# **Information Brochure**

For Admission to First Year Degree Course in Engineering / Technology / Architecture Medicine / Dentistry / Pharmacy and

Lateral Admission to Second Year (Third Semester) Engineering / Technology / Pharmacy and

First Year Masters Degree Courses in / of Computer Application (MCA) Business Administration (MBA) PGDM, PGCM and PGDM (Executive)



### PROGRAMME FOR JOINT ENTRANCE EXAMINATION - 2011, ORISSA

#### TABLE-I

STRE	AM: MCA/MBA/	PDGM / PGCM / PDGM (Executi	ve) PGAT for M. Pharm
DATE	9.00	1 <sup>st</sup> Sitting AM to 12.00 Noon	2 <sup>nd</sup> Sitting 2.30 PM to 4.30 PM
1.05.2011 (Sunday)		MCA	Entrance Test for MBA/ PGDM/ PGCM/PGDM (Executive) / M. Pharm
STRE		ch (Lateral Entry) / B. Arch. / M .ateral Entry) / PGAT for M. Tecl	
DATE		1 <sup>st</sup> Sitting	2 <sup>nd</sup> Sitting 2.30 PM to 4.30 PM
8.05.2011 (Sunday)	9.00 AM to 11.00 AM	Physics & Chemistry / Diploma Test (Engineering / Technology / Pharmacy) / B.Sc. Paper - I	Biology / B. Sc. Paper - II /
	12.00 Noon to 1.00 PM	Mathematics	PGAT (M. Tech/M.Arch)

The salient features of "The Orissa Professional Educational Institutions (Regulation of Admission and Fixation of Fee) Act, 2007" are as follows.

- \* Methods of admission in professional educational institutions: Subject to provisions of this Act, admission of students in all private professional educational institutions, Government institutions and sponsored institutions to all seats including lateral entry seats, shall be made through JEE conducted by the Policy Planning Body followed by counselling in order of merit, in accordance with such procedure as recommended by the said body and approved by the Government of Orissa.
- \* **Reservation of seats:** In a private professional educational institution other than minority institution not exceeding 5% of the approved intake may be filled up by NRI from the merit list prepared on the basis of JEE as per AICTE guideline issued in this regard.

Where any shortfall in filling up of seats from NRI occurs, such vacant seats may be filled up from the merit list of All India Engineering Entrance Examination (AIEEE) or All India Medical Entrance Examination, as the case may be, conducted by Central Board of Secondary Education: Provided that while filling up such vacant seats NRI shall be preferred. In a private professional educational institution 15% of the approved in take may be filled up strictly from the merit list of All India Engineering Entrance Examination or All India Medical Entrance Examination, as the case may be, conducted by Central Board of Secondary Education.

\* Prohibition of Capitation fee : No capitation fee shall be collected by a professional educational institution or by any person who is in charge of the management of such institution, from any candidate in consideration of his admission to or continuance in any course of study or his promotion to higher class in such institution under the management.

### **IMPORTANT NOTES FOR THE APPLICANT**

#### IMPORTANT NOTES FOR THE APPLICANT

- Permanent nativity certificate is mandatory for taking admission against any reserve category like: SC/ST/ES/PC/ WO/GC/Lateral Entry in all courses. Permanent nativity certificate is to be produced at the time of document verification during counselling. All such applicants are required to keep the up-to-date nativity certificate ready well in advance.
- 2. Mark sheet and Certificate/Provisional Certificate of the qualifying examination must be produced on the day of counselling, without which the applicant will not be allowed to participate in the counselling process.
- 3. There are two methods of giving application form for OJEE-2011. (i) Online application form, which can be filled directly in the website of JEE, that is available in OJEE website i.e. www.odishajee.com (ii) Application available at Banks and Post offices can be purchased and submitted to OJEE office through the banks, post offices or by post/speed post/regd. Post/ courier. That will open from a specific date to be notified separately.
- Top portion of the application form [Optical Magnetic Reader (OMR) Sheet] will be processed by a machine. The machine picks up only dark marks. Therefore, appropriate circles should be darken using HB pencil or Black/Blue ball point pen only.
- 5. Applicant should write in capital letters the required information in the boxes above the circles (wherever provided) and then darken the appropriate circle under each of them. Writing in the boxes is only for the candidate's guidance to darken the correct circle. It should be ensured that darkening in the correct circle is done, as the candidate is solely responsible for any error in darkening of the circles.
- 6. Applicant should not scribble, smudge, cut, tear, or wrinkle the application form and should not put any stray marks anywhere on the application form.
- 7. Photograph, signature and address of the applicant are to be scanned by another machine that recognizes only good quality images, and from the specified areas of the form. Therefore, applicant should paste a good black and white recent (not older than 2 months) photograph in the space provided, and the applicant should write her/ his address and sign in Black / Blue ball point pen only in the space provided.
- 8. Applicant should write the complete address clearly giving his/her name and PINCODE carefully and legibly with Black / Blue ball point pen only. If a mistake, cover the whole box with an exact size white paper slip and write your address on it. Your address must not overflow this box. You may, if possible, type your address on a slip not larger than the box and paste it neatly within the box.
- 9. The candidate should not fold the application form and must be ensured that the envelope matches the size of the form. The candidate should not put any pin or staple anywhere in the application form. He/ she has to paste only the photograph and nothing else on the form.
- 10. Applicants are advised to ensure the correctness of their mailing address, PINCODE, and telephone number, if any, with STD codes. Please note that OJEE-2011 will not be

responsible if communications do not reach the applicant due to incomplete or illegible address / phone number.

- 11. Applicant must quote the six digit application number of her/ his application form as a reference in all his/her future correspondence.
- 12. If the acknowledgement card does not reach the applicant by April 20, 2011 (for MCA, MBA, PGDM, PGCM, and PGDM (Executive) Candidates) then he/she must check the website of JEE that is www.odishajee.com. Similarly if the acknowledgement card does not reach to the candidate by April 25, 2011 (for B.Tech, MBBS, B. Pharm, and B. Arch Candidates) then she/he must check the website as given above.
- 13. Application must be complete in all respect. Incomplete application or application filled in a language other than English will summarily be rejected.
- 14. Options such as Category, Choice of place of examination centre and Reservation type, once filled up by the applicant in the application form cannot be changed under any circumstances.
- Applicant should give options only with respect to category (S, ZZ, OL, NRI) and Reservation type (SC/ST/PC/GC/WO/ ES) that he/she can substantiate with documentary evidences during counselling.
- 16. The cost of application material is non-refundable.
- 17. Any dispute arising out of OJEE-2011 shall only be settled and decided under the Hon'ble High Court of Orissa.
- 18. Applicant should not submit any document along with the application form to support this claim.
- 19. Original certificates, mark sheets and other documents will be verified at the time of counselling with respect to category and reservation that is claimed and shall be returned to the applicant immediately after the verification is over in case of refusal to take admission.
- 20. Claim for admission will be rejected if you cannot submit the certificates, mark sheets, other necessary documents at the time of counselling or if one has filled the form wrongly.
- 21. Admission may be cancelled at any time, if certificate/ mark sheets/any other documents are found to be forged or manipulated. A candidate will not be considered for admission if he/she fails to substantiate the claim with respect to reservation, category, nativity, date of birth, qualification etc.

### PLEASE ENSURE BEFORE SUBMITTING THE APPLICATION THAT:-

- (a) you have followed all the instructions in filling up the form.
   You have gone through the important notes carefully;
- (b) you have written your address on the acknowledgement card correctly;
- (c) you have enclosed the acknowledgement card with the application in the envelope, if you are submitting by post;
- (d) you have not used a staple / pin / tag in your application;
- (e) you have retained a photocopy of the application form;
- (f) once duly filled in application form is submitted, no further change will be entertained under any circumstances.

### ORIGINAL DOCUMENT TO BE BROUGHT ON THE DAY OF THE COUNSELLING.

- (a) Rank letter.( mandatory)
- (b) Original Date of Birth Certificate / 10th certificate.

- (c) +2 Certificate.
- (d) +2 Mark sheet and 10<sup>th</sup> Mark sheet.
- (e) Diploma certificate (for Lateral Entry of Diploma Candidates)
- (f) Diploma Mark sheet (for Lateral Entry of Diploma Candidates)
- (g) +3 Certificate (For MCA, MBA, PGDM, PGCM, PGDM(Executive) & B.Sc. Lateral Entry)
- (h) +3 Mark sheet and +2 Mark sheet (For MCA, MBA, PGDM, PGCM, PGDM(Executive) & B.Sc. Lateral Entry)
- (i) B.Tech/ B.Pharm/B.Arch Certificate and Grade/Mark sheet for MTech/ M.Pharm.
- (j) GATE/GPAT card for MTech/MPharm.
- (k) NATA Score card for B.Arch
- (I) School / College Leaving Certificate.
- (m) Experience Certificate for candidates seeking admission to PGDM(Executive) programme
- (n) Nativity Certificate in the prescribed form for candidates seeking admission against reserved category as mentioned in Para 1.
- (o) Relevant SC/ST Certificate in the prescribed form.
- (p) Green Card certificate in original for children of Green card holders.
- (q) Relevant certificate of Defence / Paramilitary service of candidate's parent / spouse.
- (r) Relevant documents for NRI candidates.
- (s) Relevant documents for OL candidates.
- (t) Any other relevant certificate as mentioned in this Brochure.

All Engineering, Pharmacy, and most of the colleges offering MCA and MBA degree programmes are either constituent or affiliated colleges of the Biju Patnaik University of Technology, Orissa, Rourkela except Veer Surendra Sai University of Technology, Burla which is a Unitary Technical State University.

All the students to be admitted (except those to be admitted to Medical and BDS colleges), Pharmacy, MBA, DTE&T quota and MCA Courses in other Universities of the State, PGDM, PGCM, PGDM (Executive.) through OJEE 2011 will be registered students of the Biju Patnaik University of Technology.

#### **GENERAL INFORMATION**

- 1.1 Application form duly filled in should be submitted in person at the Bank from which it is purchased or by Registered post/Speed post/registered courier service to the JEE Cell in the address given in the back cover page, so as to reach on or before 21<sup>st</sup> March, 2011
  - (i) Hand-delivery of forms at the JEE cell will not be accepted.
  - (ii) Any application received after the due date will not be considered.
  - (iii) The JEE-2011 committee will not take the responsibility for any postal delay or irregularity or loss in postal transit of the application form.
  - (iv) While submitting the application form by hand at the Bank, from where you have purchased the form, collect duly signed and stamped acknowledgement card from the corresponding Bank. The last date of submission of application form to the Bank is 21<sup>st</sup> March, 2011
- 1.2 The Joint Entrance Examination-2011 will be held on <u>Two</u> Sundays, May 1, 2011 and May 8, 2011 as per TABLE-I.
- 1.3 Those who send their application by post should duly fill up the acknowledgement card, affix postage stamp of denomination Rs. 10/- and enclose the same inside the envelope meant for submission of application form.

- 1.4 A single application form is sufficient for any possible combination of course to be opted. Do not send extra/ duplicate forms as those will be rejected. Not more than one set of application form shall be submitted in one envelope. If the envelope contains more than one application form, the whole content will be rejected.
- 1.5 For any correspondence in future, mention the application number printed below the bar code of the application form.
- 1.6 If an applicant does not receive the Admit Card for the examination by April 25, 2011 (for MCA, MBA, PGDM, PGCM, PGDM (Exec.)) and by April 30, 2011 (for BTech, MBBS, Pharmacy, Lateral Entry for Diploma and B.Sc.), he/she must check his /her roll No. and centre of examination from our website and he/she may down load the duplicate admit card, which must be endorsed by the centre Superintendent of the examination centre for allowing the candidate to appear the exam. How ever this will be examined at a later stage to validate the authenticity.

#### 1.7 Availability of Courses :

JEE-2011 will be conducted to draw the merit list of successful candidates for admission into :

- Degree course in Engineering / Technology in different branches of engineering colleges/institutes in the State of Orissa affiliated to BPUT, VSSUT and in DTE & T quota seats outside state institutes. A list of colleges / institutes in Orissa and discipline wise seats available for the year 2010 are given in Table - II as an indicator.
- (ii) MBBS/BDS courses in the colleges as per list given in Table III for the year 2010 as an indicator.
- (iii) B.Pharm. course in the colleges as per list given in Table - IV for the year 2010 as an indicator.
- (iv) MCA course in the colleges / institutes as per list given in Table - V for the year 2010 as an indicator.
- (v) 3<sup>rd</sup> semester of Engineering / Technology and Pharmacy stream for diploma holders under lateral entry scheme. 3rd semester of Engineering / technology stream for B.Sc. / +3 Sc. with mathematics in +2 standard. Maximum 20% of intake capacity of last year in appropriate discipline (these seats will be over and above the intake capacity) and carry forward vacant seats of first year of engineering/pharmacy as per list submitted by JEE-2010 will be available for lateral entry at third semester level as an indicator.
- MBA course in the colleges/ institutes as per list given in Table - VI for the year 2010 as an indicator.
- (vii) Architecture courses in the colleges are as per Table-VII
- (viii) The list of colleges / Institute offering for PGDM/ PGCM and PGDM (Executive) will be given later in the OJEE – 2011 website.

#### Note: List of Colleges/Institutes/University and availability of seats therein are for the year 2010 and this should be used for a reference or as an indicator.

- 1.8 Fee Structure:
- 1.8.1. Fees payable to colleges/institutes/universities : Fees payable to colleges/institutes/universities at the time of admission will be decided by the competent authority and shall be published in the Counselling-cum-Admission Instructions to be provided to each of the JEE qualified candidate along with the rank card. The same will also be published in our website.

1.8.2. (a) Fees payable to VSSUT/BPUT:

The Universities will charge the following fees from all the students admitted to their constituent/affiliated colleges.

1.	One time Curriculum Development Fee	Rs. 1500/
2.	One time Fees payable towards WelfareFund for Students	Rs. 500/
3.	One time University Registration Fee	Rs. 500/
4.	Subject wise Registration Fee in each Semester	Rs. 800/ (Per Semester)
5.	Semester Examination Fee	Rs.700/
6.	Insurance Fee Five Year Programme Four Year Programme Three Year Programme Two Year Programme	As per actual
7.	One Time Sports & Cultural Fee	Rs 250/

(b) Fees for other Universities: It will be decided by competent authorities of respective Universities.

#### 1.9. Age limit:

Wherever there is no age limit for taking admission (vide clause 4), the Government of Orissa will not be responsible for any regulation of service where such requirement for age exists. The candidate should take admission at his / her own risk as regards to age.

#### 1.10 Medical Fitness :

JEE will not be responsible if a candidate faces difficulty in employment on medical ground. Candidates claiming reservation under physically challenged category will have to go through a Medical Board (Clause 2.1.4). The decision of the Medical Board will be final and binding.

#### 1.11. Merit List :

Separate merit list for all qualifying candidates shall be drawn on the basis of JEE- 2011 results in the following manner.

- One for candidates seeking admission to Engineering / Technology degree courses on the basis of marks obtained in Physics, Chemistry and Mathematics,
- One for candidates seeking admission to Medical/ Dental degree courses on the basis of marks obtained in Physics, Chemistry and Biology,
- One for candidates seeking admission to Pharmacy degree course on the basis of marks obtained either in Physics, Chemistry and 2xMathematics or in Physics, Chemistry and Biology whichever is higher,
- (iv) One for candidates of diploma streams seeking admission under Lateral Entry scheme to engineering and technology on the basis of marks obtained in diploma test in engineering/technology.
- One for candidates of diploma streams seeking admission under Lateral Entry scheme to Pharmacy on the basis of marks obtained in diploma test in pharmacy
- (vi) One for candidates of B.Sc. or +3 Sc. (should pass mathematics as a subject in +2 level) streams seeking admission under lateral entry scheme to engineering/ technology on the basis of marks obtained in BSc Paper-I and BSc Paper-II.
- (vii) One for candidates seeking admission to MCA courses will be on basis of marks obtained in MCA test.
- (viii) One for candidate seeking admission to MBA will be on the basis of marks obtained in Entrance test.

- (ix) One for the candidates seeking admission to PGDM, PGCM, PGDM (Executive program) will be on the basis of marks obtained in Entrance test.
- (x) One for candidates seeking admission to B. Arch. Course will be on the basis of marks obtained in Physics, Chemistry, and Mathematics and must have NATA score not less than 40%.

In addition, separate merit lists will also be drawn for candidates qualifying under each of the reservation categories. Each successful candidate shall be given a rank card.

#### 2. Categories :

#### 2.1. Orissa State Candidates (S- Category)

Candidates belonging to '**S category**' will be eligible for admission to Government colleges, except Government medical and Dental colleges, on the basis of their merit rank. However, for MBBS/BDS course in Govt. colleges and Private Colleges and lateral entry the parents of the candidate must be permanent native of Orissa. For admission to colleges under state category one has to satisfy at least one of the following three criteria.

- (a) The candidate must have passed/appeared 10+2 examination from any of the recognised institution in the State.
- (b) Parents of the candidate other than (a) must be permanent nativity of Orissa. To claim benefit under this category, a candidate shall furnish at the time of counselling a permanent native certificate, in prescribed form (Appendix-I) from a Revenue Officer not below the rank of Tahasildar of the area where his/her parents have permanent nativity.
- (c) Sons / daughters / spouse of the permanent employees of Government of Orissa / Govt. of India/Govt. of Orissa undertakings/Govt. of India undertakings, serving in the State of Orissa at the time of application. To claim the benefits under this category, candidate has to submit a certificate from the employer of his/ her parents/spouse in the prescribed form (Appendix-II) at the time of counselling.

### Provided that candidates claiming any reservation shall have to produce the nativity certificate in Appendix – I.

#### Reservation of Seats under State Categories :

The reservation of seats in different colleges under various categories will be as per the policy of the Government of Orissa. The percentage of seats to be reserved for different categories are subject to change and the decision of the State Government as on the date of admission will be applicable.

2.1.1 8% and 12% seats in all colleges are reserved Respectively for candidates belonging to Schedule Caste and Schedule Tribe by birth (not by marriage or adoption).

Separate merit lists will be drawn up for each reserved category. If eligible candidates belonging to a reserved category are not available, seats can be filled up by the candidates belonging to the general category.

2.1.2. Candidates applying for SC/ST reserved category shall furnish SC/ST certificate from the Tahasildar of the place of birth in Orissa **at the time of counselling** in the format given in this brochure (Appendix - III).

**NOTE**: Scheduled caste/Scheduled tribe persons who have migrated from their state of origin to another state for the purpose of seeking education, employment etc., will be deemed to be scheduled caste/ tribe of the state of their origin and will be entitled to derive benefits from the state of origin and not from the state to

which they have migrated. (Vide Govt. India Letter No. BC/160 14.1.82 SC & BCD/ dated 22<sup>nd</sup> Feb,1985). Thus, SC/ST candidates from Orissa who are staying outside the State have to produce SC/ST certificate from the competent authority of Orissa State during counselling.

