims at providing teaching and research facilities in Hindi, keeping in view the changing social norms, communication patterns, different social roles of language in our society and fast changing literary values in our time. While drawing up the syllabus, sufficient care has been taken to cater to the above needs. It has been kept flexible enough to incorporate various requirements of the students in the context of contemporary society. Special attention is also given to the regional and comprehensive studies of language and literature.

### Programmes of study

The Department offers M.A., M.Phil. and Ph.D. programmes in Hindi and an M.A. course in Functional Hindi (Translation).

The M.A. (Hindi) course extending over four semesters provides instruction and guidance for acquiring broad acquaintance with the various new fields of Hindi language and literature without entirely neglecting the old and medieval texts and offers wide scope for elective studies. Special emphasis is also given to the functional aspects of the language.

The M.A. Functional Hindi (Translation) extends over four semesters of four courses each. The course is designed to facilitate the use of Hindi in its functional applications such as the use of Hindi for official purposes, in advertisements, mass media, banking and literature etc. Special emphasis will be given to translation theory and practice.

The **M.Phil. programme** is a two semester programme. The students will take courses on research methodology and advanced literary trends in the first semester and write a dissertation on an approved topic in the second semester under the supervision of a Faculty member.

The **Ph.D.** programme is entirely a research programme. Students are required to submit their theses after taking the prescribed courses. No student is permitted to submit his thesis for the Ph.D. degree unless he/she has pursued a course of research in the department for not less than two years from the date of confirmation of admission, under the supervision of an approved guide and on an approved topic. There may be written and oral examinations on the course work and the dissertation. *Applicants for the Ph.D. course must submit along with their applications, a brief description (in about 500 words) of their proposed topic of research.* 

# हैदराबाद विश्वविद्यालय



### Research in the following fields is given preference:

- 1. Bhakti Literature/Bhakti Movement
- 2. Comparative Studies
- 3. Sociological approach to Literature
- 4. Various aspects of Modern Literature
- 5. Dakshini Hindi Language and Literature
- 6. Functional Hindi and Translation
- 7. Literature Cinema mass media and cultural studies

#### **Entrance examination**

The entrance examination for M.A./M.Phil/Ph.D. consists of two parts - Part 'A' and Part 'B'. Part 'A' consists of objective type questions and Part 'B' consists of short and essay type questions.

A common entrance examination will be held for both **M.A. Hindi** and **M.A. Functional Hindi** (**Translation**) courses. At the time of making application for entrance examination for admission, the student will mention the order of preference of his choice of course in the application for admission in these courses.

The written test for admission to M.A. Hindi and M.A. in Functional Hindi (Translation) will include questions on the history of Hindi Language and Literature, works of prominent personalities of Hindi Language and Literature, essays on Social, Cultural, Political, Scientific and academic topics, related to Hindi language and literature comprehension and explanation of a piece of poem/passage in Hindi and questions on general Hindi grammar/Linguistics.

The written test for admission to **M.Phil.** programme in Hindi will contain questions (M.A. standard) on the History of Hindi literature, History of Hindi language and General Linguistics, questions on the proposed area of research and objective type questions on the History of Hindi language and literature.

The main purpose of the written test for **Ph.D.** is to evaluate the scholarship, research aptitude and ability for critical analysis. It consists of the following:

- One Essay type question on literary and linguistic topics of M.A. standard. Areas of questions will be Medieval poetry, Modern poetry, Drama and Fiction, Linguistics, Modern Criticism
- 2) One question on Research Methodology and related topics

- 3) One question on the proposed research project
- 4) Translation from Sanskrit to Hindi and English to Hindi

### **Faculty**

### **Professors**

**Shashi Mudiraj,** Ph.D. (Osmania), D.Litt. (Lucknow)-Modern literature, Socio psychological approach to Literature, Comparative studies, Functional Hindi and Translation

Noorjahan Begum, M.A. Hindi (Andhra), M.A.Sanskrit (Gorakhpur), Ph.D. (Andhra), D.Litt. (DBHPS) - Bhakti Literature, Mythological Approach to Modern Poetry, Forms of Poetry, Aesthetical aspects of Literature, Dakshni Literature and Translation

Subhas Chandra Kumar, Ph.D. (Bhagalpur) - Bhakti Movement and Bhakti Literature, Sociological approach to Literature, Comparative Literature, Functional Hindi, Translation, Modern Literary genres, Critical and aesthetic aspects of literature, Marxist aesthetics, Regionalism in literature, Interdisciplinary study of literature

V. Krishna, Ph.D. (Osmania) - Modern literature, Philosophy of literature, Comparative studies, Functional Hindi and Translation and Dalit Literature. (on deputation to ICCR upto 06-09-09)

Ravi Ranjan, Ph.D. (Hyderabad) – Bhakti Poetry, Modern Literature, Sociology of Literature & Literary Criticism (Head of the Department)

**R.S. Sarraju,** Ph.D. - (Andhra) - Functional Hindi and Translation Studies, Comparative Indian Literature, Sociology of Literature (Chief Warden)

### Readers

Sachidanand Chaturvedi, Ph.D (Kanpur), Ph.D. (Manipur)- Sanskrit literature, Hindi Poetics, General Linguistics, Modern Hindi Prose (Essay) (Dy. Chief Warden)

Alok Pandey, Ph.D. (JNU) – Bhakti Literatuare, Modern Literature, Sociological Approach to Literature, Media, Hindi cinema, Cultural Studies, Interdisciplinary Studies

Garima Srivastava, Ph.D. (Delhi) – Linguistics, Poetics, Literary Criticism, Sociological Approach to Literature, Modern Hindi Literature, Women and Marginalized Studies (on deputation to ICCR upto 1.1.2012)



**M. Shyam Rao,** Ph.D. (Hyderabad) - Modern Hindi Poetry, Aesthetics, Marxist Approach to Literature, Sociology of Literature

#### Lecturers

**Bhim Singh,** M.Phil. (Delhi) – Modern Literature, Folk Literature (Katha – Sahitya)

**M. Anjaneyulu,** Ph.D. (Hyderabad) – Modern Hindi Literature, Comparative Studies

### Department of Telugu

The main objective of the Department of Telugu is to promote studies in Telugu Language and Literature. The Department undertakes teaching and research in Telugu with emphasis on various aspects of historical and comparative studies in language and literature. The syllabus for various courses is drawn keeping in view of the changing needs of the society in relation to language use, and the role of literature in the society. An equal importance is also given for studies in Classical literature and Sanskrit, along with interdisciplinary approach.

### Programmes of study

The Department offers M.A., M.Phil. and Ph.D. programmes in Telugu.

The M.A. programme in Telugu is of four semester duration with all the important areas of study. There are 16 core courses with 52 credits, and a wide range of 21 optional courses with 3 credits each spread over four semesters. The students are required to study four core courses and choose atleast two optional courses in each semester. Thus the students of M.A. Programme have to earn a minimum of 76 credits in order to get the Degree. The courses are designed with an emphasis on the all round developments of the personality of the students with an adequate importance to job opportunities. The Courses provide a wide range of specializations such as classical, modern and folk literatures, literary criticism and aesthetics, traditional grammar, Telugu linguistics, computer application to Telugu language, and mass media.

The **M.Phil.** Programme is of two semester duration which includes course work and dissertation.

The **Ph.D.** programme is entirely a research programme oriented towards studies in classical and modern Telugu literature, comparative literature and culture, history, literary movements and Language studies. The Ph.D. Programme will normally extend over a minimum of two years from the date of confirmation of admission. The nature of the

programme is individually designed for each candidate but invariably includes a thesis on the approved topic under Faculty guidance.

### **Entrance examination**

I. The Entrance Examination paper for M.A. consists of all objective type questions for 100 marks to be answered in OMR Sheet. It will consist of objective type questions at Degree level in the areas of classical and modern literary works, genres, authors, quotations, grammar, chandas, alankaras, Andhra Culture, history of literature, literary movements and history of Telugu language, General Knowledge, current events etc.

II. The M.Phil Entrance Exam Paper will consist of all objective type questions at P.G. level for 75 marks to be answered in OMR sheet. The questions will be based on classical and modern literature, linguistics and history of Telugu Language and Literature grammar, chandas, alankaras, literary criticism, folk literature, Dramaturgy, aesthetics, literary works, authors, Basic Sanskrit knowledge, General Knowledge, etc. The candidates who qualified in the written Test will have an oral test for 25 marks.

Part 'A' **Ph.D.** entrance test will consist of objective type questions based on classical and modern literature, linguistics and history of Telugu language, grammar, chandas, alankaras, literary criticism, folk literature and General knowledge (25 marks) and Part 'B' will consist of a) problems concerning the particular area of research like classical literature, modern literature, grammar, literary criticism, language and folk literature (20 marks); b) preparation of research design, detailed synopsis of a given topic (15 marks) and c) literary appreciation or linguistic analysis of one literary piece out of two (one from classical and one from modern age) (15 marks). The candidates who are qualified in the written Test will have an oral test for 25 marks.

# Faculty

#### **Professors**

Parimi Ramanarasimham, M.A.Telugu (Andhra), M.A. Linguistics (Annamalai), Ph.D. (Mysore) - Applied Linguistics: Language teaching, Stylistics, Lexicography, Computational Linguistics and Machine Translation, Preparation of instructional materials; Educational Television (Software); Study of traditional Telugu Grammar through linguistic approach, Literary and Technical Translation.

N.S. Raju, Ph.D. (Andhra), P.G. Diploma in Applied Linguistics - Classical Telugu Literature, Grammar, Prosody,

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Poetics, Sociological approach to Literature, Linguistic approach to traditional Telugu grammar and Preparation of text books.

- **S. Sarat Jyotsna Rani,** M.A. (Nagarjuna), M.Phil. (UoH), Ph.D. (Osmania) Classical and Modern Literature; Modern Poetry; Folk Literature and Cultural History of Andhras and Telugu Drama.
- **B. Ramabrahamam,** Bhashapraveena (Andhra University), M.A. Telugu (Andhra), M.A. Sanskrit (Andhra), Ph.D. (Nagarjuna University) Sanskrit; Prakrit and Telugu Grammars; Prosody; Poetics; Classical Literature; Applied Criticism; Translation. (**Head of the Department**)

**Tummala Ramakrishna,** Ph.D. (S.V.University, Tirupati) – Modern Telugu Literature, Fiction Writing, Preparation of Text Books

G. Aruna Kumari, M.A. (Telugu), M.A. (Philosophy),
(O.U.), M.A. Sanskrit (O.U.), M.Phil. and Ph.D. (UoH) D.Litt.
Modern Literature, Classical Literature, Folk Literature,
Sanskrit Logic and Inscriptional Telugu.

### Reader

R.V. Rama Krishna Sastry, Ph.D. (Sanskrit & Telugu), M.A. (Sanskrit), M.A. (Telugu), M.A. (Jyothisha) (Telugu University), Vyakarana Vidya Praveena, Bhasha Praveena (Andhra University) CIC (IGNOU) - Telugu and Sanskrit Grammar, Classical Literature, Literary Criticism.

#### Lecturers

**Pillalamarri Ramulu,** M.A. (Osmania) M.Phil & Ph.D. (UoH) P.G. Diploma in Sanskrit - Classical and Modern Literature, Literary Criticism, Evolution of Telugu Literature, Folk Literature and Cultural Studies.

Pammi Pavan Kumar, M.A. Telugu (UoH), M.A. Linguistics (Annamalai), M.Phil., Ph.D. (UoH) – Classical and Modern Telugu Grammar, Language Teaching, Natural Language Processing, Preparation of text books and Mass Media.

Darla Venkateswara Rao, M.A. Telugu (UoH), M.A., Sociology (B.R.A.O.U.) M.Phil & Ph.D. (Telugu) (UoH) P.G. Diploma in Linguistics & Teaching of Telugu Language (PSTU.), Diploma in Sanskrit (O.U) - Comparative Aesthetics, Literary Criticism, Applied Criticism, Classical Literature, Modern Poetry, Dalit Literature, Sociological approach to Literature.

**D. Vijayalakshmi,** M.A. Telugu (Madras), M.A. Linguistics (Annamalai), Ph.D. (SPMVV, Tirupati), Diploma in Tamil,

P.G. Diploma in Telugu Translation (SPMVV, Tirupathi) – Applied Linguistics, Study on Telugu Language, Dialectology, Translation, Folk Literature, Lexicography, and Comparative Linguistics.

**B. Bhujanga Reddy,** M.A., M.Phil (Telugu), M.A. (Applied Linguistics), Ph.D Linguistics (UoH), M.A. (Sanskrit) P.G. Diploma in Translation Studies, Senior Diploma in Sanskrit - Literary Criticism, Literary Translation, Telugu Grammar and Linguistics.

**Dr. Addanki Srinivas** (Temporary), B.A. (OL) – Nagarjuna University, M.A. (Telugu), Ph.D (Telugu) – Andhra University, M.A. (Sanskrit) – S.V. University - Telugu Language, Grammar, Prosody, Classical and Modern Literature.

### Department of Urdu

The Department of Urdu lays emphasis on the interdisciplinary job oriented education in Urdu. It provides an atmosphere, which helps the student in developing his/her intelligence, organizing ability and research aptitude. The Department also aims at developing the importance of national integration through its study and research programmes. It also provides an atmosphere for the development of creative talents among students. This Department is the only Department of Urdu in India having its own fully equipped Computer Lab with 12 PCs having Multimedia kits, CD read write drives, scanners and all the PCs are connected to internet.

The Department offers M.A., M.Phil., and Ph.D. programmes in Urdu.

The M.A. Urdu syllabus has both modern and interdisciplinary features. The programme aims at giving a fair knowledge of all the important forms of Urdu literature with introduction of other disciplines in Humanities and Social Sciences relevant to Urdu literature. The programme consists of several innovative optional courses like translation theory & practice, Writing methods for audio visual media, and core/compulsory courses in Computer & Urdu Software practices and Introduction to Urdu Journalism.

The **M.Phil.** Programme has twin objectives: i) to train a student in research methodology so that he/she may pursue Ph.D. research in a systematic manner; and ii) to familiarize them with practical criticism so that their research does not become a mere enumeration of facts but exhibits an exercise of the faculties of critical appreciation and evaluation of literary works.



The candidates for **Ph.D.** may be required to work on a topic approved by the Departmental Committee but our special targets are i) inter-disciplinary topics ii) topics of comparative literature. *Applicants for the Ph.D. course must submit along with their applications, a brief description (in about 500 words) of their proposed topic of research.* 

### **Entrance examination**

The entrance examination for M.A./M.Phil/Ph.D. consists of two parts - Part 'A' and Part 'B'. Part 'A' consists of objective type questions only (25 marks). The tests are designed to test candidate's knowledge at appropriate level i.e. B.A. for admission to M.A. and M.A. for admission to M.Phil./Ph.D. Part 'B' of M.A. entrance examination will consist of i) two questions of essay type to test the explanatory/ descriptive ability of the candidate in Urdu language/literature and general topics (50 marks), and ii) one question to determine the candidate's capacity for understanding and explaining poetry/couplets/ nazm/rubai etc. (25 marks).

Part 'B' of the M.Phil. entrance examination will consist of a) two essay type questions to evaluate candidate's knowledge of literary forms, history of Urdu literature and criticism (30 marks); b) short questions on Urdu language and literature (20 marks).

Part 'B' of the **Ph.D.** test will consist of i) two essay type questions (30 marks) and ii) short question/s on Urdu language/literature (20 marks).

The qualified candidates for M.Phil. & Ph.D. will have an oral test for 25 marks.

# **Faculty**

### **Professors**

Mohammed Anwaruddin, Ph.D. (UoH) - Urdu Journalism, Textual Criticism, Research Methodology, Deccani Language and Literature, Urdu Criticism & Modern Literature.

**K. Muzaffer Ali,** Ph.D. (Madras) – Poetics; Classical Urdu literature; Urdu drama; Modern poetry; Modern & post modern criticism; Generes of Urdu literature; metaphorical studies in Urdu literature & Quran.

**Prof. Mohd. Baig Ehsas,** Ph.D.(UoH) – Classical & Modern Fiction, Modern Poetry; Modern & Post Modern Criticism, Mass Media (Head of the Department)

### Readers

**Rizwana Moin,** Ph.D. (UoH) – Interdisciplinary studies, Classical & Modern Literature, Fiction.

**Habeeb Nisar,** Ph.D. (UoH) – Classical Prose & Poetry, Deccani literature, Inter-disciplinary studies, Criticism, Textual Criticism, Practical Criticism, Urdu Fiction

### Lecturers

Mohammed Naseemuddin, Ph.D. (Hyderabad) -Deccani Language & Literature, Classical Literature, Modern Poetry, Criticism, Textual Criticism, Linguistics, Oriental Poetics. (on lien)

**Arshia Jabeen,** Ph.D. (UoH) – Modern prose; Modern Fiction; Modern Literary criticism; Computer studies.

**Abdur Rab Manzar,** Ph.D. (Osmania) – Modern Criticism, Modern Prose & Poetry

Mohd. Khasif, Modern Fiction & Mass Media

# Centre for Applied Linguistics and Translation Studies (CALTS)

The Centre for Applied Linguistics and Translation Studies (CALTS), created as a research centre in 1988, established a post-graduate teaching programme in 1990. CALTS specializes in language interface studies with a special emphasis on Language Technology (for which a Special Assistance Programme has been sanctioned by UGC (Phase-I: 2002 to 2007, Phase - II 2007-2012), Translation Studies, Lexicography, Language typology and Language Teaching. CALTS has ongoing project on Indian Language to Indian Language Machine Translation funded by MCIT, Govt. of India and on Language Teaching & Curriculum Design funded by TIFR. Widely perceived as one of the advanced centres of teaching and research in Linguistics and Translation Studies in the country, the Centre, jointly with IIIT, Hyderabad, has also created a substantial computational facility for research and training in Natural Language Processing (NLP) and Machine Translation (MT). CALTS has specialized Faculty in other areas too, which include formal Syntax and Semantics, Historical Linguistics, Stylistics, Psycholinguistics and Sociolinguistics as well as specialists in different Ancient and Modern Indian and Foreign Languages, such as Sanskrit, Telugu, Tamil, Kannada, Malayalam, Marathi, Oriya, Bangla, Khasi and Russian.

### Programmes of study

M.A. in Applied Linguistics is a four-semester programme with 4 courses per semester. The compulsory courses cover Phonetics, Phonology, Morphology, Syntax, Semantics, Language Teaching and Testing, Translation Studies, Lexicography, Computational Linguistics, Historical Linguistics, Psycholinguistics and Sociolinguistics. The optionals frequently offered include: semantics, word

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formation, South Asia as a Linguistic Area, Semiotics, Language of Mass Media, Language use in Professions, Advanced Computational Linguistics, Machine Translation, Computational Lexicography, Linguistics and Literature, Field Methods, Structure of an Indian Language, Advanced Syntax, etc.

**5-year Integrated M.A. in Language Sciences** has been launched from 2006-2007.

This ten semester progrmame trains students to work as language experts in the emerging areas of Computational Linguistics, Speech Technology, Communication Studies and Cognitive Science, and Language Therapy among others.

M.Phil. in Applied Linguistics is a two-semester programme including four papers in the 1st semester courses and a dissertation in the second semester. The course work provides exposure to Research Methodology & Advances in Applied Linguistics as well as Theories of Translation and options such as Sociolinguistics, Language Teaching & Testing, Lexicography, Psycholinguistics, Language Planning & Development, Indian Grammatical Tradition, Translation, History & Culture, Structure of an Indian/Foreign Language, Computational Linguistics. The dissertation will have to be written on a topic approved by the Centre.

M.Phil. in Translation Studies is a two-semester programme including course work and a dissertation. There are four courses to enable students from Literature, Linguistics and other backgrounds to pursue their interests in Translation Studies and begin research without getting too deeply involved in Micro Linguistics. The dissertation will have to be written on a topic in Translation Studies approved by the Centre.

The Ph.D. programme in Applied Linguistics and the Ph.D. programme in Translation Studies extend over a minimum period of two years from the date of confirmation of admission. The nature of each programme is individually decided for each candidate but normally (and for candidates who have done no M.Phil. always) includes at least four courses spread over the first two semesters and a dissertation on an approved topic under Faculty guidance.

### **Entrance examination**

The entrance examination for M.A./M.Phil/Ph.D. consists of two parts - Part 'A' and Part 'B'. Part 'A' consists of 25 objective type questions (25 marks). Part 'B' of the entrance examination for admission to **M.A.** in **Applied Linguistics** will test language and general aptitude of the candidate as well as take into account proficiency in Linguistics (if any). The

questions will pertain to i) shortnotes on general/social issues related to language (25 marks); ii) English language proficiency (20 marks); iii) a short essay (10 marks) and iv) an option of either (a) translation of a short passage from English into any Indian language the candidate is comfortable with or (b) elementary problems in descriptive linguistics (20 marks).

Part 'A' of the question paper for **M.Phil. Applied Linguistics** will consist of 25 objective type questions on general linguistics (25 marks) and Part 'B' will test the following: i) simple questions on structure of Indian languages (15 marks); ii) Question on proposed topic of your research (15 marks) and iii) four short questions on different areas of Applied linguistics (Language Teaching and Testing, Computational Linguistics, Lexicography, Socio linguistics and psycholinguistics, etc.) (20 marks).

Part 'A' of the question paper for **M.Phil. Translation Studies** will consist of 25 objective type questions on language and general aptitude (25 marks); and Part 'B' will consist of the following: i) translation of sentences (10 marks); ii) translation of a prose passage along with discussion of the problems involved (10+5 marks); iii) questions on structure of Indian languages (10 marks) and iv) question on proposed topic of your research (15 marks).

Part 'A' of the question paper for **Ph.D.** programme in **Applied Linguistics** will include 25 objective type questions on general linguistics (25 marks) and Part 'B' will include five short questions in different areas of Applied Linguistics (25 marks), one question on methodology and/or topic suggested (10 marks) and three short notes on structure of Indian languages (15 marks).

The entrance examination for admission to the **Ph.D.** programme in **Translation Studies** will include under Part 'A', 25 objective-type questions testing language knowledge and familiarity with fields relevant to translation studies (25 marks) and Part 'B' consisting of: i) prose translation along with discussion of the problems involved (10+5 marks); ii) poetry translation (10 marks); iii) three questions on translation theory (15 marks) and iv) questions on translation of technical terms (10 marks).

Note: Applicants for admission to the Ph.D. programme must submit along with the application (i) a brief description (about 500 words) of their proposed topic of research and (ii) a copy of M.Phil./M.Litt. dissertation/papers (returnable).

### **Faculty**

### **Professors**

**Padmakar Dadegaonkar,** Ph.D. (Osmania) - Marathi Language & Literature, Sanskrit Language & Literature, Comparative Literature, Translation Studies, Computational Linguistics, Lexicography

**Panchanan Mohanty,** Ph.D. (Berhampur) - Language Teaching and Testing, Psycholinguistics, Phonology, Morphology, Language Typology, Computational Linguistics, Quantitative Linguistics, Translatology.

**B.R. Bapuji,** Ph.D. Linguistics and Sociology (Osmania) - Social Theory, Sociology of Language, Translation Studies, Political Sociology, Gender Studies, Literacy Studies.

**G. Uma Maheshwara Rao,** M.Sc (BHU), M.A. Linguistics, Ph.D. Linguistics (OU), M.A. Applied Linguistics (SUNY New York) - Historical Linguistics, Derivational Morphology, Nonlinear Phonology, Computational Linguistics. (Head of the Centre)

Gautam Sengupta, Ph.D. (Massachusetts) - GB Theory, Philosophy of Language, Computational Linguistics & Formal Semantics and Linguistic Cognition (Joint Faculty, Centre for Cognitive Science)

**N. Krupanandam,** Ph.D. (SVU) - Tamil Language and Literature, Comparative Literature, Language Teaching, Lexicography, Telugu Language and Literature, Translation Theory and Practice.

**K. Subrahmanyam,** Ph.D. (Andhra) - Sanskrit Language and Literature, Discourse Analysis, Literary Criticism, Translation Studies, Natural Language Processing, Telugu grammar & Literature, Comparative Literature, Paninian Studies, Indian Philosophy, Ayurveda, Rajaniti, Lexicography and semantics.

**Shivarama Padikkal,** Ph.D. (Mangalore) - Kannada Language & Literature, Cultural Studies, Translation Studies.

**J. Prabhakara Rao,** Ph.D. (Moscow) - Mathematical and Computational Linguistics, Systemic Linguistics and Systemic Typology, Methodology of Linguistics, Russian Linguistics and Russian as a Foreign Language.

### Lecturers

**Gracious Mary Temsen,** Ph.D. (Delhi) - Syntax, Linguistic Typology, Mon-Khmer Linguistics.

**K.Rajyarama,** Ph.D. (UoH) — Derivational Morphology, Translation Theory and Practice, ELT and Syntax.

Somsukla Banerjee, Ph.D. (IIT, Kanpur) – Cognitive Linguistics, Semantics, Language Deficit Studies, Psycholinguistics.

### Centre for Comparative Literature

The Centre for Comparative Literature functioning since 1988, aims at providing an interface between literatures and cultures with a contemporary charge. The Centre offers research programmes in M.Phil and Ph.D. The endeavour is to: encourage young learners to research expressive modes and archives of knowledge beyond those of their own culture; forge alliances with and develop sensitivity to differences in cultures and traditions; develop a critical awareness of socio-political and cultural discourses in terms of their impact on the literary and cultural studies.

### Programmes of Study

M.Phil. is a two-semester programme, which includes course work and a dissertation. The Courses comprising of 16 credits include: (1) Comparative Theory and Research Methodology; (2) Criticism and Contemporary Theory; and two Courses of the student's choice from the Courses being offered by the Centre, in consultation with the Faculty. The dissertation is required to be written under supervision on a topic approved by the Centre. The programme includes a written examination at the end of the first semester on the courses and submission of a dissertation for examination by the end of second semester.

The **Ph.D.** programme extends over a minimum period of two years from the date of confirmation of admission. The nature of the programme is decided for every student individually in consultation with the Faculty, but the requirements invariably include Course Work over two semesters comprising of 16 credits and a dissertation on an approved topic under Faculty guidance.

Applicants for admission to the Centre should note that the medium of instruction in the Centre is English, and they should therefore ensure that they have a good knowledge of English to follow the lectures and to participate in other curricular actives of the Centre. Furthermore, applicants must provide documentary evidence of knowledge of the literatures of at least two languages (one of which may be English). This does not hold in the case of those who already have an M.Phil. in Comparative Literature and are applying for a Ph.D.

### **Entrance examination**

The entrance examination for M.Phil./Ph.D. consists of two parts: part 'A' and part 'B'. Part 'A' consisting of objective type

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questions, will test the candidate's knowledge of modern Indian literatures and comparative literature theory (25 marks).

Part B of the M.Phil. question paper will consist of i) short notes on Indian literatures and Western and Indian critical concepts and movements (20 marks); ii) one essay on a topic on comparative Indian literature (15 marks) and iii) translation of a passage from English to an Indian language (15 marks). Applicants for Ph.D. must submit along with the application (a) a brief description (about 500 words) of their proposed topic of research and (b) a copy of the M.Phil. / M.Litt. dissertation / papers (this will be returned). Applications unaccompanied by these enclosures may not be considered.

