1.0 IMPORTANT NOTES

1.1 Application through Physical Mode

Application Form & Prospectus can be obtained by post or personally from the Admission Section of KIIT University Koel Campus, PO-KIIT, Bhubaneswar, Pin-751024. Forms will also be available at different counters of University, designated branches of Allahabad Bank and Post Offices. **(Appendix –VI)**

Candidates must follow instructions strictly as given in the Prospectus. Candidates not complying with the instructions shall be summarily disqualified.

Candidates must keep a photocopy of the Application Form for future reference.
Before mailing the application, please ensure that:-

- The Form is signed at specified columns by candidate and guardian.
- A recent Passport size photograph taken on or after 1st September'2007, is pasted in the photograph block.

Despatch the application by Registered Post/ Speed Post/ Courier using the KIIT envelope.

1.2 Online Application Mode

Candidates can apply online at http://www.kiitee.ac.in or http://www.kiit.ac.in. The 'Online Application Form' will be accepted after the following steps are completed:-

- Fill up 'Online Application Form' and submit.
- Take the print out of Registration Form mentioning the Application Number.
- Paste the Photograph in the space provided for it. Enclose one additional photograph.
- Sign on 'Signature' columns both by candidate and parent/guardian.
- Despatch the Form along with two passport size photographs and a Demand Draft of Rs**.700/- or Rs.900/-(as applicable)** drawn in favour of KIIT payable at Bhubaneswar.
- Mention the Application No., Name and Address on the reverse of the Demand Draft.

Candidates should retain photocopies of 'printed application form' and 'demand draft' which may serve as reference for future correspondence.

1.3 Common Instructions

Information on receipt of applications at KIIT will be available in the website http://www.kiitee.ac.in & http://www.kiit.ac.in. Candidates can check status of their Application Form on the website after 20 days of its despatch to KIIT.

In case, the Admit Card is not received by **1st April, 2008**, candidates should check KIIT website and download the admit card by entering the application number. In case of non - availability of admit card in the website, write/contact to KIIT between **1st April, 2008 to 10th April, 2008** giving details of the post office, date of despatch, receipt of postal despatch, Photocopy of the Application Form, one photograph (as pasted on the Application Form) and proof of remittance of fee.

Candidates must preserve the Admit Card till the admission process is over.

1.4 IMPORTANT DATES

Issue of Application Form	**: -**	**07.01.2008**
Last date of Selling & Receiving Application Form	**:-**	**28.02.2008**
Date of Entrance Exam	**:-**	**03.05.2008 & 04. 05.2008**
Publication of Result	**:-**	**20.05.2008**
Counselling	**:-**	**10.06.2008 to 14.06.2008**

Application Form should be sent to
The Director, Admissions
KIIT University, Koel Campus
PO-KIIT, Bhubaneswar
Pin-751024, Orissa
Ph.No.-0674-2741998,2742103

2.0 ENTRANCE EXAMINATION

2.1 PROCEDURE

01. The Entrance Examination will be conducted at selected centres as per the programme given in the section 2.2. Instructions will be given to candidates along with the admit card and also will be available in KIIT website.

02. The Examination Hall will be opened 30 minutes before the commencement of the Test. Candidates should take their seats immediately after opening of the Examination Hall.

03. In the first 15 minutes, the invigilators will give instruction regarding appearing the Examination, procedure of Marking the answers etc. If the Candidates do not report in time, they are likely to miss some of the important instructions to be announced in the Examination Hall.

04. No candidate, in any case, will be allowed to enter the examination centre after the commencement of the examination.

05. Sign on the Attendance Sheet at the appropriate place in the Examination Hall.

06. **Except Integrated Law, questions for all other courses will be Fully Objective type and answers will be marked on OMR sheet. For Integrated Law, Candidates have to write the answer on Question Booklet itself. Therefore, Sl.No. 06-15 of this section and Section 2.3 will not be applicable for the candidates appearing the Entrance Examination for Integrated Law Programme.**

06. Answer Sheet will be placed Inside the Sealed Question Booklet. Open/Break the Seal after getting announcement by the invigilator.