- 2.1.3. 5% of seats are reserved for children of Green card holders. Candidates applying under Green Card category shall furnish the Green card of their parents issued by Family Welfare Department, **Government of Orissa/any other appropriate authority**, in original **at the time of counselling**. The name, date of birth of the candidate alongwith the parents name should match with the 10<sup>th</sup> pass certificate. If in future it is found that the green card has been obtained by providing wrong information or suppressing facts the card holder will be deprived of the facilities already obtained and will be liable for legal punitive action.
- 2.1.4.3% of seats are reserved for Physically Challenged candidates for admission to Engineering/Technology/MBA/ MCA/Pharmacy/PGDM/PGCM and PGDM (Executive) courses and candidates are eligible to be considered under Physically Challenged Category for admission to these courses with 40% disabilities in consonance with section-39 of the Persons with Disabilities (Equal opportunities, Protection of Rights and Full participation) Act, 1995. 3% of total MBBS seats of three Govt. medical colleges of the state and BDS stream in SCB Medical College are reserved for persons with disabilities and they have to meet the medical standard of Locomotory disability of lower limbs between 50 to 70% (% of disability may vary subject to the decision of the Hon'ble Apex court). The medical standard of PC category candidates will be decided by a medical board specifically constituted with Senior Professors of the premier medical college and hospital: SCB Medical College, Cuttack, and Chairman OJEE-2011 or his representative under the Chairmanship of Principal, SCB Medical College or his nominee, that they are eligible to be categorized as physically Challenged candidates and capable of undergoing each part of the requirements for Engineering/Architecture/Medical studies. The decision of this Board will be final and binding. They SHOULD NOT therefore, submit along with the application form any medical certificate to the effect that they are physically Challenged.

Further, for MBBS/BDS stream, the candidates claiming locomotary disabilities are only eligible for consideration. Visually handicapped and hearing disabled candidates are not eligible as stipulated by Medical Council of India.

- 2.1.5. <u>2% of seats in Engineering Colleges and 3% seats in</u> <u>Government Medical Colleges in MBBS and BDS courses</u> are reserved for children/widows of ex-servicemen who are native of Orissa. Candidates applying under Military reserved category shall furnish a certificate in the prescribed format provided in this brochure as Appendix-IV at the time of counselling. The priorities will be notified in the Counselling-cum-Admission Instructions as per decision of the Governmet of Orissa.
- 2.1.6. 30% of the seats in all the categories [except Outside State (ZZ), Non-resident Indians (NRI), OL category ] are reserved for women candidates for <u>Engineering/</u> <u>Technology, MBA, MCA, PGDM / PGCM and</u> <u>PGDM</u> (Executive) courses.
- 2.1.7. All India quota seats to the tune of 15% for MBA programs shall be filled up from the merit list of CAT (7.5%) and MAT (7.5%). If any vacancy remains, shall be filled up from the merit list of OJEE-2011 during academic session 2011-12.

#### NOTES:

- 1. All reservations shall apply to the permanent native of Orissa state only.
- 2. Seats available under General Category in any course are those available after deduction of the number of seats pertaining to all the Reserved Categories from the total number of seats available for that particular course.
- 3. For Engineering Stream a candidates belonging to categories 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5 and 2.1.6 can also compete under general category provided he/she satisfy all conditions of eligibility for the same. For MBA, MCA PGDM, PGCM and PGDM (Executive) streams, the candidates belonging to categories 2.1 .1, 2.1.2, 2.1.3, 2.1.4, and 2.1.6 can also compete under general category provided they satisfy all conditions of eligibility for the same. For Pharmacy streams, the candidates belonging to categories 2.1 .1, 2.1.2, 2.1.3 and 2.1.4 can also compete under general category provided they satisfy all conditions of eligibility for the same. At the time of counselling for admission, a candidate figuring in the merit list for both Reserved and General Categories may first exercise his/her option for the college and discipline for admission under reserved category. A candidate who forgoes his/her option under reserved categories is entitled to exercise his/her option subsequently for the college and discipline for admission according to his/ her merit position under general category.
- 4. For Medical/BDS stream, candidates belonging to 2.1.1, 2.1.2, 2.1.3, 2.1.4, and 2.1.5 categories can compete with General category candidates if they satisfy the eligibility condition. At the time of counselling, a candidate figuring in both General and Reserved category merit list will first exercise his/her option for General category seats. A candidate who foregoes his/her option for General category seat is entitled to excercise option for Reserved category as per his/her merit rank.
- 5. If a candidate does not report during scheduled hour of reporting, he/she will be treated as absentee and no seat will be kept reserved for him/her. A candidate failing to report as per reporting schedule for counselling will not be permitted to participate in the counselling subsequently **under any** circumstance.
- 6. Seats, if any, remaining vacant in the ST reserved category can be filled up by candidates belonging to General category. If all the seats belonging to SC reserved category are not filled up due to non-availability of candidates belonging to SC category, such vacant seats may be filled up by candidates belonging to General category for the benefit of students/ institutions.

7. Seats reserved under all other category will be filled up by general category candidates in case the same are not filled up.

In case of any change in the percentage of reservation of seats/reservation criteria mentioned in the clause above on the basis of guidelines from MCI/PCI/DCI/MHRD/AICTE/ Government of Orissa, it will be intimated through the Counselling-cum-Admission Instructions to all the merit listed candidates. It will also be published in our website and in the notice board at the counselling venue.

#### 2.2 Non-Resident Indians : (NRI)

NRI means children or wards of an Indian citizen who ordinarily residing outside India and hold an Indian passport

#### 2.3 Outside state category : (ZZ)

Outside state candidates are not elligible for admission in Government Colleges to Engineering/ MBA /MCA/ MBBS/ BDS/ PGDM/ PGCM and PGDM (Executive) courses admission under lateral entry programme and for private MBBS programmes.

Outside state candidates are eligible for admission in private Engineering//MBA/MCA/BDS/PGDM/PGCM and PGDM (Executive) colleges as per their eligibility criteria.

### 2.4.1 OL Category : (Oriyas belonging to outlying Oriya speaking tracts)

### (Notification NO:13411-SC-6-64/69-Gen Political &service Department, Govt of Orissa Dt. 8/8/1969)

Due to settlement of boundaries of states some oriya speaking areas have been merged in other neighboring states as a result of which the oriyas living in these areas who are now permanent residents of other states have been deprived of studying oriya language or oriya culture. 3% of seats in Government Engineering colleges are reserved for Oriya speaking people residing outside the State of Orissa. OL reservation is not applicable to private engineering colleges/ MBA/MCA/MBBS/BDS/Pharmacy/PGDM/PGCM and PGDM (Executive) colleges.

- 2.4.2 A candidate eligible to avail the reservation under OL Category must have:
  - A nativity certificate from outside the state of Orissa. (Appendix – V, CERTIFICATE OF AUTHENTICITY OF ORIYAS BELONGING TO OUTLYING ORIYA SPEAKING TRACT)
  - Certificate of having passed Oriya as a language upto M.E. standard. (Appendix – VI)

#### OR

If not, then the candidate has to pass an Oriya examination with minimum 40% marks to be conducted by OJEE 2011 committee at the time of counseling.

(iii) The candidate must have passed 10+2 Science examination from outside Orissa.

#### 2.5. Enquiry Regarding Admission:

Information regarding admission may be obtained from the Chairman, OJEE-2011.

**Note :** All enquires and correspondences with JEE authorities must bear the candidate's Application number. After receiving the admit card the candidate should also quote the Roll No. allotted to him/ her in the correspondence, if any. **Telephonic enquiry will be attended to during 8 AM to 8 PM only.** 

#### 2.6. Choice of College and Discipline:

Selection for admission will be strictly on the basis of rank secured in the JEE-2011 merit list subject to the availability of seats in colleges and disciplines at the time of counselling for admission.

Reporting at counselling according to the time schedule is very important, other wise the candidate may loose his chance to get a seat as per his/her choice or rank.

#### 2.7. Places of Examination:

Following is a tentative list of places where JEE-2011 Examination will be conducted.

Angul, Balasore, Bargarh, Baripada, Bhawanipatna, Berhampur, Bhadrak, Bhubaneswar, Bolangir, Burla, Cuttack, Dhenkanal, Jagatsinghpur, Jajpur, Jeypore, Jharsuguda, Kendrapara, Keonjhar, Koraput, Nayagarh, Paralakhemundi, Phulabani, Puri, Rayagada, Rourkela, Sambalpur, Sarang Sundergarh, Kandhmal, Malkangiri, Nabarangpur, New Delhi, Viazag, Kolkata, Kharagpur, Ranchi, Jamshedpur, Guwahati, Mumbai, Raipur, Patna, Hyderabad, Bangalore, Chennai, Ahmadabad and Surat.

#### 2.8. Option for Examination Centres :

Candidates should give three places of examination of their choice (as given in clause 6.9) in order of preference. Allocation of centre will be made subject to availability and facilities existing. If sufficient candidates in the centre(s) chosen by a candidate are not available, a candidate may be allotted to a centre not included in his/her choice for operational convenience. The decision of the JEE-2011 committee regarding the allocation of the centre shall be final and binding. Change of allotted centre is not permissible under any circumstance. **Candidates choosing for a centre outside the state are required to opt for at least one centre inside the state of Orissa.** 

### For Lateral Entry the centres will be limited to the following places only:

Balasore, Berhampur, Bhubaneswar, Cuttack, Rourkela and Sambalpur. Candidates desirous to appear for the above courses are to give their preference of the centres accordingly.

# For MCA, MBA, PGDM, PGCM, PGDM(Executive) and PGAT the centres will be limited to the following places only :

Angul, Balasore, Berhampur, Bhubaneswar, Cuttack, Rayagada, Rourkela, and Sambalpur.

#### 3. Admission Rules and Procedure

JEE refers to the Joint Entrance Examination conducted by the State of Orissa for admission to Engineering/ Technology/ Medicine/Dentistry/Pharmacy/B.Arch. and Master in Computer Application (MCA) / Master in Business Administration (MBA)/ PGDM/ PGDM (Executive) / PGCM// M. Arch and Third Semester of Degree Courses in Engineering / Technology/ Pharmacy under Lateral Entry (both Diploma and B.Sc.) in the academic year 2011 - 2012.

- **3.1.** The reservation policy of the Government of Orissa and the Government approved procedure given in the brochure for allocation of seats during counselling will be strictly followed.
- **3.2.** Admission is strictly based on JEE merit rank and choice of the candidate with respect to Institution and course given during the counselling.
- **3.3.** Candidates will be called for the counselling as per a schedule to be despatched along with the Rank Card.
- **3.4.** During Counselling all certificates in original will be verified. No further verification at college level is required. For records of the college, a set of attested copies of the certificates/ marksheet etc. will be collected during counselling and will be sent to the colleges.
- **3.5.** A candidate selected through the counselling for a course in a college (Except MBBS/BDS) has to take admission in the respective constituent/affiliated college. On receipt of the enrolled students from the constituent/affiliated college BPUT/ VSSUT will give the registration number to the student.
- 3.6. As per the resolution No. ME-II-ILL-4 / 2006-716 / H Dated 09.01.2008 released by Government of orissa in Health and Family welfare Department, candidates

taking admission into M.B.B.S. programme in Government medical colleges are to render two years of service in K.B.K. / Rural areas under the State Government; accordingly the candidates are to sign the bond introduced by the State Government (the Bond format is given in Appendix-VII) during admission. In case a candidate does not join the service of the State of Orissa within 30 days of receipt of an appointment order, he or she will be required to pay Rs. 5 lakhs within a period of four years and a half. In case , he / she does not pay the amount within the stipulated period, the amount shall be recovered from him/her as arrears of land revenue by invoking the provision of Orissa Public Recovery (OPDR) Act, 1962. If a candidate having completed MBBS course works for a period which is less than 2 years and gets selected for the PG course in a Govt. Medical College inside the state he / she shall be required to serve for a period of 2 years. However, if a candidate appointed in contractual basis chooses to join a PG course in an institution outside the State or in a private institution inside the state, he / she will be required to pay an amount @ Rs. 2.50 lakhs per annum for the period which falls short of 2 years. None of these provision will apply to the candidates who take admission in MBBS in the state against All India Quota. Appointment under the State Government for this purpose shall mean and include regular appointment through selection process by Government / O.P.S.C, adhoc appointment and contractual appointment. For any relaxation in this regard, the decision of the State Government shall be final. This resolution has come into force from first batch of MBBS students joining the degree course w.e.f. 2008-09

- 3.7. Each candidate has to pay a non-refundable counselling fee of Rs.300/- . This amount is payable through an Account Payee Bank Draft in favour of "OJEE - 2011" drawn on any Nationalised Bank payable at Bhubaneswar.
- **3.8.** A candidate has to pay Rs.16,000/- through a separate A/c Payee Bank Draft drawn in favour of "OJEE-2011" on any Nationalised Bank payable at Bhubaneswar. The balance after deduction of the University fee of Rs.4,500/- (for 4-year programme; as per clause 1.8.2) shall be paid to the admitting college for adjustment against the tuition and other fees payable to the college.
- **3.9.** A candidate must demand the headwise break up of fees that he/she pays at the college level.
- 3.10. The procedure of refund of fees will be as per UGC / AICTE / MCI / DCI / PCI guidelines / instructions issued from time to time.
- 3.11. Candidates who do not receive the JEE rank card or have lost the rank card can get a duplicate rank card from the counselling venue on the day of his or her counselling on payment of Rs.200/- in the form of Bank draft in favour of "OJEE-2011" drawn on any nationalised bank payable at Bhubaneswar .He / She can check the schedule of counselling from our JEE Website. i.e. www.odishajee.com
- **3.12.** The counselling process will start tentatively after third week of June 2011 and to be intimated in detail in the counselling brochure and website.
- **3.13.** No candidate can be admitted to a college on the basis of marks scored in qualifying examination.
- **3.14.** A student admitted to a college against a course cannot be transferred to another course in the same college in the

First year under any circumsatances.

- **3.15.** A student admitted to a college cannot be transferred to another college in the First year in same course or in another course.
- 4. Minimum Eligibility Criteria :
- 4.1 For admission to Ist Year Degree courses in Engineering/Technology, Architecture and Pharmacy.
- 4.1.1. Engineering & Technology :

Pass or appearing in 2011 in 10+2 examination of CHSE or equivalent, with Physics and Mathematics as compulsory subjects along with one of the following subjects : Chemistry / Biotechnology / Biology. Should obtain **at least 50% marks** (**45%** in case of candidate belonging to SC/ST category) in the above subjects taken together.

#### 4.1.2. Pharmacy :

Pass or appearing in 2011 in 10+2 examination with Physics and Chemistry as compulsory subjects along with one of the following subjects : Mathematics / Biotechnology / Biology. Should obtain **at least 50% marks (45%** in case of candidate belonging to SC/ST category) in the above subjects taken together

There is no age limit to appear at JEE-2011 for admission into Engineering & Technology, Pharmacy courses.

#### 4.1.3. Architecture

Pass or appearing in 2011 in 10+2 or equivalent examination from a recognized board with Physics and Mathematics as compulsory subjects along with one of the following subjects Chemistry / Engineering Drawing / Computer Science / Biology. Should obtain at least 50% marks (45% in case of candidate belonging to SC/ST category) in the above subjects taken together.

All the aforesaid admission to B.Arch. degree course are to be subject to passing NATA conducted by the council of architecture and the minimum passing score for NATA is 80 out of 200 for all categories of candidates. NATA shall be a prerequisite for admission into B.Arch course, but the ranking shall be on the basis of JEE ranking and admission to the course is based on the JEE rank.

#### 4.2. For admission to 1<sup>st</sup> Year Medical Stream (MBBS/BDS):

(i) Pass in 10+2 or appearing in 2011 examination of CHSE, Orissa or equivalent, with Physics, Chemistry & Biology (Botany and Zoology) with at least 50% marks in aggregate (Physics, Chemistry & Biology taken together) for general category candidates and 40% marks in aggregate for SC/ ST candidates. For candidates seeking admission through JEE to Govt. and Private Colleges the candidate must be a permanent native of Orissa. They are to submit the Permanent nativity Certificate (Appendix - I) at the time of counselling.

**AGE:** The lower age shall be 17 years as on December 31, 2011. The upper age shall be 25 years as on December 31, 2011. The upper age limit may be relaxed by three years for SC/ST candidates.

4.2.1. In case of the admission through the competitive examination, a candidate must have passed in the subjects Physics, Chemistry, Biology and must have obtained a minimum of 50% mark taken together in Physics, Chemistry and Biology in the competitive examination. In respect of candidates belonging to SC/ ST or other back ward class, the marks obtained in Physics, Chemistry and Biology taken together in the qualifying examination and in the competitive entrance examination be 40% instead of 50% as stated above.

4.3 (i) For admission to 2<sup>nd</sup> year Degree courses in Engineering, Pharmacy courses under Lateral Entry for Diploma holders:

Pass in 3 years diploma course in Engineering with at least 50% (45% in case of candidate belong to SC / ST category) marks in aggregate from State Council of Technical Education and Training (SCTE&VT), Orissa or equivalent and for Pharmacy, pass in 2 years diploma course in Pharmacy with minimum 50% (45% in case of candidate belong to SC / ST category) of marks in aggregate from Orissa State Board of Pharmacy (OSBP) or SCTE&VT for direct admission to the third semester degree courses. The candidate must be a native of Orissa. Results of final diploma examination must be available on the date of counselling. Candidates, whose results are not available on the day of counselling, will not be allowed to participate in the counselling. There is no reservation of seats in various categories in lateral entry to degree engineering/Technology, pharmacy courses.

They are to submit the Permanent Nativity Certificate (Appendix - I) at the time of counselling.

#### Choice of Discipline: (for Lateral Entry Stream)

Candidates having Diploma in Engineering/Architecture in the disciple indicated in Column-I are eligible to be admitted to their corresponding discipline only mentioned in Column–II of Table number-X based on merit list. Plastic Technology/Plastic Mould Technology is allowed for lateral entry into Plastic Technology only. The diploma offered by NTTF Gopalpur is recognized equivalent to diploma course offered by SCTE & VT, Orissa, Bhubaneswar.

Further the students having rank in lateral entry shall also be eligible for admission to the first year class in case the vacancies in lateral entry are exhausted. However the admission shall be based strictly on the basis of JEE rank only.

#### (ii) For admission to 2nd year Degree courses in Engineering/Technology under Lateral Entry for B. Sc. / +3 Sc. students :

Pass or appearing in 2011, for the Bachelor's Degree examination of three years duration in Science from any University of Orissa or equivalent recognised by UGC and have passed with a minimum of 50% (45% in case of candidates belonging to SC / ST category) marks in aggregate and passed XII standard with mathematics as a subject.

Further even though the student in this stream are admitted to second year course, they shall clear the subjects of Engineering Drawing and Engineering Mechanics of first year engineering program along with second year subjects.

They are to submit the Permanent nativity Certificate (Appendix - I) at the time of counselling.

#### Choice of Discipline: (for Lateral Entry Stream)

Candidates having B. Sc. or +3 Sc. with mathematics in class XII as a subject are eligible to be admitted to any discipline of engineering as per availability of seats.

The students belonging to B. Sc / +3 Sc. stream shall be considered only after filling the supernumerary seats in the lateral entry category with students belonging to diploma stream. Students who have passed diploma in Engineering and technology from an AICTE approved Institution or B.Sc / +3 Sc degree from a recognized University as defined by UGC shall also be eligible for admission to the first year engineering degree courses subject to vacancies in the first year class in case the vacancies at the lateral entry are exhausted. The admission shall be based strictly on the eligibility criteria mentioned above.

#### 4.4 M.C.A.:

Pass or appearing in 2011, for the Bachelor's Degree examination of minimum three years duration in any discipline from any University of Orissa or equivalent recognised by UGC and having passed in Mathematics at 10+2 level. Business mathematics at +2 level are not permitted. Should obtain at least 50% marks (45% in case of candidate belonging to SC/ST category) at the qualifying examination.

There is no age limit to admission to MCA course.

#### 4.5 M.B.A./PGDM:

Pass or appearing in 2011, for the Bachelor's Degree examination of minimum three years duration in any discipline from any University of Orissa or equivalent recognised by UGC. Should obtain at least 50% marks (45% in case of candidate belonging to SC/ST category) at the qualifying examination.