### **Faculty**

### **Professor**

**Tutun Mukherjee,** Ph.D. (Osmania University) – Literary Criticism and Theory; Translation; Women's Writing; Theatre and Film Studies; Culture Studies (**Head of the Centre**)

### Reader

**M.T. Ansari,** Ph.D. (CIEFL, Hyderabad) – Cultural Studies, Critical Theory, Malayalam Literature, Minority Discourse.

#### Lecturers

**Sowmya Dechamma C.C.,** Ph.D. (UoH) – Translation Studies, Gender and Ecological Studies, Kannada Literature, Kodava Language and Cultural Discourse.

**J. Bheemaiah,** Ph.D. (Osmania University) – Dalit Studies, Telugu Literature, Cultural Studies.

### Department of Sanskrit Studies

Sanskrit is a repository of unlimited invaluable knowledge of Ancient Indian Heritage. There is an urgent need for knowledge mining from Ancient Sanskrit texts for bridge building between the past and the future through the present. Keeping this in view, a unique research oriented Department of Sanskrit Studies was established in 2006 which will act as an interface between Sanskrit and the sub-fields of the Humanities, Social Sciences and the Sciences.

### Major goals of the Department are:

- To build bridges between the Ancient Indian knowledge systems and the current knowledge systems.
- b) To explore Ancient Sciences and Technologies with a modern perspective to build alternate viable systems for the future.
- c) To collect, preserve, and maintain the manuscripts

dealing with Ancient Indian Sciences and Technology.

d) To train traditional scholars in order to undertake research in application oriented knowledge mining.

### Ph.D. programme

The Department offers a Ph.D. programme in Sanskrit Studies. While the present focus of the programme is in Language Technologies, the Department actively encourages research in Sanskrit Studies in other disciplines such as Physical Sciences, Social Sciences, Ayurveda etc. The Ph.D Programme extends over a minimum period of two years from the date of confirmation of admission. The nature of each programme is individually decided for each candidate which may include two courses and a dissertation on an approved topic under the Faculty guidance.

### M.Phil Programme

The Department offers an M.Phil. Programme in Shabdabodha Systems and Language Technologies. This is a two semester programme. The first semester consists of course work with minimum 16 credits. In the Second Semester student carries out research on an approved topic under the Faculty guidance leading to a dissertation.

### **Entrance Examination**

The entrance examination for Ph.D. consists of two parts - Part 'A' and Part 'B'.

Part 'A' consists of 25 objective type questions (25 marks). The questions will be on vykarana/linguistics, technical language of navya nyaaya, Computational Linguistics/ NLP and on general Sanskrit. The purpose of examination will be to test the understanding of concepts rather than mere memorization. There will be negative marking for this part, and 0.33 mark will be deducted for each wrong answer.

Part 'B' will have three sub-sections. The first sub section consists of 10 marks, wherein the candidate has to write a short note on the topic in which he would like to do research, explaining the methodology involved. The second subsection involves essay type questions (20 marks) to test the aptitude of the candidates for research. The third sub-section consists of 6 short answer type questions on vyakarana, nyaya, NLP, manuscriptology, Computational Linguistics and ayurveda. The student has to attempt any 4 questions (20 marks).

The entrance examination for **M.Phil.** consists of two parts – Part A consists of 25 objective type questions (25 marks). The questions will be on vyakarana/linguistics, and on general Sanskrit. The purpose of examination will be to test



the understanding of concepts rather than mere memorization. There will be negative marking for this part and 0.33 mark will be deducted for each wrong answer. Part B will have two sub sections. The first section consisting of essay type questions (20 marks) and the second section consists of short answer type questions on Vyakarana (30 marks).

### **Faculty**

### Reader

**Amba Kulkarni,** M.Sc. (Maths), M.Tech (CSE, IIT, Kanpur)- Bridging the gap between Science and Technology in Sanskrit texts and the Modern Science and Technology, with special emphasis on Language Technology, Computer Science and Mathematics. **(Head of the Department)** 

### Lecturer

**J.S.R.A. Prasad,** Ph.D. (Rashtriya Sanskrit Vidyapeetha, Tirupati) - Nyaya Vaisheshika, Natural Language Processing, Ayurveda, Philosophy of Language, Sanskrit Lexicography.

### **Guest Faculty**

R. Anupama, Ph.D. (Rashtriya Sanskrit Vidyapeetha, Tirupati)

### Joint Faculty

# Centre for Applied Linguistics and Translation Studies

**Prof. K. Subrahmanyam,** Ph.D. (Andhra) - Sanskrit Language and Literature, Discourse Analysis, Literary Criticism, Translation Studies, Natural Language Processing, Telugu grammar & Literature, Comparative Literature, Paninian Studies, Indian Philosophy, Ayurveda, Rajaniti, Lexicography and semantics.

# Department of Computer/ Information Sciences

**Prof. K.N. Murthy,** Ph.D. (Hyderabad) – Natural Language Processing, especially grammars and parsing systems. Tools for language teaching and language learning. Other interests include Yoga, Ayurveda and the Darshanas.

### Department of Telugu

R.V. Rama Krishna Sastry, Ph.D. (Sanskrit & Telugu), M.A. (Sanskrit), M.A. (Telugu), M.A. (Jyothisha) (Telugu University), Vyakarana Vidya Praveena, Bhasha Praveena (Andhra University) CIC (IGNOU) - Telugu and Sanskrit Grammar, Classical Literature, Literary Criticism.

### **Department of Plant Sciences**

Kottapalli Seshagirirao, M. Phil.. & Ph.D., (UH) F.R.A.S. – Botanical Sanskrit, Telugu & Latin, Ayurvedic Medicine, Medicinal & Pharmaceutical Botany, Plant Systematics, Biodiversity & Conservation.

### **Senior Linguists**

**Devanand Shukl,** Ph.D. (Delhi) – Sanskrit Computational Linguistics

### English Language Teaching Cell (ELTC)

The English Language Teaching Cell, primarily services the needs of the Integrated Programmes of the University and also provides need-based courses in English for other students across the University. The aim is to provide essential English language skills that would help students cope with their curricular demands in their respective disciplines, and also to prepare them for future career demands. Classes are organized in small groups to facilitate individual as well as remedial attention. The Cell currently has two Faculty members, Dr. Shree Deepa and Ms. Jyoti Hymavathi Devi and a few Guest Faculty.



### School of Social Sciences

The School of Social Sciences comprises the following Departments and Centres.

### **Departments**

- 1. Department of Economics
- 2. Department of History
- 3. Department of Political Science
- 4. Department of Sociology
- 5. Department of Anthropology

### **Centres**

- 1. Centre for Regional Studies
- 2. Centre for Folk Culture Studies
- 3. Centre for Study of Social Exclusion and Inclusive Policy
- 4. Centre for Study of Indian Diaspora
- 5. Centre for Knowledge, Culture and Innovation Studies
- 6. Centre for Human Rights
- 7. Centre for Gandhian Economic Thought

The Departments of Economics, Political Science and Sociology have been recognised by the University Grants Commission for the Special Assistance Programme.

An Archival Cell with the support of the UGC is functioning under the auspices of the Department of History for preservation of rare and valuable manuscripts. The Department of Anthropology has developed a museum as teaching aid for students. All the Departments are equipped with internet facilities.

From the Academic Year 2007-2008 the School of Social Sciences has started a 5-Year Integrated Programme in Social Sciences leading to Masters Degree in Economics, History, Political Science, Sociology and Anthropology. For the first three years the students admitted to the programme do courses offered by various departments in the School and other Schools in the University. At the end of three years, students will branch out to Departments of Economics, History, Political Science, Sociology and Anthropology after fulfilling the credit requirement, stipulated by the Departments.

**Prof. G. Nancharaiah,** Department of Economics is the **Dean of the School.** 

### **Department of Economics**

The Department of Economics has been offering programmes of study leading to M.A., M.Phil.and Ph.D.

degrees since 1979. The Department offers well-balanced courses of study at all levels incorporating Economic Theory, Quantitative Analysis, and Indian Economic Problems.

### Programmes of study

M.A. programme has been designed to expose the student to alternative paradigms of economic theory and their application to contemporary national and international problems. Students are in addition trained in econometrics and quantitative methods. A certain minimum standard in quantitative methods is expected of candidates. The programme for M.A. studies is divided into 4 semesters spread over two years and consists of compulsory and optional courses which the student can opt for from a wide range of courses, designed to cover economic theory, techniques and applied economics.

**M.Phil.** is a one year programme consisting of course work and dissertation. The course work places emphasis on: a) recent advances in selected areas of economics, b) literature in the chosen area of research and, c) proficiency in research methodology of economics. Students are required to do course work in the first semester. During the remaining part of the programme, they are expected to write a dissertation.

The **Ph.D.** programme consists mainly of research work (with a provision for course work to those who are admitted without M.Phil. degree) leading to a thesis on an approved topic. The thesis will be of a high standard seen as a contribution to knowledge and will be defended in an open viva-voce.

### Entrance Examination

The Entrance Examination for M.A. programme consists of only objective type questions. This is designed to test the candidates' general aptitude (including his/her quantitative ability) and understanding of economics at the bachelor's level.

Admission to the M.Phil./Ph.D. programme will be based on written and oral tests. The written test (common to both M.Phil. & Ph.D.) consists of objective type questions. Only those who qualify in the written test will be called for the oral test. Those who are qualified under UGC JRF are exempted from the written test for the Ph.D programme. Candidates for Ph.D programme are required to submit a research proposal along with applications for admission. Applications without research proposal will not be considered.



### **Faculty**

### **Professors**

- **G. Nancharaiah,** Ph.D. (Andhra) International Economics, Agricultural Economics, Development Economics & Mathematical Economics (Dean of the School)
- **K.N. Murty,** Ph.D. (Gujarat) Econometrics, Applied Economics and Statistics
- **B. Kamaiah,** Ph.D.(IIT,Bombay) Monetary and Financial Economics
- **J.V.M.Sarma,** Ph.D. (Gujarat) Public Economics, Corporate Finance, Econometrics and Computer Applications (Head of the Department)
- **A.V. Raja,** Ph.D. (IIT, Kanpur) Micro Economic Theory, Law & Economics, Environmental Economics, Development Economics.
- **Vathsala Narasimhan,** Ph.D.(ISI, Calcutta) Economic Theory, Mathematical Economics and Economics of Development with special reference to Agriculture.
- **G. Omkarnath,** Ph.D. (JNU) Classical Economics, Political Economy of India and Capital Theory
- Naresh Kumar Sharma, Ph.D. (ISI, Delhi) Development Economics, Agricultural Economics, Science and Technology, Gandhian Economic Thought
- **J. Manohar Rao,** Ph.D. (JNU) Health Care Economics, Development Theory and Policy, WTO and Globalization, Classical Political Economy, Economics of Science, Technology and Technical Change, Micro-Economic Theory, Comparative Economic Systems.

### Readers

- **R.Vijay,** Ph.D. (Hyderabad) Political Economy, Development Economics, New Institutional Economics.
- **R V Ramana Murthy,** Ph.D. (UoH) Development Studies, Macro Economics and Law & Economics
- **N.A. Khan,** Ph.D. (Allahabad) Public Economics, International Trade, Infrastructure Economics, Macro Economics
- **Debashis Acharya,** Ph.D. (UoH) Macro-Monetary Economics, Financial Economics

#### Lecturers

K. Laxminarayana, (Selection Grade) Ph.D. (UoH) -

- Political Economy and Agricultural Economics, Economics of Education
- **B. Nagarjuna,** (Senior Scale) Ph.D (UoH) Industrial Economics, Transitional Economics and International Finance, Indian Economy.
- **Phanindra Goyari,** (Senior Scale) M.Phil, (IGIDR, Mumbai), Ph.D. (UoH) Econometrics, Mathematical Economics, Agricultural Economics, and Model Building & Simulation in Economics.
- **G. Vijay,** Ph.D.(Institute of Social Studies The Hague)—Labor Economics, Environmental Economics, Economics of Business Organizations, Law and Economics
- **G. Sridevi,** Ph.D. (Institute of Social and Economic Change, Bangalore) Food Security, Health Care, Gender and Poverty.
- **Vamsicharan Vakulabharanam,** Ph.D. (Massachusetts, USA) Macro Economics, Development Economics, Political Economy.

### UGC Research Scientist 'B' (Readers' Grade)

**S.Sandhya,** Ph.D. (JNU) – Demography, Population and Development, Health Economics, Health Policy

### **Department of History**

The Department of History offers courses leading to M.A., M.Phil., and Ph.D degrees. It also offers 10 courses in history for the first three years of IMA Social Sciences. Its teaching programme is designed to provide students with a broad overview of world history narrowing down to focus on the history of India with special emphasis on socioeconomic, science, technology, Environment and cultural history.

At the research level the Department's primary focus is on the socio-economic and cultural history of the Deccan region, namely, Andhra Pradesh, Karnataka and Maharashtra. At the same time, an in-depth study of the linkages (socio-cultural and economic) of the Deccan region with other Indian regions and the outside world are also attempted. There is a two fold aim of all research activities in the Department: a) Widening the database in its studies of local and regional history and b) introducing an inter-disciplinary approach to understand the underlying social and economic realities of the history of the Deccan through the ages. The Department has been involved in guiding research on North East regions; science, technology, environment and medicine, economic history, women's studies, Indian national movement, peasant and tribal movements, cultural history and contemporary history.



### **Programmes of Study**

The M.A. course is a two year programme consisting of 16 courses spread over four semesters, with four courses per semester. The main thrust of the first two semesters is to equip the students in certain core compulsory courses in both Indian and non-Indian history. These are designed to be comprehensive and introduce students into the various interpretative dimensions of understanding the history of human civilization with a focus on India. During semesters III and IV a wide range of special courses as optionals are offered by the Department thus providing an opportunity for students to specialize in specific areas of Indian History. Students also have an opportunity to do at least two courses outside the Department during their third or fourth semesters with the aim to encourage inter-disciplinary studies. The Department during each academic year decides the number and title of options.

The **M.Phil.** Course covers two semesters including dissertation, extendable by one semester. During the first semester, three compulsory courses have to be done by the students. The focus is on issues of historical interpretation and method. One of these is an intensive introduction to the problem being researched by the individual students leading, in the following semester to the writing of a dissertation under the guidance of a Faculty member on an approved topic.

The **Ph.D.** programme is mainly a research programme. Those students admitted directly without M.Phil degree are required to do the M.Phil course work and examination conducted by the Department. Students undertake research on an approved topic under the guidance of a Faculty member.

### Infrastructural Facilities

Under the support from the Special Assistance Programme of the UGC the Department has been able to purchase a large number of books on most of the recent writings on history. Under the UGC Programme of Universities with Potential for Excellence (UPE) the Department could procure and strengthen the infrastructural facilities in the Department. It has also been able to support the continuance of several foreign and Indian journals on History subscribed by the Library. The Archival Cell in the Department contains the private papers of individuals who have participated in the freedom movement. The Department has an archaeological museum containing antiquities representing stone ages to late Medieval periods. As part of its effort the Department continues to document and update its resources with the help of equipment being purchased from time to time.

### Computer Lab for students of M.A, M.Phil and Ph.D.

The Department of History has a Computer Laboratory with 12 Computers and a printer. All the students of history are free to use the lab with free internet access.

### **Entrance Examination**

The Department conducts its M.A., M.Phil. and Ph.D. Entrance Examinations based on a wide array of different types of questions. Two aspects that are common to the examination for M.A. course is the inclusion of essays and objective type questions to assess the general aptitude and capability of the candidates and their knowledge of the subject for pursuing the course concerned. In addition, for the M.A. examination, the Department may have other types of assessment procedures like the inclusion of short extracts and questions based on it or the inclusion of "fill in the blanks" based on well-known historical facts. The M.Phil. and Ph.D. examination assess the students on writing, major essay, short essays and short notes on key concepts in history and one of the essays to be done is necessarily on historiography or historical method. In general, candidates interested in pursuing their studies in the Department are assessed in their intensive knowledge of historical facts and also their ability to comprehend general concepts in history along with their skills in writing about historical narratives in a comprehensive way. Students seeking admission to the M.Phil. and Ph.D. courses must also take a Viva-Voce examination.

## **Faculty**

### **Professors**

Aloka Parasher Sen, Ph.D. (London) - Ancient and Early Medieval Indian History, Socio Economic History of the Deccan, Women's History, Historical Archaeology, Urban History and Historiography (on EOL)

R.L. Hangloo, Ph.D. (JNU, Delhi) - Medieval Indian History with Special reference to Medieval Indian State, Medieval Indian Economy and Technology, and History of Kashmir and Central Asia (Head of the Department)

Atlury Murali, Ph.D. (JNU, Delhi) - Social and Cultural History of Colonial India with special reference to Freedom Struggle, Peasant Movements, Women's Studies, Environmental Studies and History of Computers, Science, Technology and Medicine

**K. P. Rao,** Ph.D. (Nagpur) – Field Archaeology, Pre and Proto History, Ancient Indian History, Iron Age, Megalithic Culture and Ancient Trade.



**Rekha Pande,** Ph.D. (Allahabad) - Medieval Indian History, Socio-economic History, Women's History, Religion, Society and Cultural History and the History of Medieval Science and Technology (Coordinator, Centre for Women's Studies).

**Rila Mukherjee,** Ph.D. (Paris) — Economic History of South Asia, early Modern European history, Democracy and citizenship studies, Maritime and Oceanic history, Historical Cartography

### Readers

Sanjay Subodh, Ph.D. (Chandigarh) – Medieval Indian Historiography, Science and Technology and Medieval Archaeology.

**R. Swarupa Rani,** Ph.D (Hyderabad) — Modern Indian History, Social and Cultural History of South India, Women's History and Historiography.

### Lecturers

**M.N. Rajesh,** Ph.D. (JNU, Delhi) – Medieval Indian History, Socio-Religious Movements and Polity in South India and the Deccan and Tibetan History and Culture.

**Anindita Mukhopadhyay,** Ph.D. (London) — Modern Indian History, Modern Western Ideas and their Impact, Law and Society, Society and Culture.

**V. Rajagopal,** Ph.D. (Wisconsin) - Modern Indian History, Social History and History of South India.

### Department of Political Science

The Department of Political Science currently has Special Assistance Programme (DSA-III) on the thrust area **Globalization, State, Civil Society and governance interface.** The Department offers courses leading to M.A., M.Phil., and Ph.D. degrees. The Department has a **Faculty** and student exchange programme with the Uppsala University, Sweden.

### Programmes of study

The M.A. programme in Political Science consists of 16 courses (8 core or compulsory courses and 8 optional courses) spread evenly over four semesters. Each course carries four credits. In formulating the entire programme, the Department is guided by the consideration that at the post graduate level, students should be familiar with all the subdisciplines, trends, approaches, and paradigms of Political Science. With this in view, the Department offers core courses on Political Thought, Comparative Politics, International Relations, Indian Political Process, Public Administration and Public Policy. These courses are aimed at acquainting

students with the latest political and theoretical trends, making the programme contemporaneous, relevant and useful. There is also a course giving an overview of the major approaches to the study of politics.

After completing these 8 compulsory courses in the first two semesters, students are required to choose 8 optional courses from a considerably long list of special courses. These not only supplement the compulsory courses in the core areas but also offer students opportunities to study such frontier areas like Human Rights, Feminism and Post-modernism and vulnerable/marginalized groups.

The **M.Phil.** course is a two semester programme. The students are required to devote the first semester to course work which consists of four courses, each carrying four credits, in the areas of Research Methodology, Advanced Theories and a specialized course in the field of student's research interest. In the following semester, each student is required to write a dissertation on an approved topic under the supervision of a Faculty member.

The **Ph.D.** programme consists mainly of a research project (and course work if required) and a thesis on a topic approved by the Department. The thesis should be of a high standard and considered to be a valuable contribution to the area of study concerned. Candidates for the Ph.D. programme are required to submit a research proposal for the intended Ph.D. thesis along with the application for admission. The research proposal should contain hypothesis, goals or objectives, statement of the problem and methods of executing the proposal. This is an essential requirement.

### **Entrance Examination:**

### M.A.

The written test for admission to **M.A.** Political Science consists of three parts. Part-A (30 marks) consists of multiple-choice type questions that test the general knowledge as well as subject specific knowledge of the candidate. Part-B (30 marks) consists of passages of general type to test reading comprehension abilities of the candidates. In Part-C (40 marks) the candidates will be asked to answer two essay type questions, where choice is available. In this section while some questions are subject specific, some are of general nature which can be answered by candidates from non-political science background.

#### M.Phil.

The written test for **M.Phil** programme consists of 10 essay type questions out of which the candidates are expected to answer any five questions (75 marks). The questions will cover different areas of political science, namely Political

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Theory, International Relations, Comparative Politics, Indian Government and Politics and Public Policy / Public Administration. Selection of candidates will be based on the performance in the written test (75 marks) and interview (25 marks) with the exemption to JRFs as per the UGC Rules.

### Ph.D.

The written examination for **Ph.D.** programme will have two parts. Part A consists of three questions on Methodology. Out of the three questions, the candidate should attempt only One question and it carries 37.5 marks. It should reflect the candidate's preparedness to pursue research. Part-B consists of 10 questions covering different areas of Political Science: Political Theory, International Relations, Comparative Politics, Indian Government and Politics and Public Policy / Administration. Candidates are expected to attempt only one question and it carries 37.5 marks. Selection of candidates will be based on performance in the Written test (75 marks) and interview (25 marks), with exemptions to JRF / RGNFs as per UGC Rules.

# **Faculty**

### **Professors**

**Rajendra Govind Harshe,** Ph.D.(JNU) – International Relations, Comparative and Area Studies with reference to Afro Asia and Political Theory . (On EOL as Vice-Chancellor, Allahabad University).

**Shantha Sinha,** Ph.D. (JNU) - Indian Government and Politics, Political Sociology, Political Development, Rural Political Processes.

**Prakash C. Sarangi,** Ph.D. (Rochester) – Political Theory, Comparative Politics.

- **P. Eashvaraiah,** Ph.D. (Kanpur) Indian Political Process: Political parties in India, Agrarian Politics in India; Modern Political Theory with Reference to Socialism and Feminism.
- **I. Ramabrahmam,** Ph.D. (Hyderabad) Public Policy, Governance, Higher Education and Training. ( **Head of the Department**)

**G.Sudarshanam,** Ph.D. (Kakatiya) – Public Administration, Public Policy, Rural Development.

**Md.Moazzam Ali,** Ph.D. (JNU) - International Relations, Comparative Politics; Russian and East European Studies; Human Rights; Modern Ideologies.

**Arun Kumar Patnaik,** Ph.D. (JNU) — Political Theory, Political Economy of Development.

**Jyotirmaya Sharma,** M.A. (HULL) – Political Philosophy/ Theory, Indian Political Thought

K.C. Suri, Ph.D. (JNU)-Indian Political Process and Public Policy

### Lecturer (Selection Grade)

**B. Chandrasekhara Rao,** M.A. (Andhra), (Dip. In Strategic Studies) - Comparative Government and Politics, Indian Government and Politics, Chinese Studies, Dalit Politics.

#### Readers

Sanjay Palshikar, Ph.D. (Poona) - Political Theory, Indian Political Process

**Vasanthi Srinivasan,** Ph.D. (Ottawa) – Political Philosophy, Comparative Politics.

**Prithvi Ram Mudiam,** Ph.D. (London) – International Relations: Indian Foreign Policy, South Asian Politics, International Political Economy.

**Manjari Katju,** Ph.D. (London) – Indian Political Process, Politics of Hindu Nationalism, Women Studies.

**K.Y. Ratnam,** Ph.D. (JNU) – Indian Political Process, Dalit politics in India, Democratic process in A.P.

### Lecturers

**R. Ramdas,** Ph.D. (JNU) – Indian Political Process, Tribal Development, Comparative Politics

**Biju B.L.,** Ph.D. (Univ. of Kerala) – Political Theory, Indian Political Process, Politics of Globalization

### **Department of Sociology**

The Department, started in the year 1979, has grown over the years to be one of the important centres of sociology teaching and research in the country. While emphasizing topics and themes central to the discipline, the Department's teaching and research activities have been oriented towards contemporary questions that have both basic and applied dimensions. The academic activities of the Department have a unique disciplinary and interdisciplinary orientation, designed to guide and support student development as independent learners as well as to inspire them to critically engage with policies, issues, and social action. Department has had a Special Assistance Programme supported by the U.G.C. in the thrust areas of social identities, globalization and the idea of 'public space'. This has been upgraded to DSA-I status (2007-12), with a special focus on themes of globalization and public and public space. The learning ambience of the department is both informal and rigorous, being geared towards promoting a critical spirit of



inquiry among students. The structure and content of our courses are meant to give a grounding that not only prepares students for future studies in sociology/social science, but also offers the benefits of learning to work in a constructive way in other areas of life.

### Programmes of study

Three programmes of study are offered leading to the M.A., M.Phil. and Ph.D. degrees in Sociology. The Department also participates in the Five Year Integrated Master's programme in Social Sciences by offering a variety of courses at the Centre for Integrated Studies. At the end of three years, students in the Integrated Master's programme have the option to join the Department with the regular M.A. students, subject to some conditions. The courses offered by the Department under the auspices of the Integrated Master's programme are the following: Introduction to Study of Society; Changing Indian Family; Equality and Inequality; Caste in Modern India; Rural and Urban Societies; Roots of Social Protest; Contemporary Development Issues; Religion and Society; Introduction to Social Research; Work and Organisations.

The M.A. programme in Sociology is a four semester programme spread over two years, and consists of 10 compulsory courses and 6 optional courses. Both the compulsory and optional courses are of 4 credits each. Students are allowed to take up to Three of the Six optional courses from other departments subject to the permission of the Head of the Department.

The Compulsory courses for M.A. include: Classical Sociological Theory; Research Methods I: Survey Research and Basic Statistics; Sociology of India; Population and Society; Modern Sociological Theory; Research Methods II: Qualitative Research Methods; Social Stratification; Urban Sociology; Sociology of Development; and Political Sociology.

The Optional courses for M.A. include: NGOs and Development; Environment and Sustainable Development; Indian Diaspora; Sociology of Gender; Sociology of Health, Sickness and Healing; Rural Society and Agrarian Change; Sociology of Backward Classes; Religion, Law and State; People, Nation and State; Law, State and Society; Industrial Relations and Contemporary Capitalism; Science, Culture and Society; Technology, Culture and Society; Sociology of Communication; Sociology of Organisations; Sociology of Culture; Modernity and Modernisation; Decentralised Governance and Development; Sociology of Muslim Communities; Social Theories, Modernities and Politics of Geography. The offer of these courses is subject to the teachers' concerned.

The contents of most of these courses are available on the University website.

The **M.Phil.** programme is a preliminary research degree course of two semester duration. The course work during first semester consists of two compulsory courses in Advanced Sociological Theories and Research Methodology, and one optional course generally in the broad area of research in which the dissertation is planned. The M.Phil. dissertation is expected to be completed by the end of the second semester.

The **Ph.D.** programme is a full time research programme over a minimum period of two years. The examination pattern of Ph.D. course includes thesis evaluation and an open house Viva Voce examination. The progress of the research candidate is monitored by a Doctoral Committee convened and authorized by the respective supervisors.

### **Entrance Examination**

The written test for admission into the M.A. degree course in Sociology is divided into two Sections: A and B. Section A: (maximum marks 25) comprises objective type of questions to test the comprehension of a given passage, simple arithmetic and reasoning abilities. Section B: (maximum marks 75) consists of précis writing, a short note (about 150 words) and an essay (about 500 words) on a contemporary social issue or theme.

The **M.Phil.** entrance written test and interview will be based on M.A. level sociological theory and methods, both in the wider context of the discipline and in the specific context of India.