07. Answer Sheet used will be of special type which will be scanned on Optical Scanner.

08 The top portion of the Answer Sheet contains the following columns which are to be filled in neatly and accurately by the candidates with **Blue/Black Ball Point Pen only.**

Top Portion

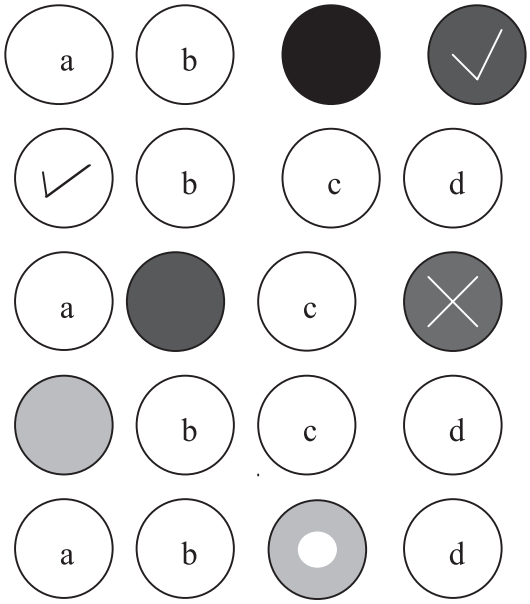
1. Roll No.
2. Application No.
3. Version Code
4. Course

Bottom Portion

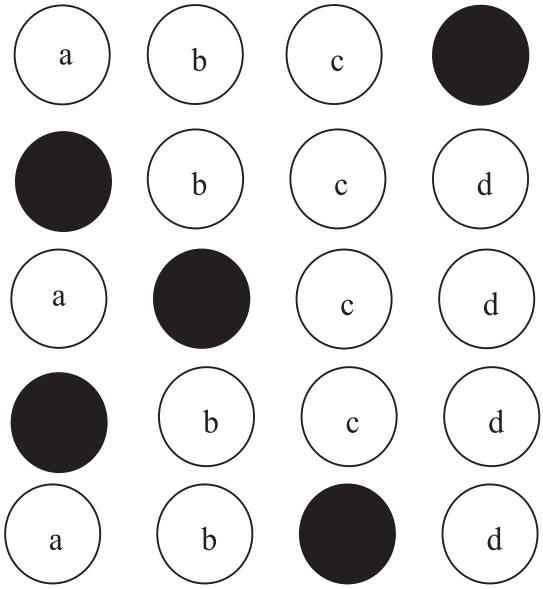
1. Name of the Candidate
2. Examination Centre Name
3. Signature of Candidate
4. Signature of the Invigilator

10. **Instruction for Marking the Answers** :- For each question, out of four alternatives, darken only one circle for correct answer completely with **Blue/Black Ball point pen only.** The answer once marked is not liable to be changed. Use of Pencil is strictly prohibited. **If a candidate uses pencil for darkening the circle, his/her answer sheet will be rejected.**

Example :
Wrong Method of Marking



Correct Method of Marking



11. An incompletely /light/faintly darkened circle is a wrong method of marking and liable to be rejected by the optical scanner.

The corrected and wrong method of darkening the circle have been illustrated in the diagram.

12. Changing an answer is not allowed.

13. If you do not want to answer any question, you need not darken the circle given against that question number.

14. Don't do any rough work on the answer sheet. **Use the space provided in the Question Booklet for Rough work.**

15. If more than one circle is darkened, then it will be treated as wrong way of marking and will be treated as wrong answer.