#### 4.5.1 PGCM

Pass or appearing in 2011, for the Bachelor's Degree examination of minimum three years duration in any discipline from any University of Orissa or equivalent recognised by UGC.

There is no age limit to for admission to  $\ensuremath{\mathsf{MBA}}\,/\,\ensuremath{\mathsf{PGDM}}\,/\,\ensuremath{\mathsf{PGCM}}$  course.

#### 4.6 PGDM (Executive)

Pass or appearing in 2011, for the Bachelor's Degree examination of minimum three years duration in any discipline from any University of Orissa or equivalent recognised by UGC and 5 years relevant managerial / supervisory experience. Should obtain at least 50% marks (45% in case of candidate belonging to SC/ST category) at the qualifying examination.

There is no age limit to for admission to PGDM (Executive) course.

#### NOTES:

- (i) Candidates should fulfill the requirements of reservations under clauses 2.1 as applicable.
- (ii) Women and Physically challenged candidates are not eligible for admission to Mining engineering course.
- (iii) Candidates desirous to be admitted to Engineering colleges/ institutes of outside state under DTE&T quota seats have to fulfil other conditional eligibility requirements of the institute concerned, as per data to be received by JEE from D.T.E.&T, Orissa.
- (iv) The Govt. of Orissa will not be responsible for any regulation of service where such requirement for age exists. The student should take admission at his/her own risk, as regards to ages.
- 5. Subjects for appearing at JEE-2011 :
- (a) All candidates seeking admission to 1st year degree courses in Engineering/Technology will have to appear in Physics, Chemistry and Mathematics.
- (b) Candidates seeking admission to MBBS/BDS course will have to appear in Physics, Chemistry and Biology.

- (c) Candidates seeking admission to either Engineering/ Technology or MBBS/ BDS course will have to appear in Physics, Chemistry, Mathematics and Biology.
- (d) Candidates seeking admission to B. Pharm. course will have to appear in Physics, Chemistry and either in Mathematics or Biology or both.
- (e) All Diploma holders seeking admission to 2nd year Degree courses under Lateral Entry scheme have to appear entrance test one paper as follows

For Diploma in Engineering / Technology shall cover the syllabus of Mathematics, Basic Electrical Engineering, and Engineering Mechanics (detail syllabus given in page no. 26 and 27).

For Pharmacy stream, the paper shall cover the syllabus of part - I and part - II of Diploma in Pharmacy as per the Education Regulation - 1991 of Pharmacy Council of India.

(f) All B.Sc. or +3 Sc. with Mathematics in +2 level candidates seeking admission to 2<sup>nd</sup> year Degree Engineering courses under Lateral Entry scheme have to appear B.Sc. Paper-I (B.Sc. Mathematics) and B.Sc. Paper-II (B.Sc. Physics and B.Sc. Chemistry).

- (g) All candidates seeking admission to MCA course will have to appear in Mathematics and Computer Awareness (in one sitting).
- (h) Candidates seeking admission to MBA /PGDM/PGCM/PGDM (Executive) course will have to appear an Entrance test in verbal and analytical reasoning, general knowledge, comprehension and computer and business fundamentals (in one sitting).
- All candidates seeking admission to 1st year Master Degree courses in Engineering/ Technology/ Pharmacy/Architecture will have to appear the respective courses examination as per detail syllabus of BPUT regulation.
- (j) All candidates seeking admission to 1st year degree courses in Architecture will have to appear in Physics, Chemistry and Mathematics.

#### DISCIPLINES

The intake capacity of the colleges based on approval of AICTE along with grant of affiliation from BPUT for affiliated colleges shall be considered for counselling.

#### TABLE-II

#### AVAILABILITY OF SEATS (DISCIPLINE WISE) IN ENGINEERING AND TECHNOLOGY STREAM (2010) as an Indicator.

#### Government Engineering Colleges

COLLEGE	Year of Establi- shment	CHEM.	CIVIL	COMP. SC.	ELE& TC	ELECT.	EEE	I&E	ІТ	MECH	OTHERS
College of Engineering &Technology, Bhubaneswar	1982		30	60 (S.S.C.)		45		30	60 (S.S.C.)	45	FASHION Tech - 30 (S.S.C.) TEXTILE - 40 BIOTECH- 30 (S.S.C.)
Central Institute of plastic Engineering and technology, Bhubaneswar	2008										Plastic Engg Tech-60 MANU-60
Government College of Engineering, Kalahandi	2009		60	60		60				60	
Indira Gandhi Institute of Technology, Sarang	1982	30	30	45 (S.S.C.)	45 (S.S.C.)	45				45	MET- 30
International Institute of Information Technology, Bhubaneswar (Self sustaining)	2009			60 (S.S.C.)	60 (S.S.C.)		60 (S.S.C.)		60 (S.S.C.)		
Orissa School of Mining Engineering, Keonjhar	1998					60				60	MET-20 MINING - 30 MINERAL-20
Parala Maharaja Engineering College, Berhampur	2009		60	60		60				60	
Veer Surendra Sai University of Technology, Burla	1956		30+30 (S.S.C.)	30+ 30 (S.S.C.)	60	60	30		40 (S.S.C.)	60	MANU – 30+ MANU 30 (S.S.C.)

S.S.C. : Self Sustaining Course

#### Private Engineering Colleges

COLLEGE	Year of Establi- shment	AE&I	CHEM.	CIVIL	COMP. SC.	E&EE	ECE	ELE &TC	ELE CT.	I&E	IT	MECH	OTHERS
Adarsha College of Engineering, Angul	2009			60	60	60	60		60			60	
Ajay Binay Institute of Technology, Cuttack	1998	60			60	60		120	60			60	
Apex Institute of Technology &Management, Pahal, Bhubaneswar	2008				60	120	120			60	60		
Aryan Institute of Engineering &Technology, Khurda	2009			60	60	60	60		60			60	
Balasore College of Engineering& Technology, Balasore	2001	60			60			120	60		60	60	
Bhadrak Academy of Technology, Janla, Bhubaneswar	2010			60	60		60		60			60	
Bhadrak Institute of Engineering & Technology, Bhadrak	1997			60	90			60	60		40	60	
Bhubaneswar Engineering College, Khurda	2008			60	60	60		120				60	
Bhubneswar Institute of Industrial Technology, Bhubaneswar, Khudra	2010			60				60	60			60	MET-60
Bhubneswar Institute of Technology, Janla, Khudra	2009			60	60	90	60				30	60	
Black Diamond College of Engineering & Technology, Jharsuguda	2008				60			60	60			60	
BRM International Institute of Technology, Pandra, Bhubaneswar	2008				60	60		90			60	60	
Capital Engineering College, Khurda	2010				60			60	60			60	
Centurian Institute of Technology, (CUTM), Khurda	2008			60	60	120	60					120	
C. V. Raman College of Engineering, Janla, Khurda	1997	60	60	60	120			120	120		60	120	
College of Engineering, Bhubaneswar	1999			60	120	90		120			60	120	Automobile- 60
Dhaneswar Rath Institute of Engineering & Management Studies, Cuttack	1999	60		60	90			120	90		60	60	
Eastern Academy of Science &Technology, Phulnakhra	2001	60			60			60	60		60	60	BIOMED-22 ENV-30
Einstein Academy of Technologyand Management, Khurda	2009			60	60	60		60	60			60	
Eklavya College of Technology& Science, Khurda	2009	60			60	120		60				60	
Gandhi Academy of Technologyand Engineering, Berhampur	2009			60			60		120			120	
Gandhi Engineering College, Madanpur, Khurda	2006				120	120	120					60	

COLLEGE	Year of Establi-	AE&I	CHEM.	CIVIL	COMP. SC.	E&EE	ECE	ELE &TC	ELE CT.	I&E	IT	MECH	OTHERS
Gandhi Institute for Educationand Technology, Khurda	2009			60	60	120	60					60	
Gandhi Institute of Technological Advancement, Bhubaneswar	2005				120	60	120		60			60	
Gandhi Institute for Technology, Gangapada, Bhubaneswar	2006				60	120	120				60	60	
Gandhi Institute of Engineering& Technology, Gunupur, Rayagada	1997	120	60	60	120	90	120		60		60	120	BIOTECH- 30 MET-30
Gandhi Institute of Industrial Technology, Berhampur	2008				90	120	90				60	60	
Gandhi Institute of Science &Technology, Rayagada	2008				60	60	90		90		60	60	
Gandhi Institute of Technology & Management, Khurda	2008				60	60	120		60			60	
Ghanshyam Hemalata Institute of Technology & Management, Puri	1997				60			90	90			60	
Gopal Krushna College of Engineering & Technology, Jeypore, Koraput	1999			30			43		30				
Gurukul College of Engineering for Women, Chattabara, Bhubaneswar	2009	60		60	60	120	60					60	
Gurukul Institute of Technology, Janla, Kurda	2008			60	60	120	60				60	60	
Hi-Tech College of Engineering, Bhubaneswar	2009			60	60	120	60					60	
HI-Tech. Institute of Technology, Khurda	2008			60	60	120	120				30		
Indic Institute of Design & Research, Khurda	2008	60		60	60	60	60		60			60	
Indotech College of Engineering, Khurda	2009			60	60	60		60	60			60	
Indus College of Engineering,Jatani, Khurda	2007			60	60	60	90		60			60	
Institute of Advanced Computer& Research, Rayagada	2001			30	90	60	90				60	90	
International Institute of Technology, Khurda	2010				60	60	60					60	
Jagannath Institute of Engineering and Technology, Cuttack	1996				60			120				60	
Jagannath Institute of Technology & Management, (CUTM) Paralakhemundi	1997		30	60	60	60	90			60	60	60	
Kalam Insitute of Technology, Berhampur	2008			60	60	60	60				60	120	
KMBB College of Engineering and Technology, Khurda	2009					60	60		60			60	
Konark Institute of Science &Technology, Jatni, Khurda	2002	60			90			120	90			60	
Koustuva Institute of Technology, Bhubaneswar	2008			60	60 -10 -	60	60				60	60	

COLLEGE	Year of Establi- shment	AE&I	CHEM.	CIVIL	COMP. SC.	E&EE	ECE	ELE &TC	ELE CT.	I&E	IT	MECH	OTHERS
Koustuva Institute of Self Doman(For Women), Bhubaneswar	2001				120	120		120			60		
Krupajala Engineering College, Bhubaneswar	1999	60		60	120	60		120	90		60	90	
Kruttika Institute of Technology Education, Chandaka	2010	60					60		60			60	
Maharaja Institute of Technology, Khurda	2008			60	60		60		120			120	
Mahavir Institute of Engineering & Technology, Paniora, Bhubaneswar	2002	60			90	60		120			60		BIOMED- 30
Majhighariani Institute of Technology & Science, Rayagada	1999				90	60	90				60	60	BIOTECH- 40
Morden Engineering & Management Studies, Balasore	2008			60	60	60	60			60		60	
Morden Institute of Technology & Management, Khurda	2008			60	60	120	60					60	
Nalanda Institute of Technology, Chandaka Bhubaneswar	2006			60	60		120		60			120	
National Institute of Science &Technology, Berhampur	1996				120	60	120			60	90		
Nigam Institute of Engineering and Technology, Baranga, Cuttack	2009				60	60	60					60	
NM Institute of Engineering &Technology, Bhubaneswar	2005				120	60	120				60	60	
Orissa Engineering College, Nijigarhkurki, Bhubaneswar	1986			120	120			120	120		90	120	
Oxford College of Engineering and Management, Balianta, Bhubaneswar	2009			60	60	60	60					120	
Padmanava College of Engineering, Rourkela	1999			30	90	60		90			60	45	
Padmashree Kruthartha Acharya College of Engineering, Bargarh	2002	30		60	60			60	120			60	
Purushottam Institute of Engineering & Technology, kansbahal	1999	60			120	90		120			30		
Radhakrishna Institute of Engineering and Technology, Khurda	2010			60	60		60		60			60	
Rahul Institute of Engineeringand Technology, Berhampur	2009			60	60	60	90				60	60	
Rajdhani Engineering College, Bhubaneswar	2006			60	90	60	90				60	60	
Rayagada Institute of Technology and Management Rayagada	2010			60		60	60					60	
Roland Institute of Technology, Berhampur	2002	30		60	90	60	60				60	60	
Samanta Chandra Institute of Technology & Management,Semiliguda	2001	30		60	60			90	60			60	

COLLEGE	Year of Establi- shment	AE&I	CHEM.	CIVIL	COMP. SC.	E&EE	ECE	ELE &TC	ELE CT.	I&E	IT	MECH	OTHERS
Sanjaya Management Institute ofTechnology, Berhampur	1997			30	60	60		90	60			60	
Satyasai Engineering College, Balasore	2007	60			60			60	120			120	
Seemanta Engineering College, Jharpokharia	1997			30	90			120	60	60		60	
Shibani Institute of Technical Education, Janla, Khurda	2009			60	60	60		60				120	
Silicon Institute of Technology Bhubaneswar	2001	60			120	120		120			60		
Silicon Institute of Technology Sambalpur	2009			60	60		60		120			60	
Sophitorium Engineering College, Khurda	2009			60	60		120		60			60	
Spintronic Technology and Advanced Research, Khurda	2009			60	60	60	60					120	
Srinix College of Engineering, Balasore	2009				60	60	60					60	
Subash Institute of Technology, Baranga	2008			60	60	60	60				60	60	
Suddhananda Engineering and Research Center, Phulnakhara, Cuttack	2009			60			60		60			60	
Sundargarh Engineering College, Sundargarh	2007				60		60		60			60	
Synergy Institute of Engineering & Technology, Dhenkanal	1999			30	120			120	90		30	120	
Synergy Institute of Technology, Phulnakhara	2009	60		60	60	60	60					60	
Temple City Institute of Technology and Engineering, Khurda	2007			60	60	60	60		60		60	60	
The Techno School, Bhubaneswar	2007	60			90	60	90				60	60	
Trident Academy of Technology, Bhubaneswar	2005				120	120	120				60		
Vedang Institute of Technology, Khurda	2009				60	60	60					60	
Vignan Institute of Technology & Management, Berhampur	2008	60			60	60	90				60	60	
Vijayanjali Institute of Technology, Balasore	2009			60	60	60	60					120	
Vikas College of Engineering for Women, Baragada	2009	60		60	60	60	60					60	
VITS Engineering College, Khurda	2009				60		60		60			60	
Vivekananda Institute of Technology, Chandaka, Bhubaneswar	2009			60	60	60	60					120	
Xavier Institute of Technology, Gangapatna, Bhubaneswar	2009			60			60		60			60	

Upto a maximum of twenty percent of sanctioned intake capacity of 2010-20 11 in appropriate discipline of engineering (these seats will be over and above the intake capacity) and carry forward vacant seats of first year of engineering (as per list submitted by JEE-2010) will be available for lateral entry at third semester level.

#### {\*) Abbreviation for Disciplines :

AE&I	-	Applied Electronics & Instrumentation Engg
BIOMED	-	Biomedical Engg
BIOTECH	-	Biotechnology
CHEM	-	Chemical Engg.
COMP.Sc.	-	Computer Sc. Engg.
ELECT	-	Electrical Engg.
E&EE	-	Electrical & Electronics Engg.

TABLE- III

#### GOVT. MEDICAL COLLEGES

SI.No.	College	MBBS	BDS
1	Srirama Chandra Bhanja Medical College, Cuttack	128	42
2	Maharaja Krushna Chandra Gajapati Medical College, Berhampur	128	_
3	Veera Surendra Sai Medical College, Burla	128	_

#### PRIVATE MEDICAL / DENTAL COLLEGES

SI.No.	College	MBBS	BDS
1	Hi-Tech Medical College	100	-
2	Hi-Tech Dental College	-	100
3	Gandhi Dental College	-	60

#### TABLE-IV

SL No	COLLEGE	Year of Establis- hment	TOTAL
1	College of Pharmaceutical Science, Puri	2006	60
2	College of Pharmaceutical Sciences, Berhampur	1995	60
3	Dadhichi College of Pharmacy, Sundergram, Cuttack	2005	60
4	Gayatri College of Pharmacy, Sambalpur	1999	60
5	Gayatri Institute of Science and Technology	2004	60
6	HI-Tech College of Pharmacy, Bhubaneswar	2009	60
7	IMT Pharmacy College, Gopalpur, Puri	2007	60
8	Indira Gandhi Institute of Pharmaceutical Sciences, Bhubaneswar	1994	60
9	Institute of Pharmacy & Technology, Salipur, Cuttack	1982	60
10	Jeypore College of Pharmacy, Jeypore	2001	60
11	Kanak Manjari Institute of Pharmaceutical Sciences, Rourkela	1982	60
12	Roland Institute of Pharmaceutical Sciences	1986	60
13	Royal College of Pharmacy & Health Science, Berhampur	2002	60
14	Seemanta Institute of Pharmaceutical Sciences, Jharpokharia	1982	60

ELE&TC ENV I&E IT MECH MET	- - - -	Environmental Engg Instrumentation & Electronics Engg. Information Technology Mechanical Engg. Metallurgy & Meterial Sc.
MANU	-	Manufacturing Sc. & Engg.

