VITEEE - 2012

IMPORTANT INSTRUCTIONS

1. Please make sure that you are using the correct application form.

2. Your application will be machine-processed. Use only black ball-point pen and CAPITAL letters to enter the required information. Use only pencil to shade the circle to correspond with the code / appropriate alphabet / numeral that you have entered as your option.

3. Do not scribble, smudge, tear or wrinkle the application form. Do not put any stray marks anywhere on the application form.

4. Your photograph, signature and address will also be scanned by a machine that recognizes only good quality images. Therefore, paste a good quality, recent, passport size colour photograph and sign in the space provided in black ball-point pen only. Do not have the photograph attested.

5. Write the complete address giving your name and PINCODE carefully and legibly. Please note that this block will appear as such in all our correspondence with you. In case you happen to make a mistake, cover the whole box with a slip of white paper of the same size and write your address on it. Your address must not exceed the box.

6. The use of address of any coaching centre / Institution is strictly prohibited. If anybody uses the address of any coaching centre / Institution in his / her application form, it will be rejected.

7. Do not staple, pin, stitch or stick anything on the application form. Paste only the photograph in the space provided.

8. Ensure the correctness of your mailing address, PINCODE, e-mail, Telephone number with correct STD CODE and mobile No. if any. Please note that VIT will not be responsible if communications do not reach you due to incomplete or illegible address, e-mail and telephone number.

9. You must quote your application number as reference in all your future correspondence.

10. The completed application form should be enclosed separately in the printed envelope provided, addressed to Admissions Officer, VIT University, Vellore-632014 and sent through Registered Post or Speed Post, so as to reach the Office of Admissions on or before 29th February 2012.

11. VIT will not accept responsibility for any postal delay / irregularity or loss in postal transit.

12. Your application should be complete in all respects. An incomplete application or an application filled in a language other than English will be summarily rejected.

13. Options given in the application form cannot, in general, be altered at a later stage.

14. The cost of the application material is non-refundable.

15. You should retain a photocopy of the application form and Admit Card for your reference.

CHECK LIST

Before posting the application please ensure that

☐ You have read the instructions before filling in the Application Form.

☐ You have used a black ball-point pen to enter the codes in the boxes and pencil to shade the alphabet/numeral /circle as indicated.

☐ You have affixed a good quality recent, colour photograph in the space provided.

☐ You have not got the photograph attested.

☐ You have clearly and legibly written your complete postal address to which communication is to be sent.

☐ You have entered your correct PINCODE.

☐ You have indicated your correct STD code and Phone No. / Mobile No.

☐ You have mentioned your correct e-mail address.

☐ You have signed in the space provided below the photograph.

☐ Your parent / guardian has signed in the declaration form.

☐ You have not used any pins or stapler in your application.

☐ You have clearly indicated whether you require hostel accommodation or not.

☐ You have entered the correct Test City Code on the envelope provided.

☐ You have retained a photocopy of your application.

☐ You have entered your application number | 2 | 0 | 1 | 2 | | | | | | for all future reference.

VITEEE
pronounced "WITTY"

CONTENTS

1. Introduction

VIT is emerging as a benchmark for continuous journey towards excellence, among the institutions of higher education in the field of technology in the country. Its values of equality, transparency and healthy collaboration have been ably guided by the leadership of its founder Dr. G. Viswanathan, renowned for his principled life devoted to public service.

The ubiquitous sense of joy and enthusiasm observed in the campus bears testimony to the positive learning and living experiences enjoyed by every student at VIT. Ours is a place where opportunities for learning as well as recreation are maximized and distractions are minimized.

VIT Students get to feel the taste of a boundary-less world through a heterogeneous mixture of students from across the globe, who have made VIT as their institution of choice.

VIT has long since been devoted to providing quality education in various Engineering disciplines of Science and Technology and of late it has proliferated into frontiers of Research as well. The Institute has a rigorous selection procedure to admit the students into various programmes. An exclusive entrance examination for all B.Tech. programmes, Vellore Institute of Technology Engineering Entrance Examination (VITEEE), is conducted for all those aspiring for a career in engineering.

2. B.Tech. Programmes offered at Vellore Campus

- Bioinformatics
- Bio-Medical Engineering
- Biotechnology
- Civil Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Electronics and Instrumentation Engineering
- Information Technology
- Mechanical Engineering
- Mechanical (Spec. in Automotive Engineering)
- Mechanical (Spec. in Chemical Process Engg.)
- Mechanical (Spec. in Energy Engineering)

2.1 B. Tech. Programmes offered at Chennai Campus

- Civil Engineering
- Computer Science and Engineering
- Electronics and Communication Engineering
- Electrical and Electronics Engineering
- Mechanical Engineering

3. Eligibility

3.1. Nationality:

The applicant for admission should be a Resident / Non Resident Indian National.

3.2. Qualifying Examination:

Candidates appearing for the VITEEE-2012 should have either completed or shall be appearing in 2012, in any one of the following qualifying examinations:

- The final examination of the 10+2 system of Higher Secondary Examination conducted by the State Board; Central Board of Secondary Education (CBSE, New Delhi); The Council for Indian School Certificate Examination (ISCE, New Delhi).

- Intermediate or Two-year Pre-University Examination conducted by a recognized Board/ University.

- High School Certificate Examination of the Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva.

- General Certificate Education (GCE) examination (London/Cambridge/Srilanka) at the Advanced (A) level.

Candidates who have studied in Regular, Full time and Formal Education are alone eligible to apply.

3.3. Eligibility Criteria in the Qualifying Examination:

Candidates appearing for the VITEEE in 2012 should have secured an aggregate of 60% in Physics, Chemistry, Mathematics/Biology in the qualifying examination (+2/Intermediate).

The average marks obtained in the subjects Physics, Chemistry and Mathematics or Biology (PCM / PCB) in +2 (or its equivalent) put together should be 50% for the following categories:

- Candidates belonging to SC/ST

    Fill in the proforma as given in Annexure III and have it attested by a competent authority (The list of authorities empowered for the same is given in Annexure III).

- Candidates hailing from Jammu and Kashmir and the North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.

Fill in the CERTIFICATE TO PROVE NATIVITY (proforma given in Annexure III).

These documents should be produced at the time of counselling, failing which they will not be considered for admission.

In case the marks statement is not produced by the candidates at the time of admission, the decision of the Management regarding his / her eligibility and admission to the programme shall be final.

- Candidates who have attempted Physics, Chemistry and Mathematics in the VITEEE are eligible for all the 13 B.Tech. Degree Programmes.

- Candidates who have attempted Physics, Chemistry and Biology in the VITEEE are eligible only for B.Tech. Bioinformatics, Bio-Medical Engineering and Biotechnology programmes.

3.4.   Additional Information:

- It is the responsibility of the candidates to ascertain whether they possess the requisite qualifications for admission. Having been called for the written test/ counselling does not necessarily mean acceptance of the eligibility.

- The admission offered to a candidate who has been provisionally admitted to the B.Tech. programme will stand cancelled if he/she does not submit the original relevant documents (such as Marks statement, Transfer Certificate, Conduct Certificate etc) to the Admissions Officer at the time of admission.

- Admission to various programmes will however be subject to verification of facts from the original certificates/documents of the candidates. In case any discrepancy should arise, even at a later point of time after admission, the management reserves all right to cancel the candidate's admission and this decision shall be final.

3.5.   Age Limit :

Candidates whose date of birth falls on or after 1st July 1990 are eligible to apply for VITEEE-2012. The date of birth as recorded in the High School / SSC / X Certificate will be considered authentic. Candidates should produce this certificate in original as a proof of their age at the time of counselling, failing which they will be disqualified.

4.   Admission Procedure

- The admission will be purely on the basis of the marks secured in the VITEEE-2012, conducted by VIT University.

- Candidates who have not appeared for the VITEEE are not eligible for admission.

- The candidates will be short-listed based on their entrance examination marks and will be called for the counselling.

5.   Schedule of VITEEE-2012

- VIT Engineering Entrance Examination will be held on 21st April 2012 (Saturday).

- The duration of the entrance examination will be 2 hours 30 minutes.

- Examination will be from 2.30 pm to 5.00 p.m.[IST]

6.   Pattern of the Entrance Examination

6.1.   Question Paper:

The question paper will contain 4 [Four] parts as indicated below. All Questions will be of OBJECTIVE TYPE.

- PART-I   - Physics
- PART-II   - Chemistry
- PART-III   - Mathematics
- PART-IV   - Biology

- Physics, Chemistry and Mathematics candidates shall attempt PARTS – I, II & III.

- Physics, Chemistry and Biology candidates shall attempt PARTS–I, II & IV.

- Physics, Chemistry, Mathematics and Biology candidates can attempt either Part-I, II, III or Part-I, II, IV as per their choice.

  Candidates attempting Parts-I, II & III are eligible for all the 13 programmes offered.

  Candidates attempting Parts-I, II & IV are eligible for Bioinformatics, Bio-Medical Engineering and Biotechnology programmes only.

- A candidate has to attempt any three parts only as indicated above. If any of the candidate attempt all the four parts, only the first three parts will be valued. The answered PART–IV will not be considered for valuation.

- All the questions will be mostly from the State Board of Higher Secondary Education and the CBSE syllabus only. The syllabus for the Entrance Examination is given in APPENDIX-IV of this Brochure.

- Each part has 40 questions and each question carries one mark.

- Each question is followed by 4 alternative answers. The candidate will have to choose the correct answer and shade against the appropriate choice in the OMR response sheet provided, strictly adhering to the instructions.

- No negative marks for wrong answers.

6.2. Language of the Question Paper:

The Question paper will be only in English.

6.3. Use of Calculating Devices / Phones / Written / Textual Material:

Use of calculators, log tables and slide ruler, watches with facilities of calculator, pagers and cellular phones is strictly prohibited in the examination hall. Candidates are also strictly forbidden from carrying any textual material-printed or written, bits of paper, envelope or any other material into the examination hall except the Admit Card.

7. Important Instructions pertaining to VITEEE -2012

- The examination room / hall will be opened 30 minutes before the commencement of the test. Candidates should take their seat immediately after the opening of the examination hall. If the candidates do not report on time, they are likely to miss the general instructions given in the Examination Hall.

- The Admit Card should be kept safely and brought to the examination. It should be produced on demand. A candidate who does not possess the Admit Card issued by the Institute shall not be permitted for the examination under any circumstances.

- Candidates will be permitted to enter the Examination Hall only on verification of their Admit Card.

- The Registration Number (as given in the Admit Card) should be entered in the specified place in the response sheet.