The written test for **Ph.D.** will examine candidate's knowledge of sociological theory and methods. Ph.D. candidates will be interviewed on the general area of specialization proposed by the student and their M.Phil. work. Ph.D. candidates may be required to undertake course work, if recommended by the Department. The candidate seeking admission to the Ph.D. programme must submit, with their applications, an outline of their research proposal bringing out specific theoretical and methodological approaches to be employed.

# Faculty

### **Professors**

**E.Haribabu,** Ph.D.(I.I.T., Bombay) – Sociology of Science and Technology

**Sasheej Hegde,** Ph.D. (Bangalore) – Philosophy of Social Science, Social and Political Theory, Law and Ethics, Indian Sociology/Historiography (Head of the Department)

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**Vinod K. Jairath,** D.Phil. (Univ. of Sussex, U.K.) – Sociology of Development, Sociology of Muslim Communities.

**Sujata Patel,** Ph.D. (J.N.U.) – Social Theory, Urban Sociology, Political Sociology.

#### Readers

**K. Laxmi Narayan,** Ph.D. (Mysore) – Urban Sociology, Social Demography, Backward Classes.

**Aparna Rayaprol,** Ph.D. (Pittsburgh) – Sociology of Gender, Indian Diaspora, Urban Sociology, and Qualitative Research Methods.

**N. Purendra Prasad,** Ph.D. (Hyderabad) – Agrarian Studies, Sociology of Health, and Sociology of Development.

#### Lecturers

**V. Janardhan,** Ph.D. (Hyderabad) – Sociology of Industrial Relations; Corporate Business and Society.

**Ajailiu Niumai,** Ph.D. (J.N.U.) – Gender, Non-Governmental Organizations (NGOs) and Development, Child and Society (Presently on Leave and with the Centre for the Study of Social Exclusion and Inclusive Policy).

**Nagaraju Gundimeda,** Ph.D. (Hyderabad) – Sociology of Education, Information Technology and Society.

**C. Raghava Reddy,** Ph.D. (Hyderabad) – Science and Technology Studies, Sociology of Organisations.

Satyapriya Rout, Ph.D. (I.S.E.C., Bangalore) – Sociology of Environment, Natural Resource Management and Development, Decentralized Governance.

#### **Department of Anthropology**

The Department of Anthropology started functioning from the academic year 1988-89. It imparts training in both theoretical and applied research in Anthropology, which equips students to meet the academic challenges in urban/rural/tribal field studies. Apart from studying ethnographic diversity, the department is oriented towards application of anthropological knowledge to the understanding of social problems and development issues. The department has developed a small museum as a teaching aid for students.

#### **Programmes of study**

The Department offers M.A., M.Phil. and Ph.D. programmes in Anthropology (Social/Cultural).

The **M.A.** course is a two-year programme consisting of a total of 16 courses of 4 credits each spread over four

semesters with four courses per semester. Of them, 11 are compulsory courses and the remaining 5 are optional courses. The compulsory courses are:

- 1. Introduction to Social Anthropology
- 2. Physical Anthropology
- 3. Archaeological Anthropology
- 4. Physical and Archaeological Anthropology Practicals
- 5. Field work and Research Methods
- 6. Theories of Culture
- 7. Theories of Social Structure
- 8. Applied Anthropology and Tribal Welfare
- 9. Indian Society
- 10. Anthropology of Complex Societies
- 11. Field Work Dissertation and Viva-voce

The Department offers optional courses in Development Anthropology, Ecological Anthropology, Medical Anthropology, Peasant Society, Economic Anthropology, Anthropology of Communication, Anthropological Linguistics, Natural Resource Management and livelihood Systems, etc. The students are permitted to opt for some inter-disciplinary courses from other departments and schools in consultation with the department.

"Field work" is an important component of the compulsory courses; the students must conduct field-work on a chosen topic for a period of about one month under the supervision of Faculty and submit a dissertation for Viva-voce examination. This "field work" is usually conducted during the winter vacation at the end of the third semester. This course is largely subsidised by the University and the students have to pay Rs.250/- towards nominal field work fees during the concerned semester.

The **M.Phil** programme is for two semesters. The first semester is devoted for course work consisting of two compulsory courses of 4 Credits each, viz., 1) Advanced Anthropological Theories and 2) Advanced Research Methods, and one optional course of 4 Credits, generally in the broad area of research on which the dissertation is planned. The second semester is devoted for preparation and submission of M.Phil dissertation.

The **Ph.D.** is a full fledged research programme on an approved research topic for a minimum period of two years. There is provision for admitting limited number of part-time Ph.D. students also. A duly constituted Doctoral Committee for each student monitors the progress every semester. Based



on the Report of the Doctoral Committee, the registration of the candidate for next semester will be recommended.

#### Entrance examination

The written test for admission into M.A. degree course consists of two parts viz., Part 'A' and Part 'B'. Part 'A' consists of objective type of questions for 25 marks. There is negative marking of 0.33 marks for each wrong answer for Part 'A' questions. Part 'B' consists of essay and precis writing, comprehension and analysis of statistical data.

The written test for M.Phil. admission is based on P.G. level Anthropological theory, methods, and Indian ethnography, and consists of objective type of questions in Part 'A' and short notes and critical essay writing in Part 'B'.

The written test for Ph.D. is on the same line as M.Phil. Candidates for Ph.D. will be interviewed on the general theoretical area of specialization proposed by the concerned student, and his/her M.Phil., if any. Candidates must submit along with their application, a tentative, but a detailed research proposal on the proposed research topic covering review of literature, objective of study, research methodology and design of the study.

# **Faculty**

#### **Professors**

**K.K. Misra,** Ph.D. (Utkal) – Culture, Environment and Development; Language, Culture and Cognition; Theory in Anthropology

**P.Venkata Rao,** Ph.D.(Andhra) – Anthropology of Development, Tribal Studies, Complex Societies, and Ageing.

**N.Sudhakar Rao,** Ph.D. (Rochester) – South Asian Social Systems, Social Structure, Kinship Studies, Indian Society and Ideology, Anthropology of Communication, Anthropology and Gender (**Head of the Department**)

#### Readers

**R. Siva Prasad,** Ph.D. (Mysore) Social stratification, Social mobility and social change, Urban Anthropology, Ecology and environment, Peasant studies, Anthropology of development, Anthropological theory (on EOL till 31.12.2010).

**B.V. Sharma,** Ph.D. (UoH) – Medical Anthropology; Development and Action Anthropology

**George Tharakan. C,** Ph.D. (UoH) – Kinship Studies, Theories of Culture, Indian Society

#### Lecturers

**Shaik Abdul Munaf,** M.Sc. (SVU) – Archaeological Anthropology, Ethno archaeology, Indian Prehistory

**M. Romesh Singh,** Ph.D. (UoH) – Applied Anthropology and Tribal Studies, Business Anthropology

## Centre for Regional Studies

The Centre for Regional Studies aims at conducting multidisciplinary research in the Deccan and other regions of India. The envisaged research programmes encompass ecological and environmental studies; socio-economic history, regional historical processes; regional social structure; regional economics and development studies. In view of the multidisciplinary nature of research, the Centre promotes studies in the fields of geography, cultural anthropology, sociology, economics, political science, archaeology and socio-economic history of different regions in India.

The Centre for Regional studies offers M.Phil. and Ph.D. programmes in the broad areas of research outlined above. The entrance test (written) for admission to M.Phil. and Ph.D. programmes consists of two parts. Part A of the question paper will consist of objective type questions to examine the aptitude of the candidates to pursue the research programmes in the Centre. Part-B will consist of questions related to the subject of study at the level of post graduate degree.

# **Faculty**

#### **Professor**

Sheela Prasad, Ph.D. (JNU) - Urban and Regional Geography, Health, Environmental Studies. (Head of the Centre)

#### Reader

Arvind S. Susarla, Ph.D. (Clark University) – Geography of Hazards and Disasters, Environmental Studies, Communicating Risks

#### Centre for Folk Culture Studies

In the wake of globalization, Indian culture in general and folk culture in particular needs special attention to safeguard its own identity and heritage. This vital area of enquiry is now arousing culture consciousness among the zealots of the exotic ranging from corporate groups to that of policy makers and social activists.

The Centre for Folk Culture Studies is the first of its kind in the Central University system in India. It was established with the assistance of the Ford Foundation, USA. The Centre's



interdisciplinary and multiperspectival approaches emphasizes research and teaching in Folk Culture Studies in the milieu of contemporary ethnographic fieldwork.

Several reputed scholars from various parts of the world have been collaborating with the Centre in its research activities. The Centre's clientele has been growing incessantly from scholars abroad to Indian academicians.

The main objectives of the Centre are: to study diverse aspects of folk expressive behaviour as a dialogue between human groups and their physical and social environments; to analyse culture in relation to various aspects of human creativity such as Science, Technology, Art, Religion, Literature etc; to document and utilize folklore genres (verbal and non-verbal) and folk lifestyles of various cultural landscapes in order to cognate the native knowledge systems for sustainable development.

#### Adv. PG Diploma in Folk Culture Studies

The objective of the course is to bring innovation and excellence in teaching by incorporating field based studies through fieldwork which exposes the students to the life experiences of the folk communities and their adaptation strategies to living environments. The course primarily aims at training the students in new ethnographic methods, which would eventually become their strength in dealing with social issues and developmental activities related to cultural sphere. The students trained through this course may become potential human resource for the governmental and nongovernmental organizations working in the fields of cultural studies, rural development and sustainable prosperity. The course has a research component and each student would submit a dissertation based on field data in any one aspect of any given folk community. The students will be trained in archival management for preserving, retrieving and disseminating the data in multimedia formats.

#### **Entrance Examination**

There will be an entrance examination for Advanced P.G. Diploma in Folk Culture Studies. The admission is based only on the entrance examination. The written test is for 100 marks and is divided into two sections: A and B. Section A (maximum marks 25) comprises objective type of questions to test the ability of the candidate in general knowledge and current events. The Section B (maximum marks 75) consists of short notes and an essay on Indian culture and history.

#### Ph.D. Programme

The Centre offers Ph.D. Programme in Folk Culture Studies. The written test will consist of essay and objective type questions to ascertain the general aptitude and capability of the candidate for pursuing research in folk culture studies.

## **Objectives of the Course**

- 1. To appreciate how people learn and internalize one's own culture, and on occasions challenge their own culture.
- 2. To understand how communities represent themselves to the others through their cultural idioms.
- 3. To gain knowledge of how expressive traditions play a role in communicating cultural constructs and community behaviour.
- 4. To get insights into the worldview of the communities through the process of ethnographic research interviewing people and analyzing their cultural behaviour.

# **Faculty**

#### **Professor**

**Y.A.Sudhakar Reddy,** Ph.D. (I.I.T., Madras) - Socio cultural and Economic History; Peasant Studies; Oral History; Performance Studies and Folk Culture. (Head of the Centre)

#### Reader

**P.S. Kanaka Durga,** Ph.D. (Nagarjuna University) - Cultural History; Ethnohistory; Epigraphy; Medieval Bhakti Literature; Folklife Studies; Folklore and Gender Studies

**Joly Puthussery,** Ph.D. (Hyderabad) – Performance Theory; Folk Theatre in India; Public Performance and Discourse; Religion and Theatrical Practices

#### **Documentation Officer**

**U.N. Sudhakarudu,** M.A. (UoH), M.Phil (OU) – Cultural Studies, Popular Culture, Visual Communication, Film Studies, Television Production, Educational Television, Development Communication, Traditional Media and Folk Arts, Audio-Visual Documentation and Archiving.

# Centre for the Study of Social Exclusion and Inclusive Policy

The Centre for the Study of Social Exclusion and Inclusive Policy is one of the few Centres set up in the country, being fully funded by the UGC with Faculty positions and non-teaching staff. It was established in May 2007. Based on the recently originated concept the Centres have been established for undertaking comprehensive studies and research into the Social Exclusion as a complex and multidimensional concept having social, Cultural, Political and economic ramifications.



These dimensions are interwoven. It is one of the byproducts of modern or post-modern, competitive, market driven, technocractic, and globalised society. This concept is concerned with subtle forms of discrimination and indirect exclusion and stubborn underneath or hidden inquality and superficial equality. Its faint appearance can even be noticed in the strategies of policies and economic growth strategies. This new concept encompasses all forms of discrimination which operate in covert and overt manner on caste, gender, ethnicity, religious and linguistics minorities etc. The Centre, through its research programmes, strives to intervene in policy processes to mitigate the problems of social exclusion and help building the democratic processes. The centre has the following objectives:

- a) To develop understanding of the nature and dynamics of discrimination and exclusion.
- b) To Conceptualize and problematize discrimination, exclusion and inclusion.
- c) To develop and understanding of discrimination at the empirical level.
- d) To help with critical inputs into the policy processes for protecting the rights of these groups.

### **Programmes of Study**

The Centre has adopted multi-disciplinary approach. It offers M.Phil. and Ph.D. programmes in the broad areas of research outlined in the objectives.

#### **Entrance Examination**

The entrance test (written) for admissions to these programmes consists of two parts:

Part – A: consist of objective questions

Part – B: consists of essay type questions to examine the aptitude and analytical abilities of the candidate to pursue research programmes in the centre.

## Courses offered by the Centre:

S.No.	Course No.	Course Title	No. of credits
1	SI-701	Processes of Exlcusion and Social groups	4
2	SI-702	Social Exclusion: Theoretical perspectives	4
3	SI-703	Research Methodology	4
4	SI-706	Study Area	4

# **Faculty**

#### **Professor**

**G. Krishna Reddy,** Ph.D. (Osmania) – Political Theory, Caste politics in India, Media Studies and Social movements

#### Readers

**Sreepati Ramudu,** Ph.D. (Jamia Milia Islamia) – specialization in Social movements, Politics and Public Policy

**Ajailiu Niumai,** Ph.D. (JNU) – specialization in Gender, Non-Governmental Organizations (NGOs) and Development, Child and Society

#### Lecturers

**J. Rani Ratna Prabha,** Ph.D. – Economics of Discrimination and Child Labour excluded

**V. Srinivasa Rao,** Ph.D. (Hyderabad) - Specialization in Concerns to the area of social exclusion and inclusive policies especially Scheduled Tribes; primary education, education policies, community participation/mobilization and tribal studies

**Rosina Nasir,** Ph.D. – Area of Interest : Anthropological Demography/Population studies, Health issues related to women and childrens

## Centre for the Study of Indian Diaspora

#### About the centre

The Centre for the Study of Indian Diaspora was established under the Area Studies Programme of the U.G.C. in 1996 to carry out interdisciplinary research on overseas Indians who today constitutes more than 20 million spread over hundred countries around the world. The Centre envisages research on the historical context of the Indian Diaspora, civilizational heritage of diasporic communities, continuities and transformation in culture, economy and political life, besides promoting communication and linkages between India and the Indian diaspora.

#### **Objectives**

The Centre through its special programme addresses the following issues in the study of Indian diaspora:

- The process of emigration, settlement and identity formation in host societies.
- Ethnicity of Indian diasporic communities in relation to the changing power structures, under which ethnic identity is an integrating or divisive force.

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- Transnational networks and linkages between India and the Indian diaspora, and between diasporic communities.
- Indian diaspora in relation to the on-going struggles for identity at the national and global level, and in relation to increasing ethnic consciousness in India.
- Comparative studies of creative writings on the Indian diaspora by the Indian writers, diasporic Indian writers and non-Indian writers. Research into the new cultural forms of the Indian diaspora, including popular culture.
- Micro-level ethnographic studies on the Indian diaspora.
- Contributions of the Indian diaspora to the scientific, technological, administrative and industrial development in host societies.

#### Programme of study

The Centre offers interdisciplinary courses on Indian Diaspora at the M.A. level besides M.Phil and Ph.D. programmes on Indian diaspora. The entrance test (written) for admission to M.Phil and Ph.D. programmes consists of two parts. Part-A of the question paper will consist of objective type questions to examine the aptitude of the candidates to pursue the research programmes in the Centre. Part-B will consist of questions related to the subject of study at the post-graduate level.

### Visiting Fellowships

The Centre offers two to three Visiting Fellowships to national and international scholars each year to carry out specific research or to finalize their Reports/Monographs at the Centre for a period ranging between one to six months. As part of the fellowship, the Centre provides travel support within India and hospitality at the University of Hyderabad.

Application for Visiting Fellowships should include a 2-page description of work to be carried out during the fellowship period, a detailed CV, and recent published papers in the relevant area. Application Deadline: Twice a year - June 30 & December 31.

#### **Faculty**

**Prof. E. Haribabu,** Ph.D. (IIT Bombay) – Sociology of Science & Technology (**Director of the Centre**)

#### Lecturers

**Dr. Ajaya Kumar Sahoo,** Ph.D. (Hyderabad) - International Migration, Indian Diaspora, Transnationalism, Sociology of Religion, and Social Movements

**Dr. Amit Kumar Mishra,** Ph.D. (New Delhi) - South Asian Diaspora, Nationalism and Transnationalism, Identity, Multiculturalism, Imperialism and the Anti-imperial Movements in Asia and Africa

Contact: Phone: +91-40-2313 3040/41/42/43

Telefax: +91-40-23011043 Email: csidss@uohyd.ernet.in

# Cent re for Knowledge, Culture and Innovation Studies

The Centre is offering an interdisciplinary Ph.D. programme in Science, Technology and Society Studies from the academic year 2009-2010.

## The course work for the Ph.D. Programme:

Every Ph..D. Student admitted to this programme must pursue and pass the following courses in the 1st year of their admission (2 Semesters)

#### I Semester

Science, Culture and Society

Research Methodology

Science, Technology and Innovation

Research Related Course I (First course in the area of one's research)

#### **II Semester**

Technology, Culture and Society

Science, Technology and Ethics

Science, Technology in the Modern India

Research Related Course II (Second course in the area of one's research)

**Evaluation:** 40 per cent for unit tests and 60 per cent for the end-semester examination in each of the courses.

#### Centre for Human Rights

The Centre for Human Rights was formally established in the year 2007. Prior to that there was a Human Rights Programme within the Department of Political Science for which the UGC has sanctioned funds under Special Assistance Programme (SAP) in Human Rights. Under the Human Rights Programme a Bi-annual journal "Indian Journal of Human Rights" was brought out since 1977. Post Graduate Diploma in Human Rights is being offered through distance mode. After the establishment of Centre for Human Rights, a number of seminars/ conferences/ symposia have been organized on different aspects of Human Rights.



The main objective of Centre for Human Rights to undertake research and teaching programmes in Human Rights. Centre also conducts seminars and debates on current issues and theoretical perspectives of Human Rights. The Cecntre offers four optional courses for Post-Graduate students of the University on interdisciplinary basis. These four courses are (1) Critical Concepts of Human Rights (2) Human Rights in India: The Constitutional and Legal Framework (3) Human Rights in India: The Socio-Economic Context and (4) Dalit Human Rights. These courses are offered subject to the availability of the teachers.

From the year 2010-11, the Centre is offering Ph.D. Programme in Human Rights.

The **Ph.D.** programme consists mainly of a research project (and course work if required) and a thesis on a topic approved by the Centre. The thesis should be of a high standard and considered to be a valuable contribution to the area of study concerned. Candidates for the Ph.D. programme are required to submit a research proposal for the intended Ph.D. thesis along with the application for admission. The research proposal should contain hypothsis, goals or objectives, statement of the problem and methods of executing the proposal. This is an essential requirement.

#### **Entrance Examination**

The written examination for Ph.D. will consist of essay type questions. The candidate has to attempt four questions out of a total of eight questions. The questions will be covering broad areas of theory and practice of human rights in India and at the global level. The written examination will be for 75 marks. The remaining 25 marks will be for viva voce examination.

#### Faculty

**Prof. G. Sudarshanam,** Ph.D. (Kakatiya University) (Coordinator of the Centre)

#### **Guest faculty**

**Prof. G. Haragopal,** Ph.D. (Kakatiya University)

#### Joint Faculty

**B.** Chandrasekhar Rao, M.A. (Andhra), (Dip. in Strategic Studies) – Dalait Politics, Comparative Government and politics, Indian Government and Politics, Chinese Studies (Department of Political Science)

**Dr. K.Y. Ratnam,** Ph.D. (JNU) – Indian Politics, Dalit Politics in India, Democratic Process in A.P. (Department of Political Science)

**Dr. V. Janardhan,** Ph.D. (Hyderabad) – Sociology of Industrial Relations, Corporate Business and Sociology (Department of Sociology)

**Dr. K. Laxminarayan,** Ph.D. (Hyderabad) – Political Economy and Agricultural Economics (Department of Economics)

**Dr. G.Vijay,** Ph.D. (Institute of Social Studies The Hague) – Labour Economics, Environmental Economics, Economics of Business Organisations, Law and Economics (Department of Economics)

**Dr. V. Srinivasa Rao,** Ph.D. (Hyderabad) – Exlcusion, Inclusive Policies-STs, Education and Social Participation (Centre for the Study of Social Exclusion and Inclusive Policy)

#### Centre for Gandhian Economic Thought

The Centre for Gandhian Economic Thought (CGET) has been established by the University in 2008. Gandhi's thought illuminates many fields of human activity – his vision also extends to an understanding of a "superior" mode of economic organization.

The development of modern economic theory took place in the context of great changes in social, political and philosophical thought — in particular in the theories of knowledge about nature and society and concomitantly in methods of productions. One consequence of these changes was the perception that production was wealth. With production and consumption becoming separate activities, market came to occupy the central place in modern economic theory, and further, basic assumptions about the consumer led to economics becoming a science of scarcity.

Economic issues loom large in the totality of the Gandhi's work, in addition to his contribution to politics, philosophy, morality, culture, and civilization as an integrated whole. His abiding concern remained with the economic conditions of the ordinary people. Gandhi's economics comes bundled with morality. The following three inter-related aspects are important for developing a Gandhdian critique of economic theory and for an attempt at constructing new economic theories: first, importance of taking a long view regarding economic actions; second, taking responsibility for the consequences of one's actions; and third, non-separation of means and ends or insisting at least as much on the sanctity of means as that of ends.

Gandhi's intutive understanding was based on a civilizational perspective deeply underlying all his thought. It grasped the processes set in motion by predominant economic theories,

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and the systems based on them – the processes which are even more clearly visible today, especially in their environmental and ecological consequences. The Gandhian vision and insights provide a framework to develop a critique of existing economic theories and to develop economic theory based on such a framework. Certain problems of economic theory, logically leading to certain absurd conclusions, cannot be pinpointed to any one aspect of economic theory. Thus, it is not sufficient to understand the problems of economic theory through an enquiry purely within that system of thought. Looking at it from outside, such as from a Gandhian perspective, may help in pinpointing these problems.

## **Objectives**

The Centre for Gandhian Economic Thought has its research focus primarily, though not solely, on economic theory. It has set the following braod objectives:

- Develop a framework for economic theorizing based on Gandhi's vision.
- 2. Examine existing economic theories from a Gandhian vantage point.
- 3. Carry out research on economic theories based on Gandhi's vision.
- 4. Critically examine Gandhi's and Gandhian economic thought.
- 5. Develop courses and academic programmes on Gandhian economic thought.

#### **Courses of Study**

The Centre offers Ph.D. programme in: Economic thought of Gandhi and Gandhian thinkers; Indian economic thought;

Critical economic theory; Economic methodology; and Economic philosophy. The research in the Ph.D. programme will be expected to focus on a critical examination of economic theory, methodology and philosophy from alternative vantage points, such as a Gandhian perspective. The selected candidates will have to take four courses in the first year of the programme.

#### **Entrance Examination**

Admision to the Ph.D. programme will be based on a written test (75 marks) and an interview (25 marks) test. The written test consists of TWO parts. PART A will have objective type questions (25 marks) and PART B will have short answer questions (50 marks). In both the parts there will be questions to asses competence in economic theory (mostly microeconomics and macroeconomic), mathematics, and basic familiarity with Gandhian thought as well as current economic affairs. Only those who qualify in the written test will be called for the interview. Those who are qualified in the UGC NET for JRF are exemptd from the written test for the Ph.D. programme. Candidates for Ph.D. programme are required to submit a short write up along with applications for admission. The write up should state the kind of research problems in which the candidate is interested.

# Faculty

#### **Professor**

Naresh Kumar Sharma Ph.D. (ISI Delhi) – Gandhian Economic Thought, Economic theory, Development Economics (Coordinator of the Centre)



# Sarojini Naidu School of Arts and Communication

The Sarojini Naidu School of Arts and Communication started functioning from 1988-89 and offers Masters-level courses in Dance, Theatre Arts, Fine Arts, and Communication and Doctoral (Ph.D) programmes in Communication, Theatre Arts, and Dance.

The University is indebted to the family of Sarojini Naidu for the bequest by the late Padmaja Naidu of the 'Golden Threshold', where the University started functioning. In recognition of this gesture, the University started this School by naming it after Sarojini Naidu to offer post-graduate and research programmes in the fields of arts and culture.

The School provides courses of study in the Departments of Dance, Theatre Arts, Fine Arts, and Communication. It seeks to enlarge the scope of the academic programme so as to include other areas of artistic endeavor like music. The broad objective of the teaching programme is not only to explore the evolution and forms of arts, but also to bring about an integrated approach to the study of creativity. Apart from the core Faculty, experts in various fields and Guest Faculty of national and international repute teach courses in the School.

**Prof. Vinod Pavarala,** Department of Communication is the **Dean of the School.** 

The School comprises the following Departments:

- 1. Department of Dance
- 2. Department of Theatre Arts
- 3. Department of Fine Arts
- 4. Department of Communication

The School has evolved a pattern of studies for Master's Degree programmes in four semesters in the Departments of Dance, Theatre Arts, Fine Arts, and Communication. The courses are so arranged as to make the students aware of not only the evolution of each art, but also the social context and the innovations that these art forms have experienced in their growth.

The Ph.D. programmes mainly consist of a research project with some course work if necessary and the writing of a thesis on a topic approved by the Faculty of the Department. It is expected that the thesis will make valuable contribution to the specialized area of study. Candidates seeking admission into the programme must submit with their applications a tentative but detailed outline of their research proposal.

Candidates must appear for an interview before admission into Ph.D.

## Department of Dance

The Department of Dance offers a two year postgraduate degree (Master of Performing Arts) and PhD. in Dance. The Master of Performing Arts programme is devised to enhance the scholarship of dance in practice and theory, to initiate students into research and teaching, and, to develop an ability to aesthetically appreciate dance as a specialized human endeavor. In the Master of Performing Arts programme, three different specializations, viz., **Kuchipudi**, **Bharatanatyam**, and **Folk** are being offered. The students are required, at the time of the admission itself, to specify their specialization.

In the Master of Performing Arts (MPA) programme, the various courses spread over two years are designed to create an understanding of evolution and development of dance both in India and the World over. It also gives a clear understanding of the dance forms of their choice, enabling the students to perform with greater felicity and also undertake new choreographic works. A project work based on field study using various research methodologies is a part of the course. Arts management, Musical Aspects, Stage Craft & Design and Dance & Media are some of the important areas that are dealt with in the course from the present academic year. For the courses with specialization in Bharatanatyam and Kuchipudi, major stress is on the techniques of Classical Indian Dance including the Sattwikabhinaya and their analysis and application to suits the changing needs. Specialised paper on the theoretical construct of the technique and form are also offered.

The **Folk** dance specialization seeks to bring together the works of folklorists, linguists, ethnologists and social anthropologists besides an artistic and cultural approach. This course will offer a blend of practice and theory, including folk narratives, folk music and choreographic techniques involved in folk forms such as the circular forms, martial and acrobatic forms, traditional theatre forms and mask dance forms.