SL No	COLLEGE	Year of Establis- hment	TOTAL
15	Sri Jayadev College of Pharmaceutical Sciences	1983	60
16	The Pharmaceutical College, Barpali		60

#### TABLE- V LIST OF GOVERNMENT COLLEGES FOR MCA.

S/N	COLLEGE/UNIVERSITY(GOVT.)	Year of Establis- hment	TOTAL
1	Berhampur University, Bhanja Vihar		30
2	Centre for IT Education, Bhubaneswar	2001	60
3	College of Engineering & Technology, Bhubaneswar	1982	30
4	Fakirmohan University, Balasore		30
5	Gangadhar Meher College (Autonomous), Sambalpur	1995	30
6	Indira Gandhi Institute of Technology, Sarang	1982	30
7	Institute of Management & Information Technology, Cuttack	1962	32
8	Khalikote College (Autonomous), Khalikot	1998	30
9	North Orissa University, Baripada		30
10	Ravenshaw University, Cuttack	1998	30
11	Utkal University, Vani Vihar	1990	30
12	Veer Surendra Sai University of Technology, Burla,	1956	30
13	Sambalpur University, Joytivihar, Burla		30

#### LIST OF PRIVATE MCA COLLEGES

S/N	NAME OF THE COLLEGE	Year of Establis- hment	TOTAL
1	Academy of Business Administration Balasore	1993	60
2	Ajay Binay Institute of Technology Cuttack	1998	60
3	Balasore College of Engineering & Technology, Balasore	2001	60
4	Bhadrak Institute of Engineering & Technology, Bhadrak	1999	60
5	Bhubaneswar Engineering College Bhubaneswar	2008	60
6	BRM Institute of Management & Information Technology, Bhubaneswa	r 2007	60

S/N	NAME OF THE COLLEGE	Year of Establis- hment	TOTAL
7	BRM International Institute of Technology, Pandra, Bhubaneswar	2008	60
8	CV Raman Computer Academy Bhubaneswar	2000	120
9	College of Engineering Bhubaneswar Bhubaneswar	2007	60
10	Dr. Ambedkar Memorial Institute of Information Technology, Rourkela	2001	120
11	Gajapati Institute of Management,	2002	60
12	Gandhi Engineering College Bhubaneswar	2006	60
13	Gandhi Institute for Technological Advancement, Bhubaneswar	2005	60
14	Gandhi Institute for Technology Bhubaneswar	2006	60
15	Gandhi Institute of Computer Studies, Gunupur	2003	60
16	Gandhi Institute of Technology & Management, Bhubaneswar	2008	60
17	Gayatri Institute of Computer & Management Studies, Gunupur	1999	45
18	Indian Institute of Science & Information Technology, Bhubaneswar	1995	90
19	Indus College of EngineeringKhurda	2007	60
20	Institute of Advanced Computer & Research, Rayagada	2000	60
21	Institute of Professional Studies and Research, Cuttack	1993	60
22	Inter Science Institute of Computer Application, Bhubaneswar		60
23	Koustuva Institute of Self Domain Bhubaneswar	2001	60
24	Kushagra Institute of Information and Management, Khurda	1999	120
25	Mahavir Institute of Engineering and Technology, Khurda	2002	60
26	Nalanda Institute of Technology, Bhubaneswar	2007	60
27	National Institute of Science and Technology, Beharmpur	1996	60
28	NIIS Institute of Business Administration, Bhubaneswar	2008	60
29	NM Institute of Engineering & Technology, Bhubaneswar	2005	60
30	North Orissa School of Communication & Management,		120
31	Orissa Computer Academy, Bhubaneswar	1996	120
32	PJ College of Management & Technology, Balasore	2007	60

S/N	NAME OF THE COLLEGE	Year of Establis- hment	TOTAL
33	Purushottam Institute of Engineering & Technology, Kansbahal	1999	60
34	Rajdhani Engineering College, Bhubaneswar	2006	60
35	Regional College of Management, Bhubaneswar		120
36	Roland Institute of Technology, Beharmpur	2002	60
37	Rourkela Institute of Management Studies, Rourklea	1984	60
38	Rourkela Institute of Technology, Kalunga	1984	60
39	Seemanta Engineering College, Jharpokharia	1997	60
40	Silicon Institute of Technology, Bhubaneswar	2001	60
41	Srusti Academy of Management, Bhubaneswar	2003	60
42	Tapaswini Institute of Information Technology, Kansbahal	2001	60
43	Temple City Institute of Technology & Engineering, Bhubaneswar		60
44	The Techno School, Bhubaneswar	2008	60
45	Trident Academy of Creative Technology, Bhubaneswar	1998	120
46	Trident Academy of Technology, Bhubaneswar		60
47	United School of Business Management, Bhubaneswar		60

#### TABLE-VI GOVT MBA COLLEGES

SI.No.	College / Institute	Commen- cement of the course since	Seats
1	Berhampur University, Bhanja Vihar		30
2	Centre for IT Education, Bhubaneswar	2004	60
3	Dhenkanal Automous College, Dhenkanal	2009	60
4	Fakirmohan University, Balasore		40
5	Gangadhar Meher College (Automous), Sambalpur	2005	60
6	Madhusudhan Institute of Cooperative Management, Bhubaneswar		45
7	Institute of Management & Information Technology, Cuttack	1962	90
8	North Orissa University, Baripada		30
9	SCS Automous College, Puri	2009	60
10	Utkal University, Vani Vihar		30

	PRIVATE MBA COLLEGES			
SI.No.	Institute	Commen- cement of the course since	Seats	
1	Academy of Business Administration, Balesore	1993	120	
2	Acdemy of Mangement & Information Technology	2010	60	
3	Academy of Management Studies, Bhubaneswar	1997	120	
4	Ajay Binay Institute of Technology, Cuttack	2007	60	
5	Apex Institute of Technology and Management, Pahal	2009	60	
6	Astha School of Management, Bhubaneswar	2008	60	
7	Balasore College of Engineering and Technology, Balasore	2001	60	
8	Bhubaneswar Institute of Management & Information Technolgy, Bhubaneswar	1996	120	
9	Bhadrak Institute of Engineering & Technology, Bhadrak	2002	60	
10	Barabati Institute of Management Studies, Cuttack	2009	60	
11	Biju Patnaik Institute of Information Technology & Management, Bhubaneswar	1999	120	
12	Bhubaneswar Engineering College		60	
13	BRM Institute of Management & Information Technology, Bhubaneswar	2003	120	
14	Capital Institute of Mangement and Science (CIMS)	2010	60	
15	Centre for Management Studies, Bhubaneswar	2002	60	
16	Centurian Institute of Technology, (CUTM) Khurda	2008	60	
17	College of Engineering, Bhubaneswar, Bhubaneswar	2007	60	
18	C.V. Raman College of Engineering, Bhubaneswar	2007	60	
19	Dr. Ambedkar Memorial Institute of Information Technology, Rourkela	2001	60	
20	Dhaneswar Rath Institute of Engineering and Management, Cuttack	2005	120	
21	Gandhi Institute for Technological Advancement, Bhubaneswar	2009	60	
22	Gandhi Institute for Technology, Bhubaneswar	2008	60	
23	Gandhi Institute of Management Studies, Gunupur	2002	120	
24	Gayatri College of Management, Sambalpur	2009	60	

SI.No.	Institute	Commen- cement of the course since	Seats
25	Gayatri Institute of Computer & Management Studies, Gunupur	_	60
26	Global Institute of Management, Bhubaneswar	1997	120
27	Gurukul Instiitute of Technology, Janla	2009	60
28	Hi-Tech Institute of Technology, Khurda	2009	60
29	Institute of Advanced Computer & Research, Rayagada	2007	60
30	Indus College of Engg., Jatni, Khurda	2008	60
31	IIPM School of Management, Kansbahal	2007	60
32	Institute of Professional Studies and Research, Cuttack	1993	120
33	Kalam Institute of Technology, Berhampur	2009	60
34	Kushagra Institute of Information and Management, Cuttack	2008	60
35	Konark Institute of Science & Technology, Jatni, Khurda	2008	60
36	Koustuva Institute of Technology, Bhubaneswar	2008	60
37	Koustuva Institute of Self Domain, Bhubaneswar	2007	60
38	Mahavir Institute of Engineering and Technology, Bhubaneswar	2008	60
39	Modern Engineering & Management Studies, Balasore	2009	60
40	Modern Institute of Technology & Management, Khurda	2009	60
41	NIIS Institute of Business Administaration, Bhubaneswar	2008	60
42	NIIST International Institute of Management, Bhubaneswar	2009	60
43	National Institute of Science and Technology, Beharmpur	2007	60
44	NM Institute of Engineering & Technology, Bhubaneswar	2007	60
45	Post Graduate Centre for Management Studies, SMIT, Berahampur	1981	60
46	Purushottam Institute of Engineering & Technology, Kansbahal	2008	60
47	P.J. College of Management & Technology, Bhubaneswar	2007	60
48	Regional College of Management, Bhubaneswar	1995	180
49	Rajdhani College of Engineering andManagement, Bhubaneswar	1999	120

SI.No.	Institute	Commen- cement of the course since	Seats
50	Rajdhani Engineering College, Bhubaneswar	2008	60
51	Rourkela Institute of Technology, Kalunga	1984	60
52	Rourkela Institute of Management Studies, Rourkela	1984	180
53	RJ School of Management, Balasore	2008	60
54	Saraswat Institute of management , Kerenda, Khurda	2010	60
55	Srusti Academy of Management, Bhubaneswar	2003	120
56	Suddhananda School of Management & Computer Science, Phulnakhara	2009	60
57	Trident Academy of Creative Technology, Bhubaneswar	2009	60
58	Trident Academy of Technology, Bhubaneswar	2007	60
59	The Techno School, Bhubaneswar	2007	60
60	United School of Business Management, Bhubaneswar	2007	120
61	Vignan Institute of Technology & Management, Berhampur	2009	60

#### TABLE- VII B. ARCH. COLLEGES

SI.No.	Name of the Institute	Commen- cement of the course since	Seats
1	College of Engineering and Technology, Bhubaneswar	1982	40
2	Piloo Mody College of Architecture, ABIT, Cuttack	1993	180

The list of colleges / Institute offering for PGDM/ PGCM and PGDM (Excutive) will be given later in the OJEE - 2011 website.

#### 6. INSTRUCTIONS FOR COMPLETING JEE APPLICATION FORM.

Notes:

- (a) The applicant has to note down the six-digit application number for future reference. Applicant has to read the instructions carefully before filling the application form. Please refer to the sample filled in application form provided on the last two pages.
- (b) The applicant has to write first in capital letters the required information in rectangular boxes above the circles (wherever provided) and should darken the appropriate circle underneath each letter. What the candidate writes in these boxes is only for his/her guidance and for verification that he/she should darkening the correct circle.

- (c) A machine will process the top portion of the application form. The machine picks up only dark marks. Therefore, darken the circles carefully using HB pencil or blue / black ball pen only. Please see the illustration on the application form to learn how to darken the circles.
- (d) If the applicant wishes to change a marking, erase the darkened circle completely and then darken the appropriate circle. This is possible if the applicant used pencil. Otherwise, he/she can use white correction fluid for covering wrongly darkened circle.
- (e) The applicant should not scribble, smudge, cut, tear, or wrinkle the application form. The applicant should not put any stray marks anywhere on the application form.
- (f) The applicant should not write or mark on the Barcodes.
- (g) Photograph, signature and address are to be scanned by another machine that recognize only good quality images, and from the specified areas of the form. Therefore the applicant has to paste a good black and white photograph taken not more than two months earlier, and write your address and sign in black / blue ball pen only.
- (h) Please note that the applicant's name, parents/ guardian's name, and date of birth should exactly be the same as in mentioned in the High school or your first Board/ Pre-University examination certificate. Any departure, whenever discovered, may lead to cancellation of the applicant's candidature.
- The candidate's application form must be complete in all aspects. Incomplete application or application filled in a language other than English will be summarily rejected without any notice.
- (j) Options filled by the candidate in the application form can not be changed at a later stage under any circumstance.
- (k) It is suggested that the candidate should make a photocopy of the application form before filling and use that first for practice.

#### 6.1 Name of the Candidate: (Item - 1)

The applicant has to write his/her name in **CAPITAL LETTERS** as mentioned in his/her original certificate of the High School or equivalent examination in **Black/Blue ball pen.** He/she has to write a single letter in each box. Within any one word of the applicant name, he/she should not leave any blank box. Leave one and only one blank box between any two words of the name. If his/her name has several initials leave one blank after each of them. If it requires more than 35 boxes abbreviate the middle name (s). Darken the appropriate circle under each letter of the name.

#### 6.2 Category : (Item - 2)

Refer Clause No. 2 of this brochure for ascertaining the category to which you belong. (S-Orissa State, NRI-Non-Resident Indians, ZZ-Outside State, OL-Category)

#### 6.3 Reservation : (Item - 3)

Category	Code
General	GE
Scheduled Caste	SC
Scheduled Tribe	ST
Physically Challenged	FC
Ex-Serviceman	ES
Women	WO
Children of Green Card Holder	GC

Candidates belonging to S-Category (eligible to claim reservation as per Clause 2.1) and seeking admission under reservation in any of the followings are to darken the appropriate circles (**multiple choice may be given**).

#### 6.4 Nationality : (Item - 4) Darken the appropriate circle.

#### 6.5. Gender : (Item - 5)

Darken the appropriate circle.

#### 6.6. Course : (Item - 6)

Enter the appropriate code in the boxes provided at the top and darken the corresponding circles below them against the course code (given below) that you want to appear. (e.g Engineering, Architecture, Medical, MCA,MBA, PGDM, PGCM, Lateral entry in a particular discipline or possible combinations). Candidates are required to opt for only one course code.

For example if you are appearing for Engineering only darken the circle 01. If you are appearing for both the Engineering and Medical, darken circle 05. **Examination time table will not permit other combinations of courses.** 

As per eligibility criteria, Diploma holders are required to apply either for First Year admission or Second Year admission but not for both. If two applications are received from one Diploma holder then both will be rejected.

Qualifying Exam.	Course	Course Code
	Engineering only	01
	Medical only	02
	Pharmacy only	03
	Architecture only	04
	Engineering and Medical	05
10+2	Engineering and Pharmacy	06
	Engineering and Architecture	07
	Medical and Pharmacy	08
	Architecture and Pharmacy	09
	Engineering and Medical and Pharmacy	10
	Engineering, Pharmacy and Architecture	11
	Entrance Test for MBA, PGDM, PGCM and PGDM(Executive).	31
Bachelor	MCA	32
Degree	Entrance Test for MBA, PGDM, PGCM and PGDM(Executive) and MCA	33

#### For Admission to First Year Programme

For Admission to Second Year Programme (Under Lateral Entry)

Qualifying Exam.	Course	Course Code
	Applied Electronics & Instrumentation	51
Diploma (more than 50% marks)	Automobile Engineering	52
	Chemical Engineering	53
	Civil Engineering / Rural Technology	54
	Computer Application & Programming	55

Qualifying Exam.	Course	Course Code
	Computer Science and Engineering	56
	Electrical Engineering	58
	Electronics and Telecommunication Engg	59
	Information Technology	60
	Mechanical Engg. / Tool and Die Making	61
Diploma (more than	Metallurgical Engineering	62
50% marks)	Mining Engineering	63
	Pharmacy	64
	Textile Engineering	65
	Drilling	67
	BioTechnology	68
	Others	69
B.Sc. / +3 Sc. (Mathematics as a subject in +2 Sc)	Engineering	75

#### 6.7. Mother Tongue : (Item-7)

Assamese	01	Oriya	10
Bengali	02	Punjabi	11
English	03	Sanskrit	12
Gujarati	04	Sindhi	13
Hindi	05	Tamil	14
Kannada	06	Telugu	15
Kashmiri	07	Urdu	16
Malayalam	08	Others	17
Marathi	09		

#### 6.8 Date of Birth : (Item - 8)

Enter the date, month and year of your birth as per the English calendar and as recorded in your School/Board/Pre-University examination certificate. Use numerals 01 to 31 for DATE, abbreviations JAN, FEB etc. for MONTH, and the last two digits of the YEAR of birth. For example, if born on 23rd JANUARY 1988 the date should be entered as follows : 23 JAN 88. Darken the appropriate circle in each column.

#### 6.9 Place of Examination Centres : (Item - 9)

Table – VIII gives a list of the numerical codes of the places where centers for the JEE-2011 will be located. Select three different places in order of your preference. Enter the appropriate codes in the boxes provided at the top and darken the corresponding circles below them. The first preference must be entered under column-I and the second and the third preferences under column-II & III respectively.

A JEE centre may be cancelled owing to poor response, operational difficulties or any other reason. Candidates may not necessarily be allotted a particular place as JEE centre of their choice.

TABLE- VIII						
List of JEE-2011 Centres with Centre Code						

Place of Centre Code Place of Centre		Place of Centre	Code
Angul	11	Jharsuguda	26
Balasore	12	Kandhamal	27

Place of Centre	Code	Place of Centre	Code
Bargarh	13	Kendrapara	28
Baripada	14	Keonjhar	29
Bhawanipatna	15	Koraput	30
Berhampur	16	Malkangiri	31
Bhadrak	17	Nabarangapur	32
Bhubaneswar	18	Nayagarh	33
Bolangir	19	Paralakhemudi	34
Burla	20	Phulbani	35
Cuttack	21	Puri	36
Dhenkanal	22	Rayagada	37
Jagatsinghpur	23	Rourkela	38
Jajpur	24	Sambalpur	39
Jeypore	25	Sarang	40
		Sundergarh	41

**Outside the State** 

Ahmedabad	51	Mumbai	59
Bengalooru	52	New Delhi	60
Chennai	53	Raipur	61
Guwahati	54	Patna	62
Hyderabad	55	Ranchi	63
Jamshedpur	56	Surat	64
Kharagpur	57	Vizag	65
Kolkata	58		

#### 6.10. Year of Qualifying Examination: (Item - 10) (For Engineering / Medical / Pharmacy / Architecture)

- (i) Those who have already passed 10+2 or an equivalent qualifying examination should indicate the year of passing and darken the appropriate circles.
- MCA / MBA / PGDM / PGCM/ PGDM (Executive) / MTech / MPharma : Those who have already passed Bachelors Degree or an equivalent qualifying examination should indicate the year of passing and darken the appropriate circle.
- Lateral Entry : Those who have already passed Diploma or B.Sc. or +3 Sc. examination should indicate the year of passing and darken the appropriate circle.
- (iv) Those who are appearing for their qualifying examination in 2011 should darken the circles corresponding to 2011.

#### 6.11 Percentage of Marks : (Item - 11)

- (i) Write the actual percentage of aggregate marks obtained in the 10<sup>th</sup> Class / Equivalent examination under column-I.
- (ii) Write the actual percentage of aggregate marks obtained in the qualifying examination under column II if the results are available. Otherwise leave it blank. Enter only integer part of the percentage of marks and ignore the decimal point. For example 76.15, 76.56 or 76.90 be taken as 76 only. Darken the appropriate circles against each entry.

#### 6.12 Photograph : (Item - 12)

Paste (do not staple) a recent good quality **black and white** photograph of size 3 cm x 4 cm taken not more than two months earlier. It is expected that the candidate will have the same appearance at the time of examination and counselling as in this photograph. Incase your appearance changes, you are required to bring two new photographs at the time

of examination. Do not sign on the photograph and do not get it attested.

**NOTE :** Photograph should not be larger than the space provided in the box for pasting it. Keep four more copies of the same photograph, to be required at the time of counselling.

#### 6.13 Complete Mailing Address : (Item - 13)

Write the complete postal address to which any communication is to be sent . The address must include your name, C/o name if required, and other details including the PINCODE for the mail to reach you. Indicate phone number, if any, with STD code. Please note that this block will be machine scanned and therefore, it should be written very clearly in **black / blue ball pen** only (not in pencil). If you make any mistake, cover the whole box with an exact sized white paper slip and write your address on it. You may also paste a typed address slip inside the box. Your address must not overflow this box.

#### 6.14 Signature : (Item - 14)

Put your usual signature in **black / blue ball pen** within the box provided. Your signature must not overflow or touch the border of the box provided. Your signature establishes your identity. **Hence, do not merely write your name in capital letters. This may lead to rejection of your application.** 

6.15 Left Hand Impression : (Item -15)

Put your Left Hand Thumb Impression in the specified box.

- 6.16 Board of Qualifying Examination : (Item 16) Darken the appropriate circle.
- 6.17 PINCODE of Address for Communication : (Item 17) Write PINCODE in the space provided. Darken the appropriate circle against each digit.
- 6.18 Phone Number including STD Code : (Item 18) Write your phone number, if there is any, with STD code, on which you can be contacted. Darken the appropriate circles below the phone number.
- 6.19 Mobile phone Number : (Item 19) Write your mobile number, if there is any, on which you can be contacted or a message can be left for you. Darken the appropriate circles below the phone number.

#### 6.20 Name of one Parent / Gurdian : (Item - 20)

Write the name of one of your parent or guardian exactly as in your 10<sup>th</sup> class or equivalent certificate, if given. Write the name of your father if no name is given in the 10<sup>th</sup> certificate. Write a single letter in a box. Within any word of the name, do not leave any blank box. Leave one and only one blank box between any two words of the name. Darken the appropriate circle under each letter of the name. If the name has several initials, leave one blank after each of them.

### 6.21 Relationship : (Item - 21)

Indicate your relationship with the parent/ guardian named in item 6.19 by darkening the appropriate circle.

#### 6.22 Candidate's Residence district (Item - 22) Candidate's belonging to S-category (Orissa State candidates as per Clause no. 2.1(a)) should mention the code against the name of the district where he/she studied +2 course, refer Table - IX.