- Candidates will not be permitted to enter the examination hall after 3.00 p.m.

- Candidates will not be permitted to leave the examination hall before 4.30 p.m.

- Each candidate will be allotted a seat indicating his or her Registration Number. The candidate should find out and occupy the allotted seat. If this is not done his / her candidature shall be cancelled.

- The test will start exactly at 2.30 p.m. and an announcement to this effect will be made by the invigilator.

- During the examination time, the invigilator will check the Admit Card to verify the identity of each candidate. The invigilator will also sign in the place provided in the Response sheet.

- Candidates should carefully go through and strictly adhere to all the instructions given in the OMR Response Sheet before they begin.

- The candidates should bring their own black ball-point pen of good quality. This will not be supplied by the University.

Candidates should shade the correct response against each question in the OMR response sheet only with a black ball-point pen

- A signal will be given at the beginning of the examination and at half time.

- A signal will also be given before the closing time, when the candidate must stop marking the answers.

- The candidates should sign in the attendance sheet at appropriate places.

- The Admit Card should be preserved and produced for verification at the time of counselling / admission.

- Violation of any instruction and adoption of any unfair means in the examination hall will make the candidate ineligible for admission.

8. Application Forms

8.1. Issue of Application Forms

- The Prospectus and the information brochure for the B.Tech. programme, along with the necessary enclosures which include the Application Form and a printed self-addressed envelope, can be obtained against cash payment of ` 950/- from the various post offices as given in the VIT website: www.vit.ac.in

- Candidates can obtain the application form in person from the VIT University at Vellore (or) VIT University at Chennai (or) from the Administrative Office, New No. 6, (Old No. W-73), Second Street (Opposite Towers Club), Anna Nagar, Chennai – 600 040 (Phone: 044-42016555, 65480555, Fax: 044-26222555), by handing over a Demand Draft for ` 950/- drawn in favour of 'VIT University', payable at Vellore.

- Candidates can also obtain the application form through post by sending a Demand Draft for ` 950/-drawn in favour of 'VIT University', payable at Vellore, with a covering letter addressed to "Admissions Officer", VIT University, Vellore-632014, requesting for the application form and indicating their complete postal address. On receipt of the DD, the application form with the enclosures will be sent by post. The postal charges will be borne by the Institute. Candidates should write their name, Mobile Number and address on the reverse of the DD.

- Candidates can also apply online at www.vit.ac.in/admissions
(online applicants need to pay ` 900/- only).

Candidates are advised to purchase the information brochure/ application form only through means mentioned above and not from any private publishers / vendors. Fake application forms will not be processed and will be rejected.

8.2. Returning the Completed Application:

The application form duly completed should be checked if all the items have been correctly filled and appropriate codes indicating your exact choice have been put in the right spaces provided against each. You are advised to go through the checklist available on the inside front cover of the brochure. Also ensure that you have adhered to the instructions for completing the computerized OMR application form (section-19 in the brochure) before mailing the application. The application should be refolded only along the original fold and inserted in the envelope provided.

Your application should be sent through either Registered Post / Speed Post in the self-addressed envelope provided by VIT so as to reach the office positively on or before February 29, 2012. Before despatching the application form ensure that you have filled in the correct Test City Code and tick the checklist on the envelope provided.

Note:

Incomplete application form shall not be considered and no correspondence shall be made in this regard.

The application form once sold shall not be taken back under any circumstances nor the application fee, refunded in any case.

8.3. Receipt of Completed Application Form:

The last date for the receipt of completed application forms at VIT is February 29, 2012

Any application received after last date will not be accepted. Any delay in receiving the application by the candidate will not be considered a valid reason for late submission. The Institute will not accept responsibility for any postal delay, irregularity or loss in postal transit.

9. e-Tracking through SMS / Internet

For the benefit of the candidates, the following arrangements have been made to inform the status of the application, venue of the entrance examination and results.

Once the application is received at VIT, a message will be sent by SMS to the candidates stating that their application has been received at VIT. This would however be possible only if the mobile number is correctly shaded in the application form. The candidates may also track the status of their application by typing their application number in the VIT website. However, this feature can be availed of only after about 2 weeks of despatch of their application.

Once the Admit Card is processed, this information will be sent to the candidates mentioning their registration number and the examination centre. This information can also be viewed through the website.

At the time of publication of the results, the rank will be intimated through SMS as well as it will be available in the website as mentioned in 12.2.

10. Test Cities for VITEEE-2012

The VITEEE - 2012 will be held in 112 cities. The list of Test Cities along with their corresponding codes is found in APPENDIX- III of this information brochure.

11. Admit Card

11.1. Important Information:

- The Admit card will be issued only to those eligible candidates who have submitted their application forms complete in all respects on or before the last date as specified in section 8.3.

- Admit cards will be despatched through speed post. Admit Cards will not be faxed or sent by e-mail.

- Candidates must not tamper with the Admit Card or alter any entry made therein after it has been authenticated.

- The Admit Card is not transferable to any other person. Impersonation is a legally punishable offence.

- The Admit Card will contain your name, Registration. no. photograph, signature, address, address of your test centre, test schedule and a set of instructions for you to read carefully and prepare accordingly for the test.

- The Admit Card once received should be carefully examined by the candidate. Any discrepancy as such should immediately be brought to the notice of the Admissions Officer.

- No candidate will be permitted to write the test without a valid Admit Card. The Admit Card should be presented to the invigilators for verification.

- The Admit Card is an important document. It should be preserved and produced at the time of counselling and Admission.

11.2. Admit card not received due to Application being incomplete:

In the case of an eligible candidate, whose application form is incomplete (For eg. Declaration not signed, no signature below

the photograph, photograph not affixed on the application form, address not clearly written etc.), the application will not be processed for the issue of an Admit Card. VIT does not take the responsibility to inform such candidates. Candidates are advised to doubly check that the application form is complete in all respects before posting.

11.3. Duplicate Admit card:

In case a candidate does not receive the Admit Card by 10th of April 2012, he/she should make it a point to report the same immediately to the Admissions Officer and if he / she does not receive the Admit Card before the examination date, he / she would have to meet VIT Representative one day before the examination at the centre with a copy of the application form and two attested passport size photographs, identical to the one affixed in the application form. All enquiries pertaining to the Admit Card without mentioning application number will not be entertained under any circumstances.

12. Results

12.1. Rank List:

A merit list will be prepared based on the total marks secured in the VITEEE – 2012.

Note: There is no provision to send the marks of the candidates (selected or unselected) by post. At the time of publication of the results, the rank will be intimated through SMS, if the mobile number of the applicant is provided.

Since the machine gradable sheets are graded and scrutinized with extreme care, there is no provision for re-grading and re-totalling. No photocopies of the answer sheets will be made available. No correspondence in this regard will be entertained.

12.2 Announcement of Results:

The entrance examination results will be available in the following websites:

- www.vit.ac.in
- www.schools9.com
- www.indiaresults.com
- www.minglebox.com
- www.shiksha.com
- www.globalinfowings.com
- www.bharatedu.com
- www.examresults.net
- www.instantexamresults.com

13.Scholarship under "GV School Development Programme" (GVSDP)

Performance	Scholarship
Toppers of each State Board and Central Board	100% fee waiver for all the four years.
VITEEE rank holders of 1 to 50	75% fee waiver for all the four years.
VITEEE rank holders of 51 to 100	50% fee waiver for all the four years.
VITEEE rank holders of 101 to 1000	Annual fees (Tuition fee & Special fee) : ` 95,000

14. Tuition and Special Fees

please refer to our website www.vit.ac.in

15. Counselling

15.1. Advance Payment :

The selected candidates will have to submit the DD for ` 30,000- in favour of 'VIT University', payble at Vellore, on the Confirmation of seat and acceptance of branch alloted.

This includes ` 10,000/- towards couselling fee. Couselling fee is NON-REFUNDABLE, but it will be adjusted in the tuition fees once the candidate joins the University

15.2. Counselling procedure for allocation of seats/ branch:

The counselling for allocation of branches to the short-listed candidates based on their All India Rank (AIR) in the

VITEEE-2012. A candidate may obtain this information on our website or by calling the VIT office, on the day after the declaration of the results of VITEEE-2012.

> The intimation regarding counselling dates will be displayed in VIT website and also SMS will be sent to the qualified candidates after declaration of results. Common selection and Admission procedure will be followed through single window counselling at Vellore and Chennai campus for all the B.Tech programmes offered in both the campuses of VIT University.

To take care of possible absentees, the number of qualified candidates is kept more than the number of seats available in VIT University. The fact that a candidate has qualified in the VITEEE-2012 and has been called for and the counselling does not guarantee admission to him / her. This will depend upon the candidates All India Rank (AIR) in the entrance examination and the availability of seats.

Details of various branches offered under the B.Tech. programme in the current year, the total number of seats allocated for each branch, the number of seats already allotted, number of seats still available will be displayed at the counselling centre for the benefit of candidates to make their choice. Based on the availability, the candidate will be allotted the branch.

VIT will in no way be responsible for counselling information not reaching the candidates. They should check the VIT website: www.vit.ac.in for information on counselling.

No change of date / time of counselling is permissible. If a candidate does not personally appear before the Admission Committee for counselling on the date specified, his/her seat shall be offered to the next candidate in the order of merit.

However, due to unforeseen reasons, if a candidate is unable to attend the counselling on the specified date and time, he / she can attend on a subsequent time / date, after duly intimating the office, regarding this. But the candidate can only opt for the branch available at that time and cannot claim any other branch as per his / her original turn / seniority.

After the counselling for a particular day is over, the number of seats (branchwise) still available for allotment on the next day of counselling will be published in the website and will also be displayed on the notice board of the Institute for the benefit of candidates.

If the mark statement of the qualifying exam has not been received before the date of counselling, the candidate would have to furnish an undertaking stating that if he/she fails to qualify as per the norms, it would lead to him / her to forego his / her seat.

Advance payment for Hostel

Candidate requiring hostel accommodation will have to submit a separate crossed Demand Draft for ` 20,000 drawn in favour of 'VIT University', payable at Vellore and 4 nos. of recent passport size colour photos along with a hostel application form which is given at time of room counselling to the Chief Warden Office to confirm the hostel room.

Submission of Documents at the Time of Counselling

The candidates should produce the following documents in original along with one set of photocopies while reporting for counselling. Candidates will not be allowed to participate in the counselling process without these documents.

- VITEEE-2012 Admit Card

- Class X Board Certificate as a proof of date of birth

- Marks Sheet of Qualifying Examination (if available)

- Community Certificate (For SC/ST only)

- Nativity Certificate (For candidates hailing from Jammu and Kashmir and the North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura).