2.2 KIITEE - 2008 Programme

Date	Course	Subjects	No. of Questions	Time	Important Notes
03-05-2008	BBA/ BCA (3 years)	Mathematical Ability	50	10.00 a.m. to 1.00 p.m.	
		Analytical & Logical Ability	40		
		Verbal Ability	20		
		General Knowledge	10		
	MCA (3 years)	Mathematics (10+2 standard)	60	10.00 a.m. to 1.00 p.m.	The detail Syllabus is given in the **Appendix-I.**
		Analytical & Logical Ability	30		
		Computer Awareness	30		
	B.Tech. (LE) (3 years)	Part–I: Mathematics	20	10.00 a.m. to 1.00 p.m.	The detail Syllabus is given in **Appendix-II.**
		Part–I: Basic Electrical Engineering	20		
		Part–I: Engineering Mechanics	20		
		Part – II Branch Specific	60		
	Integrated Law (5 years)	Mathematical Ability	Questions will be both subjective and objective type.	10.00 a.m. to 1.00 p.m.	For Integrated Law questions will be both subjective and objective type and candidates have to answer on the Question Booklet itself, Question Booklets of those examinees will be collected by the Invigilators.
		Analytical & Logical Ability			
		Linguistic Skill			
		General Knowledge & Current Affairs			
		Legal Aptitude			
	M.Tech. (2 years)	Branch Specific	120	10.00 a.m. to 1.00 p.m.	The questions will be pertaining to the B.E. / B.Tech. Syllabus of concerned discipline.
	M.Sc. (Biotech) & M.Sc. (Microbiology) (2 years)	Biology (10+2+3 standard)	50	10.00 a.m. to 1.00 p.m.	The detailed Syllabus is given in the **Appendix-III.**
		Chemistry (10+2+3 standard)	30		
		Mathematics (10+2 standard)	20		
		Physics (10+2 standard)	20		
04.05.2008	B.Tech. (4 year)/ Int. M.Sc. (Bio) (5 years)	Physics (10+2 standard)	40	10.00 a.m. to 12.00 noon	The detailed Syllabus is given in the **Appendix-IV.**
		Chemistry (10+2 standard)	40		
	B.Tech. (4 year)/ Int M.Sc.(Bio.) (5 years)	Mathematics (10+2 standard)	40	1.00 p.m. to 2.00 p.m.	
	Int. M.Sc. (Bio) (5 years)	Biology (10+2 standard)	40	3.00 p.m. to 4.00 p.m.	

2.3 Scoring & Negative Marking

All the questions will be of objective type each scoring three marks(+3) for each correct response, minus one mark (-1) for each incorrect response & zero (0) for no response. So the candidates are advised not to respond to a question, if they are not sure about the answer. If a candidate will indicate more than one answer of a question, then it will be treated as incorrect and will fetch negative marks.

2.4 Rules and Regulation

The invigilator will announce commencement and completion of the Examination. Candidates should leave their seat on hearing announcement of completion.

The candidate must show, on demand, the valid Admit Card for admission in to the Examination Hall. A candidate, without a valid Admit Card, will not be permitted to enter the Examination Hall under any circumstances.

A seat indicating application number will be allotted to each candidate. Candidates should find out and occupy their allotted seats only. The candidature of a candidate, found to have changed Hall or seat on his/her own, shall be cancelled and no plea would be accepted.

Candidates are not allowed to carry any Textual, Material, Calculator, Slide Rule, Log Table, Electronics Watch, Printed or Written Material, Papers, Mobile Phone, Pager or any other device except the Admit Card and two Blue/Black Ball Point Pens inside the Examination Hall.

No candidate, without the permission of the Centre Superintendent/ Invigilator can leave his/her seat or Examination Hall till the completion of the Examination.

Smoking in the Examination Hall is strictly prohibited.

Tea, coffee, cold drinks or snacks are not allowed inside the Examination Hall.

2.5 UNFAIR MEANS

Candidates shall maintain perfect silence and attend to their Questions only. Any conversation or gesticulation or disturbance in the Examination Hall shall be deemed as misbehavior. If a candidate is found using unfair means or impersonating, his/her candidature shall be cancelled and will be debarred from the Examination.

2.6. Non –attendance

For those unable to appear in Entrance Examination on scheduled date of Examination for any reason, no **re-examination** shall be held under any circumstance. The schedule will remain unchanged even if the date is declared as a public holiday.

2.7 Language of the Question Papers

Language of the questions will be in English. The questions will not be in any other language.

3. 0 Eligibility Criteria

3.1 For B.Tech. (4 years) Course :- Pass in 10 +2 (Science) examination or equivalent with Physics, Chemistry and Mathematics and having at least 50% marks in aggregate at 10+2 examination .