District's Name	Code	District's Name	Code		
Angul	01	Kandhamal	16		
Balasore	02	Kendrapara	17		
Bargarh	03	Keonjhar	18		
Bhadrak	04	Khurda	19		

TABLE-IX

District's Name	Code	District's Name	Code
Bolangir	05	Koraput	20
Boudh	06	Malkanagiri	21
Cuttack	07	Mayurbhanj	22
Deogarh	08	Nabarangpur	23
Dhenkanal	09	Nayagarh	24
Gajapati	10	Nuapada	25
Ganjam	11	Puri	26
Jagatsingpur	12	Raygada	27
Jajpur	13	Sambalpur	28
Jharsuguda	14	Sonepur	29
Kalahandi	15	Sundergarh	30

- **6.23.** Serial Number of 10<sup>th</sup> Class Certificate (Item 23) Enter the serial number of your 10<sup>th</sup> Class Certificate in the boxes provided at the top (only digits), Darken the corresponding circles below them. If there is any alphabet before or after the serial number omit the same.
- 6.24. Parent's / Guardian's Total Annual Income : (Item 24) Darken the appropriate circle.
- 6.25. Parents' Educational Background : (Item 25) Darken the appropriate circle.
- 6.26. Place of Residence : (Item 26) Darken the appropriate circle.
- 6.27. Declaration by the Candidate : (Item 27)

The candidate must sign the declaration in **black / blue ball pen.** The place and date should also be entered. Two signatures; the one below the declaration and the other in the box below your photograph, should be identical. Applications without signatures or with different signatures at the two places will be treated as incomplete and rejected. The declaration by the candidate must be counter signed by Parent/ Guardian. Write the name of Parent / Guardian in the space provided.

#### 6.28. Enclosures with Application Form :

You have to enclose the Acknowledgement Card duly filled in. Those who submit the application in the notified Bank should collect the Acknowledgement Card duly signed and stamped by the authorised person of the concerned bank. Any copies of certificates/marksheets/ appendix forms **SHOULD NOT** be enclosed with the application form.

IABLE-X				
COLUMN-I	COLUMN-II			
If you have Diploma in Engineering in the discipline:	You are eligible to be admitted to			
Civil Engg./Rural Technology / Biomedical Engg.	Civil Engineering /Environmental Engg			
Mechanical Engg. / Tool & Die Making	Mechanical Engg./Manufacturing Sc. and Engineering / Bio-Medical Engg.			
Automobile Engineering	Mechanical Engg./Automobile Engg./ Bio-Medical Engg.			
Electrical Engineering.	Electrical Engg./ Electrical & Electronics Engg / Bio-Medical Engg.			

COLUMN-I	COLUMN-II
Electronics & Telecommunication Engg./ Applied Electronics Instrumentation.	Applied Electronics and Instrumentation/Instrumentation and Electronics Engg. / Electronics and & Communication Engg. / Bio-Medical Engg./Electronics and Telecommunication
Metallurgical Engineering	Metallurgical Engineering / Mineral Engg. /Bio-Medical Engg.
Mining Engineering	Mining Engineering / Bio-Medical Engg.
Chemical Engineering / Food Technology / Food Processing.	Chemical Engineering / Biotechnology / Bio-Medical Engg.
Chemical Engineering	Chemical Engineering / Environmental Engg /Biotechnology / Bio-Medical Engg.
Textile Technology	Textile Technology / Bio-medical Engg.
Computer Science & Engg. / Computer Application Programming	Computer Science & Engineering / Bio-Medical Engg.
Information Technology	Information Technology / Bio-Medical Engg.
Drilling Technology.	Mining or mechanical Engineering / Bio-medical Engg.
Mechatronics	Mechanical / Bio-medical Engg / Applied Electronics and Instrumentation/Instrumentation and Electronics Engg. / Electronics and Communication Engg.
Biotechnology	Biotechnology / Bio-Medical Engg.
Garment Design & Fashion Technology	Fashion Technology / Textile Technology/Bio-medical Engg.
Architect Assistant	Architect
Pharmacy	Pharmacy / Bio-medical Engineering.

#### ADMIT CARDS :

a) Admit Cards will be despatched around 15 days before the date of examination. If an applicant does not receive the Admit Card for the examination by April 25, 2011 (for MCA, MBA, PGDM, PGCM, PGDM Exec.) and by April 30, 2011 (for BTech, MBBS, Pharmacy, Lateral Entry for Diploma/ and B.Sc), If a candidate does not receive or lose his/her admit card, the candidate may down load the Admit card from JEE-2011 website which will be endorsed by Centre Superintendent, These cases will be verified at a later stage for authentication. No complaints will be entertained for non receipt of admit cards after Joint Entrance Examination is over.

#### 7. Rules for Entrance Examination:

- i) The joint Entrance Examination will be held as per the Scheduled date and time mentioned.
- ii) The medium of examination is English.
- iii) The examination hall shall be opened to the candidates half an hour before the examination commences. No candidates will be allowed to enter in the examination hall without a valid original/down loaded admit card.
- iv) Candidates are required to take their respective seats at least 15 minutes before the commencement of the examination, strictly according to the sitting chart notified earlier by the centre Superintendent.

- In no case a candidate is allowed to enter the v) examination hall after the examination starts.
- vi) Attendance will be taken by the invigilators on the attendance Roll sheets provided with full signature of the candidates against their roll Numbers. During Examination the candidates have to enter their Application Number, answer sheet number, and question series number against their roll number in the roll sheet provided.
- vii) No candidate will be allowed to leave the hall without surrendering his/her question booklet and answer sheet until the examination is over. Ordinarily no candidate shall allowed to leave the hall temporarily during the examination.
- Candidates suffering from any disease which renders their viii) presence in the examination hall undesirable in the interest of other candidates will not ordinarily be allowed to enter the examination hall. Candidates are not allowed to have substitute writer.
- ix) Candidates should bring their own black /blue ball pen, HB pencils and eraser for writing and blackening the circle. Books, printed papers(other than their Admit Cards), Manuscripts or electronic gadgets such as mobile phones, cell phones and electronic diary, calculators etc, must not be taken into the examination hall. In case these prohibited materials are found the candidate be debarred from appearing the examination and asked to leave the Hall.
- x) The candidates are advised to inspect the question booklet and answer sheet about its completeness before attempting to answer. In case page/ pages are found missing, torn or not in order, the candidates should immediately report to the invigilator and get a fresh question answer book issued after surrendering the defective one.
- Candidates are not permitted to talk to each other in the xi) examination hall. No one should receive any help from or assist another in any manner. Malpractice of any form detected during or after the examination would entail not only cancellation of candidature but also more severe punishment as deemed fit by the JEE committee.
- A candidate should write his/her roll number as assigned in xii) his/her admit card and sign in the place provided in the question booklet and answer sheet. He/ she should on no account write anywhere in the answer sheet his/her own name, roll number or anything else that is not strictly connected with the answers to the question given. Writing of any such thing or false roll number is serious offence. The answer sheet without the candidate's roll number clearly written in space provided will not be examined.
- xiii) A candidate wishing to say any thing should standup in his/ her seat and remain standing until the invigilator attends to him/her. He/she should on no account leave the seat or make any noise to draw the invigilator's attention.
- In any other matter not provided in these rules, the Centre xiv) Superintendent is empowered to take necessary decisions.
- 7.1 **Examination Procedure / Valuation methodology :** There will be multiple choice type questions. The number of questions will be sixty (60) per each hour of examination. Each question shall have four answers (including one or more correct answer(s)) and the examinee shall have to blacken only the appropriate circle (which he/she considers most correct) in HB pencil or black / blue ball point. Each correct answer shall fetch four marks whereas each incorrect answer will lead to deduction of one mark. Each unattempted question will fetch zero. If more than one circles are darkened for one question, it will be treated as an incorrect answer and one mark will be deducted.

The Answer Sheet consists of two pages, the top one is the

Original answer sheet whereas the annexed one is the carbon copy. The part – A of the original sheet contains the details such as Roll No., Question Booklet number, Name and signature of the candidate, Name of the centre, Signature of the Invigilator.

The Part – B of the answer sheet is meant for recording the answers by darkening the appropriate circle(s) by the candidate

Whatever is the impression of written/marked on the main sheet, will be reproduced in the second sheet.

This will be detached by the invigilator and returned to the candidates at the end of the examination.

#### 7.2 **Retotalling and Review:**

The JEE answer sheets are all machine evaluated with adequate care that machine evaluation is made error free. The JEE is held only for preparing a relative merit list. There is no award of class. Mark sheets are not issued in general. A candidate, may however request for retotalling / readdition with a fee of Rs.500/- (Rupees five hundred only) in the shape of demand draft in favour of OJEE-2011 drawn on any nationalised bank in Bhubaneswar should reach the JEE office within seven calendar days of the publication of JEE - 11 result. Re evaluation of answer script is not permissible. No question papers can be made available, since they are strictly confidential. A committee will manually verify the results and its decision will be final and binding on the applicant. No photocopy of the answer sheet will be made available to the candidate.

#### 7.3 Wrong / Correct ways of Marking :

Each question is followed by answers which have numbers A B C and D. Select the most appropriate answer. Then by using HB pencil or black / blue ball pen darken the circle bearing the correct answer in the answer sheet against the corresponding number of the question. The wrong & correct method of answering is illustrated below.

#### Wrong & Correct Methods of showing your answer

-				
WRONG METHOD	A	Ø	Ô	D
WRONG METHOD	A	B	C	Ø
WRONG METHOD		B	C	D
WRONG METHOD	A	۲	C	D
WRONG METHOD		B		D
CORRECT METHOD		B	C	D
CORRECT METHOD	A		C	D
CORRECT METHOD	A	B		D
CORRECT METHOD	A	B	C	

7.4 Issue of Marks

Candidates desirous of knowing subject-wise marks secured by them should make a written request enclosing a demand draft of Rs.200/- (Rupees two hundred only) in favour of "OJEE-2011" drawn on any Nationalised Bank at Bhubaneswar, so as to reach the JEE office within 10 days of the publication of result.

#### 7.5 Sample Questions

- If we dip capillary tubes of different radii r in water and 1. water rises to different height h in them, then,
  - h/2 = constant(B) h/r = constant (A) (C)
    - hr = constant (D)  $hr^2 = constant$
  - The drug taxol is obtained from the bark of
    - Pacific Yew (A)
- Eucalyptus (B) (D)
- (C) Cinnamon
- Cinchona

2.

3. The number of different types of F-S-F bond angles in SF4 are

(A) (C)	two three		(B) (D)	one four
The i	ntegral	$\int_{0}^{2} (1-x) dx \text{ equals :}$		
(A)	1		(B)	0

#### 8 SYLLABI

4.

#### 8.1 (ENGG/MEDICAL/BDS/ARCHITECTURE/PHARMACY)

The Syllabi given hereunder for OJEE-2011 are only illustrative and not exhaustive. The syllabi are in line with courses of studies in Science stream for the Higher Secondary Examination 2011 of CHSE, Orissa. Since JEE is conducted with a view to preparing merit lists for admission the decision of the JEE Committee as regards the scope of the syllabus is FINAL.

#### 8.1.1 PHYSICS

**Measurements and Motion :** Concept of Mass, Length and Time, SI Units. Conversion of MKS system of units to SI units. Dimension and Dimensional equations of mechanical quantities, Vector addition, Subtraction, scalar and Vector products. Lami's Theorem. Equations of linear motion for uniformly accelerated bodies (by calculus method). Newton's laws of motion, conservation of energy and momentum, collision, work, energy, power, sliding and rolling friction. Motion in circular orbits, centripetal force. Banking of tracks, Kepler's laws (Statements only). Newton's laws of gravitation. Earth satellites-orbital and escape velocities. Moment of inertia-definition and expression for rod, ring and circular disc. Angular momentum and conservation of angular momentum, Projectile motion.

Kinetic theory of gases and thermodynamics: Basic assumptions, derivation of expressions for pressure, law of equipartition of energy, mean energy, gas equation, specific heats of gases, relation between Cp and Cv.

**Work and heat :** Concept of temperature. Definition of "J". First law of thermodynamics, reversible, isothermal and adiabatic processes. Carnot cycle/Carnot engine. Second law of thermodynamics, absolute scale of temperature, law of radiation. Newton's law of cooling. Thermal energy, specific heat, latent heat, thermal conductivity and its determination by Searle's method.

Characteristics of Materials: Elastic and plastic behaviors of solids, elastic limit Young's modulus, Shear and Bulk modulus, Poissions ratio.

**Liquids :** Intermolecular force, cohesion, adhesion, surface and surface energy, determination of surface tension by capillary rise method.

Flow of liquids : Streamlined and turbulent flow. Atmospheric Pressure, Buoyancy and Archimedes Principle of Flotation. Bernoulli's equation and its application. Viscosity- coefficient of viscosity, Stokes law.

**Electricity**: Electric field and potential at a point and capacitor, Kirchhoff's laws and their application, wheatstone bridge. Joule's law of heat. Faraday's law of electrolysis. Biot–Savert's law, Field due to circular coil at its centre. Moving coil galvanometer (dead beat only). Force on a moving charge in magnetic fields. Lenz's law. Faraday's laws of electromagnetic induction rotating coil in a magnetic field. Alternating current, self and mutual induction, phase relation between voltage and current in a pure resistance, inductance and capacitance, dynamo, motor, transformer, elementary

idea on electromagnetic waves. Capacitance, dielectric constant and its effect on capacitance. Permeability susceptibility, diamagnetic, paramagnetic and ferromagnetic substance.

**Wave motion :** Simple harmonic motion, wave propagation, characteristics of wave motion, longitudinal and transverse waves, superposition of waves, stationary waves. Beats, open and closed organ pipes, velocity of sound in air-effect of pressure, temperature and humidity on it. Doppler effect, laws of transverse vibration of string (Statement only).

**Optics :** Reflection and refraction at curved surfaces. Spherical mirror and thin lens formula and refraction through prism. Total internal reflection, Dispersion. Huygen's principle, reflection and refraction by plane surface, Young's double slit experiment.

**Eectronic Devices :** Energy and band (descriptive idea only), metals, insulator and semi conductors, intrinsic P- type and N-type semiconductors. Thermionic emission, vacuum triode construction and characteristics, PN junction, PNP and NPN transistor, PN Junction as a rectifier, vacuum triode and transistor as amplifiers.

**Relativity and Nuclear Physics :** Postulates of special theory of relativity, variation of mass (Statement only), mass energy relation (Statement only).

Atomic nucleus, nuclear forces, nuclear mass, binding energy, mass defect, artificial radio activity, radio isotopes and their uses. Nuclear fission, energy released, chain reaction, controlled chain reaction, fusion, energy generation in the sun, radiation hazards.

#### 8.1.2 CHEMISTRY

General behaviour of matter

**Solid State :** Characteristics, Classification, Solubility, Melting points, Crystal structure of simple ionic compounds.

**Liquid state :** Characteristics, Boiling and Freezing points, Viscosity, Surface tension, Osmosis, Raoult's law, Lowering of vapour pressure, Depression of freezing points, Elevation of boiling points.

**Gaseous State :** Gas laws, Kinetic model of gases, ideal gas equation, Vanderwaal's equation, Average root mean square and most probable velocities.

Atoms and molecules : Symbols, Valency, Atomic mass, Molecular weight, Avogadro's hypothesis, Mole concept, Determination of equivalent weight of zinc and copper, Atomic mass by Dulong Petit's method and Molecular mass by Victor Mayor's method.

**Structure of atoms and molecules :** Fundamentals particles and their properties, Rutherford and Bohr models of atom, Hydrogen spectrum, Atomic structure, Energy levels, Shell and Sub-shells, s,p and d orbitals, Quantum numbers, Pauli's exclusion principle, Aufbau-principle, Hund's rule, Electronic configuration of atoms.

**Chemical bonds :** Ionic, Covalent, Coordinate and Hydrogen bond, Hybridisation- SP<sup>3</sup>, SP<sup>2</sup>, and SP, Shapes of molecules, Molecular Orbital Theory. periodic classification : Periodic table and periodic laws, s, p, d and f block elements, Periodicity in properties such as atomic and ionic radii, Dalton's atomic theory, Laws of chemical combination, Ionisation energy, Electro negativity and Oxidation state.

#### Chemical energetics, equilibrium and kinetics:

**Energetics**: Internal energy, Enthalpy, Heat of reaction, Bond energy, Hess's law, Idea on enthalpy, entropy and free energy.

**Equilibria :** Reversible reaction, Laws of mass action, Equilibrium constant  $K_{o}$ ,  $K_{c}$  and their relation. Its application

to ammonia synthesis and dissociation of HI, Decomposition and thermal dissociation, Solubility product, Common ion effect, Ionic product of water, pH Hydrolysis of salt, Buffer solution. Theory of acid and base.

**Kinetics :** Rate of reaction, Factors affecting the rate, Rate constant, Order and Molecularity of a reaction, Simple zero and First order reaction, Half life period, Arrehnious equation and Activation Energy.

**Types of chemical reaction :** Neutralisation and oxidation– Reduction reaction, Equivalent weight, Normality, Molarity and Molality, Oxidation number, Balancing chemical reactions, Ion electron reactions involving  $KMnO_4$ ,  $K_2Cr_2O_7$ ,  $Na_2S_2O_3$ , oxalate etc.

**Non-metals :** Group study, Preparation, Properties and uses of elements of compounds of hydrogen (ortho and para hydrogen, isotopes of hydrogen, D2O and  $H_2O_2$ ). Allotropes of carbon, Silicones, Silicon carbide, Nitrogen family (NH<sub>3</sub> and HNO<sub>3</sub>). Oxygen and sulphur family (O<sub>2</sub>,  $H_2S$ , SO<sub>2</sub>,  $H_2SO_4$ , contact process), Halogens, Hydrogen halides and Interhalogen compounds,Zero group elements (properties & uses).

**Electro chemistry :** Electrolysis, Electrical Conductivity, Faraday's laws, Kohlaurash law, Galvanic cell, Cell reaction, Nernst equation, Standard electrode potential, Electro chemical series e.m.f. of simple cells.

**Nuclear chemistry :** Radio activity, Group displacement law, Half-life period, Carbon dating, Nuclear Fission and Fusion.

**Metals and metallurgy :** Occurrence of metal, Metallurgy ores, flux, slag calcinations, roasting, smelting (by reduction of oxides) and refining. General trends in the characteristics, principles of extraction of Na, Mg, Ca, Al, Cu and Fe and their oxides, hydroxides, chlorides, nitrates and sulphates.

**Organic chemistry:** Introduction, Functional Groups, Nomenclature, Isomerism, Polymerisation, sp<sup>3</sup>, sp<sup>2</sup>, sp hybridization, Ideas on nucleophile and electrophile, Preparation and properties of simple alkanes, alkenes, alkynes and monohalogen derivaties. Preparation and properties of aliphatic nitro paraffins, types of aliphatic amines, preparation and properties of simple primary amines.

General methods of preparation, properties and uses of alcohols, aldehydes, ketones, carboxylic acids, esters, acid, chlorides and amides.

**Aromatic compounds :** Aromaticity, Aromatic substitution, Addition and Oxidation reactions, phenol, Reimer-Tiemann reaction, benzaldehyde (by Etard's reaction), Cannizarro's reaction, benzoic acid.

**Bio-chemistry :** Biological importance of organic compounds such as carbohydrates, amino acids, proteins, lipids and nucleic acids (only by metabolic process).

**Industrial chemistry:** General idea on fertilizers, pesticides, polymers (Nylon, Terylene, Neoprene, Buna-S PVC, Teflon Bakelite) and medicine-analgesic, antipyretic, antibiotic and antiseptic (structure and preparation not required).

#### 8.1.3 MATHEMATICS

**Logic** : Statement, Negation, Implication, Converse, Contraposititves, Conjuction, Disjunction, Truth Table.

Algebra of sets : Set operation, Union, Intersection, Difference, Symmetric difference, Complement, Venn diagram, Cartesian product of sets, Relation and functions, Composite function, Inverse of a function, Equivalence relation, Kinds of function.