- DEMAND DRAFT for ` 30,000/- drawn in favour of 'VIT University', payable at Vellore.

> Candidates without DD for the said amount will not be permitted to attend counselling.

It is only after the verification of documents, candidates will be allowed to participate in the counselling process. Authentic records pertaining to identification, age, marks sheet of qualifying examination, community, nativity (if applicable) and other eligibility criteria as specified in section-3, will be checked. If a candidate fails to produce any of these documents, he/she will not be considered for admission.

A candidate should decide for certain on whether he / she should join the programme based on the branch allotted to him / her at the time of counselling before the payment of the fee.

Allotment of branch & Campus once made is final and cannot be changed under any circumstances.

16. Payment of Balance Fees

The balance fee should be paid in the form of a DD drawn in favour of 'VIT University', payable at Vellore along with a covering letter should reach the Admissions Officer on the date specified in the provisional admission letter. The candidates should write their name, Rank and the branch allotted at the time of counselling on the reverse of the DD.

DD received after the due date (mentioned in the provisional admission letter) will not be entertained.

17. Submission of documents on admission

The following documents in original are required to be submitted at the time of Admission:

- Qualifying examination mark statements of all attempts
- Transfer Certificate / School Leaving Certificate
- Migration Certificate (if issued by the board)
- Conduct Certificate
- Community Certificate (For SC/ST only)
- Nativity Certificate (For candidates hailing from Jammu and Kashmir and the North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura).
- Provisional Admission Letter. (photo copy)
- Recent Passport size colour photos – 4 nos.
- Affidavit to be signed separately by Student & Parent in ` 20/- Stamp Paper.
- 2 sets of photocopies of all original documents.

Students hailing from Andhra Pradesh Intermediate Board of Education should make it a point to submit their Pass Certificate Cum Memorandum of Marks at the time of admission.

All the above referred documents shall be handed over to the Admissions Office at the time of admission, failing which the provisional admission accorded will stand cancelled.

17.1. Submission of 'No Dues' Certificate

A candidate who desires to leave the University after joining the programme will have to submit a 'NO DUES' Certificate from his / her respective school to get back the certificates. This should be accompanied by the application for withdrawal and the original fee receipt and provisional admission letter.

The certificates will be issued only on production of 'NO DUES' Certificate in the prescribed form, obtained from the Admission Office.

17.2. Refund of Fees

The refund will be made as per the norms of the UGC.

Refund will be made only after submission of original fee receipt, Provisional Admission letter and No Dues Certificate. Refund DD will be made in the name of candidate only.

17.3. General Discipline

All candidates admitted to the Institute shall maintain good conduct, pay the requisite tuition fees and other charges by the due dates, attend their classes regularly and abide by the rules and regulations of the Institute. If at any point of time, the conduct and character of a candidate is not satisfactory or is of a suspicious nature, the Management reserves the right, without assigning any reason, to make him /her vacate the hostel or expel him/her from the University.

17.4. Measures for prevention of ragging at the institution level:-

Ragging is totally prohibited in the institution, and anyone found guilty of ragging and / or abetting ragging, whether actively or passively, or being a part of a conspiracy to promote ragging, is liable to be punished in accordance with these regulations as well as under the provisions of any penal law for the time being in force.

Ragging juniors in any form is forbidden. If any one is found in ragging his/her juniors, he/she can be rusticated from the Institute.

It is mandatory that candidates and parents who are attending counselling have to sign an undertaking as the information given in (as per UGC Regulations-2009, www.ugc.ac.in) Annexure-I & II in ` 20 non-judicial bond paper.

18. Hostel - Vellore and Chennai Campus

Hostel Accommodation:

- Separate hostel accommodation is available for boys and girls in both Vellore and Chennai campus.
- Hostel accommodation will be provided only to those candidates whose residence is beyond 100 kms radius from the University Campus. Single room accommodation will not be available for first year undergraduate students.
- For details regarding Establishment Charges, Mess, etc., please visit www.vit.ac.in

19. Instructions for completing the computerised OMR application form

- The application form should be filled by the candidate in his/her own handwriting.
- It is suggested that the candidate make a photocopy of the form and use it for practice. ONLY THE ORIGINAL APPLICATION FORM SHOULD BE SENT.
- Read the instructions carefully before filling in the application form. Requests for corrections will not be

entertained later. Refer to the specimen copy enclosed in this brochure.

- Your application form will be Machine-processed. First, write in CAPITAL LETTERS the required information or enter the relevant code with a black ball-point pen in the box(es) (wherever provided). Shade the alphabet/numeral/circle corresponding to the above using HB pencil only. What you write in the boxes is only for your guidance and for verification that you are shading the correct alphabet/numeral/option.

- If you wish to change a marking, erase the shaded spot completely and then shade the appropriate alphabet / numeral.

- Do not scribble, cut, tear or wrinkle the application form. Do not put any stray pencil marks anywhere on the application form.

- Do not write or make any marks on the Barcode.

- Your photograph, signature and address are to be machine-scanned. The machine recognizes only good quality images. You are therefore to paste a good quality colour photograph with light colour background taken not more than two months earlier and write your address and signature in black ball-point pen only.

- Please note that your name, your parent's /guardian's name and your date of birth should be exactly the same as given in your High school/+2/ Intermediate/Pre-University examination certificate.

- Your application must be complete in all respects. An incomplete application or application filled in a language other than English will summarily be rejected.

- Options filled by you in the application form cannot be changed at a later stage.

- Please note down the ten digit application number for future reference.

Item–1–Name of the Candidate

Write your name in capital letters as it appears or would appear in your XII Std certificate. Write only a single letter in a box. Do not leave any blank box between the letters in a name. One box should be left blank between consecutive words of your name. If your name has several initials, leave one blank after each of them. Shade the corresponding alphabet underneath each letter of the name. Do not write Mr., Miss, Km. etc before your name.

Item–2–Date of Birth

Write the date, month and year of your birth as per the English calendar and as recorded in your School Board/+2/ Intermediate/ Pre-University examination certificate. Use numerals 01 to 31 for DATE, numerals 01 to 12 for MONTH, and the last two digits for the YEAR of birth. For example, if born on 1st MAY 1991, the date should be entered as follows: 01 05 91. Shade the corresponding numerals for date, month and year in each column.

Item–3–Gender

Item–4–Religion (For statistical purpose only)

Item–5–Nationality

Item–6–Community

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code, in all the above items. Candidates belonging to MBC category should use the same code as OBC / BC (for statistical purpose only).

Item–7–Mother Tongue

Use the language codes as given below. Enter the correct code in the space provided and shade the numerals below to correspond with the code entered.

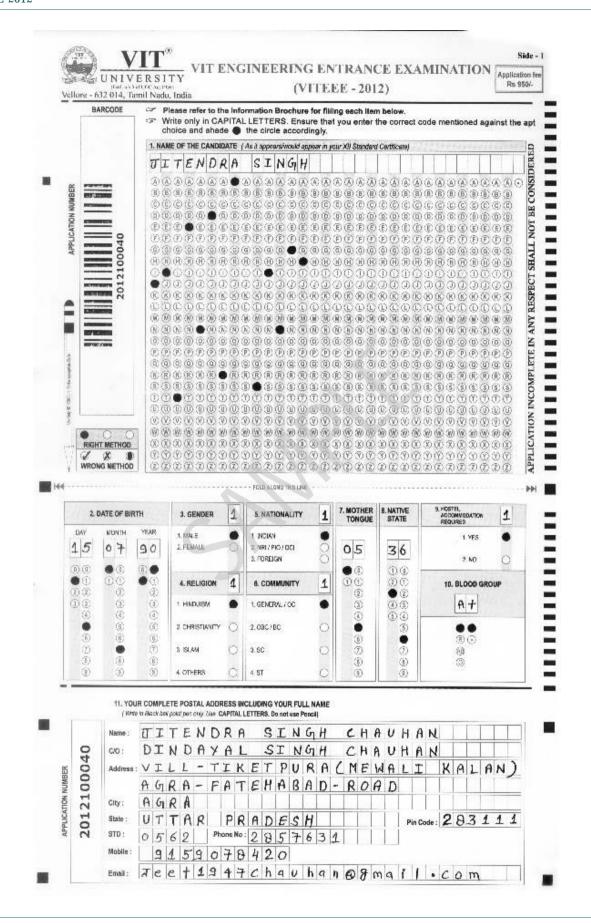| Assamese | - | 01 | Kashmiri | - | 07 | Sindhi | - 13 |
Bengali	-	02	Malayalam	-	08	Tamil	- 14
English	-	03	Marathi	-	09	Telugu	- 15
Gujarati	-	04	Marwari	-	10	Urdu	- 16
Hindi	-	05	Oriya	-	11	Others	- 17
Kannada	-	06	Punjabi	-	12		

Item–8–Native State

Refer to the codes for various States given in APPENDIX-I of the Information Brochure and enter the appropriate code in the box provided. Shade the numerals below to correspond with the code entered. Please mention particular state, candidates belongs to.

Item–9–Hostel Accommodation

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Item–10-Blood Group

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Side - 2

12. NAME OF THE PARENT / GUARDIAN

D I N D Y A L | S I N G H | C H A U H A N

13. RELATIONSHIP OF PERSON AT S.NO. 12 WITH THE CANDIDATE | **1**

1. FATHER ●   2. MOTHER ○   3. GUARDIAN ○

14. PARENT'S / GUARDIAN'S OCCUPATION | **2**

1. AGRICULTURE SERVICES ○   2. BUSINESS ●   3. DEFENCE SERVICE ○   4. ENGINEERING SERVICES ○   5. PUBLIC / GOVT. SERVICE ○   6. LAW PRACTICE ○

7. MEDICAL SERVICES ○   8. PRIVATE SERVICE ○   9. SELF EMPLOYED ○   10. TEACHING / RESEARCH ○   11. OTHERS ○

15. MEDIUM OF INSTRUCTION	16. CHOICE OF CAMPUS	17. XII BOARD	18. MODE OF STUDY	19. PINCODE (As mentioned in S.No.11)	20. MOBILE NO. (As mentioned in S. No .11)	21. TEST CITY
2	1	26	1	283111	09159078420	102
1. ENGLISH ○	1. VELLORE ●		1 REGULAR (FULL TIME) ●			
2. OTHERS ●	2. CHENNAI ○		2. OTHERS ○			

22. WHERE DID YOU SEE OUR ADMISSION ADVERTISEMENT ? (PLEASE SPECIFY NAME OF THE NEWS PAPER / WEBSITE ETC.)

w w w . V i t . a c . i n

SAMPLE

FOLD ALONG THIS LINE

23. DETAILS OF THE QUALIFYING EXAM PASSED / APPEARING FOR :
(Candidates must furnish this information, otherwise application will be rejected)

Qualifying Exam Passed / Appearing :	12th	Reg.No / Roll number (If already Alloted)	0030439

Name of the School : S H R E E M A T I   B H A G A V A T I   D E V I

School Address : D E V H A N S H   N A G R A   F A T E H A B A D - A G R A - R O A D

City : A G R A

State : U T T A R   P R A D E S H   Pin Code : 2 8 3 1 1 1

Month & Year Passed / Appearing : M A R   2 0 0 9   (eg: APR - 2012)

24. DECLARATION

I solemnly and sincerely affirm that I am an Indian National and that all particulars furnished by me in this application form are true and correct. I have not concealed any information. However, in the event of any information being found to be incorrect, fraudulent or untrue, either before or after the examination or after my admission to the programme, I understand that I am liable to face criminal prosecution and the management can claim all authority to cancel my candidature / selection or admission as the case may be and I would have to forego my seat and the fees.