3.2 For B.Tech. -LE (3 years) :- Pass in three years diploma course in Engineering with at least 60% marks in aggregate.

Course wise Eligibility Criteria

For Admission into Following Branches	Eligible Diploma Holders
Civil Engg.	Civil Engg
Mechanical Engg.	Mechanical Engg or Automobile Engg.
Electrical Engg.	Electrical Engg. / Electronics & Electrical Engg.
Electronics & Electrical Engg.	Electrical Engg./Electronics & Electrical Engg./ Electronics & Tele-Comm./ Electronics & Instrumentation Engg./ Electronics
Electronics & Tele-Comm. Engg.	Electronics Engg./ Electronics & Communication Engg./ Electronics & Tele-Comm. Engg./ Electronics & Instrumentation Engg. / Electronics & Electrical Engg./
Computer Science & Engg.	Computer Science/ Information Technology/ Electronics Tele-Comm.
Information Technology	Computer Science / Information Technology / Electronics & Tele-Communication Engg.

3.3 For Integrated Law Progrmme (5 years)

BBA(LLB) / BA (LLB) : Pass in 10+2 in any stream with at least 50% marks.

B.Sc. (LLB) : Pass in 10+2(Science) with at least 50% marks.

3.4 BBA / BCA (3 years) : Pass in 10+2 in any stream with at least 50% marks.

3.5 For Integrated M.Sc. (Biotechnology) (5 years) :- Pass in 10 +2 (Science) examination or equivalent with Physics, Chemistry and Mathematics/Biology and having at least 50% marks in aggregate at 10+2 examination.

3.6 For MCA (3 years) :- Any Graduate with minimum 50% marks in graduation or equivalent having mathematics either in 10+2 or graduation level-as one of the subject.

3.7 For M.Tech. (2 years):- B.E. or B.Tech. or equivalent Degree (e.g. AMIE, GRADE-IETE etc) in respective branches of Engineering and Technology with a First Class or equivalent CGPA or First Class MCA/ First Class M.Sc. in (Comp/IT/ETC)

GATE qualified candidates shall be accorded preference in the process of selection. GATE qualified candidates having Score 350 or above need not sit in the entrance Examination.

Course wise Eligibility Criteria (M.Tech.):-

Electrical: – Power Electronics & Drives :- First class B.E./ B.Tech. or equivalent in Electrical, Electronics, Electrical & Electronics, Electronics & Tele-Comm., Electronics & Instrumentation.

Computer Science & Engineering :- First Class B.E./ B.Tech. or equivalent in Computer Science, Information Technology, Electrical, Electronics, Electrical & Electronics, Electronics & Tele-Comm., Electronics & Instrumentation or First Class in MCA or First Class in M.Sc. Comp.Sc./ Information Technology.

Electronics & Tele-Communication Engg. :-First Class B.E./ B.Tech., or equivalent in Electronics & Tele-Comm., Electronics & Instrumentation, Electrical, Electronics, Electronics & Electrical or First Class in M.Sc. (Electronics).

Mechanical : – Manufacturing Process & System :-First Class B.E. / B. Tech. or equivalent in Mechanical / Production Engineering.

Civil :– Construction Engineering & Management : First Classs B.E./B.Tech. or equivalent in Civil Engineering.

3.8 M.Sc. (Biotech/Microbiology) (2 years) :- Bachelor's degree in any branch of Science/ Agriculture/ Pharmacy/ Veterinary / Engineering / Technology / Medicine (MBBS/ BDS) with at least 55% marks.

For all the courses, candidates appearing in the qualifying examination can also apply. But, they have to produce the pass certificate of the qualifying examination on the day of counseling, failing which their rank/position secured in the entrance Examination will stand cancelled automatically and they will have no claim for the admission as per the rank.

4.0 Date of Birth

For B. Tech. 4 year/ Integrated M.Sc.(Biotech.), BBA / BCA / BBALLB / BALLB/ BSCLLB :- Candidate should have been born on or after 01.07.1987.

For B.Tech. (LE): - Candidate should have been born on or after 01.07.1984.

For MCA/M.Sc. :- Candidate should have been born on or after 01.07.1982

For M. Tech.: – No age Bar.