Besides the regular teaching by well-trained core faculty, for all the above courses, additional inputs will be provided in the form of workshops by eminent and international guest faculty; video seminars; performing in dance-productions; opportunity to create new dances; and travel to important performing arts festivals.

The **PhD** programme of the Dance Department, started in 1991, has so far produced nine Ph.Ds in various aspects of



dance, including both historical works as well as those exploring the evolution, kineasthetics and interrelation between various dance forms.

#### **Entrance Examination**

Admission is through an entrance examination consisting of a combination of objective and essay-type questions on subjects related to the specific field of study. There would be a common question paper for all specializations. Those selected in the entrance examination will then be called for a practical test before final selection. The folk specialization will be offered only if a minimum of five candidates qualify for admission.

Candidates are required to indicate in the application their preference of specialization in order of priority. Based on the prerequisite experience and the candidate's performance in the admission test and viva, the Department shall assign specialization streams to each selected student.

# **Faculty** Professor

Anuradha Jonnalagadda (Kuchipudi), Ph.D. (Hyderabad)—Theoretical aspects of dance, Kuchipudi practicals and choreography. (Head of the Department)

#### Reader

**Pasumarti Ramalinga Sastry** (Bharatanatyam) Diploma (Kalakshetra, Chennai) – Bharatanatyam dance, theory, practicals, Choreography and Nayika and Nayaka categories.

# Lecturer

**M.S. Siva Raju** (Kuchipudi), Ph.D. (Hyderabad) – Comparative dance studies, musical aspects of dance, movement for dance and choreography.

## **Visiting Faculty**

Dr. Nataraj Ramakrishna

Dr. Sunil Kothari

Prof. C.V. Chandrasekhar

Dr. Pappu Venugopala Rao

Sri Kala Krishna

Prof. Ramachandra Gouda

Smt. Chitra Vishweswaran

Dr.B.M.Sundaram

## Department of Theatre Arts

The Department of Theatre Arts strongly believes that working at good theatre is physically demanding and intellectually arduous. There is no short cut to achieve it except hard work and serious study. The objective of our Master's programme is to empower students through rigorous training, to practice and appropriate the art of theatre to new contexts thrown up by the rapidly changing contemporary culture and technology. To do this, thorough knowledge of the history and theory of performance is imperative so that a theatre artist understands the field as full of choices and can chart out his or her own path in the society and market.

The Master's programme balances training in the practical aspects of theatre with the historical and theoretical aspects. The aim is to train multi-faceted theatre artists, integrating theory with practice, imagination with technology, and art with the practical issues of management and marketing in diverse contexts of the globalized market.

Apart from experienced permanent Faculty, the Department also organizes workshops with prominent experts in theatre, often in collaboration with the National School of Drama, New Delhi. The department, along with the Sarojini Naidu School will soon move into a new building with the best possible facilities and latest equipment.

The medium of instruction will be English. But there is no language bar for acting or other practical work. Students can work in the language of their choice and multilingual plays are encouraged. The department offers the following courses:

#### M.P.A. (Theatre Arts)

The Masters in Performing Arts programme is a rigorous, full time three-year course. This course trains the students in the practical and theoretical work so that they understand and practice theatre as a unique form of artistic communication. The core components are designed to provide hands-on experience of all the areas of theatrical communication and their possible application in different contexts. The theory courses teach the students to look at the history of theatre practice from multiple perspectives -like the literary, socioeconomic, political, philosophical, etc. The course content covers both Western and Indian drama and theatre and also provides understanding of theatre in relation to other forms of artistic expression –like painting, sculpture, music, cinema, etc. The course tries to encompass the whole spectrum, from classical to contemporary, traditional to commercial, and folk to the digital. Here is a brief outline of the course components, spread over the three years of study:





Arts, Aesthetics and Society (Modern to Contemporary)

History, Theory and Text (Classical non-Indian/ Indian Classical/ Traditional/ Folk/ Realism and after/ Contemporary Approaches)

- To understand different forms of artistic expressions, their processes, contexts, grammar and to relate them with theatrical expressions.
- Significance and multiplicity of theatre activities and their relationship to their contemporary history and culture
- How different theatre forms struggle for space within the same period and culture.

#### **Production Process**

#### **Play Productions**

- Different stages of production process from an idea/theme/text to a concrete theatrical expression.
- Working with experienced and professional directors on different kinds of plays. To understand different ways of interpreting and producing a professional performance.

## **Basics of Design**

Theory and Practice of Scenography Theory and Practice of Direction

#### **Design and Direction**

- Hands-on training in design skills and to understand their function in the total performance structure in organic relation to other components.
- Working with new materials and techniques to explore new avenues in contemporary performance.

# Basics of Acting Styles of Acting

Acting in Play Productions (Classical/traditional/ folk/ Modern Western/Modern Indian/Contemporary approaches)

- The basic elements of acting, stage presence and theatrical communication. To be able to follow direction and execute the director's interpretation of the text and design one's acting in relation to other elements of design.
- Skills and possibilities of improvisations, different approaches to and styles of acting through a series of scene-works and productions.

# Theatre and New Contexts Community Theatre or Applied Theatre

# Children's Theatre & Theatre in Education Theatre Management

- Using the skills of theatre practice in different contexts like Community theatre, Children's theatre, event management, etc.
- To visualize and prepare professional theatre projects with a clear understanding of the budget, work division, human and financial resource management, presentation and marketing.

#### **Specializations**

In the third year, apart from the common courses, students are offered the following specialized courses. The department reserves the right to decide whether a student is eligible to opt for a particular Specialization, depending upon his/ her performance in that area during the first two years.

Advanced Course in Direction (Direction Practicals);

Advanced Course in Design (Design Practicals); and

Acting and its new Contexts (Contemporary approaches to Acting)

Apart from these courses, students should undergo continuous Compulsory Non Credit-courses dealing with Movement and Voice (practical) throughout the three year programme. All practical courses require 90% attendance from the students. Medical fitness is a must to go through the rigorous programme. So exemptions for lack of attendance on medical grounds can not be entertained.

There is an exit clause at the end of the first year. Students, who have successfully completed the first year and do not wish to take advantage of the more in-depth training provided during the next two years can leave the course with a P.G. Diploma in Theatre Arts. Promotion into the second year, apart from the desire of the student, is subject to satisfactory performance and successful completion of the first year of study. The performance of the student will be assessed on the basis of regular attendance, motivation and active participation in the studies and practical work, cooperation and co-ordination with fellow students as well as securing the necessary minimum marks in written and practical exams.

#### Entrance examination and interview

Any graduate with an aptitude for theatre can apply for the M.P.A. course. Experience in theatre or any performing art will be an added advantage. Eligible candidates are required to write an entrance examination of two-hour duration,



consisting of objective and descriptive type questions on areas related to theatre and culture. Those qualified in the written test will be called for an audition/interview at the University. Candidates are expected to come prepared to discuss a full length play of their choice and also perform a dramatic passage from a play of their choice in a language of their choice. Any additional talents like music, dance, martial arts, drawing, etc. will be added advantages.

#### Ph. D. Programme in Theatre Arts

The focus of Doctoral program in Theatre Arts is to generate a knowledge-base in the area of Performance research and practice of theatre. Performance is seen as an inclusive field encompassing all the genres of performance from traditional to contemporary, and explored in the backdrop of constituent and frontier domains like history, language, literature, anthropology, cultural studies, folklore, music and management in the social and historical context. A flexible interdisciplinary framework is followed to enable researchers to carry out work in the area of performance studies. To bridge the domains of practice and research, Practice as Research in Performance is encouraged.

# **Faculty**

#### **Professor**

**B.** Ananthakrishnan, Ph.D. (Madras)-Performance Studies, Production Process. (Head of the Department)

#### Readers

**Jnaneswara Bhikshu,** Ph.D. (Hyderabad) Indian Drama and Theatre, Comparative Theatre Aesthetics

**Satyabrata Rout,** M.A. (National School of Drama)-Scenography

**Rajiv Velicheti,** M.A.- English (O.U.), Diploma in Dramatic Arts (National School of Drama) - Theatre History, Acting and Direction

### **Visiting Professors**

**Prof. Ramgopal Bajaj** (Former Director, National School of Drama)

Prof. Mohan Maharishi (Former Director, National School of Drama)

#### Joint Faculty

**Prof. Tutun Mukherjee** (from Centre for Comparative Literature)

#### **Guest Faculty**

**M. Sreejith Ramanan,** M.Phil (M.G. University) Actor Training (TTRP-Singapore)

Prof. S. Ramanujam

Ms. Supriya Shukla

### **Department of Fine Arts**

The Department offers a 2 year full time post-graduate degree course, Master in Fine Arts (MFA) in the disciplines of Painting, Printmaking and Sculpture. Twenty four hour access to studio facilities ensure that concepts and skills acquired at the undergraduate level become tools for building a new level of competence and expertise. A compulsory component of the course is a survey of art history from ancient to contemporary periods of both Indian and Western art. This theoretical foundation is aimed at providing the student an understanding of art in its total context both material and subjective. The students submit a dissertation on a theoretical topic of their choice towards the end of course. The teaching does not presume to concern itself directly with a young artists work. Teachers incite such works and criticize the end products in a spirit of enquiry.

Instruction at the Department is essentially tutorial and involves a close working relationship between student and teacher, in which the latter encourages the student to make rigorous analysis of his/her work. A unique aspect of this course is the exposure the students get to the work of artists of national and international repute through the visiting Faculty programme and workshops.

In the print-making stream, the students are introduced to a wide array of basic print-making techniques, such as etching, screen printing, lithography, linocut, woodcut, dry point and engraving. The students are encouraged to explore and combine the expressive possibilities of these different techniques in their own work. These studio practices are complimented by a formal introduction to the history and aesthetics of printmaking medium. In sculpture stream, the students are encouraged in experimentation of different methods. History and aesthetics of sculpture are taught to develop a critical understanding in this domain.

#### MFA in Art History

#### **Entrance Examination**

Separate entrance exam would be conducted because of the distinct nature of the studies.

Admission: Written test (80 marks) and Viva (20 marks)



# **Faculty**

# **Professor**

R.S. Sham Sunder, P.G. Dip. Printmaking (Kala Bhavan, Visva Bharati University, Santiniketan) B.A. Bangalore University (History, Economics, Sociology) (Head of the Department)

#### Reader

**Alex Mathew,** P.G. Dip. in Creative Sculpture (Faculty of Fine Arts, M.S. University, Baroda)

**LNV Srinivas,** MFA Painting, S.N. School, University of Hyderabad

#### Lecturers

**Baishali Ghosh,** M.F.A. Art History (Faculty of Fine Arts, M.S. University, Baroda),

**Tanmay Santra,** MFA Painting (Kala Bhavan, Visva Bharati University, Santiniketan), B.Sc. (University of Calcutta)

#### **Guest Faculty**

**Shilpa Mehta,** MFA Art History (M.S. University) Indian Painting.

**Sarada Natarajan,** MFA Art History (Pre-Modern, Indian & Western Sculpture)

**Rakhi Peswani,** MFA Ceramics, (M.S. University) Painting & Sculpture.

**Santhosh Kumar Sakhinala,** MVA Art History and Criticism (M.S. University), Indian and Western Modern Art

**B. Karuna,** MFA Printmaking (University of Hyderabad) Print Making M.A. (Fine) Museolory (M.S. Univerity)

#### **Department of Communication**

The Department offers a full time 2 year Masters programme in Communication. The **M.A. Communication** programme has the following objectives:

- To study the process of mass communications from the perspective of mass communication theory, political economy, historiographical/cultural studies, and development.
- 2) Producing & studying both technology and its mediated usage.
- 3) To impart skill-based training to prepare students for the ever growing industry

The two-year (four semester) M.A. programme offers the following streams of specialization:

- a) Television & Radio
- b) Print Journalism & New Media
- c) Communication & Media studies

Core courses such as Introduction to Communication, Historiographies of Media, Media Law & Ethics, Introduction to Advertising & Public Relations, Basic writing skills etc are offered in the first two semesters. Students, according to the stream assigned, will specialize in one of the above four area in the last two semesters (See Entrance examination below for more details). Graduates who pass out of the department will have a broad understanding of the foundations of Communication and media and acquire indepth knowledge/skills in at least one area of specialization.

The following table gives an indication of the areas covered in the last two semesters of specialization:

Specialization	Focus areas of study Stream	
Television & Radio	Radio/TV journalism, studio & field Production, broadcast media management, documentary & short film making, music video, fiction	
Print Journalism & New Media	Specialized reporting & editing, features for Print & New Media, layout & design, production & managing websites, content management, media management	
Communication & Media Studies	Development Communication, Film/TV theory, Communication Research, Cultural Studies, ICTs, Globalization & media, media & gender	

# Internship Requirement for M.A. (Communication)

During the summer vacation, each student shall work for a period of four to six weeks in a reputed communication/media organization (e.g. newspaper, TV channel, production house, advertising agency, PR agency, market research firm, IT company, NGO, etc) and obtain a 'satisfactory completion' internship certificate for submission to the department along with a brief internship report. The students shall seek prior



approval of the department before joining an organization for internship. Where necessary, the department shall facilitate acceptance of students by particular organizations. The internship shall be considered a requirement for completion of the M.A. programme.

#### Infrastructure

Computer Lab: The Department has a computer lab connected through LAN with software, scanning, printing & CD/DVD writing facilities. It has software like Adobe PageMaker, Photoshop and others adequate for multi-media presentations. All computers are internet enabled. Students utilize this facility to complete their print/web projects, assignments and other course related work.

**AV Lab:** The audio lab is equipped with multiple microphones, professional multi-track digital recording and editing facility. Portable digital field recording units are also available for outdoor recording. Students learn to operate professional sound editing software such as Protools, Sound Forge, Cool Edit etc. The video lab is equipped with a three-camera set-up for multi-camera productions. Besides these, four digital video cameras are exclusively meant for single-camera field productions. Post-production facilities include non-linear Avid and Final CutPro editing systems. Access to and use of studio facilities are governed by rules laid out by the department. Students have to provide necessary undertaking regarding access/utility rules for the A V lab.

#### Copyrights

All copyrights of student work produced during their tenure at the University will rest with the Department/University.

## Student participation

The programme is intensive and involves group and individual presentations, research projects, studio exercises and other production-related activity. The programme demands active participation of the students.

While the Department subsidizes production-related activity of students, including purchase of tapes and other post-production work, they should be prepared to incur any additional expenses for such things as transport for shooting on location, field visits, and participation in various events etc.

## **Entrance Examination**

Applicants found eligible must write an entrance examination consisting of a combination of objective and essay type questions. The examination is of three parts: general knowledge and current events, media awareness, writing ability and verbal aptitude. Based on performance in the entrance examination, the short-listed candidates appear for an interview before final selection is made.

Candidates are required to indicate in the application their preference of specialization in order of priority. Based on the candidate's ranking at the end of the admission process, the Department shall assign specialization streams to each selected student. Requests for change in specialization streams shall not be entertained under any circumstances.

#### Ph.D. in Communication

The Department offers a Doctoral Programme in Communication. Those found eligible must write a written test comprising questions in: theory and concepts; research methodology; and a project synopsis. If the candidate qualifies for the interview, he/she will have to defend his/her synopsis at the interview.

# **Faculty**

#### **Professors**

**B.P.Sanjay,** Ph.D. (Simon Fraser University, Canada) – Political Economy of Communication Technologies, Development Studies, International Communication, Communication/Media Policy. (on leave as Vice-Chancellor of TN Central University)

Vinod Pavarala, Ph.D. (University of Pittsburgh, USA)-Communication and Development, Community Media, Popular Culture. (Head of the Department & Dean of the School)

#### Readers

**P.Thirumal,** Ph.D. (Pondicherry University) – Rhetoric of Development, Theory & Historiographies of Media.

**Vasuki Belavadi,** M.A. (University of Hyderabad) – Radio, Video Production, Community Media

#### Lecturers

E. Sathya Prakash, Ph.D (Osmania University) – Television Production, Media Policy & Management

Kanchan K. Malik, Ph.D. (University of Hyderabad) – Print Journalism, Communication Research, Gender and Media, Media Laws and Ethics

#### Visiting Professor

Usha Raman, Communication Consultant, Hyderabad

#### **Guest Faculty**

S.Ramu, Journalist

Pavan Kumar Manvi, ETV Network



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Paromita Vohra, Filmmaker, Mumbai

Anjali Monteiro, TISS, Mumbai

K.P. Jayasankar, TISS, Mumbai

Bimal Unnikrishnan, TV Producer, New Delhi

Venkatesh Chakravarthy, Film Scholar, Chennai

Frederick Noronha, Freelance Journalist, Goa

Subbu Vincent, indiatogether.org, Bangalore

Anil Kalaga, Tata Chemicals, Mumbai

A.R. Venkatachalapathy, MIDS, Chennai

Vamsee Juluri, University of San Francisco, USA

Rahul De, IIM, Bangalore

Sumanaspati Reddy, All India Radio, Hyderabd

Other media experts are called for extension lectures and workshops.



# **School of Management Studies**

The School of Management Studies (SMS), sanctioned by the UGC, commenced functioning from May, 1999. It offers two year full-time MBA Programme, and a Ph.D. programme in Management Studies. It promotes Faculty and doctoral research, consultancy, training, and outreach activities in various manufacturing, corporate, infrastructural, services and developmental sectors. Its Faculty organize on-campus seminars, and actively participates in external seminars, executive and Faculty development and PG programmes. The School is also offering an M.B.A. Programme in Health care and Hospital Management from the year 2008 - 09 in collaboration with the School of Medical Sciences.

#### Vision

The broad Vision of the School is to strive to achieve excellence in management education, research, training and consultancy.

To achieve this Vision, the following mission is being pursued:

#### **Mission**

- a) To continually expand the scope of application of management concepts to infrastructural, institutional, Environmental & Developmental services, Entrepreneurship & emerging areas like CRM, SCM, Health Care and Hospital Management, Business Incubation, University Industry Partnership, research, training and consultancy;
- b) To enhance quality research skills among the Ph.D. scholars;
- c) To promote the development of socio-economically sensitive, responsible and effective managers and management academics of tomorrow.

#### **Activities**

To achieve the Vision and Mission, the School:

- a) organizes the MBA core courses, electives, project work, self-awareness and growth lab, organizational skills workshop, summer internships, and other relevant inputs;
- b) promotes research by Faculty and Ph.D. scholars;
- c) organizes seminars and encourages participation in external seminars;
- d) collaborates with reputable national and international institutions and industry;

 e) encourages students to organize and participate in cocurricular and extra-curricular activities.

Prof. V. Venkata Ramana is the Dean of the School.

## M.B.A. Programme

The two year MBA full-time programme with an intake of 60 students is spread over four semesters. During the first two semesters, core and foundation courses are offered. These include Management Concepts and Approaches, Managerial Accounting and Finance, Marketing, Organizational Behaviour, Human Resource Management, Quantitative Techniques, Managerial Economics, Information Technology, Communication and Personal Effectiveness, Operations Management, Research Methodology and Business Environment. In addition, a five-day concentrated Self-awareness and Growth Lab is also organized during the first semester.

The students are required to get some practical exposure by undertaking eight weeks internship in an organization during the summer intervening between the second and third semesters. These internships are intended to familiarize the students with current management practices, work environment and organizational cultures. As such, the summer internship is an integral part of the MBA programme.

During the second year, the students have the opportunity to specialize in two selected areas of their interest. These specializations are offered through electives and project work spread over the two semesters. The students may choose from the following specialization offered:

- Marketing Management
- Finance Management
- Human Resources Management
- Operations Management
- Entrepreneurship

## Ph.D. Programme

The School also offers a Ph.D. programme in Management Studies. The students will be expected to produce a dissertation of international quality based on research in analytical and/or applied areas of strategic/functional management.

#### Minimum Qualifications for Admission

#### a) M.B.A.

Note: Admissions for the M.B.A. 2010-12 batch with an





intake of 60 students are underway on the basis of CAT-2009 scores of those candidates who had applied to the University of Hyderabad in addition to on-campus group discussion and interview of the short-listed candidates.

### Eligibility for 2011-13 batch:

- A three-year Bachelor's degree (or its equivalent) in any discipline recognized by the Association of Indian Universities/AICTE, obtained on or before June 2011. Those completing their final examinations by June 2011 can also apply.
- 2. They should appear in CAT-2010, conducted by the IIMs, in November/December 2010.
- 3. They should also apply separately to the University of Hyderabad by November/December 2010.

For admission to the 2011-13 M.B.A. batch, interested applicants should watch for the School's advertisement/press release in September/October 2010 in leading national newspapers and the University's website. They can plan to appear in CAT 2010, and apply to the University by November/December 2010. A separate MBA Prospectus for the year 2011-13 together with the programme details and the Application Form for admission during the Academic year 2011-12 will be available in electronic and print form in September/October 2010.

Candidates are required to pay an amount of Rs.13,000/-(may be revised) at the time of admission as one time payment towards the SMS Development Fee in addition to the normal fees as prescribed by the University.

#### b) International students: 2010-12 MBA Batch

Upto five international students may be considered for admission to the MBA programme in absentia. Their selection would be based on:

- 60% marks or above or its equivalent grade in a Bachelor's degree in any field from an officially recognized University/institution in their country of residence;
- Proof of proficiency in English (score in TOEFL or equivalent test or certification);
- Statement of purpose; and
- At least two academic references

Interested students should submit an application with full personal details, summary of academic records from high schools onwards, attested copies of mark-sheets and TOEFL (or equivalent) scores, a brief (200 to 300 words) statement of

purpose for pursuing the course and names and contact addresses of at least two referees, by **April 15, 2010** at the latest. They should also ensure that, if admitted, they can join the programme by mid-July, 2009 at the latest.

The charges for hostel accommodation on campus for all students from abroad will be the same as paid by students from India. All fees and charges are subject to revision by the School/University from time to time.

### c) Ph.D. Programme

**Eligibility:** Master's degree or its equivalent in Management, Commerce or Accounting (M.B.A., M.Com., C.A., I.C.W.A.) with 55% of marks.

One or more of the following qualifications will be given additional weightage in selection of applicants:

- Other postgraduate degrees/diplomas from recognized institutions;
- One or more publications in management related subjects in refereed journals
- Years of teaching/professional experience

Applicants will be required to submit, along with the application, a brief tentative proposal (about 500 words) on their proposed topic of research.

Applicants satisfying the minimum qualifications will be required to take a written entrance test, and the short listed candidates will be required to appear for an interview.

The entrance test will carry 60% weightage, additional qualifications, if any 10% weightage, and the interview 30%, in the final selection.

**Note:** Candidates who have qualified in UGC NET for JRF in Management Studies or related areas are exempted from appearing in the written test and will be given due weightage out of 60 marks for the written test. They will however have the option to appear in the written test to secure more than the assigned marks.

#### Part time Ph.D.

The candidates having Master's Degree with a minimum of 55% marks or its equivalent in Management or any related / allied areas and with a minimum of 10 years of professional experience may be considered by the School for admission to Ph.D. Programme of the school under part-time scheme to a limited extent. The qualification as laid down for the regular Ph.D. program also apply for this program. The candidates admitted have to pay a fee of Rs. 15,000/- per annum (to be



paid semester wise) and they must pursue the programme for a minimum duration of 3 years to become eligible for submission of thesis. The selection for admission would be based on: (a) submission of a research proposal on the broad area of research to be under taken, (b) making a presentation before the School Admission Committee, followed by an interview.

## M.B.A. (Health Care and Hospital Management)

The School has launched a unique MBA program (Health Care & Hospital Management) from the academic year 2008-09. The programme is offered in collaboration with the School of Medical Sciences of the University and other leading hospitals to meet the challenges and opportunities offered by the growing health care industry in India which is poised to become a global hub for the healthcare services. Some of the recent government initiatives focus on improving health care access, boosting private sector participation and upgrading technology and managerial skills to manage the complex health care environment.

## About the program

The programme fulfills specific needs of middle level administrators in hospitals or health care and related sectors. This comprehensive programme will provide a professional qualification and insights into managerial functions for those serving graduates who wish to take up health care and hospital management as a professional career. It will also be of immediate benefit to serving professionals in this sector.

The programme prepare students to contribute effectively in any area within healthcare and hospital management including but not limited to insurance companies, government agencies, hospitals, practicing physicians, health centres, diagnostic centres and nursing homes. It focuses on developing excellent managers with the desired professional skills required at entry level and middle level positions.

## Vision

The broad vision of the programme is to strive to achieve excellence in the areas of health care and hospital management education, research, training, and consultancy on par with International benchmarks and standards.

#### **Mission**

The broad mission is to prepare competent and trained hospital management professionals in a synergistic learning environment having strategic alliances with leading healthcare institutions in India and abroad. The major focus is on enhancing and enabling the existing mechanisms engaged in management of healthcare sector in India through capacity

building programmes, dissemination of knowledge through continuous interaction between academia and industry, and to promote developmental activities in health care sector.

#### **Objectives**

The programme and the pedagogical techniques are designed to develop effective communication, analytical, and problem solving skills among the participants and empower them to meet the challenges being faced by the health services organisations. The specific objectives of the programme are:

- To prepare qualified and efficient health care and hospital management professionals
- To develop better systems for effective delivery of healthcare services
- To train the students in developing better leadership skills, inculcating values and ethical practices
- To provide the necessary skills and knowledge for practical orientation and implementation of strategies in relation to modern hospital / health care management practices

## Highlights of the Programme

- Curriculum is spread over foundation and core courses in the first year and specialized courses and electives in functional areas in the second year
- Course curriculum developed by seeking inputs from senior hospital management and health care professionals
- Self awareness and growth lab for personal effectiveness
- 8-10 weeks of summer internship to understand the nuances of the hospital environment
- Final project under the supervision of a Faculty guide in conjunction with an industry mentor

#### Course Curriculum and program delivery

The course curriculum would be developed with active collaboration and involvement of senior health care and hospital management policy makers, administrators, and professionals to provide the students with state of the art knowledge and practical orientation in the field of health care and hospital management.

The course would be offered initially to a limited strength of about 20 students with key inputs from the Faculty of the school and other visiting Faculty with supplementary inputs from industry professionals. The programme would be run in





active association and collaboration with the School of Medical Sciences so that necessary expertise can be drawn from the school.

## **Program Pedagogy**

The teaching/learning methodology would be significantly interactive with case studies and group projects to study global health care and hospital management practices

- Interaction with eminent professionals from health care, and hospital management
- Individual learning through guided assignments
- Personal growth/self-development and organization skill workshops
- Computer-based learning and audio-visual aids

#### Internship

The students are required to undergo 8-10 week summer internship in a reputed institution relating to the area so as to obtain practical knowledge. In addition to the summer internship, a comprehensive project is to be pursued and dissertation to be submitted under the guidance of a Faculty member. Efforts would also be made to provide the students a continuous learning opportunity through short term projects and attachments with recognized hospitals.

Intake, Qualifications for admission and schedule for written test/interviews for M.B.A. (Health Care and Hospital Management) are provided in a tabular format at **Chapter 2** this brochure.

#### **Faculty**

The School has been ranked among the top 20 in the country in terms of Intellectual Capital because of the School Faculty have been very productive in research and related activities. In addition to the following list of Faculty, few more Faculty members are expected to join the school.

### **Professors**

V. Venkata Ramana, M.B.A. (SKU), Ph.D. (Management-Osmania) - Marketing Management, General Management, Corporate Strategy & CRM and Services Marketing (Dean of the School)

V. Sita, M.A., (Osmania) M.Phil, (Hyderabad), Ph.D. (Osmania) - FDP(IIM, Ahmedabad), PGDHRM - Public Policy, Human Resource Management, E-Governance, entrepreneurship & Women Studies.