I agree to abide by the rules and regulations governing the examination as well as the rules pertaining to the refund of tuition and hostel fees contained in the brochure.

I further undertake to submit all the required certificates as per the rule, either at the time of interview or during the admission process, failing which I understand that I would have to forego my seat and the fees.

JITENDRA SINGH
05-01-2011

Place : Agra

Date : 10 / 11 / 2011

Signature of the Parent / Guardian   Signature of the Applicant

CHECK LIST

1. Have you entered the correct Date of Birth in Sl.No. 2 ? ● Ⓝ
2. Have you affixed your photo in Sl.No. 24 ? ● Ⓝ
3. Have you signed in Sl.No. 24 ? ● Ⓝ

Item–11–Complete Postal Address

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 all other details including the correct PINCODE, for letters to reach you. Indicate your e-mail ID, Phone No. with the correct STD code and Mobile number, if any. Please note that this block will be machine scanned and therefore, it should be written very clearly and in CAPITAL LETTERS in black ball-point pen only. In case you make any mistake, cover the entire box with an exact sized white paper slip and write your address on it. Your address must not overflow this box.

The use of address of any coaching centre / Institution is strictly prohibited. If anybody uses the address of any coaching centre / Institution in his / her application form, it will be rejected.

Item–12–Name of the Parent / Guardian

Write the name of one parent or guardian in capital letters. Write only a single letter in a box. Do not leave any blank box between the letters in a name. One box should be left blank between consecutive words of the name. If the name has several initials, leave one blank after each of them.

tem–13–Relationship of the person at item 12 with the Candidate

Indicate the relationship of the person whose name you have entered in item 12, to you, by putting in the correct code in the box provided and then shading the circle against the same.

Item–14–Parent's / Guardian's Occupation

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Item–15–Medium of Instruction

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Item–16–Choice of campus

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Item–17–XII Board

Refer to the codes for various School Education Boards given in APPENDIX-II of the Information Brochure and write the appropriate code in the box provided. Shade the corresponding numeral under each digit of the code.

Candidates who have studied in Regular, Full time and Formal Education are alone eligible to apply.

Item–18–Mode of Study

Write the appropriate code in the box provided and then shade the appropriate circle to correspond with the code.

Item–19–Pincode

Write the PINCODE number in the space provided. Shade the corresponding numeral under each digit.

Item–20–Mobile Number

Write your mobile number in the space provided. Shade the corresponding numeral under each digit.

Item–21–Test City

Refer to the codes for Test Cities in APPENDIX-III of the Information Brochure and write the appropriate code in the space provided. Shade the corresponding numeral under each digit of the code.

Item–22–Where did you see our Admission Advertisment

Please specify the Name of the Newspaper / Website (or) any other source where you have seen the Admission Advertisement (write in CAPITAL LETTERS only)

Item–23–Details of the Qualifying Exam passed / appearing for

Write the relevant details in each box clearly in black ball-point pen only.

In case you have not yet been allotted your Registration No. / Roll No., please leave it blank.

Item–24–Declaration

The candidate must sign the declaration. The place and date should also be written. Applications without signatures will be treated as incomplete and rejected.

The Declaration by the candidate must be Countersigned by the Parent / Guardian.

Affix one recent good quality colour photograph in the space ear-marked for this in the Application Form. Paste a good quality colour photograph with light colour background taken not more than two months earlier, indicating clearly your name and the date of taking the photograph. Do not wear a cap or goggles. Spectacles if being used regularly are allowed. Polaroid photos are not acceptable. The photograph should be firmly affixed to the application form with gum or fevicol. Before affixing write your Application No. and Name on the back side of your photograph. It should not be pinned or stapled.

- Candidates are advised to retain the negative of the same photograph for use at the time of Entrance Examination/ Counselling / Admission. Do not sign on the photograph. Do not have it attested.

- It is expected that the candidate will have the same appearance at the time of the examination and counselling as in the photograph affixed in the application form. In case his/her appearance changes, he/she would be required to bring two new photographs at the time of the examination / counselling.

NOTE: Photograph should not be larger than the space provided in the box for pasting it.

Put your usual signature using a black ball-point pen, within the box provided. Your signature must not overflow or touch the border of the box. Your signature establishes your identity.

Check List

Read the instructions from 1 to 3 and shade yes or no.

20. Special Programme

B.Tech. with MBA Programme

Objective: This programme provides an opportunity to the students doing any branch of Engineering in our University to pursue simultaneously the Masters Degree in Business Administration.

This will enable the students to become trained Engineers proficient in Managerial skills also.

Duration: The programme is of five years (Ten Semesters) duration. For completion of this degree the student has to attend evening classes in addition to the regular classes from the third semester onwards.

Eligibility: All students pursuing B.Tech. in VIT. Willingness to put in extra effort and time.

Advantages: In five years they will have two professional qualifications in the form of UG degree in Engineering and Masters degree in Business Administration. Will have better job opportunities.

Candidates interested in joining any of the Programmes listed above should contact the Director, Academics at the end of the II semester.

Course Fee: ` 25,000/- per annum to be paid along with the normal tuition fees of the II, III & IV year. In V year they have to pay ` 1,10,000/- as tuition fee along with the special fee.

21. Check List

21.1. Documents to be Submitted at the time of Counselling:

1. VITEEE-2012 Admit Card ☐
2. Class X Board Certificate as a proof of date of birth ☐
3. Marks Sheet of Qualifying Examination (if available) ☐
4. Transfer Certificate / School Leaving Certificate ☐
5. Migration Certificate (if issued by the Board) ☐
6. Community Certificate (For SC/ST only) ☐
7. Nativity Certificate (For candidates hailing from Jammu and Kashmir and the North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura). ☐
8. DEMAND DRAFT for ` 30,000 /- drawn in favour of 'VIT University', payable at Vellore. ☐
9. If you are seeking hostel Admission bring DD for ` 20,000/- drawn favour of 'VIT UNIVERSITY' payable at Vellore. ☐

21.2. Documents to be Submitted at the time of Admission:

The following documents in original are required to be submitted at the time of admission:

- Qualifying examination mark statements of all attempts. ☐
- Transfer Certificate / School Leaving Certificate ☐
- Migration Certificate (if issued by the Board) ☐
- Conduct Certificate ☐
- Community Certificate (For SC/ST only) ☐
- Nativity Certificate (For candidates hailing from Jammu and Kashmir and the North Eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura). ☐
- Provisional Admission Letter. ☐
- Recent Passport size colour photos – 4 nos. ☐
- Affidavit has to be given by the Student and Parents separately as per Annexure - I & II ☐
- 2 sets of photocopies of all original documents. ☐

If you have any suggestions to improve our Information Brochure or Application Forms please e-mail to admission@vit.ac.in

- Thanks

APPENDIX - I
Codes of The State / Union Territory

State	Code		State	Code
Andhra Pradesh	10		Mizoram	28
Arunachal Pradesh	11		Nagaland	29
Assam	12		Orissa	30
Bihar	13		Punjab	31
Chhattisgarh	14		Rajasthan	32
Delhi	15		Sikkim	33
Goa	16		Tamil Nadu	34
Gujarat	17		Tripura	35
Haryana	18		Uttar Pradesh	36
Himachal Pradesh	19		Uttarakhand	37
Jammu and Kashmir	20		West Bengal	38
Jharkhand	21		Andaman and Nicobar Islands (UT)	39
Karnataka	22		Chandigarh (UT)	40
Kerala	23		Dadra and Nagar Haveli (UT)	41
Madhya Pradesh	24		Daman and Diu (UT)	42
Maharashtra	25		Lakshadweep (UT)	43
Manipur	26		Puducherry (UT)	44
Meghalaya	27			

APPENDIX - II
Codes of The School Education Boards of Class XII

Name of the Board	Code
Andhra Pradesh Board of Intermediate Education	01
Assam Higher Secondary Education Council	02
Bihar Intermediate Education Council	03
Central Board of Secondary Education	04
Chhattisgarh Madhyamik Shiksha Mandal	05
Council for the Indian School Certificate Examinations	06
Goa Board of Secondary and Higher Secondary Education	07
Gujarat Secondary Education Board	08
Haryana Board of Education	09
H P Board of School Education	10
J & K State Board of School Education	11
Jharkhand Academy Council	12
Karnataka Board of Pre-University Education	13
Kerala Board of Public Examinations	14
Madhya Pradesh Board of Secondary Education	15
Maharashtra State Board of Secondary and Higher Secondary Education	16
Manipur Council of Higher Secondary Education	17
Meghalaya Board of Secondary Education	18
Mizoram Board of School Education	19
Nagaland Board of School Education	20
Orissa Council of Higher Secondary Education	21
Punjab School Education Board	22
Rajasthan Board of Secondary Education	23
Tamil Nadu Board of Higher Secondary Education	24
Tripura Board of Secondary Education	25
U.P. Board of High School & Intermediate Education	26
Uttaranchal Shiksha Evam Pariksha Parishad	27
West Bengal Council of Higher Secondary Education	28
Others [IB, Cambridge..........]	29

* Candidates who have studied in regular, full time and formal education are alone eligible to apply.