5.0 APPLICATION PROCEDURE

Application Form :-

Application can either be submitted in prescribed Application Form or made **'Online'** only. Application Form and Prospectus can be obtained by Post or in person from the **Admission Section, KIIT University, Koel Campus, P.O.-KIIT, Patia, Bhubaneswar-751024.**

Application Form and Prospectus will be available across the counters of the University, at designated branches of Allahabad Bank and enlisted Post Offices **(Appendix-VI)** Postal request will not be entertained by the Banks.

The cost of Application Form and Prospectus (inclusive of Examination Fees) is:-

(a) Rs.700- (across the University counters) or

(b) Rs.725/- through designated branches of Allahabad Bank and Post Offices including Bank/Postal service charge.

(c) Rs.775/- (postal request) by Bank draft in favour of KIIT, payable at Bhubaneswar.

This includes Rs. 75/- as postal delivery charges.

(d) Candidates applying for more than one course have to enclose as additional Demand Draft of Rs.200/- in favour of KIIT payable at Bhubaneswar.

'Online' submission at website http://www.kiitee.ac.in or http://www.kiit.ac.in

- Browse KIIT web site **http://www.kiitee.ac.in or** http://www.kiit.ac.in
- Click link on Admissions/KIITEE-2008
- Select 'Online' application option.
- Go through the Instructions to fill up the form.
- Fill up 'Online Application Form' and submit.
- Take the print out of Registration Form mentioning the Application Number.
- Paste the Photograph in the space provided for it. Enclose one additional photograph.
- Sign on 'Signature' columns both by candidate and parent/guardian.
- Despatch the Form along with two passport size photographs and a Demand Draft of Rs**.700/- or Rs.900/-(as applicable)** drawn in favour of KIIT payable at Bhubaneswar.
- Mention the Application No., Name and Address on the reverse of the Demand Draft.

Candidates should retain photocopies of 'printed application form' and 'demand draft' which may serve as reference for future correspondence.

The online application will be accepted subject to receipt of printed application, DD and photographs only.

5.1 INSTRUCTIONS FOR FILLING UP THE APPLICATION FORM (Important Notes)

1. Make a photocopy of the Application Form. Use the photocopy to practice for filling up as per instructions given. Then attempt to fill up the original form.
2. The Application Form contains squares (boxes) and circles. The squares are to be filled up in BLOCK LETTERS in English language only, using blue/black ball point pen. One box should be left blank after each word. The corresponding circle (whenever available) below each character should be darkened very carefully using blue/black ball point pen only.

- As the application forms will be processed electronically, avoid overwriting, cutting, erasing or mutilating on the application form which may lead to its rejection.
- Fill up all required columns. Incomplete application Form is liable to be rejected.
- Date of Birth, Candidate's Name and Parent's Name should be exactly same as mentioned in 10th Pass Certificate.
- Options filled by the candidate can't be changed at a later stage.
- The Application Form duly filled in should be sent to the Director, Admissions, KIIT University, Koel Campus, P.O.-KIIT, Patia, Bhubaneswar-751024, in the printed envelope supplied by the KIIT University, **so as to reach positively by dt. 28.02.2008, 5.00 p.m.**
- Candidates should retain photocopy of filled in Application Form for future correspondence, if required.

5.2 Filling- up the Application Form
(Form-Sl.No.1 to Sl. No.25)
(Fill-up the application form in Block Letters only)

Sl.No. 1 :- Candidate's Name :-

Write your name in capital letters as mentioned in your original 10th Pass or equivalent Certificate . Write a single letter in each box. Leave one blank box between each word of your name.

Sl.No.2:- Name of the Father/Mother/Guardian

Write the name of the father/mother/guardian clearly. Leave one blank box between each word of the name.

Sl.No. 3 :- Date of Birth

Write the Date of Birth as recorded in the 10th Pass High School Certificate/Birth Certificate issued by the competent authority. Use numerals as per DD-MM-YY format. For example, if one is born on 8th Oct,1988, it should be entered as 08.10.88. Darken

the corresponding circles.

Sl.No.-4 Sex & **Sl.No.-5** Nationality
Darken the appropriate circle.

Sl.No. 6:- Category
Darken the appropriate circle.