#### Readers

**S. Mallikharjuna Rao,** Ph.D. (Osmania), F.I.C.W.A. – Financial Management Strategic, General Management, Infrastructure Management and Health Care Financing

(Coordinator of the M.B.A Health Care and Hospital Management Programme).

- B. Raja Shekhar, B.Tech. (Civil Nagarjuna), M.B.A. (Osmania), Ph.D. (Management Kakatiya), M.Sc (Psychology SVU), FDP (IIM, Ahmedabad), PGDPMIR, PGDCS Quantitative Techniques, Operations Management, Quality Management, Consumer Protection and Supply Chain Management. (Dean, Students' Welfare)
- **P. Jyothi,** M.A., Ph.D. (Psychology Osmania) Organisational Behaviour, Human Resource Management, Organisational Development, and Entrepreneurship.

Mary Jessica, M.Com. (Osmania), Ph.D. (Management - Osmania) – Financial Management, Merchant Banking and Financial Services, Investment Management and International Financial Management.

#### Lecturers

Chetan Srivastava, MBA (Osmania), Ph.D. (Management – Osmania), PGCCA, MCSD – Strategic Marketing. International Marketing, Advertising, Sales Management, HRD and Systems

**G.V.R.K.** Acharyulu, M.Tech. (Chemical – Kakatiya), M.B.A. (Osmania), Ph.D. (Management – Osmania), DPM - Quantitative Techniques, Operations Management, Supply Chain Management and Systems Analysis.

The following are the distinguished external members of the School Board:

- 1. **Mr. Peter Hassan,** Advisor (Industries), Govt. of A.P. & Honorary Russian Consulate, Hyderabad
- Mr. King Shuk Nag, Resident Editor, Times of India, Hyderabad
- 3. **Prof. Furqan Qamar,** Advisor (Planning Commission), Govt. of India, New Delhi
- 4. **Mr. Venkat Changavalli,** Chief Executive Officer, Emergency Management and Research Institute (EMRI)

Some of the Key invited Adjunct & Visiting Faculty are:

#### Prof. Arun K Tiwari

**Mr. Muntasir Ahmed,** I.R.S., Visiting Faculty – Former Director General of Income Tax, Hyderabad. In addition several locally and international eminent senior managers and management experts are regularly invited to interact with the students as Guest Speakers in the courses and electives and seminars.



# **School of Medical Sciences**

The School of Medical Sciences was established with a mission to "Promote, Nurture and Achieve excellence" in frontier areas of Medical and Health Sciences by offering novel teaching and research programmes. The School has a Scientific Advisory Council-cum-School Board which has eminent biomedical scientists from India and abroad as its members. The School collaborates with the School of Life Sciences and other Schools and Centers of the University involved in Health Sciences research. The School has access to State-of- the art research infrastructural facilities of the Schools and Centers of the University.

The School of Medical Sciences has several Adjunct, Joint and Visiting Faculty from the University and other Institutes who actively participate in the multi-disciplinary teaching and research programmes. The School has established academic and research partnership with reputed Institutes recognized by the University like LV Prasad Eye Institute, Care Foundation and National Institute of Nutrition.

The School offers the following academic programmes:

Master of Science in Optometry and Vision Sciences: The 5-year Integrated M.Sc. course is offered in collaboration with LV Prasad Eye Institute, Hyderabad. This novel program envisages to train the students in different aspects of optometry as well as in vision science backed up with extensive practical skills and clinical internship.

Master of Science in Nursing Sciences: The 5-year Integrated M.Sc. course is offered in collaboration with Care Foundation/Hospital, Hyderabad. The students receive specialized teaching in Medical Sciences, humanities and management along with extensive training in clinical nursing skills so as to enable them to perform ably in Nursing care and Clinical research.

The eligibility for admission to the course is based on a written test followed by an interview. The written test paper based on XII Board syllabus will have a total of 75 objective type questions in Biology, Chemistry, and basic Medical Sciences.

The School also participates in the following programs:

M.B.A – Health Care and Hospital Management, offered by the School of Management studies.

Master of Science in Health Psychology – 5-year Integrated course offered by Center for Health Psychology.

Postgraduate Diploma in Health Fitness and Life Style

Management – 1 year course offered by the Centre for Physical Fitness and Sports Sciences.

**Prof. M.Ramanadham,** Department of Biochemistry, School of Life Sciences is the **Coordinator of the School.** 

## Adhoc Faculty

- 1. Dr. R. Sarath (Physiology)
- 2. Mrs. N. Geetha Reddy (Nursing)
- 3. Mr. Lokanadham (Anatomy)
- 4. Ms. Janitha P.A. (Optometry)

## Centre for Physical Fitness and Sports Sciences

The Centre for Physical Fitness and Sports Sciences works in collaboration with the School of Medical Sciences to promote Physical Wellness programs from a scientific perspective and using an inter-disciplinary approach.

The Objectives of the Centre are:

- a. To offer academic programs to promote Physical Wellness
- b. To disseminate Physical Wellness concept and its importance to the society
- c. To develop Physical fitness movement and to highlight the essentiality of sponsoring the Sports and Physical Fitness Culture on Scientific lines

The centre offers the following Academic Programme:

**P.G. Diploma:** One year postgraduate Diploma in Health Fitness and Lifestyle Management which is fully funded by the UGC under Innovative programs of National priority. This is a unique program which blends Physical Wellness concepts with Lifestyle Management skills. The objective of the course is to train Fitness management professionals with adequate knowledge in various Physical Fitness and Lifestyle management practices using an optimum blend of theory and practicals.

Any graduate with a minimum of pass is eligible for admission based on an entrance examination. The entrance examination will have three parts- written test (75 marks), physical fitness test and interview (25 marks).

The question paper for the written test will consist of multiple choice objective type questions in human anatomy, physiology, exercise and fitness science, wellness concepts and aptitude. Based on the order of merit in the written examination, the candidates will be called for a physical fitness test. Those who qualify in the fitness test with stipulated



minimum performance standards only will be eligible to appear for the interview.

A weightage of 5 marks will be given to the Graduates and Post Graduates of Physical Education (Five marks to be added to the total marks obtained in the entrance examination after the interview).

#### **Faculty**

**Prof. M.Ramanadham,** Department of Biochemistry, School of Life Sciences is the **I/c Head of the Centre** 

## **Guest Faculty**

**Dr. K.V. Rajasekhar** (Asst. Director, Sports Centre)-Exercise Science, Exercise Kinesiology, Physical Education and Fitness studies, Cardio conditioning (Coordinator of the Course) Dr. VVBN Rao, Exercise Science, Yoga, Fitness Studies

**Dr. T. Anupama Row,** Human Anatomy, Human Physiology, Pathology of degenerative diseases and exercise

**Dr. Sathyalakshmi,** Interactions of Yoga practices with health physiology

**K. Siva Kishore,** Lifestyle for Health promotion, Cardio and Strength conditioning (**Temporary**)



# School of Engineering Sciences And Technology (SEST)

The School of Engineering Sciences & Technology (SEST) was established with a mission and objective "to pursue high quality research and impart research-led education in emerging multi-disciplinary areas encompassing science, engineering and technology". SEST, which began inducting students from the academic year 2008-09 by initiating an integrated M.Tech./Ph.D. programme in Materials Engineering, will progressively expand to offer similar multidisciplinary programmes in other frontier areas spanning varied engineering disciplines. SEST provides a perfect environment to pursue cutting-edge cross-disciplinary research by taking advantage of the already well-established schools of study at the University, particularly Physic, Chemistry, Mathematics & Computer/Information Sciences and Life Sciences, which have an enviable track-record. SEST will offer courses/research projects in collaboration with these Schools as well as the Nano-Science/Technology Centre, Advance Centre for Research on High Energy Materials and Central Instrumentation Laboratory on campus.

SEST is already on course to put in place an ideal framework to facilitate integration of science into technology. collaborates closely with premier research institutions in the vicinity and some of them, such as the Defence Metallurgical Research Laboratory (DMRL), Indian Institute of Chemical Technology (IICT), International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI) and Nonferrous Materials Technology Development Centre (NFTDC), have been formally recognised as its external research centres. Additionally, SEST is forging close linkages with diverse Indian industries, too, in an effort to build a vibrant program spanning high-quality scientific and applied research. While a few full time faculty members have already been appointed and SEST also benefits greatly from the association of two Chair Professors of great eminence, the process of adding several other highly qualified teachers and researchers is presently in progress. In the meantime, the School has been able to attract some renowned experts from DMRL, NFTDC, IGCAR, NFC etc. as Guest Faculty to participate in student teaching and ensure that high quality knowledge is imparted to its students from inception.

### **Infrastructural Facilities**

Pertinent facilities relating to the areas of solid state physics, solid state chemistry, nano-technology, thin films, material characterization etc. are already available at the University to

be accessed by the School. Apart from a recently acquired Transmission Electron Microscope, these include other key characterization facilities like X-ray diffractometer, Scanning Electron Microscope, Vibrating sample magnetometer, Spectrophotometers etc. Additional core infrastructure is being set-up at SEST in identified areas for teaching and research purpose. An opportunity to also use a wide array of sophisticated and unique materials processing and characterization equipment existing at SEST's external research centres opens up exciting possibilities to address cutting-edge research. Between a top class library on campus and those at neighbouring research laboratories, students have access to one of the largest collection of books and journals related to Materials Sciences & Engineering. A new building to house SEST, keeping in view its future expansion plans, is also to be ready soon. Thus, the University is already taking all essential steps to establish SEST as an excellent seat of learning for post-graduate education and research in engineering.

# **Programmes of Study**

# Integrated M.Tech./Ph.D., Ph.D. in Materials Engineering

The School admits students to the Integrated M.Tech./Ph.D. programme in Materials Engineering as well as separately for a Ph.D. programme in Materials Engineering.

The School presently offers an Integrated M.Tech./Ph.D. programme in Materials Engineering. Students admitted to this programme have the option of continuing to the Ph.D. programme. Continution to Ph.D course will be based on the performance in M.Tech course. The M.Tech. programme is of two year duration, of which the first two semesters will be devoted to course work. The curriculum lays an emphasis on giving a broad exposure to all aspects of Materials Engineering, consistent with interdisciplinary nature of the subject today, and students also take elective courses. The balance of the two-year period will be spent by students on a research project leading to a dissertation, which will have to be defended in a viva-voce examination. The project work can either be done within the University or at one of the recognized external institutions, or at an R&D Laboratory, or at an industry. This gives the students freedom to pursue research in a variety of specialized areas within the broad theme of Materials Science and Engineering.

The **Ph.D.** programme is entirely research oriented. The student will be provided an opportunity to undertake research under the guidance of a Faculty member of the School in an area of his/her choice and approved by the School. The student will be periodically advised by a doctoral committee.



Students admtited to the Ph.D. programme will be required to undergo some course work depending on their background or take certain additional courses to meet the demands of their research. The research work, in part or in entirety, can be carried out either within the University or at one of its formally recognised external research centres. The students are expected to actively participate in research seminars and submit monthly progress reports of their research work. The Ph.D. requirements also include presentation of the research work in a comprehensive seminar prior to submission of the doctoral thesis and a subsequent oral examination in support of the thesis.

#### **Entrance Examination**

# I. Admission to Integrated M.Tech./Ph.D. in Materials Engineering:

Admission shall be based on a written test followed by an interview for short-listed candidates.

The written test will consist of objective type questions.

The syllabus for the test comprises of the typical syllabi of Indian Universities in Materials Science & Technology of BE/B.Tech level; Physics, Chemistry, and Mathematics & Statistics of B.Sc./B.Tech/B.E. level; Solid State Physics & Chemistry of M.Sc. level and basic knowledge of numerical and computational methods.

# II. Regular Admission to Ph.D. Programme in Materials Engineering:

Admission shall be based on a written test followed by an interview for short-listed candidates.

The written test will consist of objective type questions.

The syllabus for the test comprises of the typical syllabi of Indian Universities in Materials Science & Technology of BE/B.Tech level; Physics, Chemistry, and Mathematics & Statistics of B.Sc./B.Tech/B.E. level; Solid State Physics & Chemistry of M.Sc. level and basic knowledge of numerical and computational methods.

Candidates already possessing an M.E./M.Tech. degree in one of the specified areas (mentioned at minimum qualifications), as well as those who have qualified in the CSIR/UGC NET examination for JRFs or have a GATE/JEST percentile score of 90 or above, will be exempted from the entrance examination but will have to appear for the interview.

Candidates with B.E./B.Tech./M.Sc. or an equivalent degree opting for Ph.D., and not fulfilling any of the above requirements will have to qualify in a written test and will be

short-listed for interviews based on their performance in the written test.

## Course Work Requirements:

Candidates admitted to the Ph.D. programme with B.E./B.Tech./M.Sc. or an equivalent degree will be required to undergo a mandatory two-semesters of core course work, besides any additional courses that may be recommended by the doctoral committee to meet the demands of their research.

## III. External Ph.D. Registration:

The admission procedure shall be the same as that in the case of regular admissions to the Ph.D. programme.

Candidates admitted under this category shall be free to work at one of the School's formally recognized external research centres under joint supervision of a faculty member from the University and an approved Ph.D. supervisor from the recognized institution.

Candidates admitted with B.E./B.Tech./M.Sc. or an equivalent degree will be required to undergo a mandatory one-semester of core course work, besides any additional courses that may be recommended by the doctoral committee to meet the demands of their research.

Each admitted regular, full time Indian student will be paid a Fellowship/Scholarship as per the existing rules of the University.

#### IV. Sponsored Candidates:

Candidates with requisite qualifications, and having at least two years of work experience in Government/Government-recognized organizations (Universities / Colleges engaged in teaching and research, Government R&D institutions or R&D centres of industry) are eligible to apply under this category.

The work experience should be in the areas mentioned in the requisite qualifications.

# Sponsored candidates are exempted from the written test but must attend and qualify in the interview.

The candidates should submit, along with the applications, a written statement from the sponsoring organization to pay a one-time sum of Rs.1,00,000/- (Rupees one lakh only) towards the development fund of the department.

All requirements regarding course work etc. shall be the same as that in the case of regular admissions to the Ph.D. programme.

#### V. Foreign Candidates:

Foreign nationals seeking admission to the M.Tech./Ph.D.



(Materials Engineering) programme should also possess the requisite qualifications as in the case of regular students.

Candidates with a high GRE score will be given preference. Candidates should have the ability to communicate in English and, in order to support this ability, a good score in TOEFL is desirable.

In addition, candidates should submit details of the course contents of the qualifying degree as well as letters of reference (along with contact information of the referees) along with their application.

The candidates who are granted admission shall be required to pay in Indian Rupees a one-time sum towards the development fund of the department, as per the amount decided by the University.

# Integrated M.Tech/Ph.D.in Nano Science and Technology:

The School is also offering Integrated M.Tech/Ph.D in Nano Science and Technology from Monsoon semester of 2010-11.

Students admitted to this programme have the option of continuing to the Ph.D. programme. Continution to Ph.D course will be based on the performance in M.Tech course. The M.Tech. programme is of two year duration, of which the first two semesters will be devoted to course work. The curriculum lays an emphasis on giving a broad exposure to all aspects of Nano Science and Technology, consistent with interdisciplinary nature of the subject today, and students also take elective courses. The balance of the two-year period will be spent by students on a research project leading to a dissertation, which will have to be defended in a viva-voce examination. The project work can either be done within the University or at one of the recognized external institutions, an R&D Laboratory, or an industry. This gives the students freedom to pursue research in a variety of specialized areas within the broad theme of Nano Science and Technology.

# Admission for Integrated M.Tech./Ph.D. in Nano Science and Technology

Admission shall be based on a written test followed by an interview for short-listed candidates.

# The written test will consist of objective type questions.

The syllabus for the test comprises of the typical syllabi of Indian Universities in Materials Science & Technology and Nano Science and Technology of BE/B.Tech level; Physics, Chemistry, and Mathematics & Statistics of B.Sc./B.Tech/B.E. level; Solid State Physics & Chemistry of

M.Sc. level and basic knowledge of numerical and computational methods.

# **Faculty**

#### **Professors**

K.Bhanu Sankara Rao, Ph.D. (Madras) (Dean of the School)

V.S.Raghunathan, Ph.D (IISC Bangalore)

#### Lecturers

**Koteswararao Rajulapati,** Ph.D. (North Carolina State University)

Dibakar Das, Ph.D (IIT Bombay)

Vadali Srikanth, Dr. Ing (University of Siegen, Germany)

#### **Chair Professors**

**Prof. Roddam Narasimha,** Ph.D. (California Institute of Technology), Pratt & Whitney Chair Professor

**Prof. A. K. Bhatnagar,** Ph.D. (Maryland), S. Chandrsekhar Chair Professor

#### **Guest Faculty:**

**K. Balasubramahmanian,** Ph.D. (McMaster), Nonferrous Materials Technology Development Centre, Hyderabad

**S. Ray Chowdhury,** Ph.D. (IIT-Kharagpur), Nonferrous Materials Technology Development Centre, Hyderabad

**K.P.Narayana Murty** Ph.D (University of Hyderabad) School of Physics, University of Hyderabad.

#### Visiting Faculty:

**M.Vijayalakshmi,** Ph.D. (University of Madras), Indira Gandhi Centre for Atomic Research – Kalpakkam

**Komal Kapur,** Ph.D. (IIT-Bombay), Nuclear Fuel Complex, Hyderabad

**J. Subrahmanyam,** Ph.D. (IISc.), Defence Metallurgical Research Laboratory, Hyderabad

**Abhijit Dutta,** Ph.D. (IIT-Bombay), Defence Metallurgical Research Laboratory, Hyderabad (retd)

K.G. K. Murty, Welding Research Institute, Trichy (retd.)

**T.R.Rama Mohan,** Ph.D (IIT Bombay), Professor IIT, Bombay (Retd.)

M. Vasudevan, Ph.D (IIT Madras), IGCAR, Kalpakkam

**R. Sankara Subramanian,** Ph.D (IISc, Bangalore), DMRL, Hyderabad.



# 4

# **Stand-alone Centres**

# Centre for Integrated Studies (CIS)

#### Introduction

In the process of the fulfillment of the set objectives of the University, a Centre for Integrated Studies (CIS) has been established in the year 2006-07 to offer 5-year Integrated Master's Degree courses in several subjects for imparting specialised education to the young boys and girls on completion of their +2 level of education.

# Courses offered by the Centre

The Centre offers 5-year integrated Master's Degree courses in Science, Humanities and Social Science subjects.

#### An overview of the above courses:

The five year Integrated M.A. (I.M.A.) and M.Sc. (I.M.Sc.) course of the University of Hyderabad is not merely an integrated program that combines pre-graduate and post-graduate studies, but is also trans-disciplinary, cutting across several disciplines.

**Facilities:** Central Library with a good collection of books and periodicals, computing facility with internet access, experimental laboratories and hostel accommodation on the campus, IT Lab with internet access.

**Flexibility:** The credit system has the advantage of allowing the student ample choice of courses. (The students are permitted to exercise their option of subjects either soon after admission, or at the end of first year, or at the end of second year or even at the end of third year in certain courses).

**Research orientation:** There will be a component of research project in the last year (5th year).

**Breadth:** The subjects from Sciences, Humanities, and Social Sciences are offered in the first 2 years for all the students of these courses.

**Academic atmosphere:** These students will be amidst about 3000 students engaged in higher studies and research.

**Financial Assistance:** Every student admitted to these courses will be paid financial assistance.

### Important points to be noted:

- a) All courses are full time regular courses. There is no provision for exit in between.
- b) The medium of instruction is English for all the courses except the language courses which will be taught in the language concerned. Therefore, proficiency in English is very much required.

#### Courses in Sciences

The subjects for **I.M.Sc.** courses in Mathematical Science, Physics, Chemical Science, and Systems Biology are common in the first semester. The students with Biology background in +2 stage, who left Mathematics after the 10th class are expected to put in necessary effort to learn Mathematics needed for other courses. Similarly, the students who studied Mathematics in +2 stage and left Biology after 10th class are expected to learn necessary Biology. To provide necessary help in this direction, the University offers bridge courses in the first two semesters. The students who join the programme will be required to attend the relevant bridge courses. They are also encouraged to approach and seek help of the concerned Faculty members.

The admission to I.M.Sc. in Sciences (Mathematical Science, Physics, Chemical Science, and Systems Biology) will be through a common entrance examination. The entrance examination consists of two parts: a written test for 75 marks and an interview for 25 marks. The written test paper contains 25 objective questions each in Maths, Physics, Chemistry and Biology, at +2 level, and the candidates are required to answer any 75 questions. The questions carry negative marks. Based on their performance shortlisted candidates will be called for the interview.

#### Courses in Humanities

**I.M.A.** courses in Languages (Telugu/Hindi/Urdu) and Language Sciences lead to an M.A. degree in the respective subjects. Students however, in the first two years get a broad foundation for their degree by being exposed to the basics of several disciplines.

# Courses of study: IMA Humanities and Social Sciences Programme

Courses of study for students of Integrated M.A. in Humanities and Social Sciences at the Centre for Integrated



Studies (CIS) will be common in first year. These will be introductory and foundational in nature and will all be taught courses, viz., English, I.T., Indian Languages, Indian Literature, Comparative Literature, Economics, History, Political Science, Sociology, Anthropology. In the second year, a student opting for Humanities has a choice of three courses from the School of Humanities and one from the Students opting for Social School of Social Sciences. Sciences will follow a similar pattern. At the end of the fourth semester (second year), a student can exercise his/her option of change of programme/subject after following the prescribed formalities. During the third year, a student has to select any two clusters of two courses each (one as main and the other as the next option) and one course either from Humanities/Social Sciences or from other Schools in the University viz., Sarojini Naidu School of Arts and Communication, School of Management Studies etc. The details of the IMA in Humanities and Social Sciences are available on the University website (www.uohyd.ernt.in/ academic/specializedcentres/integratedstudies/ integratedstudies.html) and also available in the CIS handbook.

#### **Entrance Examination**

There will be a common entrance test for admission to I.M.A. in Humanities. The question paper will be objective type consisting of three parts; Part A, B, and C. In Part A, there will be 30 questions of one mark each to test the competence in the concerned subject. In Part B, there will be 20 questions of one mark each to test the competence in English. In Part C, there will be 25 questions of one mark each to test the competence in the current affairs and general knowledge. Students should choose Part A (Telugu, Hindi, Urdu, and Language Science) according to their options. Questions in Parts B and C will be in English and in Part A, the questions will be in English for Language Science students and in other languages (Telugu/Hindi/Urdu) for those who opt Telugu, Hindi, Urdu respectively. For Part A there will be negative marking of 0.33 for every wrong answer. There is no negative marking for Part 'B' and 'C'.

#### Courses in Social Sciences

I.M.A. course in Social Sciences leads to the award of Master's Degree in Economics, History, Political Science, Sociology, and Anthropology. The students admitted to IMA Social Sciences make their choice at the end of the third year regarding the discipline in which they want to get the degrees after fulfilling the minimum number of credits specified by each department. There will be an Academic Counseling Unit at the School level to guide the students

every semester.

Entrance Examination: There will be a common entrance test for admission to the IMA Courses in Social Sciences. Written test carries 75 marks. The test consists of (a) Language and Comprehension (25 marks), (b) reasoning abilities (25 marks), and (c) quantitative aptitude (25 marks).

The minimum eligibility requirements and the schedule of written test/interview for admission to the above courses are given in a tabular form at chapter 2 of this Prospectus-cum-Application form.

#### **Selection Procedure**

The following procedure shall be followed for selecting the candidates for different Integrated Master's degree courses:

- a) All eligible applicants will be called for the written test to be held at 25 centres as at Chapter 2 of this brochure. Only such candidates who are found successful in the written test will be called for the interview to be held at University Campus, Gachi Bowli, Hyderabad – 500 046.
- b) The written test will be in the form of simple objective type questions of +2 standard of two hours duration to be answered in the OMR sheet with black/blue ball point/sketch pen. There is a possibility of negative marking for wrong answers. Specific instructions will be given in the question paper/answer book.
- c) The weightage for different components for the final selection for admission will be - written test 75 marks, and interview 25 marks.

#### Other weightages

- a) Weightage for distinction in Sports/Cultural activities will be given as stated at Chapter 2 of this brochure.
- b) KVPY Scholars, participants of National Olympiad, rankers in the mail list of IIT-JEE and the 1st rankers of different Boards at +2 level are exempted from the written test.
- c) Weightage for candidates from Backward District: Weightage may also be given to the candidates belonging to backward districts and pursued their education upto +2 level in those districts as per the classification/notification of backward districts by the Government of India, for which duly certified proof of residence and education in those districts would be required. 4 marks will be given to the candidates belonging to backward District under 1st quartile and 2 marks to the candidates belonging to the backward Districts under 2nd quartile.



d) Weightage for Linguistic Deprivation: 2 marks of weightage may also be given to those who pursued their +2 level education in non-English medium which may be evident from their educational certificate. In its absence, the applicants should enclose a copy of the medium of instruction certificate issued by the Head of the college or institution where they have studied their +2 level education.

The following criteria shall be followed, one after the other, to resolve the ties, where candidates secure the same marks in the entrance examination:

- (a) **First criterion:** Marks obtained in the entrance examination (written test).
- (b) **Second criterion:** Marks obtained by the candidates in the qualifying examination (at +2). If the final result is not available, then the marks up to the 1st year will be taken into account.
- (c) **Third criterion:** Marks obtained in the next lower public examination (SSC/Matriculation or equivalent).

Candidates whose result of the qualifying examination (+2) is not declared may also apply for admission as stated at **Chapter 2** of this brochure.

# University Centre for Earth and Space Sciences (UCESS)

University Centre for Earth and Space Sciences (UCESS) was set up at the University of Hyderabad (UoH) during December, 2004 to initiate inter-disciplinary and interinstitutional (industry, R&D laboratories and academia) research and teaching programmes. The hallmark of the Centre, indeed, lies in using synergy between the Earth -Oceanic and Atmospheric realms, Space and Information Sciences to project the digital divide and promote knowledgedriven and job-led economic development of the country. The Centre has strong internal linkage with well equipped and well-staffed Faculty of Physics, Chemistry, Life Sciences, Computer Sciences and Centre for Modeling and Simulation Design (CMSD) on the campus of the University of Hyderabad, and with national laboratories such as National Geophysical Research Institute, Atomic Minerals Directorate, National Remote Sensing Agency, National Mineral Development Corporation and Baldota Industries, besides overseas institutions such as the University of University of California (San Diego Supercomputer Centre) and University of Sao Paulo.

UGC has recognized UCESS and granted Faculty and research fund through their Innovative Research Program.

## **Programmes of Study**

The Centre offers one and two years postgraduate Programmes in collaboration with the National Geophysical Research Institute, Atomic Minerals Directorate and Mining Industry, as well as a number of highly focused short term refresher courses to enable cadres to update their knowledge and skills and improve their employment opportunities. Most importantly, they would have the competence to develop new cutting-edge technologies.

## **Baldota Fellowships**

Five Fellowships of Baldota Foundation are available for selected candidates to pursue M.Tech. in Mineral Exploration. The fellowship covers tuition fee and field work expenses apart from Rs.5,000/- (Rs.6000/- to be revised) stipend per month (a total fellowship of about Rs.3 lakhs plus laptop per candidate).