APPENDIX - III
Codes of the Test Cities
VITEEE - 2012 Test Cities

State	Test City	Code
Andaman and Nicobar Islands	Port Blair	101
Andhra Pradesh	Ananthapur	102
	Guntur	103
	Hyderabad	104
	Kurnool	105
	Nellore	106
	Rajahmundry	107
	Tirupati	108
	Vijayawada	109
	Vishakapatnam	110
	Warangal	111
Arunachal Pradesh	Ita Nagar	112
Assam	Dibrugarh	113
	Guwahati	114
	Silchar	115
Bihar	Bhagalpur	116
	Gaya	117
	Muzaffarpur	118
	Patna	119
Chandigarh	Chandigarh	120
Chhattisgarh	Bhilai	121
	Bilaspur	122
	Raipur	123
Delhi	Delhi	124
Goa	Goa	125
Gujarat	Ahmedabad	126
	Rajkot	127
	Surat	128
	Vadodara	129
Haryana	Faridabad	130
	Gurgaon	131
	Hissar	132
	Kurukshetra	133
Himachal Pradesh	Dharmasala	134
	Shimla	135
Jammu & Kashmir	Jammu	136
	Srinagar	137

State	Test City	Code
Jharkhand	Bokaro	138
	Dhanbad	139
	Jamshedpur	140
	Ranchi	141
Karnataka	Bangalore	142
	Hubli	143
	Mangalore	144
Kerala	Kochi	145
	Kozhikode	146
	Thiruvananthapuram	147
	Thrissur	148
Madhya Pradesh	Bhopal	149
	Gwalior	150
	Indore	151
	Jabalpur	152
	Ujjain	153
Maharashtra	Amravati	154
	Aurangabad	155
	Latur	156
	Mumbai	157
	Nagpur	158
	Nashik	159
	Pune	160
	Thane	161
Manipur	Imphal	162
Meghalaya	Shillong	163
Mizoram	Aizwal	164
Orissa	Berhampur	165
	Bhubaneswar	166
	Rourkela	167
Puducherry	Puducherry	168
Punjab	Amritsar	169
	Bathinda	170
	Jalandhar	171
	Ludhiana	172

State	Test City	Code
Rajasthan	Ajmer	173
	Bikaner	174
	Jaipur	175
	Jodhpur	176
	Kota	177
	Udaipur	178
Sikkim	Gangtok	179
Tamil Nadu	Chennai	180
	Coimbatore	181
	Kumbakonam	182
	Madurai	183
	Salem	184
	Tiruchirapalli	185
	Tirunelveli	186
	Vellore	187
Tripura	Agartala	188
Uttar Pradesh	Agra	189
	Aligarh	190
	Allahabad	191
	Bareilly	192
	Gorakhpur	193
	Jhansi	194
	Kanpur	195
	Lucknow	196
	Mathura	197
	Meerut	198
	Moradabad	199
	Noida	200
	Rae Bareli	201
	Saharanpur	202
	Varanasi	203
Uttarakhand	Dehradun	204
	Pant Nagar	205
	Roorkee	206
West Bengal	Asansol	207
	Durgapur	208
	Kolkata	209
	Siliguri	210

Abroad	Dubai	211
	Kuwait	212

APPENDIX - IV
VITEEE – 2012 Syllabus

PART - I - PHYSICS

Electrostatics

Frictional electricity, charges and their conservation; Coulomb's law-forces between two point electric charges - Forces between multiple electric charges-superposition principle.

Electric field – electric field due to a point charge, electric field lines; electric dipole, electric field intensity due to a dipole - behaviour of a dipole in a uniform electric field-application of electric dipole in microwave oven.

Electric potential - potential difference-electric potential due to a point charge and dipole-equipotential surfaces – electrical potential energy of a system of two point charges.

Electric flux-Gauss's theorem and its applications to find field due to (i) infinitely long straight wire (ii) uniformly charged infinite plane sheet (iii) two parallel sheets and (iv) uniformly charged thin spherical shell (inside and outside)

Electrostatic induction-capacitor and capacitance – dielectric and electric polarisation – parallel plate capacitor with and without dielectric medium – applications of capacitor – energy stored in a capacitor - Capacitors in series and in parallel – action of points – Lightning arrester – Van de Graaff generator.

Current Electricity

Electric Current – flow of charges in a metallic conductor – drift velocity and mobility and their relation with electric current.

Ohm's law, electrical resistance - V-I characteristics – electrical resistivity and conductivity-classification of materials in terms of conductivity – Superconductivity (elementary ideas) - Carbon resistors – colour code for carbon resistors-combination of resistors – series and parallel – temperature dependence of resistance – internal resistance of a cell – potential difference and emf of a cell - combinations of cells in series and in parallel.

Kirchoff's law – illustration by simple circuits – Wheatstone's Bridge and its application for temperature coefficient of resistance measurement - Metrebridge - special case of Wheatstone bridge - Potentiometer- principle - comparing the emf of two cells.

Effects of Electric Current

Magnetic effect of Electric current - Concept of magnetic field - Oersted's experiment - Biot-Savart law - magnetic field due to an infinitely long current carrying straight wire and circular coil - Tangent galvanometer - construction and working - Bar magnet as an equivalent solenoid - magnetic field lines.

Ampere's circuital law and its application.

Force on a moving charge in uniform magnetic field and electic field - cyclotron - Force on current carrying conductor in a uniform magnetic field - Forces between two parallel current carrying conductors - definition of ampere.

Torque experienced by a current loop in a uniform magnetic field - moving coil galvanometer - conversion to ammeter and voltmeter - current loop as a magnetic dipole and its magnetic dipole moment - magnetic dipole moment of a revolving electron.

Electromagnetic Induction and Alternating Current

Electromagnetic induction - Faraday's law - induced emf and current - Lenz's law.

Self induction - Mutual induction - self inductance of a long solenoid - mutual inductance of two long solenoids.

Methods of inducing emf - (i) by changing magnetic induction (ii) by changing area enclosed by the coil and (iii) by changing the orientation of the coil (quantitative treatment).

AC generator - commercial generator. (Single phase, three phase).

Eddy current - applications - transformer - long distance transmission.

Alternating current - measurement of AC-AC circuit with resistance - AC circuit with inductor - AC circuit with capacitor - LCR series circuit - Resonance and Q - factor - power in AC circuits.

Electromagnetic Waves and Wave Optics

Electromagnetic waves and their characteristics - Electromagnetic spectrum-radio, microwaves, infra-red, visible, ultra-violet, X rays, gamma rays.

Wavefront and Huygens's principle - Reflection, total internal reflection and refraction of plane wave at a plane surface using wavefronts.

Interference - Young's double slit experiment and expression for fringe width - coherent source - interference of light-Formation of colours in thin films - analytical treatment - Newton's rings.

Diffraction - differences between interference and diffraction of light- diffraction grating.

Polarisation of light waves - polarisation by reflection - Brewster's law - double refraction - nicol prism - uses of plane polarised light and Polaroids - rotatory polarisation - polarimeter.

Atomic Physics

Atomic structure - discovery of the electron - specific charge (Thomson's method) and charge of the electron (Millikan's oil drop method) - alpha scattering - Rutherford's atom model.

Bohr's model - energy quantization - energy and wave number expressions - Hydrogen spectrum - energy level diagrams -

sodium and mercury spectra - excitation and ionization potentials - Sommerfeld's atom model.

Masers and Lasers - spontaneous and stimulated emissions - normal population and population inversion - Ruby laser - He-Ne laser - properties and applications of laser light - holography.

Dual Nature of Radiation and Matter

Photoelectric effect - Light waves and photons - Einstein's photoelectric equation - laws of photoelectric emission - particle nature of energy - experimental verification of Einstein's photoelectric equation - work function - photo cells and their application.

Matter waves - wave mechanical concept of the atom - wave nature of particles - De Broglie relation - De Broglie wavelength of an electron - electron microscope.

Nuclear Physics

Nuclear properties - nuclear radii, masses, binding energy, density, charge- isotopes, isobars and isotones - nuclear mass defect - binding energy - stability of nuclei - Bainbridge mass spectrometer.

Nature of nuclear forces- Neutron - discovery - properties - artificial transmutation - particle accelerator.

Radioactivity - alpha, beta and gamma radiations and their properties- -decay, -decay and -decay - Radioactive decay law - half life - mean life - artificial radioactivity - radio isotopes - effects and uses - Geiger - Muller counter.

Radio carbon dating - biological radiation hazards.

Nuclear fission - chain reaction - atom bomb - nuclear reactor - nuclear fusion - Hydrogen bomb- cosmic rays - elementary particles.

Semiconductor Devices and their Applications

Semiconductor theory - energy band in solids - difference between metals, insulators and semiconductors based on band theory- semiconductor doping - Intrinsic and Extrinsic semi conductors.

Formation of P-N Junction - Barrier potential and depletion layer-P-N Junction diode - Forward and reverse bias characteristics - diode as a rectifier - Zener diode-Zener diode as a voltage regulator - LED - seven segment display - LCD.

Junction transistors - characteristics - transistor as a switch - transistor as an amplifier - transistor biasing - RC, LC coupled and transformer coupling in amplifiers - feed back in amplifiers - positive and negative feedback - advantages of negative feedback in amplifiers - oscillator - condition for oscillations - LC circuit - Colpitt oscillator.

Logic gates - NOT, OR, AND, EXOR using discrete components - NAND and NOR gates as universal gates - Laws and theorems of Boolean algebra.

PART - II - CHEMISTRY

Atomic Structure

Bohr's atomic model-Sommerfeld's extension of atomic structure; Electronic configuration and Quantum numbers; Shapes of s,p,d,f orbitals - Pauli's exclusion principle - Hund's Rule of maximum multiplicity - Aufbau principle - Emission spectrum, absorption spectrum, line spectra and band spectra; Hydrogen spectrum - Lyman, Balmer, Poschen, Brakett and Pfund series; deBroglie's theory; Heisenberg's uncertainty principle - wave nature of electron - Schrodinger wave equation (No derivation). Eigen values and eigen functions. Hybridization of atomic orbitals involving s,p,d orbitals.

p, d and f - Block Elements

p block elements – Phosphorous compounds; PCl_3, PCl_5 Oxides. Hydrogen halides, Inter halogen compounds. Xenon fluoride compounds. General Characteristics of d-block elements - Electronic Configuration - Oxidation states of first row transition elements and their colours. Occurrence and principles of extraction: Copper, Silver, gold and Zinc. Preparation, properties of $CuSO_4$, $AgNO_3$ and $K_2Cr_2O_7$.

Lanthanides-Introduction, electronic configuration, general characteristics, oxidation state - lanthanide contraction, uses, brief comparison of Lanthanides and Actinides.