Sl. No. 7 :- Course Applied
Mark the appropriate circle (s) for Course(s) applied through the particular application form.
Available Courses.
A candidate can apply for more than one course at a time as per the following group. No other grouping is allowed.

B.Tech., Integrated M.Sc (Biotech.)

BBA/BCA & B.Tech.

Integrated Law & B.Tech.

B.Tech., Integrated M.Sc.(Biotech) and BBA/BCA

B.Tech., Integrated M.Sc (Biotech.)and Integrated Law

Integrated Law & Integrated M.Sc.(Biotech.)

BBA/BCA & Integrated M.Sc.(Biotech.)

Candidates applying for more than one course have to enclose an additional DD of Rs.200/- in favour of KIIT, payable at BBSR with the application form.

Sl. No. – 8 Candidates, applying for Integrated M.Sc.(Biotech) programme, have to give option for their entrance subject Math or Biology in addition to compulsory subject Physics and Chemistry.

Sl.No.9 :- Photograph:- Paste (do not staple) recent passport size (3x4cm.) colour photograph taken after 1st September, 2007

Sl.No. 10:-Centre Option
Codes for each centre for KIITEE-2008 are given in Appendix-VI. Select three different places in order of preference and enter the appropriate code in the boxes provided. Darken the corresponding circle. A KIITEE Centre may be cancelled due to poor response, operational difficulty or any other reason. However, candidates will be allotted a centre from two choices. Do not repeat any choice.

Qualifying Exam details

Sl.No. 11:- Qualification
Darken the appropriate circle.

Sl. No. 12. :- Qualifying Exam Status
Candidates passed the qualifying examination have to mark passed and candidates appearing the qualifying examination in the year 2008 have to mark appearing.

Sl. No. 13 & 14 :- % of Marks & Passing Year
Those, who have passed the qualifying examination (as mentioned Sl.No.3.0 to 3.5) should write down the percentage of marks secured in the qualifying examination and year of passing. Candidates appearing the qualifying examination or awaiting results, should leave those columns blank.

Sl.No. 15:- Choice the Entrance subject for B.Tech. (LE) Part-II only. By Darkening the Appropriate circle.

Civil Engg.- Civil
Mechanical Engg.-Mech.
Electrical Engg.-Elect.
Electronics & Tele-Comm. Engg.- ETC
Computer Science & Engg. –CSE
Information Technology –IT
Electronics & Electrical Engg. –EEE

Sl.No.16:- Address: Write the Address for correspondence with pin code in the space provided correctly in Block letters only. This address will be required for communication with the candidate like sending of Admit Card/Rank Card/ any other communication if required by the University. Don't forget to give your telephone number and E-mail ID.

Father/Mother/Guardian should sign in the space provided with date in running handwriting.

Candidate should sign in the space provided with date in running hand writing.

Sl.No. 17. :- If a candidate has applied for more than one course, he/she has to enclose an additional DD of Rs.200/- and has to mention additional DD details.

Sl.No.-18 to 23 :- Applicable for M.Tech./Ph.D./ P.D.F. only

Sl.No.-18:- Candidates applying for M.Tech./Ph.D/ P.D.F. have to write their Branch/Stream of qualifying examination passed/ appearing.

Sl.No.-19:- Research Area Applied for (Ph.D./P.D.F.)- Candidates applying for Ph.D/P.D.F. Programme have to write their area of research (in block letters only) with their area of Specialisation/ Department.

Sl.No. 20:- Darken the appropriate circle.

Sl.No. 21:- Write the GATE Score in 0000.00 format in the appropriate boxes and darken the corresponding circles.

Sl.No.22:- Subject of Entrance Exam.
M.Tech. Entrance Exam. will be done in five different disciplines. These are

C.S. (Computer Science)
ETC (Electronics & Tele-Communication)
PED (Electrical-Power Electronics & Drives)
CEM (Civil-Construction Engineering & Management)
MPS (Mechanical- Manufacturing Process and System)
Give option for the desired subject by darkening the appropriate circle.

Sl.No.-23:- Experience, if any
Please mention your experience details.
Do not enclose copy of any certificate / mark sheet with the Application Form except the research scholars.