Number system : Real numbers (algebraic and order properties, rational and irrational numbers), Complex

numbers, Algebra of complex numbers, Conjugate and square root of a complex number, Cube roots of unity, De Moivre's theorem with simple application. Permutations and combinations-simple applications, Mathematical induction, Binomial theorem.

**Determinants and matrices :** Determinants of third order, Minors and cofactors, Properties of determinants, Matrices upto third order, Types of matrices, algebra of matrix, adjoint and inverse of matrix, Application of determinants and matrices to the solution of linear equations (in three unknowns).

**Trigonometry :** Compound angles, Multiple and Submultiple angles, Solution of trigonometric equations, Properties of triangles, Inverse circular function, Sum and product of sine and cosine functions.

Co-ordinate geometry of two dimensions : Straight lines, Pairs of straight lines, Circles, Equations of tangents and normals to a circle, Equations of parabola, Ellipse and hyperbola in simple forms and their tangents (focus, directrix, eccentricity and latus rectum in all cases).

**Coordinate geometry of three dimensions :** Distance and Division formulae, Direction cosines and direction ratios, Projection, Angle between two planes, Angle between a line and a plane. Distance of a point from a line and a plane. Equation of a sphere – general equation).

**Vectors :** Fundamentals, Dot and cross product of two vectors, Scalar triple product, Simple applications (to geometry, work and moment).

**Differential calculus:** Concept of limit, Continuity and derivative of standard functions, Successive differentiation (simple cases), Leibnitz theorem, Partial differentiation (simple cases), Derivative as a rate measure, Maxima and Minima, Indeterminate forms, Geometrical application such as tangent and normals to plane curves.

**Integral calculus:** Standard methods of integration (substitution, by parts, by partial fraction, etc), Definite integrals and properties of definite integrals. Areas under plane curves.

Differential equations (only simple cases)

- (i) dy/dx = f(x)
- (ii) dy/dx = f(x) .g(y)
- (iii)  $d^2y/dx^2 = f(x)$  and applications to motions in a straight line.

**Probability and statistics:** Average (mean, median and mode). Dispersion (standard deviation and variance), Definition of probability, Mutually exclusive events, Independent events, Addition theorem.

**Computer and computing :** Computer arithmetic, decimal, binary, octal, hexadecimal and their conversion and operation, Simple programmes in BASIC.

#### 8.1.4 BOTANY

**History :** History, Botanical studies, Branches of Botany, Brief classification of plant kingdom. Scope of Botany, Cell Biology, Cell theory.

**Plant cell :** Structure of typical plant cell, Cell wall and Cell membrane, Protoplasm - physical and chemical nature, Cell organelle - structure and functions, nucleus, lysosomes, golgi bodies, plastids, ribosomes, mitochondria, chromosomes, spherosomes, Important compounds of cell, water, amino acids, carbohydrates, fats, nucleotides, nucleic acids.

Cell inclusions, physical and chemical nature and functions of enzymes, Vitamins and hormones, mode of enzyme action, cell cycle. **Complexities of plant life :** Meristematic tissues, permanent, simple and complex tissues, Internal structure of dicot and monocot systems and roots, Internal structure of Isobilateral and Dorsiventral with functions of different tissues, Normal, secondary growth in dicot stems.

**Morphology of angiosperms :** Normal and Modified stems, roots and leaves, Inflorescence, Flower and its parts, floral diagram and floral formula, pollination, fertilization, fruits.

**Taxonomy of flowering plants :** Principle and units of classification (species, genus, family), Knowledge of important families and their economic importance.

**Continuity of plant life :** Genetics (elementary knowledge), Mitosis and Meiosis and their significance, Principle of Mendel's law of inheritance, Monohybrid and Dihybrid ratio, Concept of gene, Elementary idea of gene action, Evolution, evidence, theories and mechanism of evolution, variation and mutation, Role of mutation in agriculture, origin of species.

**Microorganisms and diversities of plant life :** Elementary idea and economic importance of virus, bactria, fungi, algae and lichen, Elementary idea of gryophytes, pterodophytes and gymnosperms.

**Processes in plants :** Absorption and transport of water and minerals, Transpiration, Stomatal mechanism, Life energy and ATP, Respiration and Fermentation, Photosynthesis, Elementary idea of protein synthesis, growth, reproduction, movements (with special reference to geotrposim and phototropism).

**Environmental biology :** Man and his environment, Biotic community, Ecological adaptations (Hydrophytes and Xerophytes).

**Botany and human welfare :** Agricultural crops – Brief description and economic importance of crop plants like Rice, Gram (green gram) Jute, Groundnut, Sugarcane, and Potato.

**Common plant diseases** – control of blight in rice, rot of sugarcane, Forestry, Genetic conservation and Crop improvement.

**Genetic engineering and biotechnology :** Recombinant DNA, Gene library, Transgenic plants, Fermentation, Bakery, Antibiotics, Monochloral antibodies.

#### 8.1.5 ZOOLOGY

Animal world : Definition, Scope and branch of Zoology.

Species concept, bionomial nomenclature, classification, scientific name of some common animals : Fishes-rohu, bhakura, mrigal, Amphibians-frog, toad, Reptiles-houselizard, garden lizard, crocodile, turtle, Snakes-cobra, krait, Birds-fowl. Peacock, pigeon, Mammals-tiger, lion, elephant, cat, dog, cow, rabbit & man.

#### **Diversity of life**

**Kingdom-protasia** : General characters of the phylum, protozoa, Classification - amoeba, entamoeba, paramoecium, euglena, trypanosoma, plasmodium.

**Kingdom–animalia :** Concept of body plan, symmetry, coelom, germ layershomeothermic and poikilothermic animals.

General characters of Non-chordata like - porifera, coelenterata, platy helminth, nematahelminthes, annelida, arthopoda, mollusca, echinodermata & hemichrhordata.

#### Multi Cellularity in Animals :

Animal tissues - Types- epithelial, connective (details about blood and lymph), Muscular & nervous - organs & organ systems.

**Locomotion -** Locomotory organelis in protozoans, hydra, annelid, brief account of joints and muscles in movement of man, modes of nutrition - Nutrition in amoeba.

**Digestive system of man** - Structure and function of alimentary canal associated glands, physiology of digestion and absorption.

**Types of Resipiration** - Structure and function of resipiratory system in man : Resipiratory organs, mechanics of pulmonary resipiration, plunomary exchange of gas, transport of gases, Glycolysis & Kreb's cycle.

**Types of Circulation -** Open circulation, closed circulatory system in man : Structure of Heart, Cardiac cycle, Arteries, Veins, Capilaries, Portal system, Coronary circulation, Blood pressure, Respiratpory pigments, group and coagulation.

**Excretory Reproduction in Man -** Structure and function of kidney.

**Control and coordidnation in Man -** Nervous systemcentral, peripheral and autonomic sense organs, endocrine system.

Types of Reproduction - Asexual, binary & multiple fission, budding.

Sexual reproduction in man - male & female reproductive system, menstrual cycle.

**Genetics -** Chromosomes and heredity : heredity and viriation, mendelian principle, laws of heredity, chromosomes, Interaction of genes, chromosomal variation.

**Evolution -** Origin of life Anatomical, embryological biochemical, palaentological, and biogeographical evidences of evolutions, Darwin's theory of natural selection, Modern synthetic theory.

Environmental Biology - Biosphere and ecosystem.

**Environmental Pollution -** Source, effects and control of air, water and sound pollution.

**Common Human Disease -** Non communicable diseases– Diabates & cardiac diseases. Communicable diseases like, amoebiasis, filariasis, malaria (Mode of inflection- pathogens, prevention and treatment).

**Defence Mechanism of Body -** Cells, Immune system and their function, immune defficiency in AIDS.

Wild life Conservation - Importance of wild life, Causes of extinction, Threatened species - endangered, valunerable and rare species, conservation of wild life.

#### 8.2. SYLLABI FOR LATERAL ENTRY STREAM (DIPLOMA)

The syllabi given here for JEE-2011 (Lateral entry diploma holders in Engineering / Technology) is only illustrative and not exhaustive. Since JEE-2011 is conducted with a view to prepare a relative merit list only for admission, the decision of the JEE-2011 committee as regards to the scope of syllabi is final. This paper is common to all the discipline except Pharmacy.

#### (A) BASIC ELECTRICAL ENGINEERING

**Electrostatics, Electromagnetism and Electrodynamics:** Coulomb's Law, Gauss theorem and its applications in calculating the field intensity, potential gradient due to spherical, cylindrical and plane charges. Calculation of capacitance of spherical, coaxial, cylindrical and parallel plate condensers, dielectrics, energy stored in and electric field.

Circuital Law of magnetism, magnetic field intensity and flux density due to a long straight conductor, solenoid and toroid carrying current. Ferromagnetic material in a magnetic field, permeability B-H curves, cyclic magnetisation and hysteresis idea of magnetic circuit, mmf and reluctance, calculation of simple magnetic circuits, effect of leakage.

Faraday's Law of electrodcmagnetic induction, e.m.f. in a conductor and a coil moving in a magnetic field. Self and mutual inductance series parallel combination, Energy stored in magnetic field.

**D.C. Circuits**: Idea of D. C. Circuits, power and energy in electric circuits, reduction of electric network by series, parallel and star-delta conversion, representation of voltage source and current source, Kirchoff Laws and their application to solve electrical circuits by branch and loop current method and nodal method. Transient phenomena in RL, RC and RLC circuits with D.C. excision.

**A. C. Circuits** : Alternating current voltage, different wave forms, average value, effective value and form factor. Sinusoidal voltage and current, amplitude, frequency and phase, addition and subtraction of A.C. quantities, phasor diagram, complex representation of sinusoidal quantities, reactance, impedance and admittance, simple series and parallel circuits and use of complex algebra in solving them, Power and power factor, active and reactive components, idea of power factor. Introduction to three phase circuits, relation between phase and lien quantities. Star and Delta connection of sources and loads, active and reactive power in 3-phase circuits, single and two wattmeter method of power measurement. Steady circuit equations, solutions of simple coupled circuits containing R, L, C and M.

**Instruments** : Construction and principle of operation of permanent magnet moving coil, moving iron and dynamometer type ammeters and voltmeters, dynamometer type wattmeters.

**Illumination**: Definition and units of luminous flux, luminous intensity, illumination, brightness, luminous efficiency.

**Production of light**: Filament lamps, halogen lamps, sodium and mercury vapour lamps, fluorescent lamps, lighting calculation by inverse Square law and light flux method, coefficient of utilization and maintenance factor.

#### (B) MATHEMATICS

**Ordinary Differential Equations**: Differential equations of first order, Physical applications, Linear differential equations, Homogeneous and non-homogeneous second order linear differential equation with constant co-efficients. Application to free and forced vibration of spring mass systems, method of variation of parameters. Normal form change of dependent and independent variables. Cauchy's Euler's equation

**Series Method**: Properties of power series, solution of ordinary differential equations. Legendre equations. Legendre Polynomials and functions, methods of Frobenius, the Gamma function, the Bessel-Clifford equations, Bassel's equation, non-homogeneous equations.

**Laplace Transforms** : The Laplace transforms (L.T.), L.T. of derivaties and integrals, derivatives and integrals of Laplace transforms, L.T. of periodic functions, Inverse Laplace transforms, Convolution theorem, Application of L. T. to solution of differential equations, special techniques.

**Fourier Series**: Fourier theorem, Fourier expansion, even and odd functions, half range expansion, seems and scale changes, forced oscillation, Miscellaneous expansion techniques.

**Matrices**: Notation and terminology, Solution of simultaneous equations by Gaussian elimination, Rank, Computation of rank by reduction of Rewechelon normal form, Algebra of matrix, inverse determinants, linear dependence and independence, solution of homogeneous and non-homogenous systems. Norms and product, Gram-schemidt Process, Projection matrix, eiegenvalues, eigenvectors, Symmetric and simple matrix, System of linear differential equations the homogenous case.

**Vectors**: Vector algebra, Vector differentiation, Vector operator del, gradient, divergence, curl, integral theorem.

#### (C) ENGINEERING MECHANICS

Statics : System of co-planer forces – Condition for equilibrium

- concept of free body diagrams – Methods of solution of engineering problems, problem with friction – Belt friction and screw jack. Force analysis of plane trusses(Method of joints and method of sections). Analysis of frames (Method of members). First moment of area and centroid – theorem of Papus, Second momentum of areas, Polar moment of inertia. Principle of virtual work for a single particle, rigid bodies, ideal systems and constrained bodies.

**Dynamics** : Kinematics of rigid body – Plane motion, Kinetics of translation and rotating rigid bodies, moment of inertia of bodies.

**D'Alembert's Principle** – Application to a single particle rigid body in translation and rotation, ideal systems. Momentum and impulse, Application to principle of linear momentum to a single particle, rigid bodies and ideal systems, Impact – application of principle of angular momentum to a single particle and rotating rigid bodies, Principle of conservation of momentum.

**Work and energy**: Principle of work and energy for a single particle, rotating rigid body and ideal systems, Principle of conservation of energy.

#### 8.3 SYLLABI FOR LATERAL ENTRY STREAM (B.Sc.)

#### 8.3.1. B.Sc. Paper-I (B. Sc Mathematics)

**Algebra** : Mappings. Equivalence relations and partition. Congruence modulo n relation.

Symmetric. Skew symmetric. Hermitian and skew Hermitian matrices. Elementary operations on matrices. Inverse of a matrix. Linear independence of row and column matrices. Row rank, column rank and rank of a matrix. Equivalence of column and row ranks. Eigenvalues, eigenvectors and the characteristic equation of a matrix. Cayley Hamilton theorem and its use in finding inverse of a matrix. Applications of matrices to a system of linear (both homogenous and nonhomogenous) equations. Theorems on consistency of a system of linear equations.

Definition of a group with examples and simple properties. Subgroups. Generation of groups. Cyclic groups. Coset decomposition. Lagrange's theorem and its consequences. Fermat's and Euler's theorems. Homomorphism and isomorphism. Normal subgroups. Quotient groups. The fundamental theorem of homomorphism. Permutation groups. Even and odd permutations. The alternating groups An. Cayley's theorem. Introduction to rings, subrings, integral domains and fields. Characteristic of a ring.

**Differential Calculus** : Definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibnritz theorem. Maclaurin and Taylor series expansions. Asymptotes. Curvature. Tests for concavity and convexity. Points of inflexion. Multiple points. Tracing of curves in Cartesian and polar coordinates.

**Integral Calculus** : Integration of irrational algebraic functions and trancscendental functions. Reduction formulae. Definite integrals. Quadrature. Rectification. Volumes and surfaces of solids of revolution.

**Ordinary Differential Equations**: Degree and order of a differential equation. Equations of first order and first degree. Equations in which the variables are separable. Homogeneous equations. Linear equations and equations reducible to the linear form. Exact differential equations. First order higher degree equations solvable for x,y,p. Clairaut's form and singular solutions. Geometrical meaning of a differential equation. Orthogonal trajectories. Linear differential equations with constant coefficient. Homogeneous linear ordinary differential equations.

Linear differential equations of second order. Transformation

of the equation by changing the dependent variable / the independent variable. Method of variation of parameters.

Ordinary simultaneous differential equations.

**Vector Analysis :** Scalar and vector product of three vectors. Product of four vectors. Reciprocal Vectors. Vector differentiation. Gradient, divergence and curl . Vector integration. Theorems of Gauss, Green, Stokes and problems based on these.

**Geometry :** General equation of second degree. Tracing of conics. System of conics. Confocal conics. Polar equation of a conic.

The straight line and the plane, sphere, cone, cylinder.

Advanced calculus : Continuity. Sequential continuity. Properties of continuous functions. Uniform continuity. Chain rule of differentiability. Mean value theorems and their geometrical interpretations. Darboux's intermediate value theorem for derivatives. Taylor's theorem with various forms of remainders.

Limit and continuity of functions of two variables. Partial differentiation. Change of variables. Euler's theorem of homogeneous functions. Taylor's theorem for functions of two variables. Jacobians.

Envelopes. Evolutes. Maxima, minima and saddle points of functions of two variables. Lagrange's multiplier method. Indeterminate forms.

Beta and Gamma functions. Double and tripe integrals. Dirichlet's integrals. Change of order of integration in double integrals.

Definition of a sequence. Theorems of limits of sequences. Bounded and monotonic sequences. Cauchy's convergence criterion. Series of non-negative terms. Comparison tests. Cauchy's integral test. Ratio tests. Raabe's, logarithmic, De Morgan and Bertrand's tests. Alternating series. Leibnitz's theorem. Absolute and conditional convergence.

Series solutions of differential equations-Power series method, Bessel, Legendre and Hypergeometric equations. Bessel, Legendre and Hypergeometric functions and their properties-convergence, recurrence and generating relations. Orthogonality of functions. Sturm-Liouville problem. Orthogonality of eigen-functions. Reality of eigenvalues. Orthogonality of Bessel functions and Legendere polynomials.

Laplace Transformation - Linearity of the Laplace transformation. Existence theorem for Laplace transforms. Lapalce transforms of derivatives and integrals. Shifting theorems. Differentiation and integration of transforms. Convolution theorem. Solution of integral equation and systems of differential equation using the Laplace transformation.

**Statics** : Analytical conditions of equilibrium of Coplanar forces. Virtual work, Catenary.

**Dynamics**: Velocities and accelerations along radial and transverse directions, and along tangential and normal directions. Simple harmonic motion. Elastic strings.

Motion on smooth and rough plane curves. Motion in a resisting medium. Motion of particles of varying mass. Central Orbits. Kepler's laws of motion.

**Numerical Analysis :** Solution of equations: Bisection, Secant, Regula falsi, Newton's Method, Roots of Polynomials

Interpolation: Lagrange and Hermite Interpolation, Divided

Difference, Different schemes, Interpolation formula using Differences.

Numerical Differentiation

Numerical Quadrature : Newton-Cotes formula, Gauss quadrature formula, Chebychev's Formulas.

#### 8.3.2. B.Sc. Paper-II (B.Sc Physics)

**Mechanics**: laws of motion, motion in a uniform field, components of velocity and acceleration in different coordinate systems. Motion under a central force, Kepler's law, Gravitational law and field. Potential due to a spherical body, Gauss and Poisson equations for gravitational selfenergy. System of particles, center of mass, equation of motion, conservation of linear and angular momenta, conservation of energy, elastic and inelastic collisions. Rigid body motion, rotational motion, moment of inertia and their products.

**Oscillations**: Harmonic oscillations, kinetic and potential energy, examples of simple harmonic oscillations, spring and mass system, simple and compound pendulum, torsional pendulum. Superposition of two simple harmonic motions of the same frequency along the same line, interference, superposition of two mutually perpendicular simple harmonic vibrations of the same frequency, Lissajous figures, case of different frequencies.

**Motion of charged particles in elastic and magnetic fields** : E as an accelerating field, electron gun, case of discharge tube, linear accelerator, E as deflecting field-CRO, sensitivity, fast CRO.

**Properties of Matter** : Elasticity, small deformations, Hooke's law, elastic constants for an isotropic solid, beams supported at both the ends, cantilever, torsion of a cylinder, bending moments and shearing forces. Bernoulli's theorem, viscous fluids, streamline and turbulent flow. Poiseulle's law. Capillary tube flow, Reynold's number, Stokes law. Surface tension and surface energy, molecular interpretation of surface tension, pressure on a curved liquids surface, wetting.

**Electrostatics** : Coulomb's law in vaccum expressed in vector forms, calculation of E for simple distributions of charge at rest, dipole and quadrupole fields Work done on a charge in an electrostatic field expressed as a line integral, conservative nature of the electrostatic field. Electric potential,  $\varphi$ , E = -  $\nabla \varphi$ , torque on a dipole in a uniform electric field and its energy, flux of the electric field, Gauss's law and its application for finding E for symmetric charge distributions, Gaussian pillbox, fields at the surface of a conductor. Screening of E field by a conductor, capacitors, electrostatic field energy, force per unit area of the surface of a conductor in an electric field.