Coordination Chemistry and solid state chemistry

Introduction – Terminology in coordination chemistry – IUPAC nomenclature of mononuclear coordination compounds. Isomerism - Geometrical isomerism in 4-coordinate, 6-coordinate complexes. Theories on coordination compounds – Werner's theory (brief), Valence Bond theory. Uses of coordination compounds. Bioinorganic compounds (Hemoglobin and chlorophyll).

Lattice - unit cell, systems, types of Crystals, packing in solids; Ionic crystals – Imperfections in solids – point defects. X-Ray diffraction – Electrical Property, Amorphous solids (elementary ideas only).

Thermodynamics, Chemical Equilibrium and Chemical Kinetics

I and II law of thermodynamics – Spontaneous and non spontaneous processes, entropy, Gibb's free energy – Free energy change and chemical equilibrium - significance of entropy. Law of mass action – Le Chatlier's principle, applications of chemical equilibrium. Rate expression, order and molecularity of reactions, zero order, first order and pseudo first reaction - half life period. Determination of rate constant and order of reaction - Temperature dependence of rate constant – Arrhenius equation, activation energy.

Electrochemistry

Theory of electrical conductance; metallic and electrolytic conductance. Faraday's laws – theory of strong electrolytes – Specific resistance, specific conductance, equivalent and molar conductance – Variation of conductance with dilution – Kohlraush's law - Ionic product of water, p_H and p_{OH} - buffer solutions - use of pH values. Cells - Electrodes and electrode potentials - construction of cell and EMF values, Fuel cells, Corrosion and its prevention

Isomerism in Organic Compounds

Definition, Classification - structural isomerism, stereo isomerism - geometrical and optical isomerism. Optical activity - chirality - compounds containing chiral centres - R - S notation, D - L notation.

Alcohols and Ethers

Nomenclature of alcohols – Classification of alcohols – distinction between 1^0, 2^0 and 3^0 alcohols - General methods of preparation of primary alcohols, properties. Methods of preparation of dihydric alcohols: Glycol - Properties – Uses, Methods of preparation of trihydric alcohols – Properties – uses. Aromatic alcohols – Preparation and properties of phenols and benzyl alcohol.

Ethers – Nomenclature of ethers - general methods of preparation of aliphatic ethers – Properties – Uses. Aromatic ethers – Preparation of anisole – Uses.

Carbonyl Compounds

Nomenclature of carbonyl compounds – Comparison of aldehydes and ketones. General methods of preparation of aldehydes – Properties – Uses. Aromatic aldehydes – Preparation of benzaldehyde – Properties and Uses. Ketones – general methods of preparation of aliphatic ketones (acetone) - Properties – Uses. Aromatic ketones – preparation of acetophenone – Properties – Uses, preparation of benzophenone – Properties. Name reactions; Clemmenson reduction, wolff – kishner reduction, cannizaro reaction, Claisen Schmidt reaction, Benzoin Condensation, aldol Condensation. Preparation and applications of Grignard reagents.

Carboxylic Acids and their derivatives

Nomenclature – Preparation of aliphatic monocarboxylic acids – formic acid – Properties – Uses. Monohydroxy mono carboxylic acids; Lactic acid – synthesis of lactic acid. Aliphatic dicarboxylic acids; Preparation of oxalic and succinic acid. Aromatic acids; Benzoic and Salicylic acid – Properties – uses. Derivatives of carboxylic acids; acetyl chloride (CH_3COCl) – Preparation – Properties – Uses. Preparation of acetamide, Properties – acetic anhydride – preparation, Properties. Preparation of esters – methyl acetate – Properties.

Organic Nitrogen Compounds

Aliphatic nitro compounds – Preparation of aliphatic nitroalkanes – Properties – Uses. Aromatic nitro compounds – Preparation – Properties – Uses. Distinction between aliphatic and aromatic nitro compounds. Amines; aliphatic amines – General methods of preparation – Properties – Distinction between, 1^0, 2^0 and 3^0 amines. Aromatic amines – Synthesis of benzylamine – Properties, Aniline – Preparation – Properties – Uses. Distinction between aliphatic and aromatic amines. Aliphatic nitriles – Preparation – properties – Uses. Diazonium salts – Preparation of benzene diazoniumchloride – Properties.

Biomolecules

Carbohydrates – distinction between sugars and non sugars, structural and formulae of glucose, fructose and sucrose, with their linkages, invert sugar – definition and examples of polysaccharides, amino acids, peptides

PART - III - MATHEMATICS

Applications of Matrices and Determinants

Adjoint, inverse - properties, computation of inverses, solution of system of linear equations by matrix inversion method.

Rank of a matrix - elementary transformation on a matrix, consistency of a system of linear equations, Cramer's rule, non-homogeneous equations, homogeneous linear system and rank method.

Complex Numbers

Complex number system - conjugate, properties, ordered pair representation.

Modulus - properties, geometrical representation, polar form, principal value, conjugate, sum, difference, product, quotient, vector interpretation, solutions of polynomial equations, De Moivre's theorem and its applications.

Roots of a Complex Number - n^{th} roots, cube roots, fourth roots.

Analytical Geometry of two dimensions

Definition of a conic - General Equation of a Conic, Classification with respect to the General Equation of a Conic, Classification of Conics with respect to eccentricity.

Equations of conic sections (parabola, ellipse and hyperbola) in standard forms and general forms - Directrix, Focus and Latus rectum - parametric form of conics and chords - Tangents and normals - cartesian form and parametric form - Equation of Chord of contact of tangents from a point (X_1, Y_1) to all the above said curves.

Asymptotes, Rectangular hyperbola - Standard equation of a rectangular hyperbola.

Vector Algebra

Scalar Product – Angle between two vectors, properties of scalar product, applications of dot products. vector product – right handed and left handed systems, properties of vector product, applications of cross product.

Product of three vectors – Scalar triple product, Properties of scalar triple product, Vector triple product, vector product of four vectors, scalar product of four vectors.

Analytical Geometry of Three Dimensions

Direction cosines - Direction ratios - Equation of a straight line passing through a given point and Parallel to a given line, Passing through two given points, Angle between two lines.

Planes - Equation of a plane, Passing through a given point and perpendicular to a line, given the distance from the origin and unit normal, Passing through a given point and parallel to two given lines, Passing through two given points and Parallel to a given line, Passing through three given Non-Collinear points, Passing through the line of intersection of two given planes, The distance between a point and a Plane, the plane which contains two given line (co-planar lines), angle between a line and a plane.

Skew Lines - Shortest distance between two lines, Condition for two lines to intersect, Point of Intersection, Collinearity of three points.

Sphere - Equation of the Sphere whose centre and radius are given, equation of a sphere when the extremities of the diameter are given.

Differential Calculus

Derivative as a rate Measurer - Rate of change, Velocity, Acceleration, Related Rates, Derivative as a measure of Slope, Tangent, Normal and angle between Curves, Maxima and Minima.

Mean value Theorem - Rolle's Theorem, Lagrange Mean Value Theorem, Taylor's and Maclaurin's series, L' Hospital's Rule, Stationary points, Increasing, Decreasing, Maxima, Minima, Concavity, Convexity and points of Inflexion.

Errors and Approximations - absolute, Relative, Percentage Errors - Curve Tracing, Partial Derivatives, Euler's Theorem.

Integral Calculus and its Applications

Simple definite Integrals - Fundamental Theorems of Calculus, Properties of Definite Integrals.

Reduction formulae - Reduction formulae for $\sin^n x\, dx$ and , $\cos^n x\, dx$ Bernoulli's formula.

Area of Bounded Regions, Length of the Curve.

Differential Equations

Differential Equations - Formation of differential equations, order and degree, solving differential equations (1_{st} order), variable separable homogeneous, linear equations.

Second order linear Differential Equations - Second order Linear Differential Equations with constant co-efficients, Finding the Particular Integral if $f(x)=e^{mx}$, sin mx, cos mx, x, x^2.

Probability Distributions

Probability - Axioms - Addition Law - Conditional Probability - Multiplicative Law - Baye's Theorem - Random variable - probability density function, distribution function, mathematical expectation, variance.

Theoretical distributions - discrete distributions, Binomial, Poisson distributions - Continuous cistributions, Normal distribution.

Discrete Mathematics

Mathematical Logic - Logical statements, Connectives, Truth Tables, Logical Equivalence, Tautology, Contradiction.

Groups - Binary Operations, Semigroups, Monoids, Groups, Order of a Group, Order of an Element., Properties of Groups.

PART - IV - BIOLOGY

Taxonomy

Linnaean system of Classification and Binomial Nomenclature; History and types of classification; Status of Bacteria and Viruses; Classification of angiosperms up to sub-class level (Bentham and Hooker' system); Salient features of Non-Chordates up to phylum level and chordates up to class levels

Evolution

Modern concepts of Organic Evolution, Evidences of Organic Evolution (Fossil records and Biochemical Evidences). Darwinism and Neo - Darwinism, Lamarckism, Neo - Lamarckism, sources of variation, Mutation, Recombination, Genetic Drift, Migration, natural Selection. Origin and concepts of Species: Speciation and Isolation (Geographical Pre-Mating and Post-Mating or Post Zygotic), Adaptive Radiations.

Cell and Molecular Biology

Discovery of Cell, Cell as a contained unit–Pro and Eukaryotic cells and its Ultra Structure. Cell division: Amitosis, Mitosis and Meiosis. The Cell: Cell Wall, Cell Membrance and Cell

Organelles (Plastids, Mitochondria, Endoplasmic Reticulum, Golgi Bodies, Ribosomes, Lysosomes, Vacuoles, and Centrioles)

DNA and RNA, DNA as Genetic Material, RNA as Genetic Material Replication, Transcription, Genetic Code, Translation, Gene Expression and Regulation, Protein Synthesis, DNA repair.

Reproduction and Genetics

Reproduction in Organisms: Asexual and Sexual Reproduction, Sexual Reproduction in Flowering Plants, Structure of Flowers, Pollination, Fertilization, Development of seeds and fruits, Apomixes, and Poly - Embryony.

Human Reproduction: Reproductive system in Male and Female, Menstrual Cycles, Production of Gametes, Fertilization, Implantation, Embryo Development, Pregnancy, Parturition and Lactation. Sex Determination in Human, XX and XY.

Chromosomes: Structure and Types, Genes and Genomes, Linkage and Crossing over, Recombination of Chromosomes, Mutation, Chromosomal Aberration, mendelian Inheritance, Chromosomal Theory of Inheritance, Deviation from Mendelian Ratio (Gene Interaction, Incomplete Dominance, Co-Dominance, Complimentary Gene, Multiple Allelism), Chromosomal Disorders in Humans.