6.0 SENDING OF APPLICATION FORM

The prescribed Application Form duly filled in should be submitted in person/by post (Registered Post/Speed Post/ Courier) to " The Director,Admissions, KIIT University, Koel Campus, Po-KIIT, Bhubaneswar-751024" so as to reach on or before dt**. 28.02.2008,** 5.00 p.m.

Application Form received after the due date will not be considered. KIIT University will not be responsible for any postal delay/irregularity/loss in transit of the Application Form.

Candidates submitting the Form by hand in the Admission Section of KIIT University, must collect the acknowledgement card duly signed and stamped by the authorized official of KIIT University.

OR

'Online' submission at website http://www.kiitee.ac.in or http://www.kiit.ac.in.

- Browse KIIT web site **http://www.kiitee.ac.in or http://www.kiit.ac.in .**
- Click link on Admissions/KIITEE-2008
- Select 'Online' application option.
- Go through the Instructions to fill up the form.
- Fill up 'Online Application Form' and submit.
- Take the print out of Registration Form mentioning the Application Number.
- Paste the Photograph in the space provided for it. Enclose one additional photograph.
- Sign on 'Signature' columns both by candidate and parent/guardian.
- Despatch the Form along with photograph and Demand Draft.

7.0. ADMIT CARD

The Admit Card will be sent by post to the candidates (including online applicants) from dt. **01.03.2008 to dt. 20.03.2008.** Candidates must not mutilate the Admit Card or change any entry made therein. In case, the Admit Card is not received by **1st April, 2008** candidates should check KIIT website and download the Admit card by entering the Application Number. In case of non-availability of Admit Card in the website, write/contact KIIT between **1st April,2008 to 10th April,2008** giving details of the Post Office, date of despatch, receipt of Postal despatch, Photocopy of the Application Form, one photograph (as pasted on the Application Form) and proof of remittance of fee.

Candidates must preserve the Admit Card till the admission process is over.

8.0 EVALUATION AND DECLARATION OF RESULTS

Results of KIITEE-2008 will be declared on **20.05-2008**. On the basis of marks secured by the candidate in Entrance Examination, separate Merit lists will be prepared for B.Tech., B.Tech.(LE), Integrated M.Sc. Programme, BBA/BCA, Integrated Law, M.Tech., MCA, M.Sc. (Biotechnology/ Microbiology) Courses. A cut-off qualifying mark will be fixed by the University, at the time of declaration of Entrance Result. Result will be published through Net. The candidates can see their result by giving their application number/roll number. Rank Card indicating the Rank in Entrance Examination, shall be sent to the qualified candidates. Candidates can download the rank card from the website.

As per the availability of seats in different courses, cut-off Rank for counselling will be notified. Candidates, having rank above cut-off rank, shall be called for counselling.

In case of two or more candidates obtaining equal marks, inter-se merit of such candidates shall be determined as follows:-

B.Tech.:- On the basis of marks obtained in Mathematics, then in Physics and then by age (preference to older candidates).

Integrated M.Sc.(Biotech.) :- On the basis of marks obtained in Chemistry, then in Physics and then by age (preference to older candidates).

B.Tech. (LE)- On the basis of marks obtained in Part-II (Concerned subject) and then by age. (preference to the older candidate).

BBA / BCA :- On the basis of Marks obtained in Mathematical Ability, then in Analytical Ability. then in English and then by age. (Preference to the older candidate)

Integrated Law :- On the basis of Marks obtained in Mathematical Ability, then in Linguistic Skill, then in Legal Aptitude, then in General Knowledge and then be age.

MCA:- On the basis of the marks obtained in Computer Awareness, then Mathematics and then by age (Preference to older candidates)

M.Tech:- Preference to Older Candidates

M.Sc.(Microbiology/Biotechnology) :- On the basis of marks obtained in Biology, then Chemistry, then Mathematics and then by age.

(Preference to Older Candidates)

9.0 COUNSELLING, SEAT ALLOCATION, DOCUMENT VERIFICATION AND ADMISSION

Counselling and seat allocation will be purely on merit basis i.e. based on the performance in the Entrance Examination.

Counselling Schedule will be published in the KIIT Website on the day of declaration of result itself. Candidates have to attend the counseling as per the schedule.