**Electric Currents** : Steady current, Current density J, nonsteady currents and continuity equation, Kirchoff's law and analysis of multiloop circuits, rise and decay of current in LR and CR circuits, decay constants, transients in LCR circuits, AC circuits, Complex numbers and their applications in solving AC circuit problems, complex impedance and reactance, series and parallel resonance, Q factor, power consumed by an AC circuit, power factor.

**Magnetostatics** : Force on a moving charge, Lorentz force equation and definition of B, force on a straight conductor carrying current in a uniform magnetic field, torque on a current loop, magnetic dipole moment, Biot and Savart's law, calculation of H order in simple geometric situations, Ampere's law  $\nabla$ .B=0,  $\nabla$ xB,=  $\mu_0$ .J field due to a magnetic dipole.

**Time Varying Fields :** Electromagnetic induction, Faraday's law, electromotive force  $e=\delta E.dr$ , integral and differential forms of Faraday's law, mutual and self inductance, transformers, energy in a static magnetic field, Maxwell's displacement current, Maxwell's equations, electromagnetic field energy density.

**Electromagnetic Waves :** The wave equation satisfied by E and B, plane electromagnetic waves in vacuum, poynting's vector.

**Kinetic theory of Matter :** Real gas : vander Waals gas, equation of state, nature of Vander Waals forces, comparison with experimental P-V curves. The critical constants, gas and vapour, Joule expansion of ideal gas, and of a Vander Waals gas, Joule coefficient, estimates of J-T cooling.

**Thermodynamics :** Blackbody radiation: Pure temperature dependence, energy distribution in blackbody spectrum. Planck's quantum postulates, Planck's law, complete fit with experiment. Interpretation of behaviour of specific heats of gases at low temperature.

Kinetic Theory of Gases : Maxwellian distribution of speeds in an ideal gas: distribution of speeds and of velocities, distinction between mean, rms and most probable speed values.

Physical Optics : Interference of a light: The principle of superpositions, two-slit interference, coherence requirement for the sources, optical path retardation, lateral shift of fringes, Localized fringes: thin films, Michelson interferometer, Fresnel diffraction: Fresnel half-period zones, plates, straight edge, rectilinear propagation. Fraunhofer diffraction : Diffraction of a single slit, the intensity distribution, diffraction at a circular aperture and a circular disc. Diffraction gratings: Diffraction at N parallel slits, intensity distribution, plane diffraction grating, polarization of transverse waves, plane, circular and elliptically polarized light. Polarization by reflection and refraction. Double reflection and optical rotation: Refraction, in uniaxial crystals, its electromagnetic theory. Phase retardation plates, double image prism, rotation of plane of polarization, origin of optical rotation in liquids and in crystals.

Quantum Mechanics: Origin of the quantum theory: failure of classical physics to explain the phenomena such as blackbody spectrum, photoelectric effect, Ritz combination principle in spectra, stability of an atom, Planck's radiation law, Einstein's explanation of photoelectric effect, Bohr's quantization of angular momentum and its applications to hydrogen atom, limitations of Bohr's theory. Wave particle duality and uncertainty principle: de Broglie's hypothesis for matter waves, the concept of wave and group velocities, evidence for diffraction and interference of particles, experimental demonstration of matter waves. Consequence of de Broglie's concepts; quantization in hydrogen atom; energies of a particle in a box, wave packets, Heisenberg's uncertainty relation for p and x, its extension to energy and time. Consequence of the uncertainty relation: gamma ray microscope, diffraction at a slit, particle in a box, position of electron in a Bohr orbit. Quantum Mechanics: Schrodinger's equation. Postulatory basis of quantum mechanics, operators, expectation values, transition probabilities, applications to particle in a one dimensional box, harmonic oscillator, reflection at a step potential, transmission across a potential barrier.

**Week spectra** : continuous X-ray spectrum and its dependence on voltage, Characteristics X-rays. Moseley's law, Raman effect, Stokes and anti-Stocks lines, fission and fusion (concepts), energy production in stars by p-p and carbon cycles (concepts). Cyclotron.

#### **Solid State Physics**

X-ray diffraction, Bragg's law,

**Magnetism :** Atomic magnetic moment, magnetic susceptibility, Dia-Para-, and Ferromagnetism, Ferromagnetic domains, Hysteresis.

**Band Structure :** Energy bands, energy gap, metals, insulators, semiconductors.

#### **Solid State Devices**

Semiconductors : Instrinsic semiconductors, electrons and holes, Fermi level. Temperature dependence of electron and hole concentrations. Doping: impurity states, n and p type semiconductors.

Semiconductor devices : p-n junction, majority and minority carriers, diode, Zener diode.

#### Electronics

Power supply : diode as a circuit element, load line concept, rectification, ripple factor, zener diode, voltage stabilization, IC voltage regulation, characteristics of a transistor in CB, CE and CC mode.

Field effect transistors : JFET volt-ampere curves, biasing JFET, RC coupled amplifier, gain frequency response, input and output impedance.

#### 8.3.3 B.Sc PAPER-II (BSc CHEMISTRY)

**Thermodynamics**: Definition of thermodynamic terms, systems, surroundings etc. Types of systems, intensive and extensive properties, state and path functions and their differentials, thermodynamic processes, concept of heat and work. First law of thermodynamics, statement, definition of internal energy, enthalpy, heat capacity, heat capacity at constant volume, pressure and their relation, Joule's law, Joule-Thomson coefficient and inversion temperature, calculation of w, q, u, H, for the expansion of ideal gases under isothermal and adiabatic conditions for reversible processes.

**Thermochemistry** : standard state, standard enthalpy of formation, Hess's law of heat of summation and its application, heat of reaction at constant pressure, volume, enthalpy of neutralization, bond dissociation energy and its calculation from thermochemical data, temperature dependence of enthalpy. Kirchoff's equation.

**Chemical equilibrium** : equilibrium constant and free energy. Derivation of law of mass action. Le chaterlier's principle.

**Phase equilibrium**: Statement and meaning of the terms -Phase, component and degree of freedom, derivation of Gibbs phase rule, phase equilibrium of one component system - water and sulphur system.

**Electrochemistry-I** : Electrical transport-conduction in metals and in electrolyte solution, specific conductance and equivalent conductance, measurement of equivalent conductance, variation of equivalent and specific conductance with dilution, migration of ions and Kohlrausch law, Arrhenius theory of electrolytic dissociation and its limitations, weak and strong electrolytes, Ostawald's dilution law, its uses and limitations. Application of conductivity measurements, determination of degree of dissociation, determination of Ka of acids, Determination of solubility product of a sparingly soluble salt, conductometric titration.

**Electrochemistry-II** : Types of reversible electrodes- gas metal ion, meta-metal ion, metal-insoluble salt-anion and redox electrodes. Electrode reactions, Nernst equation, derivation of cell EMF and single electrode potential, standard hydrogen electrodes-reference electrodes, standard electrode potentials, sign conventions, electrochemical series and its significant, EMF of a cell and its measurements. Computation of cell EMF, concentration of cell with and without transport, liquid junction potential, definition of pH, and Pka, determination of pH using hydrogen electrode, buffers-mechanism of buffer action, Henderson & Hessel baltch equation. Hydrolysis of salts. Atomic Structure : Idea to de Broglie matter waves, Heisenberg uncertainty principle, atomic orbitals, Schrodinger wave equation (Mathematical derivations excluded) significance of and 2, quantum numbers, shapes of s,p,d orbitals. Aufbau and Pauli exclusion principles, Hund's multiplicity rule. Electronic configurations of the elements, effective nuclear charge.

**Periodic Properties** : Atomic and ionic radii, ionization energy, electronegative-definition, methods of determination or evaluation, trends in periodic table and applications in predicting and explaining the chemical behaviour.

**Chemical Bonding** : Covalent Bond - valence bond theory and its limitations, directional characteristics of covalent bond, various types of hybridization and shapes of simple inorganic molecules and ions. Valence shell electron pair repulsion (VSEPR) theory to NH3,  $H_3O+$ ,  $SF_4$ ,  $CIF_3$ ,  $ICI_2$  and  $H_2O$ . MO theory, homonuclear and heteronuclear (CO and NO) diatomic molecules.

**s-Block Elements** : Comparative study, diagonal relationships, salient features of hydrides, solvation and complexation tendencies including their function in biosystems,

**p-Block Elements** : Comparative study (including diagonal relationship) of groups 13-17 elements, compounds like hydrides, oxides, oxyacids and halides of groups 13-16, hydrides of boron-diborane, borazine, borohydrides, fullerenes, carbides, fluorocarbons, silicates (structural principle), basic properties of halogens, interhalogen compounds.

**Chemistry of Noble Gases** : Chemical properties of the noble gases, chemistry of xenon, structure and bonding in xenon compounds.

Chemistry of Elements of First Transition series

Characteristic properties of d-block elements.

Properties of the elements of the first transition series, their binary compounds and complexes illustrating relative stability of their oxidation states, coordination number and geometry.

**Coordination Compounds**: Werner's coordination theory and its experimental verification, effective atomic number concept, chelates, nomenclature of coordination compounds, isomerism in coordination compounds (4 and 6 only) valence bond theory of transition metal complexes.

Acids and Bases : Arrhenius, Bronsted-Lowry, Lewis concepts of acids and bases.

### Structure, bonding and mechanism of Organic reactions:

Inductive effect, resonance, steric effect, influence of these effects on acidity, basicity and dipolemoments, reactive intermediate- carbocations, carbanions, free-radicals and carbenes; formation, stability and structure, types and mechanism of organic reactions- SN1, SN2, SE1, SE2, E1, E2, AdE, AdN,

Stereochemistry of Organic compounds: Concept of isomerism, types of isomerism, optical isomerism, elements of symmetry, molecular chirality, enantiomers, stereogenic center, optical activity, properties of enantiomers, chiral and achiral molecules with two stereogenic centers, diastereomers, threo-erythro diastereomers, meso compounds, relative and absolute configuration, sequence rules, D-L, R-S, systems of nomenclature, geometric isomerism, determination of configuration of geometric isomers, E-Z system of nomenclature, conformational isomerism, conformational analysis of ethane and n-butane, conformations of cyclohexanes, axial and equatorial bonds, conformation of monosubstituted cyclohexane derivatives, Newman projection, Sawhorse, Fischer and Flyingwedge formulae, difference between conformation and configurations.

#### 8.3.4 B.Sc. PAPER-I (B.Sc Biology) BOTANY

**Microbes :** Viruses and Bacteria : General account of viruses and bacteria – structure, nutrition, reproduction and economic importance.

**Diversity of seed plants :** Characterstics of seed plants; evolution of the seed habit; seed plants with (angiosperms) and without (gymnosperms) fruits. Morphology of vegetative and reproductive parts; anatomy of root, stem and leaf; Reproduction and life cycle of Cycas, Pinus and Ephedra. Botanical nomenclature : Principles and rules; taxonomic ranks; type concept; principle of priority. Classification of angiosperms; salient features of the systems proposed by Bentham and Hooker and Engler and Prantle. Major contributions of cytology, phytochemistry and taximetrics to taxonomy. Diversity of flowering plants as illustrated by members of the families : Ranunculaceae, Brassicaceae, Malvaceae, Rutaceae, Fabaceae, Apaceae, Acanthaceae, Apocynaceae, Asclepiadaceae, Solanaceae, Lamiaceae, Chenopodiaceae, Euphorbiaceae, Liliaceae and Poaceae.

Development & reproduction in flowering plants : The basic body plan of a flowering plant - modular type of growth. The shoot systems : the shoot apical meristem and its histological organization; vascularisation of primary shoot in monocotyledons and dicotyledons; formation of internodes, branching pattern; monopodial and sympodial growth; cambium and its functions; formation of secondary xylem; a general account of wood structure in relation to conduction of water and minerals; characteristics of growth rings, sapwood and heart wood; secondary phloem structure - function relationships; Leaf : origin, development, arrangement and diversity of size and shape; internal structure in relation to photosynthesis and water loss; adaptations to water stress; senescence and abscission. The root system : the root apical meristem; differentiation of primary and secondary tissues and their roles; structural modification for storage, respiration, reproduction and for interaction with microbes. Flower : a modified shoot; functions; structure of anther and pistil; the male and female gametophytes; types of pollination; pollen-pistil interaction, self incompatibility; double fertilization; formation of seed - endosperm and embryo; fruit development and maturation.

Cell Biology & Genetics : Structure and function of nucleus : Ultrastructure of nuclear membrane & nucleolus. Chromosome organization : Morphology; centromere and telomere; Chromosome alterations : deletions, duplications, translocations, inversions; Variations in chromosome number : aneuploidy, polyploidy; Sex chromosomes. DNA the genetic materials : DNA structure; replication; DNA- protein interaction; the nucleosome model; genetic code; satellite and repetitive DNA. Cell division : mitosis; meiosis. Genetic inheritance : Mendelism Linkage analysis; Allelic and nonallelic interactions. Gene expression : Structure of gene; transfer of genetic information; transcription, translation. Genetic variation : Mutations, spontaneous and induced; transposable genetic elements; DNA damage and repair. Extranuclear genome : Presence and function of mitochorndial and plastid DNA. Structure and function of other organelles : Golgi, ER, peroxisomes, vacuoles. The cell envelopes : Plasma membrane; functions; the cell wall.

**Biochemistry:** Basics of enzymology: Discovery and nomenclature; characteristics of enzymes; concept of holoenzyme, coenzyme and cofactors; regulation of enzyme activity; mechanism

of enzyme action. Photosynthesis: Significance; historical aspects; photosynthetic pigments; action spectra and enhancement effects: Z-scheme; photophosphorylation; Calvin cycle; C4 pathway; CAM plants; photorespiration. Respiration: ATP - the biological energy currency; aerobic and anaerobic respiration; kreb's cycle; electron transport mechanism (chemi-osmotic theory). Nitrogen and lipid metabolism : Biology of nitrogen fixation; importance of nitrate reductase and its regulation. Structure and function of lipids; fatty acids biosynthesis; oxidation; saturated and unsaturated fatty acids; storage and mobilization of fatty acids. The concept of photoperiodism; physiology of flowering; florigen concept; Physiology of senescence, fruit ripening; Plant hormones - auxins, gibberllins, cytokinins, abscisic acid and ethylene: history of their discovery biosynthesis and mechanism of action. Genetic engineering: Tools and techniques of recombinant DNA technology; cloning vectors; genomic and c-DNA-library transposable elements; techniques of gene mapping and chromosome walking.

**Biotechnology :** Functional definition; basic aspects of plant tissue culture; cellular totipotency, differentiation and morphogenesis; biology of Agrobacterium; Vectors for gene delivery and marker genes; salient achievements in crop biotechnology.

**Ecology :** Plants and environment : Atmosphere (gaseous composition), water (properties of water cycle), light (global radiation, photosynthetically active radiation), temperature, soil (development, soil profiles, physico- chemical properties), and biota. Population ecology : Growth curves; ecotypes; ecads. Community ecology : Community characteristic, frequency, density, cover, life forms, biological spectrum; ecological succession. Ecosystems : Structure; abiotic and biotic components; food chain, food web, ecological pyramids, energy flow; biogeochemical cycles of carbon, nitrogen and phosphorus. Biogeographical regions of India : Vegetation types of India: Forests and grasslands.

**Economic Botany :** Food plants : Rice, wheat, maize, potato, sugarcane. Fibers : Cotton and jute. Vegetable oils : Groundnut, mustard and coconut. General account of sources of firewood, timber and bamboos : Spices :

General account. Medicinal plants : General account. Beverages : Tea and coffee. Rubber.

#### ZOOLOGY

**Diversity-I**: Principles of classification – salient features and classification upto orders in non-chordates. Structural organization in different classes of non-chordates. Protozoa – Type study (paramecium), parasitic protozoans. Porifera and coelenterata – Type study (Sycon and Aurelia), Coral and coral reefs. Platyhelminthes and Nemathelminthes– Type study (Fasciola, Taenia) and parasitic adaptations. Annelida – Type study (Earthworm). Mollusca – Type study (Prawn).

**Cell Biology :** Cell Theory. Structure of prokaryotic and eukaryotic cells. Cellular organelles. Role of mitochondira in cellular energy transactions. Membrane transport of small molecules. Cell signalling. Cytoskeleton. Cell-division cycle. The mechanics of cell division (Mitosis and Meiosis). Cell junctions, cell adhesion. Biology of cancer.

Animal Diversity-II: Origin and general characters of chordates. Protochordates – Classification upto orders, structural organization of Amphioxus, Balanoglossus and Herdmania. Agnatha – Classification upto orders. Fishes – Classification upto orders, Type study (Scoliodon). Amphibians – Origin of land vertebrates, classification upto orders, parental care. Reptiles – Classification upto orders, poisonous snakes of India. Bird migration, principles of bird flight, origin of birds. Mammals – Origin, classification and general characters. Comparative anatomy of systems (e.g. kidney, heart). **Physiology :** Aim and Scope of Physiology – Cell Physiology, mammalian physiology, comparative physiology and applied physiology. Chemical foundations of physiology – solutions, osmotic pressure, diffusion, PK and pH, buffers. Biomolecules – Carbohydrates, lipids, proteins, nucleic acids. Blood – Composition and function of blood; Blood groups; Blood coagulation;. Heart – Structure; origin, conduction and regulation of heart beat;. Respiration – Mechanism and control of breathing. Digestion and absorption of dietary components. Structure and function of kidney, physiology of urine formation. Physiology of contraction of skeletal and smooth muscle. Physiology of nervous conduction. Endocrine glands (Pituitary, Thyroid). Nature of enzymes.

**Vertebrate Endocrinology and Reproductive Biology :** Classification of hormones. Hormonal regulation of physiological processes – basic concepts. Hormones and human health – production of hormones as pharmaceuticals. Reproductive cycles in vertebrates. Fertilization in vivo and in vitro. Embryo transfer technology. Sex determination and sex differentiation. Endocrine disorders – brief description.

**Evolution & Behaviour :** Concept of Evolution. Origin of life on Earth. Origin of prokaryotic and eukaryotic cells. Variations, mutations, recombination, Isolation, Natural selection. Concept of species and speciation. Mimicry. Population genetics, Genetic drift, Hardy-Weinberg Law. Evolution of Man. Introduction to Ethology – animal sense organs. Patterns of behaviour. Reproductive behavioural patterns. Social organization in animals, social interactions among individuals. Learning behaviour in animals. Drugs and behaviour.

#### 8.4 SYLLABI FOR LATERAL ENTRY (PHARMACY)

#### 8.4.1 PAPER for Pharmacy

The course content is same as the syllabus of part-I and part-II of Diploma in Pharmacy as per the Education Regulation – 1991 of Pharmacy Council of India.

#### 8.5. SYLLABUS FOR MCA STREAM

#### 8.5.1 MATHEMATICS

**Logic :** Statement, Negation, Implication, Converse, Contra positives, Conjuction, Disjunction, Truth Table.

Algebra of Sets : Set operations, Union, Intersection, Difference, Symmetric Difference, Complement, Venn Diagram, Cartesian products of sets, Relation and Function, Composite Function, Inverse of a Function, Equivalence Relation, Kinds of Function.

**Number Systems :** Real numbers (algebraic and other properties, rational and irrational numbers), Complex numbers, Algebra of complex numbers, Conjugate and square root of a complex number, cube roots of unity, De-Moivre's Theorem with simple application.

Permutation and combinations and their simple applications, Mathematical induction, Binomial Theorem.