Microbiology and Immunology

Introduction to Microbial Diversity, History of Medical Microbiology, Discovery of Antibiotics, Pasteurization, Microscopes. Fungi, Bacteria, Virus, Protozoa, Algae-Beneficial and harmful. Parasites and pathogens. Structure of Microbes and Diseases caused by them. Microbes in Households, Food Processing, Industrial Production of Microbial Products, Sewage Treatment, Waste management and Energy Generation. Basic concepts of Immunology: Innate and Humoral Immunity, Lymphoid Organs, Lymph Nodes and Spleen, Antibodies, Vaccines, Transplantation Immunology, Immune System Disorders.

Biochemistry

Sturcture and Function of Carbohydrates, Lipids, Proteins. Disaccharide, Starch, Glycogen, Fats, Cholesterol, Amino Acids, Peptides. Primary, Secondary and Tertiary Structure of Proteins. Enzymes, Sturcture and Mechanism of Enzyme Catalysis, Specificity of Enzymes, Co Factors and Co-Enzymes.

Physiology: Plant and Human

Plant Physiology: Movement of water, Food, Nutrients, Gases and Minerals. Respiration, Photosynthesis (Light and Dark Reactions), Factors affecting Photosynthesis, Electron Transport Chain (ETC), Glycolysis, Kreb's Cycle. Pentose Phosphate pathway, Hormones and Growth Regulators, Photo-Periodism and Vernalization.

Human Physiology:

Digestion and Absorption, Breathing and Respiration, Body Fluids and Circulation, Excretory system, Endocrine System, Nervous System, Skeletal and Muscular Systems: Locomotion and Movement, Growth, Aging and Death. Hormones; types of hormones and its functions.

Biotechnology and Its Applications

Recombinant DNA Technology, Applications in Health, Agriculture and Industries; Genetically Modified Organisms; Bio-Safety Issues, Insulin and Bt Cotton, Transgenic Plants and microbes, Plant Tissue Culture and Its Application, Protoplasmic Fusions, Single Cell Proteins, Biotechnology Products in Animal Sciences and Dairy.

Biodiversity, Ecology and Environment:

Ecosystems: Components, Types and Energy flow in Ecosystem; Species, Population and Community, Ecological Adaptations, Centers of Diversity and Conservation of Bio-Diversity, Botanical Gardens, National Parks, Sanctuaries and Museums, Environmental Issues, Human Population Explosion, Green House Effects, Ozone Layer Depletion, Government and Non-Government Agencies Handling Environmental Issues: Poverty and Freshwater Crisis and Management.

Applied Biology and Human Welfare

Bio-Pesticides, Genetically Modified Foods, Bio-War, Bio-Piracy, Bio-Pattern, Sustainable Agriculture and Medicinal Plants, Economic Important Plants (Food Crops, Oil Seeds, Fiber Yielding, Sugar Crops and Timber Yielding), Bio-Pharming, Pesticides, Organic Agriculture.

Population and Birth Control, Contraception and MTP, Sexually Transmitted Diseases, Infertility, Cancer and AIDS. Adolescence and Drug / or Alcohol Abuse.

Advanced Biology

Plant and Human Genome Projects, DNA Fingerprinting and its Applications, Bioinformatics and its Applications, DNA Sequencing and Protein Structure and Biological Database.

APPENDIX – V
SAMPLE QUESTIONS
PART – I – PHYSICS

1) The capacitance of two concentric spheres of radii R_1 and R_2 is ($R_2 > R_1$)

   A) $4\pi\varepsilon_0 \dfrac{R_1 R_2}{R_2 - R_1}$

   B) $4\pi\varepsilon_0 R_1$

   C) $4\pi\varepsilon_0 R_2$

   D) $4\pi\varepsilon_0 \dfrac{(R_2 - R_1)}{R_1 R_2}$

2) A soap bubble appears green at the point on its front surface nearest the viewer. What is the smallest thickness the soap bubble film could have? N = 1.35

   A) 100 nm
   B) 200 nm
   C) 300 nm
   D) 400 nm

3) Light of wavelength 500 nm passes through a slit 1.0×10^{-3} mm. How wide is the central maximum in degrees?

   A) 30 degrees
   B) 47 degrees
   C) 45 degrees
   D) 90 degrees

4) A circular coil of wire has a diameter of 20 cm and contains 10 loops. The current in each loop is 3 A and the coil is placed in a 2T external field. What is the maximum torque exerted on the coil by the field?

   A) 1.48 N.m
   B) 2.1 N.m
   C) 1.88 N.m
   D) 1.9 N.m

5) A magnet of length 10 cm and magnetic moment 1 Am^2, is placed along the side AB of an equilateral triangle ABC. If the length of side AB is 10 cm, the magnetic field at point C is

   A) 10^{-9} T
   B) 10^{-4} T
   C) 10^{-5} T
   D) 10^{-7} T

6) An alternating voltage $V = V_o \sin\omega t$ is applied across a circuit. As a result a current $I = I_0 \sin\left(\omega t - \dfrac{\pi}{2}\right)$ flows in it. The power consumed per cycle is

   A) $0.707\, V_o I_o$
   B) $0.5\, V_o I_o$
   C) zero
   D) $1.414\, V_o I_o$

7) In an inductor, the current I (in Ampere) varies with time t (in second) as I = 5 + 16 t. If the emf induced in the inductor is 10 mV, then its self inductance is

   A) 6.25×10^{-4} H
   B) 6.25×10^{-3} H
   C) 7.5×10^{-4} H
   D) 7.5×10^{-3} H

8) A transformer for home use of a portable radio reduces 120 V ac to 9 V ac. The secondary coil contains 30 turns and the radio draws 400 ms. Calculate the number of turns in the primary coil.

   A) 500 turns
   B) 400 turns
   C) 300 turns
   D) 600 turns

9) Calculate the resistance and peak current in a 1000 W hair dryer connected to a 120 V line?

   A) 12.2 , 9.33 A
   B) 14.1 , 9.33 A
   C) 15.6 , 8.33 A
   D) 14.4 , 8.33 A

10) The fringe width obtained in Youngs double - slit experiment conducted in a medium of refractive index 3 is 2 mm. The fringe width in vacuum is

   A) 5 mm
   B) 1.5 mm
   C) 6 mm
   D) 1 mm

PART – II – CHEMISTRY

1) A reaction is monitored by measuring the amount of the reactant that is left at a given time after initiation of the reaction. The initial amount of the reactant is 32 g. The amounts left after 5 minutes is 8 g and that after 10 minutes is 2 g, then the order of the reaction is

A) 0   B) 1   C) 2   D) 3

2) The molar conductance at infinite dilution of KCl, KNO_3, and $AgNO_3$, expressed as $mho.mol^{-1}m^2$, are 0.0159, 0.0148 and 0.0134 respectively. The molar conductance of $AgCl$ at infite dilution is

A) 0.045   B) 0.0145   C) 0.145   D) 0.195

3) Diethyl ether on heating with excess of concentrated HI gives two molecules of

A) Ethyl iodide   B) Iodoform   C) Ethanol   D) Methyl iodide

4) Which of the following product is formed in the reaction $CH_3MgBr \xrightarrow{\text{Dry Ice / acid}}$?

A) CH_3COOH B) Ch_4 C) CH_3OH D) CH_3CH_2CHO

5) The number of quantum numbers of a free electron (one that is not bound to a nucleus) is

A) 0   B) 1   C) 2   D) 4

6) The ground state elcetronic configuration of an element of atomic number 47 is

A) $[Kr]\,4d^9\,5s^2$ B) $[Xe]\,4d^{10}\,5s^1$ C) $[Kr]\,4d^{10}\,5s^1$ D) $[Kr]\,4d^6\,5s^2\,5p^3$

7) The number of nodes in a 3s orbital is

A) 0   B) 1   C) 2   D) 3

8) The correct order of the second ionization energies of fourth period elements Ca, Sc, Ti and V is

A) Ca<V<Sc<Ti   B) V<Ti<Sc<Ca   C) Ca<Sc<Ti<V   D) Sc<Ca<V<Ti

9) The colour of the precipitate forms when $AgNO_3$ solution reacts with S^{2-} ion

A) red   B) black   C) white   D) yellow

10) Identify the compounds X, Y and Z of the following reactions, where compound Z is an aldehyde

$$X \; (C_4H_8) \xrightarrow[\text{2. } H_2O_2, \text{ NaOH}]{\text{1. } B_2H_6} Y \; (C_4H_{10}O) \xleftarrow[\text{2. } H_3O^+]{\text{1. } NaBH_4} Z \; (C_4H_8O)$$

A) $(CH_3)_2C=CH_2$, $(CH_3)_3COH$, $(CH_3)_2CHCHO$
B) $(CH_3)_2C=CH_2$, $(CH_3)_2CHCH_2OH$, $(CH_3)_2CHCHO$
C) $CH_3CH_2CH=CH_2$, $CH_3CH(CH_3)CH_2OH$, $CH_3CH_2CH_2CHO$
D) $CH_3CH=CHCH_3$, $CH_3CH(OH)CH_2CH_3CH_3CH_2CH_2CHO$

PART – III – MATHEMATICS

1) M is a 4 x 4 matrix such that the first two rows are linearly independent and any three columns are linearly dependent. Then the rank of M is

   A) ONE B) TWO C) THREE D) FOUR

2) The line passing through the points A(1, -2, -3) and B(4, -5, -6) interesects the plane z = 1 at the point

   A) $\frac{7}{3}, -\frac{10}{3}, 1$ B) $-\frac{7}{3}, -\frac{10}{3}, 1$ C) (-3, 2, 1) D) (-3, 6, 1)

3) A box contains 8 items of which 2 are defective. A person draws 3 items from the box. Determine the expected number of defective items.