## M.Tech. in Mineral Exploration

This is a four semester programme open to candidates with Masters degree in any branch of science with Mathematics as one of the subjects at the B.Sc., level. Though the admission is meant for sponsored candidates only, nonsponsored candidates may also be considered for admission against vacancies if any, subject to the availability of Baldota Fellowships. Selection of candidates for admission will be based on their academic qualifications, written test and interview. Therefore, eligible and interested candidates are encouraged to apply. Sponsored candidates (or sponsoring agency) will pay fees as stipulated by the University. The geophysical field work expenses will be borne by the respective sponsoring organization.

M.Tech. program is of 4 semester course. The first two semesters involve course work followed by 20 credits of dissertation during the third and fourth semesters. The courses and labs include: (1) Gravity, Magnetic, Seismic, Electrical & EM Methods, Gamma – Ray Spectrometry, (2) Geostatistics, Mathematical Modeling & Quantitative Methods, (3) Nuclear Geology & Isotope Geochemistry & Instrumental Techniques of Analyses (4) Geochemical Exploration, (5) Spatial Data Management and Remote Sensing, (6) Special Topics, and (7) Geological and Geophysical Field training for 10 weeks. The third and fourth semesters involve 20 credits of dissertation. The dissertation work may be carried out either at the University of Hyderabad or at the respective host organization of the sponsoring candidates or at any recognized R&D lab/industry.



Note: Those candidates who do not wish to continue after successfully completing the first two semesters of course work of the M.Tech. programme, would be offered an "Advanced P.G., Diploma in Mineral Exploration", provided they complete 8 credits of project work.

## Advanced P.G. Diploma in Mineral Exploration

This is a two semester course programme identical to M.Tech. with 8 credits of Project work. Though the admission is meant for sponsored candidates only, non-sponsored candidates may also be considered for admission against vacancies if any, subject to the availability of Baldota Fellowships. Selection of candidates for admission will be based on their academic qualifications, written test and interview. Sponsored candidates (or sponsoring agency) will pay the fees as stipulated by the University. The geophysical field work expenses would be borne by the respective sponsoring organization.

## Ph.D. in Earth and Space Sciences

The Center offers Ph.D. programme in Earth, ocean and atmospheric sciences, remote sensing, environmental sciences, water resources and also in closely related areas of other branches of science.

## Laboratory and Computer Facilities

All the students would be utilizing well developed state-ofthe-art facilities of the University of Hyderabad, National Geophysical Research Institute, Atomic Minerals Directorate and National Remote Sensing Agency.

A Mobile Geophysical Laboratory, equipped with Electrical Resistivity meter (ABEM Terra meter), Proton Precession Magnetometer, Spinner Magnetometer, T-VLF etc., is available for field training. Gravity meter and portable analytical instruments will soon be added for conducting detailed geophysical, geological and environmental related investigations. Use of state-of-the-art High Performance Computing Facility with supporting softwares such as ISATIS, MATLAB, ArcGIS, Geosoft, ERDAS etc., at CMSD, UCESS, SDSC (GEON) form part of the training.

**Field work:** Students would be undergoing 10 weeks of intensive field training programme with emphasis on geophysical exploration techniques under the supervision of experts from AMD, NGRI, University of Hyderabad etc.

#### Activities of the Centre

The activities of the Centre are integrated with socioeconomic development of the region, with need based interdisciplinary programmes, which benefit both the candidate and the society.

#### Research

The Centre currently executes research projects in harvesting, conservation and recycling of water, ocean processes, ocean models and climate forecasts, paleoceanography, cyberinfrastructure, mineral exploration, earth's crust and mantle, metallogeny and environmental geochemistry (funded by UPE, UGC, INCOIS, MES, Indo-US Forum, ISRO and NRB).

## **Out-reach Programmes**

Harvesting and management of water resources, reclamation and utilization of bad lands, environmental management etc.

Popularization of earth sciences among school children and public.

Rural development –agriculture, education, health etc.

## Workshops/Training Programmes

Apart from M.Tech., Ph.D. and P.G. Diploma Programmes, UCESS organizes training programmes in Earth & Space Sciences and highly focused short-term refresher courses to enable cadres to update their knowledge and skills and improve their employment opportunities. Most importantly, the programmes are designed to enhance competence to develop new-cutting edge technologies.

### **Faculty**

Prof. K.V.Subbarao, Earth Sciences, (Professor in-charge of the Centre)

Prof. A.C. Narayana, Earth Sciences

Dr. S. Sri Lakshmi, Geophysics

**Prof. B.L. Deekshatulu,** Remote Sensing & Image Processing

Prof. D. Arun Agarwal, Computer Sciences

Dr. Rajeev Wankar, Computer Sciences, Associate Faculty

Prof. C. Raghavendra Rao, Computer Science

Faculty from the Schools of Chemistry, Physics, Mathematics, Statistics and Computer Sciences, Life Sciences of University of Hyderabad.

#### **Adjunct Professors**

**Dr. V.P.Dimri,** Geophysics, National Geophysical Research Institute

**Dr. R.R. Navalgund,** Remote Sensing, Space Application Centre, Ahmedabad



## Faculty from other Institutions and R & D Labs

**Prof. Kota Harinarayana,** Fluid Dynamics, National Aeronautics Lab.

**Dr. Anjan Chaki,** Atomic Minerals, Atomic Minerals Directorate, Hyderabad & other guest Faculty from AMD

**Dr. K. Vinod Kumar,** Remote Sensing, National Remote Sensing Agency, & other Guest Faculty from National Remote Sensing Agency

**Sri V. Kameswara Rao,** Geostatistics, National Mineral Development Corporation

#### **Visiting Professors**

**Prof. J.N.Walsh,** Environmental Geochemistry, University of London

**Dr. Chaitanya Baru,** Computer Science-IT, San Diego Supercomputer Centre, University of California, USA

Dr. Shailesh Nayak, Secretary, Ministry of Earth Sciences

**Sri T. Suryanarayana,** Geostatistics, (Retd. DGM from National Mineral Development Corporation)

#### **Guest Faculty**

Prof. R. Vaidyanadhan, Geological Society of India

Prof. Vishwas Kale, University of Pune, Pune

Dr. Subhas Tella, Geological Survey of Canada

Prof. D.V. Bhaskar Rao, Meteorology, Andhra University

Prof. A. Narayana Swamy, Geophysics, Andhra University

**Prof. I.B. Ram Prasad Rao,** Geophysics, Osmania University

Prof. S. Murali, Geophysics, Osmania University

Sri G.R.K. Murthy, formerly from NPOL, Cochin

Prof. B.V.S. Murthy, Geophysics, Osmania University

**Dr. Kalachand Sain,** National Geophyiscal Research Institute

Sri V.C. Mohan, Sesimics, ONGC (Retd)

**Dr. M.V. Ramakrishna Rao,** formerly from GSI and faculty from National R&D Labs and Universities from India & Abroad

Industry

Dr. V. Kolla, Houston, Oil Exploration

Dr. Ravi Bastia, Reliance, Oil Exploration

# Advanced Centre of Research in High Energy Materials (ACRHEM)

The Advanced Centre of Research in High Energy Materials (ACRHEM) focuses on interdisciplinary research aimed towards achieving an understanding of the theoretical and experimental aspects of the Physics, Chemistry, Mathematics and Statistics of processes involved in High Energy Materials, along with the Electronics and Photonics instrumentation involved.

The Centre's goal is to develop state of the art facilities and techniques for quantifying the properties of high energy materials (HEMs) and energetic processes. This is done through experiments with lasers, theoretical calculations and computational modeling, and synthesis of novel HEMs and nano-energetics. ACRHEM also aims for high quality teaching with student-faculty ratio highly favorable for individual attention. The centre has various ongoing research programmes both in experimental and theoretical fields to train Ph.D. scholars in fundamental as well as applied areas of Physics, Chemistry, Mathematics and Statistics of processes involved in High Energy Materials.

The following Broad Areas of Research are being pursued at ACRHEM: Synthetic and Computational Chemistry, Computational Physics, Computational & Mathematical Modeling of chemical kinetics of HEMs; THz generation/characterization using photo-conducting antenna, Surface Plasmon characterization and applications; Laser induced shock wave generation and characterization; Time and Spatially resolved spectral analysis under extreme conditions; Development of instruments and technology to observe, measure, by ultrafast measurement techniques the processes involved in the HEM applications and synthesis; tools used include ultrashort pulse lasers in the picosecond/femtosecond time domain and fast detection systems, and smart strategies; Polymer Sciences involving HEMs; Research in Cavitation and Sonoluminescence; Density functional study of HEMs involving electronic structure and mechanical property calculations; Modeling combustion phenomena; Modeling the physics of the release of energy by HEM; Modeling of mathematical and statistical processes of a mixture of HEMs; Material Sciences of HEM; Novel HEM and nano-materials/nano-structures. Prof. S. P. Tewari is the Director of the Centre.

More details at <u>www.acrhem.org</u>. The University website may also be referred to further details.



## **Programs of Study:**

**Ph.D.:** Admission to the Ph.D. programme is open to M.Sc., M. Phil. and B.E./B.Tech. qualified students. This is a research programme with students undertaking research under the supervision of faculty member, on a topic approved by the Centre. The student is required to show satisfactory progress throughout the period of research as well as fulfill other requirements prescribed by ACRHEM. Requirements for successful completion of the programme leading to the award of a Ph. D. degree in physics, chemistry or mathematics, include submission of research results in the form of a thesis and defense of the thesis in a viva-voce examination. Approximately 20 Ph. D. positions are available during the 2010-11 academic year.

Specialized courses being offered by the Centre may also be taken as optional courses by M.Sc., M. Phil., and integrated M.Sc. students from other schools. Courses being offered and proposed by ACRHEM include courses on Nonlinear Optics, Ultrafast Optics, Combustion Phenomena, Shockwaves & Detonations, Computational Material Science, Polymer Physics and Polymeric Fluids, Fluid Dynamics, Lasers, Spectroscopy, High Energy Materials, Solid State Physics, etc., aiming to give students a strong training in both experimental as well as theoretical fields. Ph.D. coursework up to a total of 12-16 credits is mandatory for all the students.

In addition to the Ph.D. programme, ACRHEM also takes Junior and Senior Research Fellows. The duly filled application on the prescribed format of the University should be accompanied by a write up on a plain paper on the purpose and intention of research in HEM as envisaged by the applicant and his / her particular area of research interest.

#### **Entrance Examination:**

For admission to the Ph.D. programme in ACRHEM there will be a written test and an interview as per the schedule of the University. The material covered in the written test will be based on the typical M.Sc. syllabi of Indian Universities in Physics, Chemistry, Mathematics & Statistics. The examination will consist of two parts, Part A and Part B. Part A will consist of 25 objective questions of one mark each, which is compulsory. Part B will consist of three sections --Physics, Chemistry and Mathematics & Statistics, each having 25 questions. One can answer ONLY 25 questions. Each correct answer gets 2 marks in part B. Those who qualify after writing this entrance examination will then be called for an interview as per the norms of the university. Those who qualify for interview after appearing in the entrance examination of the School of Physics, Chemistry or Mathematics, may also opt to appear for the interview at

ACRHEM for admission to the Centre's Ph.D. programme: such interviews shall be scheduled as per requirement.

#### Infrastructural facilities:

Besides the facilities available in different Schools and Centres of the University, ACRHEM brings the following additional infrastructure to the University pool:

- 1. Ti:sapphire femtosecond oscillator [MICRA, Coherent] and femtosecond/picosecond amplifiers (~2.5 mJ) [LEGEND, Coherent] with OPA [TOPAS/DFG, Light Conversion, tunable from 250 nm to 20? m]
- 2. High power Nd:YAG nanosecond laser system with fundamental, second, third and fourth harmonics (Innolas, 1.3 J in fundamental); Dye laser system (Radiant Dyes) pumped by Nd:YAG laser along with frequency mixing option tunable in the range of 300 nm to 3.0? m
- 3. Dynamic vibration isolation optical tables (Newport SmartTableTM); Low power and High power He-Ne lasers
- 4. Diode lasers (high power and tunable), Three dimensional nanopositioners, Power/Energy meters, Delay stages and controllers.
- 5. Boxcar Integrator, Single Shot Autocorrelator, Fast photodiodes, high-power ns/ps/fs optics.
- 6. Fully fledged synthetic chemistry labs including equipment such as Dynamical Mechanical Analyzer, Bomb Calorimeter, Fume Hoods etc.
- 7. Hand-held Spectrometers, Fast oscilloscopes, CCD/Vidicon cameras, mid-IR detectors, Single photon detector etc.
- 8. Mercury Cadmium Telluride Detector (up to 26? m), IR Viewer, Laser Beam Profiler.
- 9. Intensified CCD's integrated with Michelle spectrograph.
- 10. Tunable Ti:sapphire oscillator (Chameleon, ~140 fs pulse duration) and pulse shaper (Sihouette, Coherent)
- 11. High power picosecond laser system (80 mJ, 30 ps).
- 12. Tunable diode laser in the telecommunications spectral range
- 13. Waveguide/Fiber Optic stages for critical alignment.
- 14. Optical Spectrum Analyzer (Yokogawa)



- 15. Low temperature optical cryostat.
- 16. Vacuum chambers, Spin Coaters, Material characterization facilities.
- 17. Electron beam gun, RF Sputtering, Thin film fabrication facility etc.

Equipment being procured includes Streak Camera, RF spectrum Analyzer, CO2 laser etc.

## Computer & Library Facilities:

All research workers have personal computers connected to the network of the University with wireless network facility so that internet and e-mail facilities are directly accessible from laboratories and faculty offices. Access is available to a large number of books and journals through the University library, as well as the Centre's library. Access to the University's CMSD / HPCF computer facility is additionally available for simulation work. We are also procuring 12 64-bit Terabyte systems with 16GB RAM.

#### **Faculty**

- **Prof. S. P. Tewari, Director, ACRHEM, Ph.D.** (Delhi) Quantum Optics, Nonlinear optics (Theory)
- **Prof. S. Mahapatra,** Ph.D. (IIT, Kanpur) Theoretical Chemical Dynamics, Non-adiabatic Processes (Theory)
- **Dr. A.K. Chaudhary,** Ph.D. (Burdwan) Laser Spectroscopy and Nonlinear Optics. (Experiment)
- **Dr. S. Venugopal Rao,** Ph.D. (Hyderabad) Nonlinear Optics, Decomposition of High Energy Materials using ultrafast spectroscopy, Nanophotonics, Ultrashort laser pulses, Femtosecond laser direct writing. (Experiment)
- **Dr. P. Prem Kiran,** Ph.D. (Hyderabad) Laser matter interaction, Spatio-temporal evolution of laser induced shock waves; Nonlinear Optics; Nanophotonics; Propagation of Ultrashort, intense femtosecond pulses in atmosphere. (Experiment)
- **Dr. G. Manoj Kumar,** Ph.D. (Hyderabad) Laser induced breakdown spectroscopy, Spontaneous Emission modification, Interferometry for refractive index and thickness measurements, Combustion modeling. (Experiment)
- **Dr. B. Ashok,** Ph.D. (Massachusetts Amherst, USA) Theoretical Soft Matter Physics, Polymer Physics & Complex Fluids, Instabilities, Nonlinear Dynamics of Complex Systems, Sonoluminescence & Cavitation. (Theory)

**Dr. G.S. Vaitheeswaran,** Ph. D. (Anna University) Solid state theory, Material science, Magnetism, Superconductivity, High Pressure Studies, elastic and mechanical properties investigated using first principles density functional calculations (DFT). (Theory)

# **Associate Faculty**

#### **Chemistry:**

- **Prof. M. Durga Prasad,** Ph.D. (Calcutta) Theoretical Chemistry: Quantum Dynamics and Many Body Theories (Theory)
- **Prof. D. Basavaiah,** Ph.D. (Banaras Hindu University) F.A.Sc., F.N.A Organic and Bio-Organic Chemistry (Theory)
- **Dr. Tushar Jana,** Ph.D. (Jadavpur) Polymer and Materials Science (Experiment)
- **Dr. P.K. Panda,** Ph.D. (IISc., Bangalore) Synthesis and Exploration of chemical, biological and material aspects of porphyrinoids (Experiment)
- **Dr. K. Muralidharan,** Ph.D. (IIT, Kanpur) Synthetic main group chemistry and polymers
- **Dr. A.K. Sahoo,** Ph.D. (NCL, Pune) Organic synthesis and Organometallic chemistry. (Experiment)

#### Physics:

- **Prof. C.S. Sunandana,** Ph.D. (IIT, Madras) Condensed Matter Physics (Experiment)
- **Prof. K.P.N. Murthy,** Ph.D. (Hyderabad) Monte Carlo methods in statistical physics and in radiation transport; Walks and first passage time problems in regular and disordered lattices; Self avoiding walks; Stochastic processes; Nonlinear dynamics and chaos. (Theory)
- **Dr. S. Singh,** Ph.D. (Hyderabad) Quantum Optics (Theory)
- **Dr. M. Ghanashyam Krishna,** Ph.D. (IISc, Bangalore) Nanostructured materials, Thin Films and Sensors (Experiment)
- **Dr. K.C. James Raju,** Ph.D. (IIT, Chennai) Materials, Processes, Phenomena and characterization techniques in the microwave range, Ferroelectric thin films and applications, Microwave Electronics. (Experiment)
- **Dr. S.L. Sabat,** Ph.D. (Berhampur) Digital Signal Processing and Embedded Systems.
- **Dr. N.K. Viswanathan,** Ph.D. (Hyderabad) Interferometry, Fiber Optics, Polymer Optics (Experiment)



**Dr. J. Balakrishnan,** Ph.D. (Delhi) Stochastic Processes, Dynamical systems, Problems motivated by biology, Quantum field theory (Theory)

**Dr. A. Vudayagiri,** Ph.D. (Hyderabad) Quantum Optics, Laser Cooling (Experiment).

# Mathematics, Computer & Information Sciences:

**Prof. C.R. Rao,** Ph.D. (Osmania University) Simulation & Modeling, Knowledge Discovery

**Dr. S. Panigrahi,** Ph.D. (Berhampur) - Differential Equations

## Centre for Health Psychology

Health Psychology is a holistic approach to Health and Well being. The holistic approach shifts the emphasis of health from biomedical to biopsychosocial model. Health Psychology is the field within psychology devoted to understanding psychological influences on how people stay healthy, why they become ill; and how they respond when they do get ill. It focuses on health promotion and maintenance; prevention and treatment of illness; the etiology and correlates of health, illness and dysfunction and improvement of health care system.

#### Prospects of Health Psychologists

- They work closely with medical professionals
- They can also work independently
- They can do research and examine the interaction of biological, psychological and social factors in producing health and illness
- They provide counseling for psychosocial problems that illness may create
- They develop worksite interventions to improve employee's health habits
- They work as consultants in organizations to improve health and health care delivery

### **About the Centre**

The Centre for Health Psychology is the first ever Centre in the Country, and was established in the University in 2007. The Centre is engaged in Research in the field of Health psychology which is one of the recent branches of Psychology.

#### Infrastructure

The Centre is equipped with a Psychological Laboratory, Counseling laboratory and Behaviour Technology Laboratory. The experimental laboratory has modern instruments and about 200 standardized psychological tests. The Counseling Laboratory is a state-of-the-art laboratory to train the students in micro skills of counseling. The Behaviour Technology laboratory trains students in relaxation therapy using Biofeedback machine that measures EEG, GSR, EMG, Pulse, Respiration etc., Neurofeedback and also the usage of Stammer Suppressor, Multibehaviour therapy and Aversion therapy equipment.

## Programmes of the Study

The Centre offers Five Year Integrated M.Sc., in Health Psychology, Two year M.Sc in Health Psychology, P.G. Diploma in Counseling Psychology, and Ph. D Programme in Psychology.

#### **Entrance Examination**

There will be an entrance examination for admission to the above programmes. The admission is based on the written test followed by an interview for the short listed candidates after the written test.

- The test for admission to Integrated M.Sc. in Health Psychology will assess their aptitude in Psychology, basic knowledge in Mathematics, Biology and proficiency in English.
- The test for admission into M.Sc. Health Psychology will assess their knowledge in Psychology and proficiency in English.
- The test for admission to P.G. Diploma in Counseling Psychology will assess their knowledge in Introductory Psychology and proficiency in English.
- The test for admission to Ph. D. Programme will assess their knowledge in Psychology, Research methodology and proficiency in English language.

# **Faculty**

#### **Professor**

**Meena Hariharan,** Ph. D. (Utkal) – Health Psychology, Coping with Stress Psychology of Resilience (Coorrdinator of the Centre)

#### Lecturers

**Dr. G. Padmaja,** M.A., M.Phil, Ph.D – Counseling Psychology and Health Psychology





**Dr. Meera Padhy,** M.A, M.Phil, Ph.D – Health Psychology & Psychology of Disadvantaged

**Dr. N.D.S. Naga Seema,** M.A. Ph.D– Stress and Mental health

## **Guest/Visiting Faculty**

**Dr.S P K. Jena,** Associate Professor, Dept. of Applied Psychology, Delhi University

**Dr.M.S.Reddy,** Psychiatrist, Asha Hospital, Institute of Psychiatric Medicine & Counseling

Dr. Niranjan Reddy, Clinical Psychologist

Dr.Saroj Arya, Clinical Psychologist, NIMH, Hyderabad

Ms. Lalitha Raghuram, Country Director, MOHAN Foundation, India

# Centre for Neural and Cognitive Sciences

The Center for Neural and Cognitive Sciences is an interdisciplinary research center focusing upon the areas of linguistic cognition and cognitive systems. A truly interdisciplinary center, it brings together Faculty and researchers from various disciplines such as physics, linguistics, computer science, neurobiology and philosophy to ponder upon the nature of cognition. Within the short span of its existence the center has received considerable international attention. The Center is in the process of setting up a well-equipped laboratory with ERP and eye-tracking equipment, and offers research programs in cognitive science at the M.Phil. and Doctoral levels. The Center has been offering post-graduate courses at the interface of linguistics, philosophy and neurosciences for students majoring in the sciences and the humanities. It has received generous assistance from the University Grants Commission towards major research projects and infrastructural facilities under their Innovative Programs Scheme. The Center is on the network of the National Initiative of the Department of Science and Technology on Cognitive Science Research and has received substantial grants from them.

**Professor Vipin Srivastava** is the Coordinator of the Center; **Professor Gautam Sengupta** and **Professor S. Bapiraju** are the **Associate Coordinators**.

### **Programs of Study**

The **M.Phil.** programme in Cognitive Science consists of 16 credits of course work followed by a dissertation. The course work, to be completed within one semester, covers the following topics:

- Formal and Computational Approaches to Cognition: meaning, learning and reasoning
- Empirical Bases of Cognition
- Language, Philosophy and Cognition
- Topics in Cognitive Science: Dissertation Oriented Readings

The Ph.D. programme in neural and cognitive sciences involves an additional 16 credits of dissertation-oriented readings in the second semester of the program, followed by a dissertation.

### Eligibility for Admission

For **M.Phil**. and **Ph.D.:** Master's degree in any discipline in the Humanities or Social or Natural Sciences with at least 55% marks. Selection will be made on the basis of a written test followed by an interview. The intake for I.M.Sc., M.Phil. and Ph.D. for the 2010-11 academic year would be 8 and 3 respectively.

#### **Faculty**

**Professor Vipin Srivastava,** School of Physics (Coordinator of the Centre)

**Professor Gautam Sengupta,** Center for Applied Linguistics & Translation Studies (Associate Coordinator of the Center)

**Professor S. Bapiraju,** Department of Computer and Information Sciences (Associate Coordinator of the Center; currently on leave)

**Professor A. K. Pujari,** Department of Computer and Information Sciences (on leave)

**Professor Probal Das Gupta,** Center for Applied Linguistics (on leave)

**Professor Amitabha Das Gupta,** Department of Philosophy

Professor P. Prakash Babu, Department of Biotechnology

Dr Prajit K. Basu, Department of Philosophy

**Dr Vineet C. Padmanabhan Nair,** Department of Computer and Information Sciences

Dr.S.L.Sabat, School of Physics

Dr. S.K.Udgata, DCIS

Dr.Somsukla Banerjee, CALTS

The Center is in the process of inviting some more Faculty members in various Schools and Departments to join the forum.



#### Centre for Women's Studies

The Centre for Women's Studies (CWS), at the University of Hyderabad is an interdisciplinary centre in the Schools of Social Sciences, Humanities, Performing Arts, Communication, Management, and Natural Sciences. It is a stand alone centre collaborating with different faculty and schools. It has a Advisory Board comprising of members from different Schools, and members from different Organizations and Universtiies, to run its day to day affairs. The University of Hyderabad had a Women's Studies Cell that has been operational since 1984. This was alternatively located in the School of Social Sciences and School of The Cell offered a course titled Social Humanities. Construction of Gender as an optional course for M.A. It successfully organized various seminars and workshops and carried out many Projects. This Cell has now been upgraded to a Centre from June 2007 onwards.

#### Aims and Objectives

- To actively coordinate courses on gender and women in different departments, introduce new areas of gender research.
- Build a systematic data base on gender issues.
- Work towards a Master's programme in Women's Studies and thus enhance the emphasis on inter-face studies in the University as a whole.
- To main stream gender issues in teaching and research.
- Work towards the empowerment of women.

#### **Programme of Study**

The Centre offers an **M.Phil.** and **Ph.D.** programme in Gender Studies.

The **M.Phil.** programme is of two semester duration which includes course work and dissertation. The first semester is devoted for course work consisting of 4 courses of 4 credits each, viz., Introduction to Gender Studies, Feminist Theories and Methodologies, Gender issue in Sciences and an individual seminar course in the broad area of research. The second semester is devoted for the preparation and submission of M.Phil. dissertation.

**Ph.D.** students who have not done an M.Phil need to do the course work. Ph.D. students can also take courses related to Women and Gender offered by other departments.

#### **Entrance Examination**

M.Phil and Ph.D. Examination assess the students on writing, major essay, short essays and short notes on key

concepts in women's studies, understanding of social and developmental issues. In general, candidates interested in pursuing their studies in the Department are assessed in their intensive knowledge of gender studies and also their ability to comprehend general concepts in women's studies along with their skills in writing about gender studies in a comprehensive way. Students seeking admission to the M.Phil. and Ph.D. courses must also take a Viva-Voce examination.

M.Phil./ Ph.D. pattern consists of objective type questions, short answers, concepts and long answers. Part - A consists of objective type questions/Concepts (maximum of 25 marks), Part - B, consists of four short answers (maximum of 20 marks) and 2 essays (maximum of 30 marks) related to concepts in women's studies, women's issues, understanding of social and developmental issues. The total marks is 75 for the written exam and 25 for the Viva-Voce examination.

Students are expected to come prepared with a Research Proposal for their Viva Voce examination.

#### Areas of Research

- Population and Reproductive Health, Women and the Environment, Women and Development, Problems of the Girl-child, Gendered Economics, Feminization of Agriculture, Women in Sciences, Gender Violence, Women, Society and Law, Women and religion, Women's History, Women's Movements.
- Women and Entrepreneurship, Women and Globalization, Women in Management, Women in the Diaspora, Women and/in Media, Women and Performing Arts, Women and Body Politics, Women and Intersecting Marginalities, Women and Politics.

### **Faculty**

Rekha Pande, Ph.D. (Allahabad): Women's History, Women's Movement, Women and Religion, Violence against Women, Women and Globalization with special emphasis on Women's work in Agriculture and the ICT sector (Coordinator of the Centre).