Determinants upto third order, Minors and Cofactors, Properties of determinants. Matrices upto third order, Types of Matrices. Algebra of matrices, Adjoint and Inverse of a matrix. Application of determinants and matrices to the solution of linear equations (in three unknowns)

**Trigonometry :** Compound angles, Multiple and Sub-multiple angles, solution of trigonometric equations, Properties of triangles, Inverse circular function.

**Co-ordinate Geometry of two dimensions :** Straight lines, Pairs of straight lines, Circles, Equations of tangents and normals to a circle. Equations of Parabola, Ellipse and Hyperbola, Ellipse and hyperbola in simple forms and their tangents (Focus, directix, eccentricity and latus rectum in all cases).

**Co-ordinate Geometry of Three Dimensions :** Distance and division formulae, Direction cosines and direction ratios. Projections, Angles between two planes, Angle between a line and a plane, Distance of a point from a line and plane. Equations of a sphere-general equation.

**Vectors :** Fundamentals, Dot and Cross product of two vectors, Scalar triple product, Simple Applications (to geometry, work and moment).

**Differential Calculus :** (Concept of limit, Continuity, Derivation of standard functions, successive differentiation (simple cases, Leibnitz Theorem, Partial differentiation (Simple cases, derivatives as rate measure, Maxima and minima indeterminate forms, Geometrical applications such as tangents and normals to plane curves.

**Intergal calculus :** Standard methods of integration (substitution, by parts, by partial fractions etc.). Definite integrals and properties of Definite Integrals, Areas under plane curves, Differential Equations (only simple cases).

- (i) dy/dx = f(x)
- (ii) dy/dx = f(x) g(y)
- (iii)  $d^2y/dx^2 = f(x)$  and application to motions in a straight line with constant acceleration.

**Probability and Statistics** : Averages (Mean, Median and Mode), Dispersion (standard deviation and variance). Definition of probability, Mutually exclusive events. Independent events, Addition theorem.

#### 8.5.2 COMPUTER AWARENESS:

**Introduction to Computer :** Brief history of Computers, Components of a Computer, Computer related general knowledge, Application of Computers, Classification of Computers, Simple DOS Commands.

**Computer Arithmetic :** Number System with general base, Number base conversion, Elementary arithmetic operation.

**BASIC Language Programming :** Flow Charts, Algorithms, Constants, Variables, Arithmetic and logical expression, Elementary BASIC statements, Writing simple programs (using sequence, repetition and control structures), Subscripted Variables, Matrix operations Function and Subroutines, Concept of Files.

**Note :** The Question will cover the entire course and will be multiple choice type similar to the ones given in Section 7.5.

#### 8.6 SYLLABUS FOR MBA/PGDM/PGCM/PGDM (Executive)

Questions will be meant to measure a person's general Entrance test in the following aspects :

Section	No. of Questions
Verbal reasoning	40
Analytical reasoning	40
General Knowledge	10
Comprehension	20
Computer and Business fundamental	s 10

#### 8.6.1 Sample Questions :

A sample of questions is being provided for making the candidates aware of the style and difficulty level of the questions. The topics covered here in sample are not true indication of the syllabus and the test may contain questions from all related areas under different sections. The samples are given primarily to help the candidates understand the pattern of the test.

#### Section A : Verbal Reasoning

- 1. Identify the odd word
  - A. Sweep
  - B. wipe
  - C. Scrub
  - D. Stain
- 2. The place where bricks are baked
  - A. Foundry
  - B. Mint
  - C. Cemetery
  - D. Kiln
- 3. My watch is 6 minutes fast and the train which should havearrived at my station at 11.30 am was 5 minutes late. Whattime was it by my watch when the train arrived?
  - A. 11.41 am
  - B. 11.40 am
  - C. 11.38 am
  - D. Don't Know

#### Section B : Analytical Reasoning

- 1. Which of the following ratio is greatest ?
  - A. 7:15
  - B. 15:23
  - C. 17:25
  - D. 21:29
- 2. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same in 2 days, the time taken by 15 men and 20 boys in doing the same type of work will be:
  - A. 4 days
  - B. 5 days
  - C. 6 days
  - D. 7 days
- 3. When the integer n is divided by 6, the remainder is 3. Which of the following is not a multiple of 6?
  - A. n-3
  - B. n+3
  - C. 2n
  - D. 3n

#### Section C : General Knowledge

- 1. The term ' steeplechase' is associated with
  - A. Horse racing
  - B. Boxing
  - C. Polo
  - D. Rowing
- 2. The first indigenously built missile boat is named as:
  - A. INS Mani
    - B. INS Shilpi
    - C. INS Bibhuti
    - D. INS Vikrant
- 3. Central Salt and Marine Chemicals Research Institute is located at
  - A. Ahmedabad
  - B. Bhavanagar
  - C. Gandhi nagar
  - D. Panaji

#### Section D : Comprehension

Speech is a great blessing but it can also be great curse, for which it helps us to make our intentions and desires known to our fellows, it can also, if we use it carelessly, make your attitude completely misunderstood. A slip of the tongue, the use of an unusual word, or of an ambiguous word and so on, may create an enemy where we had hope to win a friend. Again different classes of people use different vocabularies, and the ordinary speech of an educated man may strike an uneducated listener as pompous. Unwittingly we may use a word which bears a different meaning to our listener from what it does to men of our own class. Thus speech is not a gift to use lightly without thought, but one which demands careful handling.

Only a food will express himself a like to all kinds and conditions of men.

- Speech can be a curse, because it can 1.
  - A. reveal our intensions
  - lead to carelessness R
  - C. hurt others
  - D. create misunderstanding
- 2. A 'slip of tongue' means some thing said
  - Α. unintentionally
  - B. wrongly by chance
  - C. without giving proper thought
  - D. to hurt another person

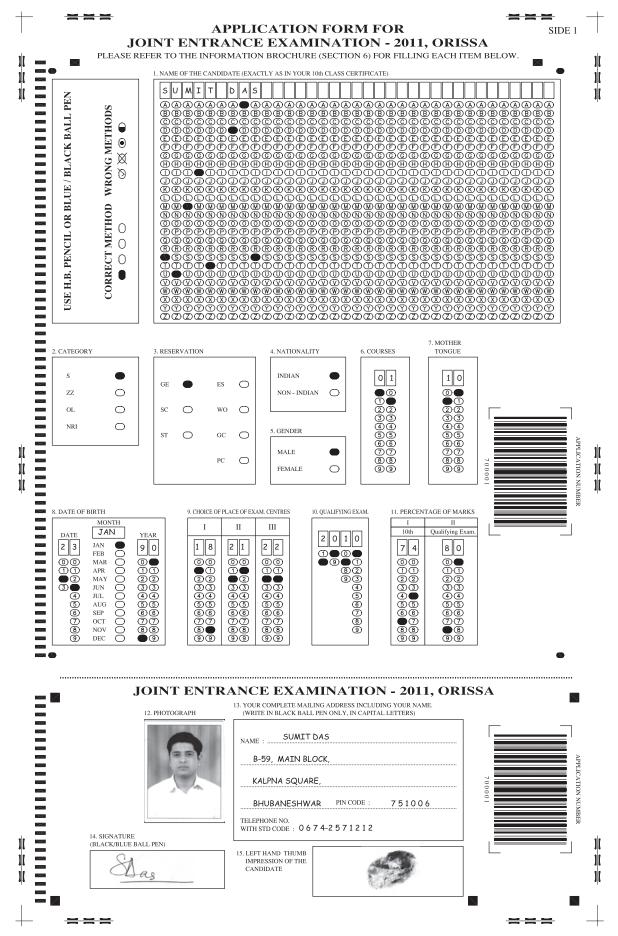
- 3. The best way to win a friend is to avoid In speech ambiguity Α.
  - В. verbosity
  - C. promposity
  - irony
  - D.

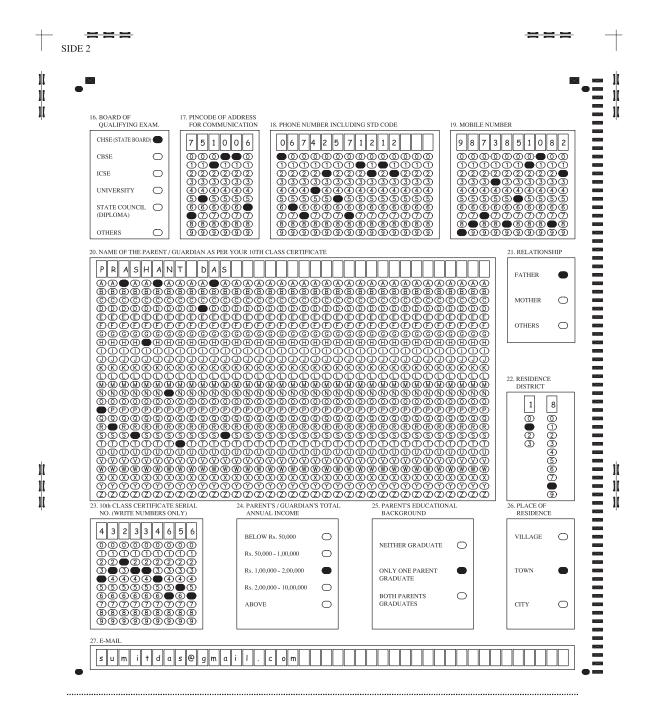
#### Section E : Computer & Business Fundamentals

- The widely used code in data communication is 1.
  - Α. 8 bit ASCII
  - Β. 7 bit ASCII
  - C. EBCDIC
  - D. None of these

2. Point of Sales terminal refers to

- Terminal associated with MICR Α.
- B. Smart Terminal
- C. Terminal associated with OCR
- D. None of the above
- 3. How many Stock Exchanges are there in India?
  - Α. 21
  - B. 22
  - C. 26
  - None of the above D.





#### 28. DECLARATION BY THE CANDIDATE

I hereby declare that all the particulars stated in this application are true to the best of my knowledge and belief. I have read the Information Brochure and I shall abide by the terms and conditions therein. In the event of suppression or distortion of any fact like suppressing category or educational qualifications or nationality etc. made in my application form, I understand that I will be denied the opportunity to appear in the JEE and if already admitted, my admission / degree acquired is liable for cancellation. I understand that the decision of the JEE regarding my admission to Engg. / Architecture / Medical / BDS / Pharmacy / MCA / Lat. Entry / MBA / PGDM / PGCM / PGCM (Executive) is final and I shall abide by the decision. Further, if admitted, I promise to abide by the rules and norms of discipline of the institute I join.

Place : BHUBANESWAR

Date : 14th March, 2011

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Name of Parent / Guardian PRASHANT DAS

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Signature of Candidate

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Countersigned by Parent / Guardian

#### ORISSA JOINT ENTRANCE EXAMINATION(OJEE)-2011 'PERMANENT RESIDENT OF ORISSA' CERTIFICATE APPENDIX – I

Office of the	
Miscellaneous Certificate Case No This is to certify that Shri / Smt / Miss	
/ wife of	-
i	
PSTahasil	
The certificate is being granted only for the purpose of O.	IEE, 2011 Orissa.
Full Signature of the Applicant	Signature of Revenue Officer Date :
Round Seal of the Office Note: 1. Revenue Officer means the Chief Officer in charge of R Tahasil and includes an Additional District Magistrate a 2. No part of the form should be mutilated in any manner. In	Ind Additional Tahasildar.
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ORISSA JOINT ENTRANCE EXA APPENDIX -	
CERTIFICATE OF EMPLOYMENT OF CAI	
Employer - Government of Orissa / Government of India / Governr Undertakings located in Orissa at the time of application (Strike considered as a proof of permanent resident certificate for candida 1. Name and Address of Organisation /	nent of India Undertakings and Government of Orissa e off whichever is not applicable). This shall not be
Office in which employed	
<ol> <li>Name and Designation of the certifying authority (Employer / Head of Office / Organisation)</li> </ol>	
3. a) Name in full and designation of employee	
to whom certificate is being issued.	
<ul><li>b) Whether in permanent employment</li><li>c) Present Place and State of posting</li></ul>	
d) Permanent address as per service records	
4. Name of the candidate in full	
<ol> <li>Relationship of the employee with the candidate: Father / Mother / Husband / Wife (Strike out whichever is not applicable)</li> </ol>	
6. Details of the Institution from which the candidate	
<ul><li>has passed / appeared at 10+2 /+3 level Examination</li><li>7. Particulars of employment of the employee</li></ul>	
Place Date of Joining	Period of Service
	Signature of the Employer / Head of Office / Organisation
Full Constants of Employee	Date:
Full Signature of Employee Date	Designation with Seal of Office
Note : In case the employee is on deputation either from Governm signed by the original employer.	•

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#### ORISSA JOINT ENTRANCE EXAMINATION(OJEE)-2011 APPENDIX – III 'SC/ST CERTIFICATE BY BIRTH'

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			of	
	0		Tahasil	
	8			
Ca: Oro	ste / Tribe which is recognized as	Scheduled Caste led Tribes) Order,	Orissa belongs to the / Tribe under Constitution (Scheduled Castes) 1950 as amended by the Scheduled Castes and	
The	e Place of birth of Sri / Smt / Miss		is	
Vill	age / Town	P.S	Tahasil	
in t	he district of	of the State	of Orissa.	
Ful	I Signature of the Applicant		Signature	
			Designation with seal of the office	
Ro	und Seal of Office		Date	
	e : This certificate should be issued by a uld be mutilated in any manner. In case		ce of residence of parent in Orissa. No part of the form ertificate is liable to be rejected.	
ORISSA JOINT ENTRANCE EXAMINATION (OJEE)-2011 APPENDIX – IV (Clause 2.1.5 of Information Brochure of JEE - 2011, Orissa) Certificate of Ex-Servicemen				
1.	Name of the Candidate			
2.				
<ol> <li>Permanent address as per service records</li> </ol>				
4.				
5.				
6.				
7.	Last place of posting including c			
8.	Awards received in any			
			Full Signature of Station Commander / Officer Commanding / Officer–in–charge / Secretary Zilla / Rajya Sainik Board	
Full Signature of				
Candidate's Parent			Designation with Seal of Office	
Da	te			

#### ORISSA JOINT ENTRANCE EXAMINATION (OJEE)-2011 APPENDIX – V CERTIFICATE OF AUTHENTICITY OF ORIYAS BELONGING TO OUTLYING ORIYA SPEAKING TRACT [OL CATEGORY]

This is to certify that Mr./Ms.					
Son / Daughter / Spouse of Mr./Mrs	of				
Village / Town P.S	Tahasil				
in the district of of the S	in the district of whose full				
signature is given below is an Oriya and belongs to an	outlying Oriya speaking tract as defined in				
resolution No-13411-Gen. Dated 8th August ,1969, of Gove	ernment of Orissa erstwhile political & services				
Department (Now:G.A Department).					
	Signature of the officer not below the Rank of Tahasildar				
Full Signature of the	Date				
Applicant	Designation with Seal of Office				
ORISSA JOINT ENTRANCE EXAMINATION (OJEE)-2011 APPENDIX – VI CERTIFICATE OF HAVING PASSED M.I.L. IN THE M.E. OR EQUIVALENT EXAMINATION FOR ORIYAS BELONGING TO OUTLAYING ORIYA SPEAKING TRACT [OL CATEGORY]					
This is to certify that Mr./Ms.					
Son / daughter / Spouse of Mr./ Mrs	in the district				
of in the state of has/ had 0					
as M.I.L. in M.E. or equivalent Examination conducted by					
(Name of the Board/University) from (Name of					
the Institution) in the year					

Date .....

Seal of Office

#### ORISSA JOINT ENTRANCE EXAMINATION (OJEE)-2011 APPENDIX-VII

BOND BY THE CANDIDATE AT THE TIME OF TAKING ADMISSION INTO UNDER GRADUATE COURSE (MBBS) FOR STATE QUOTA IN GOVERNMENT MEDICAL COLLEGES

KNOW ALL MEN BY THESE PR	RESENTS THAT we .		
			in the districtat college (Here in after called the Principal Obligor) and
			ghter/son/wife of
resident of	in the District of	at	present employed as
in the Office/Department of		and Shri/Smt	
wife of	aged about	years resident c	of in the district of
			in the Office/Department intly and severally bind ourselves and our respective
heirs, executors and administra	ators and legal repre	sentative to pay to the C	Governor of Orissa, his successors and assigns
			ner expenses, as the case may be, which amount
			(Rupees five lakhs) only that the Government will MBBS) Course and admissible under Rules 1992/
			on Govt. stipend and other expenses or if payment
			urrency of that country converted at the official rate
of exchange between that countr	y and India.		
WHEREAS the above principal	obligor is placed on	admission into MBBS c	ourse and admissible by the Government; AND
			te the Principal obligor has agreed to execute this
of the above bourden (Principal ob			as agreed to execute this bond as surety on behalf
	0		
			hat in the event of the Principal obligor Shri/
			ars of service on successful learning completion of gning/ duty due to any reason Shri/
			n service, an amount of Rs. 5,00 lakhs (@ 1.00 lakh
per annum) shall be recovered	from the candidates f	for violation of terms and	conditions of the bond by not joining/leaving the
	ears owing to seekin	g an employment accepta	ance of other employment somewhere other than
under Govt. of Orissa.			
			course shall mean and include regular employment
			ntment (any one of the above type) is given, the order. If he/she does not join within the stipulated
			ill be required to pay Rs. 5.00 lakhs.
•	•		Shri/Smt and or Shri/
			, the above written obligation shall be void and of no
			nd declared by the principal obligor and the surety
			ent may adopt, the Government shall be entitled to
Orissa Public Demand Recovery		and the sureties jointly ar	nd severally in the form of public demand under the
			promotion and posting to any rank or special status oney that spent by the State for my study.
			ischarged by reason of time being granted by the
			t or any person authorized by them (where ever with
			the Government to sue the said principal obligor Shri/Smtor any of them
for the amount due hereunder.			
IN WITNESS to the written bond a	and to all terms and co	nditions herein before cont	ained we have signed hereunder thisday
of201			
Witness 1.		Signe	d and delivered by the Principal Obligor
		Signe	d and delivered by the surety above named
In Presence of Witness:			
1.			
2.		Signe	d and delivered by the surety above named
ACCEPTED			
For on behalf of The GOVERNO	OR OF ORISSA		
(Principal, Medical college)			

- Sale of Information Bulletins at notified Syndicate Bank/ State Bank of India/Post Offices.
- 2. Last date of sale of Application Forms
- 3. Last date of receipt of Application Forms at the Bank / Post Office from where the form 1s purchased
- 4. Last date of receipt of Application Forms at JEE Cell by Registered Post / Speed Post / throgh Registered Courier Sevices
- 5. Date of despatch of Admit Card
- 5. Date of Examination (MCA, MBA, PODM, PGCM, PGDM(Ex) & M.Pharm.)
- 7. Date of Examination (B.Tech., MBBS, BDS, B.Arch., B.Pharm, LE, M.Tech. & M.Archj
- 8. Probable Date of Declaration of Result

## ADDRESS FOR COMMUNICATION

Chairman, Joint Entrance Examination-2011, C JEE Cell, Gandamunda, Khandagiri, Dist: Khurda, Bhubaneswar - 751 030 Website : www.odishajee.com E-Mail : secretaryojee2011@gmail.com Phone : 0674 2352456; Fax : 0674 2352457

Cost of the Brochure

: Rs.550/- (Rupees Five hundred fifty only)

Ragging in any form is strictly prohibited in an Institute vide the order of Honourable Supreme Court of India

25.02.2011 18.03.2011

21.03.2011

21.03.2011 05.04.2011 01.05.2011 08.05.2011 25.05.2011