   A) 0.75 B) 0.3 C) 0.2 D) 0.1

4) If one of the solutions of the equation $x^4 + ix^3 - ix - 1 = 0$ is 1, where $i = \sqrt{-1}$, then the remaining solutions are

   A) $1, \frac{i}{2}\left(-1 \pm \sqrt{3}i\right)$ B) $-1, \frac{i}{2}\left(1 \pm \sqrt{5}\right)$ C) $-1, \frac{i}{2}\left(1 \pm \sqrt{3}\right)$ D) $-1, \frac{i}{2}\left(1 \pm \sqrt{5}i\right)$

5) The area of the planar region $\{(x, y) \quad [-1,1] \times [-1,1]: |x| + y \quad 0\}$ is equal to

   A) 3 B) 2 C) 1 D) 4

6) If $a = \cos + i\sin$, $b = \cos + i\sin$, $c = \cos + i\sin$ and $a + b + c = 0$, the value of $a^{-1} + b^{-1} + c^{-1}$ is

   A) 1 B) 0 C) -1 D) 2

7) The locus of the foot of perpendicular drawn from the vertex of a parabola to a tangent to the parabola $y^2 = -8x$ is

   A) $(x+2)y^2 = x^3$ B) $(x-2)y^2 = x^3$ C) $(x-2)y^2 + x^3 = 0$ D) $(x+2)y^2 + x^3 = 0$

8) The area of the triangle formed by the tangent at the point (2, 8) on the hyperbola xy = 16 and its asymptotes is equal to

   A) 8 B) 64 C) 32 D) 16

9) The value of for which the system of equations x+y-2z=0, 2x-3y+z=0, x-5y+4z= is consistent is

   A) 1 B) -1 C) 0 D) 2

10) Let p be the statement: "You can take the fight". Let q be the statement: "You buy a ticket", then p $\longleftrightarrow$ q is the statement

   A) if p then q B) p or q C) if q then p D) p if q

PART – IV – BIOLOGY

1) Cluster of lineages is termed as

   A) Phyla   B) Speciation   C) Species   D) Clade

2) Drawbacks of Bentham-Hooker system of classification is
   A) Position of Gymnospermae in between dicots and monocots
   B) Geographical distribution of various genera
   C) Placement of monocots after dicots
   D) Natural system

3) Archaeopteryx is a connecting link between
   A) Amphibians and Reptiles   B) Birds and Mammals
   C) Reptiles and Birds   D) Amphibian and Birds

4) Chitin, a component of fungal cell walls, is a polymer of
   A) N-acetylglucosamine   B) Sialic Acid
   C) N-acetylmuramic acid   D) A disaccharide containing glucose and mannose

5) Two ribosomal subunits remain united with each other due to
   A) Low concentration of Mg^{2+} ions   B) High concentration of Ca^{2+} ions
   C) Low concentration of Mn^{2+} ions   D) High concentration of Mg^{2+} ions

6) A mixed cranial nerve is
   A) Auditory   B) Abducens   C) Facial   D) Oculomotor

7) Genetically engineered microorganism used successfully in bioremediation of oil spills is

   A) Trichoderma   B) Pseudomonas   C) Bacillus   D) Xanthomonas

8) The speciation occurs when biological populations of the same species become isolated due to geographical changes is called as

   A) Sympatric speciation   B) Saltational speciation   C) Allopatric speciation   D) Parapatric speciation

9) Okazaki fragment refers to
   A) DNA segment involved in recombination
   B) RNA primer segments in the leading strand
   C) Chain of nucleotide segments in the lagging strand
   D) DNA segment formed by endonuclease action

10) Evolution is irreversible. This is known as
    A) Allen's Rule   B) Dollow Law   C) Bergman's Rule   D) Cope's Rule

ANNEXURE I

AFFIDAVIT BY THE STUDENT

(This matter has to be typed on a non-judicial stamp paper of ` 20)

I, _____ (full name of student with admission/registration/enrolment number) s/o d/o Mr./Mrs./Ms. _____ , having been admitted to _____ (name of the institution), have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations") carefully read and fully understood the provisions contained in the said Regulations.

2)   I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3)   I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against me in case I am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

4)   I hereby solemnly aver and undertake that
   a)   I will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
   b)   I will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

5)   I hereby affirm that, if found guilty of ragging, I am liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against me under any penal law or any law for the time being in force.

6)   I hereby declare that I have not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, I am aware that my admission is liable to be cancelled.

Declared this ___day of _____ month of _____year.

_____
Signature of deponent
Name:

VERIFICATION

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at _____ (place) on this the _____ (day), of _____ (month), _____(year).

_____
Signature of deponent

Solemnly affirmed and signed in my presence on this the _____(day) of _____(month), _____(year) after reading the contents of this affidavit.

OATH COMMISSIONER / ADVOCATE AND NOTARY PUBLIC

ANNEXURE II

AFFIDAVIT BY PARENT/GUARDIAN
(This matter has to be typed on a nonjudicial stamp paper of ` 20)

I,   Mr./Mrs./Ms. _____ (full name of parent/guardian) father/mother/guardian of, _____ (full name of student with admission/registration/enrolment number) , having been admitted to _____ (name of the institution), have received a copy of the UGC Regulations on Curbing the Menace of Ragging in Higher Educational Institutions, 2009, (hereinafter called the "Regulations"), carefully read and fully understood the provisions contained in the said Regulations.

2)   I have, in particular, perused clause 3 of the Regulations and am aware as to what constitutes ragging.

3)   I have also, in particular, perused clause 7 and clause 9.1 of the Regulations and am fully aware of the penal and administrative action that is liable to be taken against my ward in case he/she is found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.

4)   I hereby solemnly aver and undertake that

a) My ward will not indulge in any behaviour or act that may be constituted as ragging under clause 3 of the Regulations.
b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 3 of the Regulations.

5)   I hereby affirm that, if found guilty of ragging, my ward is liable for punishment according to clause 9.1 of the Regulations, without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.

6)   I hereby declare that my ward has not been expelled or debarred from admission in any institution in the country on account of being found guilty of, abetting or being part of a conspiracy to promote, ragging; and further affirm that, in case the declaration is found to be untrue, the admission of my ward is liable to be cancelled.

Declared this ___day of _____ month of _____year.

_____
Signature of deponent
Name   :
Address:
Telephone/ Mobile No.:

VERIFICATION

Verified that the contents of this affidavit are true to the best of my knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein.

Verified at _____(place) on this the _____ (day), of _____(month), _____(year) .

_ _
Signature of deponent

Solemnly affirmed and signed in my presence on this the _____(day), of _____(month), _____(year) after reading the contents of this affidavit.

OATH COMMISSIONER / ADVOCATE AND NOTARY PUBLIC

ANNEXURE III

CERTIFICATE TO PROVE NATIVITY
(For candidates hailing from Jammu and Kashmir and the North Eastern states of
Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura)

Certified that Mr. / Ms. _____ an

applicant for admission to B.Tech. Degree programme in the year _____, son / daughter of Shri. /

Smt_____ residing

at_____

in _____ District of _____ State, is a native of

_____ State.

Signature of Tahsildar or Revenue Authority
Name   :
Designation   :
Place   :
Date   :
Office Seal   :   Office Seal

THE FORM OF CASTE CERTIFICATE FOR SC / ST

Certified that Mr. / Ms. _____ an applicant

for admission to B.Tech. Degree programme in the year _____, son / daughter of Shri. / Smt

_____ residing at_____

_____ in _____ District

of _____ belongs to the _____ Caste / Tribe,

which is recognized as a Scheduled Caste / Scheduled Tribe under the Constitution (Scheduled Castes) Order 1950 / The Constitution

(Scheduled Tribes) Order, 1950, as amended by the Scheduled Castes and Scheduled Tribes Orders amendment Act, 1976.

Signature of Competent Authority

Name   :
Designation   :
Place   :
Date   :

Office Seal
Authorities empowered to issue Scheduled Caste / Scheduled Tribe Certificate

- District Magistrate / Additional District Magistrate / Collector / Deputy Collector / Deputy Commissioner / 1st Class Stipendiary Magistrate / City Magistrate / Sub-Divisional Magistrate / Taluk Magistrate / Executive Magistrate / Extra Assistant Commissioner.

- Chief Presidency Magistrate / Additional Chief Presidency Magistrate / Presidency Magistrate

- Revenue Officer not below the rank of Tahsildar

- Sub-Divisional Officer of the area where the candidate and / or his family normally resides

IMPORTANT DATES.

Last date for Issue & Receipt of Applications form	Wednesday	February 29, 2012
VIT Engineering Entrance Examination (VITEEE-2012)	Saturday	April 21, 2012
Declaration of Results (Tentative)	Monday	May 07, 2012

Commencement of Classes (Tentative) - Vellore Campus

B.Tech. – CSE, ECE, EEE, EIE	Wednesday July 04, 2012.
B.Tech. – Bioinformatics, Bio-Medical, Biotech, Civil, IT, Mechanical, Mech(spec. in Energy Engg, Mech(spec. in Chemical Process Engg), Mech (spec. in Automotive Engg)	Friday July 06, 2012.

For Admission details contact:
Admissions Officer
VIT University
Vellore – 632 014, Tamil Nadu, INDIA
Phone: +91-416-2202247, 2202168, 2202157
Fax: +91-416 224 5544, 224 5766
Email: admission@vit.ac.in
Website: www.vit.ac.in

For Hostel details contact:
Chief Warden
VIT University
Vellore – 632 014, Tamil Nadu, INDIA
Phone: 0416-220 2028 (2 lines), 220 2528
Email:chiefwarden@vit.ac.in
Mens Hostel: +91-416-220 2028 (2 lines), 220 2528
Fax: +91-416 224 4705
Ladies Hostel: +91-416-220 2710
Fax: +91-416 420 7074

Commencement of Classes (Tentative) - Chennai Campus

B.Tech. – Civil, CSE, ECE, EEE, Mechancial	Wednesday July 04, 2012.

For Admission details contact:
Administrative Officer
Vandalur - Kelambakkam Road
Chennai - 600 048
Tel: +91 44 3993 1555
Fax: +91 44 3993 2555
Email: admin.chennai@vit.ac.in

For Hostel details contact:
Chief Warden
VIT University Chennai Campus
Vandalur - Kelambakkam Road
Chennai - 600 048
Tel: +91 44 3993 1205
Mens Hostel: +91 44 3993 1205
Ladies Hostel: +91 44 3993 1251
Fax: +91 44 3993 2555

SCHOLARSHIP UNDER "GV SCHOOL DEVELOPMENT PROGRAMME" (GVSDP)

Performance	Scholarship
Toppers of each State Board and Central Board	100% fee waiver for all the four years.
VITEEE rank holders of 1 to 50	75% fee waiver for all the four years.
VITEEE rank holders of 51 to 100	50% fee waiver for all the four years.
VITEEE rank holders of 101 to 1000	Annual fees (Tuition fee & Special fee) : ` 95,000

- We do not accept cash. We collect fees only in the form of Demand drafts.

- We do not have any agents.

- If any one demands any cash, please report it to vigilance@vit.ac.in to enable us to take legal action.

VIT-A place to learn; A chance to grow

Legal Jurisdiction

All Suits and actions arising out of or relating to VIT University shall be instituted within the jurisdiction of courts at Vellore, Tamil Nadu only. The Registrar of the University shall be the legal person in whose name the University may sue or be sued.