**Tutun Mukherjee,** Ph.D. (Osmania University): Literary Criticism and Theory, Translation, Women's Writing, Theatre and Film Studies, Culture Studies

**Bindu A. Bambah,** Ph.D. (Chicago): Particle Physics, Non Linear Dynamics (T)

**Jyoti,** Ph.D. (Osmania University): Organizational Behaviour, Human Resource Management, Organizational Development, Entrepreneurship



## **Assisting Faculty:**

Sita Venka, Ph.D. (Osmania University): Public Policy, Human Resources Management, E-Governance, Entrepreneurship and Women Studies

Anita, Ph.D. (JNU): Neurodegeneration and Brain Aging, Molecular Chronobiology, Cellular and Molecular mechanism underlying Post embryonic neural development. Identification of environmental and social factors influencing age related sleep disturbances in women

**Ajailiu Numai,** Ph.D. (JNU): Gender, Non-Governmental Organizations (NGO's) and Development, Child and Society, Indian Diaspora, Philanthropy

#### Centre for Buddhist Studies

Centre for Buddhist Studies founded on August 8, 2009 within the broad frame-work of the university's vision and raison d'être is first of its kind not only in South India but in the entire country for its objectives to conform to all international standards in Buddhist researches and teachings with focus on Original Buddhism based on the primary sources in Pali.

## **Programme of Study**

The centre proudly announces the introduction of Ph.D. programme in Buddhist Studies from the current academic year that commences from July 2010. The admitted candidates shall be required to write a thesis on a topic of their choice with prior approval from their Supervisor(s) and shall be allowed to submit the thesis for examination as per the UGC guidelines and university rules.

#### **Entrance examination**

The questions will be based on the Buddhist teachings, philosophy, history and literature with particular reference to the Pali texts.

The written examination (75 marks) shall have 2 sections

Section 1: descriptive (40 marks);

Section 2: objective (35 marks).

The written examination shall be followed by interview (25 marks).

Chandra B. Varma is the Coordinator of the Centre

# Centre for Modelling Simulation and Design (CMSD)

The study of passage from the micro world of atoms and molecules to the macro world of solids, liquid and gases calls for an understanding of a variety of phenomena in physics,

chemistry and biology. Atomic lasers, molecular computers, drug-receptor interactions, industrial catalysts, lubricants, and industrially important materials form part of this continuum and an understanding of this evolution needs all the three components of research, viz. theory, experiment and computation. Thus computer-based simulations form an integral part of modern research methodology. For example, the design of the best carbon particle size in Tribology involves as much computing as basic science and engineering. In this era of science-driven-engineering, the role of scientific research, based on modeling, simulation and design, is of paramount importance. Countries and Institutions across the world are gearing up to avail the challenging opportunities provided by this new tool. The primary requisite in using the third avenue of research for solving complex problems is a working, state-of-the-art High Performance Computing (HPC) center.

The University of Hyderabad, having expertise in many of the above areas, fully appreciates the inter-dependence of Science, Engineering and Technology, and launched a uniquely conceived new programme of higher education and research. The need for computation in all areas of research and teaching at the University had been felt for long. This initiative has been supported by an imaginative programme of the UGC in recognizing some Universities for their potential for excellence. Of the five Universities selected so far under the scheme, the University of Hyderabad has already proposed, and got approval for, an innovative interfacial studies and research programme with a substantial funding. The UGC-approved establishment of the Center for Modeling, Simulation and Design (CMSD) was fuelled further by generous support from DST under its FIST programme.

CMSD aims to nurture cross-disciplinary bridges, which are effective in generating new knowledge and creative explorations. The human resources generated from such efforts will be invaluable. Expertise thus developed would help in reaching out to other research organizations and industry. Training individuals and organizations in specific hardware and software, undertaking of consultancy and turnkey projects, help convert real life phenomena into appropriate mathematical and computational models etc., are some of the important tasks that CMSD has embarked on. CMSD became operational from its new premises during December 2004. CMSD has been accorded an academic status by the University; The Department of Science & Technology (DST) has recognized CMSD as National High Performance Computing Facility.

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CMSD has initiated several research activities in collaboration with several university departments and/or centres. Some areas are:

- 1. Physics of low dimensional systems: Properties of molecular thin films; substrate interactions and hybrid structures; transitions caused by anchoring; phase equilibrium and interface phenomena; layered structures and their stability.
- 2. **Topological defects in restricted geometries:** Competition between different length scales and frustration; formation of topological defects and their dynamics; quantitative analysis of defect structures through wavelet transform methods.
- 3. **Critical phenomena:** Effect of randomly quenched disorder on phase transitions; influence of molecular structure and interactions on phase stability; cross-over effects and multi-criticality (typical systems: complex fluids and magnetic systems)
- 4. Monte Carlo simulations: Computer simulations of liquid crystalline systems; phase diagrams of liquid crystals confined to porous media like aerogels; large-scale phenomena in liquid crystals: structure and dynamics near the phase transitions, extraction of bulk properties and surface effects; Atomistic simulation and modelling of complex fluids employing multiple time step algorithms; simulation of transport processes in semiconductors: process simulation and device modeling for Si, GaAs devices; application of non-Boltzmann simulation techniques to estimate entropy and free emefgies of complex systems; simulation of far-from equilibrium processes and calculation of free energy differences employing the recent fluctuation theorems.
- Genomics & bioinformatics: Biosequencing analysis; structural and functional Genomics to map protein coding regimes and sequencing of DNA; use of wavelet methods to differentiate between normal and cancerous tissues; estimation of long-range correlations in sequences;
- 6. **Protein folding:** Using mathematical tools to study how a particular sequence of amino acids makes a protein fold in a particular biologically active shape; application of self avoiding walks and their recent variants to protein folding problems;
- 7. **Cognitive neuroscience:** To model cognitive functions like learning, memory, discrimination and categorization

- using physical and mathematical tools.
- 8. **Computational intelligence:** To go beyond the capabilities of 'classical' computers using ideas from quantum mechanics (quantum computers), and biological evolution (artificial neural network, evolutionary algorithms)
- 9. **Natural language understanding:** To grasp and model the details of language acquisition in the mental lexicon and to use this knowledge to process natural languages effectively on a computer.
- 10. Very Large Scale Integration (VLSI): Design of embedded systems; development of back-end tools for simulators and synthesizers; development of algorithms for power efficient lay-out design; design of mixed signal systems; development of digital signal processors; logic function theory.
- 11. Quantum chemistry: Carry out large scale quantum chemical computations at different levels of approximatiom to study structure and dynamics of macro molecules; construction of global potential energy hypersurfaces and dynamical studies of nuclear motion on interacting manifolds of electronic states. Investigations of fundamental mechanisms of photon-induced processes in chemistry and biology and to probe the details of chemical reactions in the gas as well as condensed phases. Modelling of solvation dynamics and its effects on solution reactions employing molecular dynamics, Monte Carlo and other statistical methods.
- 12. **Molecular modelling:** Design property-specific molecules for a variety of application: e.g. design of molecules with large hyperpolarisabilities for fabricating efficient nonlinear optical materials, development of guidelines for producing hard materials that can replace diamonds in industrial applications and the design of ion-specific fluorophore-based sensors.
- 13. **Drug design and delivery:** Computational design of specific drug molecules based on the drug-receptor interactions; investigation of specific aspects such as drug-receptor binding and chiral discrimination employing high levels of quantum chemical and molecular mechanics/dynamics computations.
- 14. **Design of new materials:** Quantum chemical computations for design of the building blocks of novel materials; computational modeling of spin interactions in open shell systems and structure-property correlations in electronic and optical materials to provide a sound





basis for the design and fabrication of molecular magnets, semiconductors, optical switches etc.; exploration of phenomena of polymorphism and intermolecular interactions to understand and exploit their roles in achieving specific material attributes. development of systematic graph-based approaches to the analysis of interaction pathways in condensed matter.

Currently, Short term courses are conducted in the areas of Parallel Computing, Monte Carlo simulation, modeling etc. It is soon planned to start Ph.D program in Computational Science area.

## Computational Resources:

Currently, CMSD has over a 2 TFlops computing facility and is expected to grow to a 10 TFlops, by positioning a 1024 core cluster, by the end of this year.

- 6 IBM SMP Systems with total of 256 CPUs [1 x IBM p690 (32 Power 4), 3 x IBM p690 (96 Power 4+), 1 x IBM p595 (64 Power 5), 1 x IBM p595 (64 Power 5+)], 512 GBytes of Main memory and 4 TBytes of storage,
- A CDAC PARAM SUN cluster consisting of 16 nodes (each with dual xeon dual core processors) and 32 GB memory and
- High end workstations such as 6 x SGI Octone 2, 2 x SUN Blade 2000, 6 x IBM Intellistations, with about 100 PCs etc.
- Two interactive labs (Windows and Linux) for training on advanced software given below:

To support various application domain areas following software have been deployed on the above hardware: Accelrys Suite, Gaussian 2003, MOPAC, Relibase+, Molpro, ADF, GCG Wisconsin, SPSS, Mathematica, Statistica, GAMS, RATS, Matlab with various toolboxes, CFX 5.7, 3D Studio Max, iSIGHT Pro, BOS, BEAMPRO, GAMESS, SPARTAN 2003, NAG Fortran SMP Library, Empire 3D V4.2, Ansys Multiphysics, AWR (microwave Office), Full Wave Sonnet, Cadence, ISATIS, HPC compilers (like Fortran 90, Intel, Lahey compliers, PGI compilers, Absoft Fortran Compiler etc) on various platforms. Image Processing S/W like ERDUS.

# Additional 15 TFlops HPC has been installed

- A large SGI 128 core shared memory architecture based Unix server comprising of 4GB/core memory.
- A large SGI Altix ICE cluster with 1024 core high performance, high throughput and high availability cluster comprising of 2 GB/core memory, built using Infiniband Interconnect.

- A 100 TBytes of shared Storage system (FC, SATA) for delivering very demanding data intensive environment, leading to High Performance & Productive Computing Facility.
- Parallel file system to allow bulk I/O operations.
- A good tape backup system to archive data with time stamping.
- A 128 core Windows CCS/HPC Cluster.

# **Faculty**

#### **Director**

Arun Agarwal, Ph.D. (I.I.T. Delhi) –B.Tech (I.I.T. Delhi), SMIEEE, FIETE – Image Processing, Computer Vision, Pattern Recognition and Neural Networks, Grid Computing.

## Co-Project Investigator-HPCF

**V.S.S. Sastry,** Ph.D. (I.I.Sc., Bangalore) – Condensed Matter Physics, Magnetic Resonance, Computer Simulations (E and T)

#### **Academic Coordinator**

**K.P.N. Murthy,** Ph.D (Hyderabad) – Equilibrium and non-Equilibrium Statistical Physics, Boltzmann transport equation; nonlinear dynamics and chaos; Monte Carlo Simulation (T)

#### **Resource Coordinator**

**M.Durga Prasad,** Ph.D (Calcutta) – Theoretical Chemistry: Quantum Dynamics and Many Body Theories

#### **Associate Faculty:**

**C.K.Mitra,** Ph.D. (TIFR) - Molecular biophysics, Electrochemistry of immobilized enzymes (biosensors), Studies on protein sequences (bioinformatics) and Nanobiotechnology.

**Anand K Kondapi,** Ph.D. (Andhra) – Molecular biology, drug development and delivery, Functional characterization of DNA Topoisomerases in oncogenesis, HIV infection, neurotoxicity and Brain aging

**Sharmishta Banerjee,** Ph.D (SKU) – Signal transduction, Molecular and Cellular Oncology.

Kottapalli Seshagirirao, M.Phil, Ph.D (UH) – Protein Biochemistry, Glycobiology, Medicinal Botany, Plant Systematics, Diversity and Conservation, Bioenergy Resource, Global Biodiversity Informatics

**P Reddanna,** Ph.D. (SVU) – Biochemical toxicology and drug discovery; Inflammation, allergy, asthma and Cancer.

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**Ashwini Nangia,** Ph.D (Yale) – Supramolecular Chemistry, Crystal Engineering.

**T.P.Radhakrishnan,** Ph.D (Princeton) F.A.Sc., Materials Chemistry, Computational Chemistry

**Susanta Mahapatra,** Ph.D. (I.I.T. Kanpur) – Theoretical Chemical Dynamics, Non-adiabatic Chemistry (Professor-ARCHEM)

- **K. Lalitha Guruprasad,** Ph.D. (Osmania) Structural Biology
- **C. Raghavendra Rao,** Ph.D. (Osmania University) Simulation & Modeling, Knowledge Discovery.

Rajeev Wankar, Ph.D. (DAVV, Indore, Parallel & Grid Computing.

**Chakravarthy Bhagavati,** Ph.D. 9RPI, USA) – Image Processing, Computer Vision, Pattern Recognition.

**A.P. Pathak,** Ph.D. (IIT Kanpur), F.N.A.Sc., F.Inst.P. (London), C.Phys. – Atomic Collisions in Solids, Radiation Damage, Surface Physics, Superiattices & Heterostructures (T/E)

**Vipin Srivastava,** Ph.D. (Roorkee) – Condensed Matter Physics, Neural Networks, Brain Function Modeling (T)

**S.P. Tiwari,** Ph.D (Waikato, NZ) F.A.Sc. – Space Quantum Field Theory, Stochastic Processes, Non-Equilibrium Phenomena (T)

**Rajender Singh,** Ph.D (Delhi) – Condensed Matter Physics, Ultrasonics, Superconductivity and Magnetism (E)

S. Dutta Gupta, Ph.D. (Moscow) – Nonlinear Optics (T)

**Bindu A Bambah,** Ph.D. (Chicago) – Particle Physics, Non Linear Dynamics (T)

**Ashok Chatterjee,** Ph.D (Jadavpur) – Condensed Matter Physics (T)

**G. Rajaram,** Ph.D. (TIFR, Bombay) – Condensed Matter Physics, Magnetism and Superconductivity, Device Fabrication.

**Janaki Balakrishnan,** Ph.D (Delhi) – Dynamical systems, stochastic processes, problems motivated by biology, quantum field theory (T)

**Subrata Pal,** Ph.D. (SINP, Kolkata) – Properties of hot and dense hadronics and paatonic matter and quark-gluon plasma formed in relativistic heavy ion collisions. Properties of dense nuclear and exotic mater in neutron stars (T)

Naresh Kumar Sharma, Ph.D. (ISI, Delhi) – Development Economics, Agricultural Economics, Science and Technology, Gandhian Economic Thought.

**Phanindra Goyari,** M.Phil, (IGIDR Mumbai) – Econometrics, Mathematical Economics, Agricultural Economics and Model Building & Simulation in Economics

- **S. Mallikharjuna Rao,** (Ph.D. (Osmania), FICWA Financial Management Strategic, General Management, Infrastructure Management and Health Care Financing.
- B. Raja Sekhar, B.Tech (Civil-Nagarjuna), MBA (Osmania), Ph.D (Management-Kakatiya), M.Sc (Psychology-SVU), FDP (IIM, Ahmedabad) Quantitative Techniques, Operations Management, Operations Research, Quality Management, Consumer Protection, Marketing Research and Supply Chain Management.
- V. Sita, M.A., M.Phil, (University of Hyderabad), Ph.D (Osmania) FDP (IIM, Ahmedabad), PG Diploma (HRM) Public Policy, Human Resource Management, E-Governance, entrepreneurship & Women Studies.

Chetan Srivastava, PGCCA, MCSD, MBA (Mktg), MBA (HRM), MBA (Sys.) (Management – Osmania University) – Strategic Marketing, International Marketing, Advertising, Sales Management, HRD AND Systems.

#### Centre for Distance Education

The Centre for Distance Education was established in the year 1994 with a couple of P.G. Diploma programmes with the objective of expanding the access to higher education for all sections of society. This year (2010) we have notified the following 19 programmes including 4 new programmes and the admissions are in progress. Dr. Jeelani is the Director. The last date for submission of filled-in applications was 22.2.2010.



S.No.	Course Code	Course Name
1	PGDPM	Post Graduate Diploma in Project Management
2	PGDLAN	Post Graduate Diploma in Library Automation & Networking
3	PGDCAQM	Post Graduate Diploma in Chemical Analysis & Quality Management
4	PGDCL & IPR	Post Graduate Diploma in Cyber Laws & Intellectual Property Rights
5	PGDBM	Post Graduate Diploma in Business Management
6	PGDENM	Post Graduate Diploma in Energy Management
7	PGDCE	Post Graduate Diploma in Communicative English
8	PGDMTU	Post Graduate Diploma in Translation Studies in Urdu
9	PGDCJ&FS	Post Graduate Diploma in Criminal Justice & Forensic Science
10	PGDG	Post Graduate Diploma in Governance
11	PGDBS	Post Graduate Diploma in Buddhist Studies
12	PGDHR	Post Graduate Diploma in Human Rights
13	PGDTSH	Post Graduate Diploma in Translation Studies in Hindi
14	PGDTC	Post Graduate Diploma in Telecommunications
15	PGDCAIL	Post Graduate Diploma in Computer Application in Indian Languages
16	PGDMC & TTT	Post Graduate Diploma in Mass Communication and Translation Techniques in Telugu
17	PGDMB	Post Graduate Diploma in Medicinal Botany
18	PGDSRD	P.G. Diploma in sustainable Rural Development
19	CCF	Certificate Course in French
20	CCG	Certificate Course in German

Further, the Centre for Distance Education has entered into MoU with the following institutions for introducing courses at Sl.No. 9, 18, 19 & 20 respectively,

- 1. Truth Lab, Banjara Hills, Hyderabad
- 2. NIRD, Hyderabad
- 3. Alliance Française, Secunderabad
- 4. Goethe Zentrum, Hyderabad

### **Academic Staff College**

Academic Staff College, University of Hyderabad is one of the 51 colleges established by the University Grants Commission in 1987–1988. It is an important academic wing of the University. Till now Academic Staff College has conducted a total number of 219 courses, which includes 59 Orientation courses, 160 Refresher Courses and 7909 teachers from different states of the country since its inception. Apart from the training programmes the Faculty is also taking up the teaching assignments and research guidance in their respective departments. During the year 2008-2009, the ASC organized three Orientation Courses and nine Refresher Courses.

During the year 2009-2010, the ASC will organize Orientation Courses and Refresher Courses in subjects proposed by Academic Advisory Committee and approved by University Grants Commission.

### The Mandate

Professional training is a powerful measure in upholding teacher competence and sustaining teacher motivation. The Orientation Courses are for duration of four weeks. These are especially concerned with the objective of sensitizing

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participants on current issues of higher education and immediate social relevance. Due emphasis is laid on strengthening skills in teaching and communication and bringing innovations in teaching. Attempts are made in motivating and developing competence in scientific research. The young teachers, with less than eight years of experience are eligible for enrolling in these courses.

The Refresher Courses are organized for duration of three weeks. The objective of these courses is to update the teachers with recent developments in their concerned disciplines. The Academic Advisory Committee (AAC) decides the subjects for Refresher Courses for the year. The Refresher Courses in various subjects have a definite thrust area.

Our college also organized weeklong workshops for the Principals of Degree Colleges from Andhra Pradesh and neighboring States. Every workshop is structured on a definite theme. The college has so far organized Eleven Workshops for the Principals.

### **Faculty**

The academic team of the College consists of the Director and a Lecturer.

#### Director

### Prof. Y. Narasimhulu

Specialization - Non-linear Differential Equations, Differential Systems

Research Focus - Mathematics, Higher Education, Human Resource development through Training

#### Lecturer

### Dr.S. Sudhakar Babu

Spcialisation

Public Policy, Equality of Opportunities and Dalit Studies, Public Policy for Good Governance, Policy Studies, Civil Society, Training and Higher Education.

Research Focus - Training, Higher Education and Literacy.

Besides the core academic team, the College invites a number of Resource Persons from Universities, Training and Research Institutions.

#### Infrastructure

The college has access to all the Infrastructure facilities of the University like the Computer Lab, Central Library and Sophisticated laboratories. Besides these, the College itself has a good library with 3090 books, journals and magazines and a computer lab with 24 systems which provides hands on experience on MS Word, Power Point and Web Design to the participants.



5

# **Academic & Student Services**

## Indira Gandhi Memorial Library

University Library is a central facility to support the teaching and research activities of the University. Over the years, the library has been successfully catering to the information needs of all the academic community viz., teachers, research scholars and students of Sciences, Engineering, Social Sciences, Humanities, Performing Arts, Fine Arts, Communication and Management Studies.

The library has a collection of more than 3 lakhs books and back volumes of journals. The library subscribes to around 640 periodicals, popular magazines & newspapers in English and Indian languages. The library has access to over 18,000 e-journals from several publishers with the support of UGC-INFONET. Important text books and a small collection of SC/ST books are kept in a book bank in a separate room. The library has a separate air-conditioned reading hall which is kept open round-the-clock for the benefit of the students.

The National Board of Higher Mathematics (NBHM) has recognized this library as a "Regional Library" for Mathematics and provides financial support for the acquisition of Mathematics journals for advanced research. The Library is an active member of the UGC-INFLIBNET and has been identified as one of the 22 Document Delivery Centres in the country.

The University library has achieved several distinctions in the country for application of IT. It is the first University Library in India to computerize all its in-house operations and services; the first University Library to subscribe to electronic journals; the first library in undertaking the computerization programs of other libraries on a turnkey basis; the first to become the governing council member of the OCLC, USA; the first in installing an Electronic security gate with magnetic detector; the first in starting a Post-Graduate Diploma course in Library Automation and Networking (PGDLAN); and its is the First Library to start Digitization of rare books in India.

The library is open throughout the year except on national holidays — Republic Day, Independence Day, Gandhi Jayanthi, Holi, Dussera and Diwali. It functions from 8.00 a.m. to 12.00 midnight on all working days and from 10.00 a.m. to 5.00 p.m. on Sundays and other Holidays. In the beginning of every academic year, the library organizes User Orientation Program for the new entrants (i.e. students) of

the University, to enable them to make use of the library resources and services efficiently.

### Central Instruments Laboratory (CIL)

Central Instruments laboratory (CIL), is a central facility with state of art analytical Instruments to cater to the needs of the Science Schools and other institutions. The list of instruments at CIL covers braod based fields viz., microscopy, diffraction based and magnetic property measurement and these Instruments can also be used round the clock. The list of instruments are: Environmnetal Scanning Electron Microscope (SEM) with Energy Dispersive Spectometer, Powder X-Ray Diffractometer (XRD), Vibrating Sample Magnetometer (VSM), Electron Spin Resonance (ESR) Spectrometer, Differential Scanning Calorimeter, Protein Sequencer, HPLC based high performance Amino Acid Analyzer, Circular Dichroism (CD) Spectrometer, Differential Scanning Calorimeter (DSC), Thermogravitometer-DTA (TG-DTA).

The areas of specialization of the CIL include Mass Spectrometry, Radiation Spectroscopy (X-Ray, UV-VIS-IR), Microscopy, Advanced Electronics, Design and Development of Microprocessor and Microcontroller – based Systems, Embedded Systems, Advanced Instrumentation systems deisgn and maintenance.

### **Computer Centre**

The Computer Centre was established as a central facility to facilitate, foster and support the essential teaching and research goals of the University of Hyderabad through the deployment and delivery of computing and communication services to the University's faculty, students, officers, and staff. To assist research, there is a wide range of computing environment available, backed by staff with considerable expertise to assist researchers. Currently the centre has various kinds of systems, which provide Unix, Linux, and Windows environment to the users.

In 1993, ERNET selected University of Hyderabad to be one of the transit nodes with the addition of a VSAT dish antennae, which is operational at the Gachibowli campus, but with a narrow bandwidth of 9.6 Kbps. The transit node operational at the computer centre is also providing Email/Internet services to educational and research organizations in Andhra Pradesh such as IDRBT, NFC,

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DMRL etc. Further 128 Kbps microwave and 2 Mbps backbone links were established in the year 2000, 2001 respectively. UGC funds allocated in the year 2000, helped in increasing the number of terminal points available to users. UGC grant allocated in the year 2001 helped in establishing the 1 Gbps structured SM fiber optic network for the university. Also 2 Mbps point-to-point leased line between UOH and IDRBT, 2 Mbps UOH - Infosys (Hyderabad) – Bangalore leased line, and 128 Kbps ISDN lines were established. In the year 2006, the bandwidth was upgraded to 4 Mbps. In the year 2008 the bandwidth was upgraded to 68 Mbps, and new buildings, quarters, and hostels are brought under the backbone. Wi-Fi towers are also erected at different locations to have wireless connectivity for the users.

The Centre is having Internet/Email, programming, and word processing rooms to enable users to execute various tasks. The Centre has number of systems like IBM 9117 model 570, and several Pentium systems. We have added Nas server, Wireless PCs, 8 node linux cluster, Itanium server, and Xeon server. New Email server is installed and is operational for use by various users. Authentication for security purposes servers are also installed. The Centre also has Colour and Black/White Laser printers, Scanner, CD Writer, LCD Projector, and different peripherals. NAAC committee commended on the Computer Centre facilities and its upkeep. X plan proposal visiting committee commended on the progress made by Computer Centre.

Qualified officers help in teaching MCA/MBA/M.Sc students of various Schools and Departments. They also guide students in completing their project works and are invited to give lectures during orientation programmes in Academic staff college, and various Centre for Distance Education programmes.

The Centre has entered into Campus-wide software license agreement with M/S Microsoft. The Centre offers advice and consultancy to users to these central facilities and assist in solving problems users might have on their equipment. The Computer Centre have operators, programmers, systems programmers, systems managers, systems analysts. **Dr C.Ravindra Kumar** is the Director Incharge of the computer centre.

### Health Care

The University Health Centre, managed by a team of doctors, supported by nurses / para medical staff caters to the **basic**Out Patient treatment and few beds for emergency

Inpatient treatment. Specialists such as Ophthalmologist,

Orthopedician, Physiotherapist and Psychiatrist will be
available on specific days. The services of a **Student**Counselor is available near the Chief Warden Office.

Round-the-clock **Ambulance (108)** facility is available for emergency purposes.

At the time of admission every student shall submit a physical fitness certificate and also an undertaking to the Health Centre, signed by the parent/guardian to the effect that "any hospitalization/medical treatment expenses shall be borned by the parents/guardians of the student concerned and the university is not responsible for treating the major diseases/ailment occurred while pursuing studies in the University."

However, the University will assist them in providing a Medical Insurance Card (valid for one year) from a standard insurance company, which they may use for hospitalization.

### Hostel Accommodation

There are altogether 18 hostels on the campus, of which 12 are for men and 6 are for women. Foreign students, unless they opt not to, are accommodated at the Tagore International House.

Due to paucity of Hostel accommodation, the University cannot guarantee Hostel accommodation to all the students admitted into various programmees / courses. No student admitted to the University can claim the Hostel seat as a matter of right. The hostel seats may be allotted to the students subject to availability, based on the distance from their present place of residence with sufficient proof on first come first serve basis.

No hostel accommodation will be provided to the students admitted from the places within the limits of Greater Hyderabad Municipal Corporation (GHMC).

**Reservation of seats:** Of the total number of available seats in a particular academic year in the hostels, 22.5% are reserved for candidates belonging to SC/ST and 3% for Physically Challenged students.

The hostel accommodation may be provided subject to the availability of seats in the hostels for a maximum period i.e. P.G. courses -02 years; M.C.A. and MPA Theatre Arts -03 years; M.Phil  $-1\frac{1}{2}$  year; Ph.D. - upto 05 years; Integrated Masters -05 years. In no case, the stay will be extended beyond the above stipulated period.

The students are required to submit 'proof of nativity' at the time of hostel admission. They can submit a 'Nativity Certificate' issued by the Revenue Officer or any other relevant certificate issued by competent authority of their respective native place as proof of residence.



Mess facility attached to different hostels is compulsory and is completely managed by the inmates. Even if a boarder does not avail the mess facility, a minimum monthly 10 days' mess bill will be charged. The average vegetarian monthly mess bill (Break fast, Lunch and Dinner) for women worked out to about Rs. 1000/- and for men Rs. 1200/- during earlier years. The particulars of the mess deposits to be paid at the time of hostel admission are provided at **chapter 2** of this brochure.

The rules and regulations in the Hostel Hand Book, periodically updated at the University's website, is binding on all boarders.

#### **Students Welfare**

The office of the Dean of Students Welfare looks after the welfare of the students with active support from the elected representatives of the students, Faculty and administration. A Student Counseling Service by professionals is available in the University. In case of any student requiring parental guidance, his/her parents will be informed accordingly.

There is a Students' Union which caters to the students' interests and promotes cultural and sports activities. The elections to the Students' Union are conducted by the students themselves.

### Discipline among students

All powers relating to discipline and disciplinary action in relation to the students of the University are vested in the Vice Chancellor. He may delegate all or any of his powers as he deems proper to any of the officers of the University specified by him.

Ban on ragging on the campus: Ragging, use of drugs, drug trafficking and eve teasing, which are criminal offences, are strictly forbidden in the University and persons found indulging in such activities will be subjected to strict disciplinary and other action in keeping with the law of the land. Indulging in any criminal activity within or outside the University and any physical violence against fellow students and fellow residents will not be tolerated and will attract stern disciplinary action including rustication. As per the orders of the "Hon'ble Supreme Court of India" if any incident of ragging comes to the notice of the authority of the University, the concerned student should be given liberty to explain and if his explanation is not found satisfactory, the authority would expel him/her from the University.

Committee on violence against women and sexual harassment: As suggested by the UGC, a Committee has been constituted with Dean, Students' Welfare, Chief Warden, Women Faculty members, Women students,

Students' Union and Teachers' Association as members, to combat the menace of violence and sexual harassment against women on the campus.

**Proctorial Board:** The Proctorial Board shall examine all disciplinary and related issues pertaining to the students. All students misconduct /indiscipline related cases shall be brought to the notice of the Chief Proctor. Based on the gravity of the case, the Proctorial Board shall make appropriate recommendations to the Vice-Chancellor.

### Games and sports

The department is equipped with a centre for Games and Sports. The centre consists of a well equipped international standard indoor stadium accommodating indoor games like shuttle badminton etc.

The centre is also now equipped with a Fitness Centre where students can participate in various fitness programs. This centre is catering the needs of fitness through the state of the art equipment, and the fitness centre is poised for further development in the present year.

The department also houses a Yoga Centre in which Yoga classes are given for the students and other interested university community. It also offers a certificate course in yoga to instill further motivation among the student community.

The department also is promoting the sports and games culture among the student community by well organizing coaching camps in various disciplines for the University teams.

The department also houses a Tennis Courts Complex near Yoga Centre and imparting coaching in Tennis to the University Community.

The University is also a member of the Inter University Sports Board of India and its teams participate in Zonal and All India Inter University Tournaments regularly, apart from this the department also organizes annual inter school competitions to inspire the student community to involve in physical games and improve their health status.

### Financial Support

The University offers fellowships to all students admitted to any of its regular programme of study. Particulars in brief are

# Boarding / Boarding-cum-Lodging Allowance (BBL Allowance)

1. All 5-year Integrated M.A. and M.Sc. students will be supported with financial assistance @ Rs.500/- p.m. for

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the first three years and @ Rs.1000/- p.m. for the next two years.

- 2. All M.Sc., M.A., M.B.A., M.P.A., and M.F.A., students will be paid BBL allowance @ Rs. 1000/- p.m. for two years and for MCA for three years.
- 3. University Achievers' awards For all PG courses (except M.Tech and M.Phil) an achievers award @ Rs.5000/- (lump sum) for scoring highest marks in the class will be paid in the preceding semester. Its continuation depends upon the continuation of the scoring of the highest marks by the awardee. Such awards will be one if the class strength is less than 10 and two if the class strength is more than 10.
- 4. M.Tech. (GATE scorers) will be paid scholarship @ Rs. 8,000/- and Non-GATE students will be paid @ Rs.6,000/- p.m. The tenure of the scholarship will be for 2 years.
- 5. M.Phil. students will be paid BBL Allowance @ Rs. 3,000/- p.m. for one year, extendable by one more semester in exceptional cases.
- 6. Ph.D Scholars will be paid scholarship @ Rs.5000/- p.m. for a period of 4 years, extendable by one more year in exceptional cases.

Concessions to blind students: Concessions to blind students are provided by the University as per the UGC guidelines from time to time which inter-alia, include exemption from tuition fee, examination fee and other fees, Reader's allowance @ Rs. 400/ p.m. in respect of PG/M.Phil/Ph.D. students and Rs.1000/ for JRF holders for the employment of a Reader, an annual grant of Rs.500/ for guide charges, extra time of 20/30 minutes for writing examination paper of 2/3 hours respectively and permission to use a personal typewriter during examinations. In addition to this, the blind students are eligible for scribe charges @ Rs 150/- for Internal Exams/Term papers and Rs. 300/- for end-semester examinations. Special stationary charges @ Rs. 500 per annum.

### Fellowships for research studies

UGC Fellowships: UGC JRFs pursuing their research work leading to M.Phil. and Ph.D. in Sciences, Humanities and Social Sciences are paid a fellowship of Rs.12,000/ p.m. for the first two years and Rs.14,000/ . p.m. for the subsequent years.

**Rajiv Gandhi National Fellowships** sponsored by the Ministry of Social Justice for SC/ST candidates to pursue M.Phil and Ph.D. Degrees: The SC/ST Scholars enrolled for

Ph.D. and M.Phil programmes in the University have to apply for this Fellowship as and when the University Grants Commission issues the Notification. The value of JRF is Rs.12,000/- p.m. for the first two years and Rs.14,000/- p.m. for the subsequent years.

**CSIR Fellowships:** The CSIR JRFs pursuing research are paid a fellowship of Rs.12,000/ p.m. for a period of two years which may be increased to Rs.14,000/ p.m. for the subsequent years.

Fellowships from other sources: In addition to the above, provision exists for securing JRFs/SRFs in various research projects/direct fellowships being operated in the University financed by Govt. Agencies and other Organizations such as the UGC, CSIR, DST, DAE, ICMR, ICSSR, NBHM, etc. JRF test qualified candidates admitted to M.Phil. and Ph.D. programme may apply for these positions in response to the notice issued by the project investigators.

# Post Graduate Merit Scholarship Scheme for University Rank holders at Undergraduate level:

The University Grants Commission on the basis of a recent initiative of MHRD, has introduced the Post-Graduate Merit Scholarship for University Rank Holders (in General and Honours courses at University levels). The selection will be purely on Merit basis. The value of each scholarship is Rs.2,000/-p.m. and duration is for 2 years.

# Post-Graduate Indira Gandhi Scholarship Scheme for single girl child:

The University Grants Commission, on the basis of a recent initiative of MHRD, has introduced the Post-Graduate Indira Gandhi Scholarship for Single Girl Child as an incentive for the parents to observe small family norms. The value of each scholarship is Rs.2,000/- p.m. and duration is for 2 years.

NOTE: Applications for UGC sponsored Scholarships are invited by the UGC through Press Notification. Students are advised to watch for advertisement in News Papers and respond accordingly.

**M.Sc. Biotechnology Scholarships:** The students admitted to M.Sc. Biotechnology are eligible for scholarship @Rs. 1200/ per month for the entire duration of the course (i.e. 2 academic years) funded by the Dept. of Biotechnology, Govt. of India.

Financial assistance from other sources: The students of the University are also eligible to apply for the award of the following Scholarships given by the Govt. of India and the Govt. of Andhra Pradesh subject to their fulfilling the conditions prescribed in each case.



- a) GOI National Merit Scholarship
- b) GOI Post Matric Scholarships for SC/ST students
- c) GOI Scholarships for non Hindi speaking students for Post Matric studies in Hindi
- d) GOI Scholarships for physically handicapped
- e) GOI Scholarships for Ex-Servicemen/Freedom Fighters' children
- f) A.P.Govt. EBC Scholarships
- g) A.P.Govt. State Merit Scholarships
- h) A.P.Govt. Listed Backward Classes Scholarships
- i) A.P.Govt. Scholarships for the children of deceased Govt. servants who died while in service.
- j) A.P.Govt. Scholarships and book grant to children of political sufferers.

NOTE: Decision regarding the University scholarships, is generally taken up by October each year by way of notification inviting

applications. Payment of these scholarships can, therefore, be made only after announcement of the list of selected students. However, payment of scholarships awarded/funded by other agencies like UGC, CSIR, AICTE, etc. can be made only after receipt of the sanction and scholarship amounts by the University.

# Placement Guidance and Advisory Bureau (PGAB)

Placement Guidance and Advisory Bureau (PGAB) at the University of Hyderabad is actively working to ensure that the students are placed in Companies/Labs, Organizations and Institutions of repute all over India. It also places high importance to various extra and co-curricular activities designed for total personality development of students apart from excellence in academic. The University's alumni occupy premier positions in India and abroad.

For further details please contact the Placement Coordinator (email: <<u>placement@uohyd.ernet.in</u>> telephone number: 040-2313 4040).



# 6

# Teaching And Evaluation Regulations

## Special features

The special features of the University's academic set up include a favourable teacher student ratio (1:9/10); a flexible academic programme that encourages interdisciplinary courses and research. The assessment, including projects and examinations, is continuous and internal.

### Semester system

The courses are organised on the semester pattern. The academic year consists of two semesters of 16 to 18 weeks each.

### Continuous internal assessment

The examination system of the University is designed to test systematically the student's progress in class, laboratory and field work through continuous evaluation in place of the usual "make or mar" performance in a single examination. Students are given periodical tests, short quizzes, home assignments, seminars, tutorials, term papers in addition to the examination at the end of each semester. The final result in each course is calculated on the basis of continuous assessment and performance in the end semester examination. The evaluation regulations are given below.

## Attendance and progress of work

Students are required to attend at least 75% of the classes actually held in each course (at least 60% if the same course is repeated) and participate, to the satisfaction of the School/Department/Centre, in study seminars, sessionals and practicals as may be prescribed. The progress of work of the research scholars and their attendance is regularly monitored by their supervisors/Schools/Departments/Centres and the names of the defaulters removed from the rolls. Absence from classes continuously for 10 days and more will make the student liable have his/her name removed from the rolls of the University. Absence on medical reasons should be supported by a certificate which has to be submitted soon after recovery.

#### **Evaluation regulations**

The performance of each student enrolled in a course will be assessed at the end of each semester. Evaluation of all P.G., Advanced P.G./P.G. Diplomas, M.Phil., M.Tech and Integrated PG courses is done under the Grading System. There will be 7 letter grades; A+, A, B+, B, C, D and F on a 10 point scale which carries

10,9,8,7,6,5,0 grade points respectively.

- 2. The final result in each course will be determined on the basis of continuous assessment and performance in the end of semester examination which will be in the ratio of 40:60 in case of theory courses and 60:40 in laboratory courses (practicals).
- 3. The mode of continuous assessment will be decided by the School Board concerned. The students will be given a minimum of three units of assessment per semester in each course from which the best two performances will be considered for the purpose of calculating the result of continuous assessment. The record of the continuous assessment in such a form as the School Board may decide will be maintained by the School/Department/
- 4. At the end of semester examination, the answer scripts will be evaluated and the grades scored by each student in each course taken by him/her will be communicated to the Dean of the School/Head of the Department/Centre for onward transmission to the Office of the Controller of Examinations. Wherever required, the Dean / the Head of the Department/Centre along with the teacher concerned may moderate the evaluation.
- 5. (a) Students must obtain a minimum of 'D' grade in each course in order to pass in the Postgraduate, Adv. PG/Postgraduate diploma, M.Phil, M.Tech and Integrated PG courses. Students who obtain less than 'D' Grade in any course, may be permitted to take the supplementary examination in the course/s concerned within a week after the commencement of the teaching of the next semester or as per the schedule notified. Appearance at such examinations shall be allowed only once. Those students who get less than 'D' grade in the supplementary examination also shall have to repeat the course concerned or take an equivalent available course with the approval of the Head of the Department/Centre and the Dean of the School concerned. Such approval should be obtained at the beginning of the semester concerned.
  - (b) In order to be eligible for award of medals/prizes and ranks etc., the students should complete the course within the prescribed duration. The grades obtained by





the student in the supplementary/ repeat/improvement examinations shall not be taken into account for the award of medals/prizes/ranks etc. Further, for the purpose of award of M.Phil. and M.Tech. medals, prizes and ranks, the student should complete the course, examination and submission of dissertation etc., within a maximum period of three and five semesters respectively from the date of the admission to the course.

- 6. (a) No student of PG/Adv. PG/PG Diploma/M.Phil, and M.Tech, shall be permitted to move to the next semester, if S/he has a backlog of more than 50% of the courses of a semester concerned subject to a maximum of two backlogs where the number of the courses in a semester are four and a maximum of three backlogs where the number of courses in a semester are more than four at any given point of time including the backlogs of previous semester, if any.
  - (b) No student of 5-year Integrated M.A./M.Sc. courses shall be allowed to move to the next semester, if she/he has a backlog of more than 50% of the courses of a semester concerned subject to a maximum of 5 backlogs at any given point of time including the backlogs of previous semester/s, if any.
- 7. The qualifying marks for the dissertation/project report/ monograph/ research paper in the M.Phil., and M.Tech courses shall be 50%. Students who obtain less than 50% or 'D' grade in the dissertation/ monograph/ research paper will be required to rewrite it within such extra time as may be allowed by the School Board concerned on the recommendation of the Supervisor(s).
- 8. Students who are permitted to appear in supplementary examinations in course/s in accordance with clauses 5(a) above will be required to apply to write the examination concerned in the prescribed form and pay the prescribed examination fee by the date prescribed for the purpose by the University.
- 9. (a) A student in order to be eligible for the award of M.A., M.Sc., MCA, MBA, MPA, MFA Adv. PG/PG Diploma and Integrated PG Courses must obtain a minimum of 'D' grade in each course. The results of successful candidates will be classified as indicated below on the basis of the CGPA:

CGPA of 8.0 and above and upto 10.0 I Division with Distinction

CGPA of 6.5 and above and upto 7.9 I Division CGPA of 5.5 and above and upto 6.4 II Division

CGPA of 6.0 II Division with 55%

CGPA of 5.0 and above and upto 5.4 III Division

(b) To satisfactorily complete the programme and qualify for the degree, a student must obtain a minimum CGPA of 5. There should not be any 'F' grades on records of any student for making himself/herself eligible for award of the degree.

The division obtained by a student will be entered in his/her provisional cum consolidated grade sheet and in the degree/diploma certificate.

10. A student in order to be eligible for the award of the M.Phil and M.Tech degree must obtain a minimum of 'D' grade in each of the courses S/he takes as well as in the dissertation / project report/ monograph. The results of the successful candidates will be classified as below:

CGPA of 8.0 and above and upto 10.0 I Division with Distinction

CGPA of 6.5and above and upto 7.9 I Division

CGPA of 5.5 and above and upto 6.4 II Division

No III Division in these programmes

To satisfactorily complete the programme and qualify for the M.Phil. / M.Tech. degree, a student must obtain a minimum CGPA of 5.5. There should not be any 'F' grades on records of any student for making himself/herself eligible for award of the degree.

The division obtained by a student will be entered in his/her provisional cum consolidated marks sheet and the degree certificate.

- 11. No student will be permitted to take a supplementary examination a second time in the same course except in the case of one repeating the entire course.
- 12. (a) No student of Post graduate, Adv. PG/PG Diploma, and Integrated PG courses shall be allowed to continue his/her enrolment for more than two semesters beyond the prescribed duration of the course. While counting the maximum permissible number of semesters before which a student has to complete his programme the "idle semester" (i.e. the semester he/she has to forego for want of instructional facility) will not be counted and it should be limited to one semester only. However, such students have to pay the tuition and other fees for the idle

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- semester also. A student may be permitted to discontinue his/her studies for reasons certified as valid by the Head and/or Dean of the School concerned for a period not exceeding two semesters.
- (b) No student of the M.Phil. and M.Tech. shall be allowed to continue his/her enrolment for more than two semesters beyond the prescribed duration of the course. Also, no student of MCA, M.Phil. and M.Tech. or any other programme having project work will be permitted to work on the dissertation/project unless S/he has completed the course work.
- 13. Students who are not found eligible to take semester examinations and also those who are not promoted to the next semester of the course may be considered for readmission to the concerned semester of the immediate following academic year. Such students should seek readmission before the commencement of the classes for the concerned semester or within a week of the commencement of the concerned semester if they are appearing in the supplementary examinations. Such students are given an option either to undergo instruction for all the courses of the concerned semester or to undergo instruction in only such courses in which they have failed on condition that the option once exercised will be binding on the student concerned.
- 14. The answer scripts of the semester examinations shall not be returned to the candidates but may be shown by the instructor at the specific request of the student concerned. The result of the continuous assessment of the students will, however, be communicated to students immediately after the assessment.
- 15. No request for re-valuation of the result declared in any course will be entertained. However, every School shall constitute a Grievance Committee consisting of 3 or 4 teachers to examine the complaints received from the students of the School regarding their assessment. Such requests for reconsideration from the students concerned should reach the Dean of the School concerned through the Head of the Department/ Centre within 15 days of the announcement of the results of that assessment.

Note: If a student is not satisfied after consideration of his grievance concerning evaluation by the School level Committees, the Dean of the School on a request from the student may refer the matter to the Controller of Examinations for getting the paper evaluated by an external examiner, whose evaluation will be final. The fees for external evaluation in all such cases shall be Rs. 50/- per paper.

- 16. (a) Students absenting themselves after payment of fees from a regular semester examination may be permitted by the University to appear in a supplementary examination of the semester. The application for permission to appear in a supplementary examination shall be made by the student concerned in the prescribed form. The application along with the prescribed fee should reach the office of the Controller of Examinations through the Department/Centre/School concerned by the date prescribed for this purpose.
  - (b) Students may opt to audit a course within the Department or outside, provided S/he satisfies the prerequisites. 75% of attendance is required for an audit course for including the same in the additional grade sheet.

### Improvement examination

- Students securing 'D' grade in the course of a semester may be allowed to improve their marks in one course in a semester. Appearance at such an examination in the course will be allowed only once. No further chance will be given under any circumstances.
- ii) The appearance at an examination for improvement should take place soon after completion of the examinations for the semester concerned along with the supplementary examinations which may be held within a week of the commencement of the teaching of the next semester.
- iii) For the purpose of determining the Division, the better of the two performances in the examinations will be taken into consideration.
- iv) The facility for improvement shall be open to all those who want to improve their grade irrespective of the CGPA obtained by them in the examination concerned. However, a student is required to clear all courses of a particular semester in which the student intends to take an improvement examination.
- v) For the purpose of award of medals, prizes, and rank, etc., the grades obtained by a student in the examination taken for improvement/supplementary shall not be taken into account. In respect of tie cases actual marks obtained will be taken into account for identifying the topper.
- vi) The grade sheet of a student will indicate full information of the examinations taken by him/her. Both the Grades obtained in the 1st and 2nd attempts will be shown in the grade sheets.





- vii) Application for improvement examination shall be made by the students concerned to the Controller of Examinations in the prescribed form along with the prescribed Examination Fee within a week of the commencement of the teaching of the next semester/as per the schedule notified.
- viii) Students are permitted to avail the facility of improvement examinations to a maximum of four courses of their respective programmes as detailed below:

one course at the end of the first semester, two courses at the end of the second semester, three courses (to be taken from 1st & 3rd semesters) at the end of the third semester and four courses at the end of the fourth semester.

Students who have completed the course without availing themselves of the improvement facility in accordance with the schedule prescribed by the University may be allowed to avail themselves of the unavailed improvement chances within a maximum period of six months after completion of the course. Such exams are to be taken when the regular or supplementary/improvement exams are held.

**Note:** A provision exists for a special supplementary examination in respect of such students who after completion of the prescribed duration of the course are not able to get their degree due to backlogs. However, students having backlogs due to shortage of attendance, will not be allowed this facility.

### Evaluation of M.Phil. dissertation

- Students are required to take an open seminar on the M.Phil dissertation. Schools/Departments/Centres may hold it before/after submission of the dissertation.
- ii) A Board comprising of 3-4 members will assess the performance of the M.Phil. candidates at the seminar for 25% of the marks prescribed for the dissertation. The remaining 75% marks for the dissertation will be awarded on the basis of examiners report in accordance with the existing procedure. There is no minimum mark for passing in the seminar.

# Evaluation of M.Tech. CS/AI/IT & MCA Project work

1. The Project work of M. Tech. and M.C.A. students will be evaluated in two phases viz., mid-term and final. Midterm is for 40% and the final is for 60%.

- 2. The mid term and final evaluation will be done by a Board of examiners and the students have to present the work done by them.
- 3 (i) The provisional certificate-cum-consolidated grade transcript will contain the CGPA and the division also. The overleaf will contain classification of the results under letter grade system.
  - (ii) An additional grade sheet will be given to the students for the courses audited by them without attributing the credits, and also for the courses taken by them having credits which are not counted for the award of the degree and the credits scored by them for the extra curricular activities like NSS, literacy programme etc. The audited courses will be included in the additional grade sheet, based on the certification given by the teacher concerned and recommended by the Head of the Department and Dean of the School concerned.
  - iii) In the degree certificate, the division will also be mentioned.
  - iv) In addition to the above provisions, the existing evaluation regulations in the University shall be applicable in the other matters, wherever required.

### Course work for Ph.D. scholars

Every student admitted to Ph.D. programme shall satisfactorily complete the course work prescribed by the School/Department/Centre. The course work shall be for not less than 12 credits which may be distributed among different components as decided by the respective School/Department/Centre. The Ph.D. students must pass the course work by securing 50% of marks in each subject within a maximum period of 2 semesters. However, in exceptional cases, another spell of two semesters may be granted to complete the course work which shall be decided based on the merit of each case. No student shall be permitted to work on the research project without completion of the course work. The provisional admission of the candidates who fail to complete the course work in the above stipulated period stands cancelled automatically. This shall also apply for the Ph.D. students registered for part time, external category and at the Associate Institutions.

Note: Those students who have done course work at their M.Phil./M.Tech. level may be considered for exemption from the said course work by the School/Department/Centre concerned.

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### Medals for excellence in studies

With a view to encourage good performance in studies, the University has instituted several donor medals. These include the following:

## **Donor Medals**

1.	Sarojini Naidu Memorial Trust Medal	M.A. English
2.	Roopchand Chajed (Jain) Medal	M.A.Hindi
3.	Dr. Prakash Moonis Memorial Medal	M.A.Urdu
4.	M/s. Jindal Jubilee Gold Medal	M.A. Economics
5.	Andhra Bank Medal	M.A. History
6.	Canara Bank Medal	M.A. Communication
7.	Nataraja Ramakrishna Sharada Devi Medal	M.P.A. Dance
8.	Sri S.L. Parasher Medal	M.F.A. Painting
9.	M./s Jindal Jubilee Gold Medal	M.Sc Maths
10.	M/s Narosa Publishing House Medal	M.Sc Maths (Applied)
11.	A.P. Mahesh Bank Medal	M.C.A.
12.	Bhagwat Saran Agarwal Memorial Medal	M.Sc Physics
13.	Vasavi Academy of Education Medal	M.B.A.
14.	Prof. V.V. Sarma Memorial Medal	M.Sc Chemistry
15.	Prof. A.N. Radhakrishnan Memorial Medal	M.Sc Biochemistry
16.	K.L.N. Reddy Medal	M.Sc Plant Sciences
17.	Kiran Kumar Medal	M.Sc Animal Biotechnology
18.	Burhani Trust A.P.Medal	M.Sc. Biotechnology
19.	SBH Medal	M.Tech CS
20.	Alekhya Technology Medal	M.Tech AI

21.	Mannapalli Subbaramaiah Medal	for overall merit in M.TechCS/AI/IT
22.	Smt. N.V. Ranganayakamma Medal	M.Phil Physics
23.	Prof. G.C. Jain Medal	M.Phil Urdu
24.	Roopchand Chajed (Jain) Medal	M.Phil Hindi
25.	The President of India Medal	for overall performance (Bi-annually)
26.	Pingali Mohan Reddy Medal	overall performance in PG in Life Sciences
27.	Alumni Medal	M.A. Anthropology (for a topper in Social Anthropology subject)
28.	Akhtar Hassan Memorial Medal	M.Phil Urdu
29.	IDRBT Medal	M.Tech IT
30.	Dr. (Mrs) Sheela Raj Memorial Medal	The best Ph.D. or M.Phil thesis to be adjudged every year in History
31.	Tadinada Sri Mahalashmi Medal	M.Tech. Mineral Exploration
32.	Dr. Salam Khan Bio Asia Medal	M.Sc Biotechnology
33.	Dr. Naushaba Hasnain and Prof. Syed Mohammad Hasnaian Medal	For performance in PG courses of School of Humanities with a preference to M.A. Urdu, if the overall marks are 1% less than the topper
$\mathbf{D}_{0}$	onor Medals for women t	oppers
	Smt. Ravuri Kantamma Bhardwaja Medal	M.A.Telugu
35.	State Bank of India Medal	M.A. Economics
36.	A.P. History Congress Medal	M.A. History
37.	Prof. G. Ram Reddy Memorial Medal (Human Rights)	M.A.Political Science
38.	Prof. M.Shakuntala	M.Sc Physics

Memorial Medal



The toppers in the remaining Master's degree courses are awarded the University Medals.

## **University Medals**

- 1. M.A. Philosophy
- 2. M.A. Functional Hindi
- 3. M.A. Telugu
- 4, M.A. Applied Linguistics
- 5. M.A. Political Science
- 6. M.A. Sociology
- M.A. Anthropology
- 8. M.P.A. Theatre Arts
- 9. M.Sc Statistics
- 10. M.Sc Moleculor Microbiology
- 11. M.B. A. Health Care and Hospital Management

### **SC/ST Medals**

The University has instituted medals for securing the first rank with first class among the SC/ST students in various examinations at Master's degree level in the year 1991 – the birth centenary of Bharat Ratna Dr. B.R. Ambedkar.

For the award of the above medals, the topper in the subject concerned should secure first division in the degree and pass all the examinations within the prescribed duration in first attempt. The marks obtained in supplementary/improvement examination shall not be taken into account.

#### The President of India Medal

President of India Medal will be awarded bi-annually for a PG student for overall performance to be adjudged as the best for general proficiency including character, conduct, excellence in academic, and other extra and co-curricular activities viz., a) sports activity, (b) cultural activity, (c) participation in debates, seminars and similar activities, (d) participation in NSS, blood donations camps, etc., (e) participation in literacy drive and non-formal education, and (f) leadership which includes representation on students union, mess secretary etc. For this, a weightage of 70% will be given for academic performance after normalization and 30% for other activities. The students must provide the information to the HoDs/Deans for this purpose with documentary evidence from time to time or before they leave the University on completion of the course.

# University Medal for Physically Challenged Students

The University instituted a medal for the meritorious student from amongst the physically challenged category from P.G. Courses. This will be awarded annually at the Convocation. The selection procedure for this award will be similar to that of the President of India Medal.