Counselling will be stopped as soon as all the seats reserved for the KIITEE-2008 are filled up.

Verification of documents would be done at the time of counseling / admission. So as to verify records on identification, age, qualifying examination and category of candidates. On failing to establish correctness in any of the documents, the candidates will not be considered for admission.

Candidates, called for Counselling must bring Original Documents (listed below) and token Fees to the Counselling Centre.

1. Admit Card
2. Rank Card
3. 10th Pass Certificate
4. 12th Marksheet and Pass Certificate
5. Graduation Marksheet and Pass Certificate only for MCA & M.Sc. (Biotechnology/ Microbiology)
6. Diploma Pass Certificate and three years Mark Sheet (for Lateral Entry Candidates)

7. B.Tech./B.E./ MCA/ M.Sc. or Equivalent Degree Certificate (For M.Tech. Candidates)

8. Relevant Certificate issued by the Competent Authority, clearly indicating the Reservation Criteria claimed by the candidate.

   Physically handicapped candidates need not bring medical certificates. The decision of Medical Board constituted by KIIT University will be final.

9. GATE Score Card (for M.Tech. GATE Qualified only)

10. School/College Leaving Certificate

11. Conduct Certificate

12. Rs.20,000/- as token fees, which is inclusive of institutional fees in the form of a DD in favour of KIIT, payable at Bhubaneswar. Cash payment will not be acceptable.

10. RESERVATION CATEGORY
(Applicable for B.Tech.- 4year and MCA only)

The KIITEE-2008 Quota Seats are distributed among different categories of candidates as follows. Separate Merit list will be prepared for each Category.

Categories of Candidates

General	:-	(GE)
Scheduled Caste	:-	(SC)
Scheduled Tribe	:-	(ST)
Physically Handicapped	:-	(PH)

8% & 12% seats of KIITEE-2008 quota seats will be reserved for Schedule Caste & Scheduled Tribe (by birth) respectively. (Not by adoption or marriage)

3% seats of KIITEE-2008 quota seats will be reserved for PH candidates having 40% disabilities in consonance with section-39 of the persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation)Act. 1995. A Medical Board has been constituted under the Chairmanship of Principal, Kalinga Institute of Medical Science (KIMS) with Senior Professors of KIMS and Director (Admissions) of KIIT University or her representative (s). The Board should certify that they are eligible to be categorized as Physically Handicapped Candidates and capable of undergoing Engineering/MCA course at KIIT University as per the facilities available. The decision of the Board will be Final. Therefore, they need not submit any Medical Certificate to the effect that they are Physically Handicapped.

30% seats of each category will be reserved for the women candidates.

All the unfilled reserved seats (SC/ST/PH) will be converted to General Category and reserved woman seats (SCW/STW/ PHW) will be converted in General Women Category.

11. Legal Jurisdiction

All disputes pertaining to the conduct of KIITEE-2008 shall fall within the jurisdiction of Bhubaneswar only. The Director, Admissions, KIIT Unuiversity shall be the authorised person in whose name the University may sue or may be sued. If any person or officer engages himself/herself in act(s) that would result in the leakage of the question paper(s) or attempt to use or help in the use of unfair means in this Examination, he/she shall be liable to prosecution under the Indian Penal Code.

(APPENDIX –I)
SYLLABUS FOR MCA PROGRAMME

MATHEMATICS

Unit :-1 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.

Unit :-2 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 applications. Permutation and combinations and their simple applications, Mathematical induction, Binomial Theorem. Determinants up to third order, Minors and Cofactors, Properties of determinants. Matrices up to third order, Types of Matrices. Algebra of matrices, Adjoint and inverse of a matrix. Application of determinants and matrices to the solution of linear equation (in three unknows)

Unit 3:-Trigonometry : Compound angles, Multiple and Sub-multiple angles, solution of trigonometric equations, Properties of triangles, Inverse circular function.

Unit 4:-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)

Unit 5:-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 plane. Equations of a sphere-general equation.

Unit 6:-Vector Fundamentals, Dot and Cross product of two vectors, Scalar triple product, Simple Applications (to geometry, work and moment).

Unit 7:-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.

Unit 8:-Integral Calculus:- Standard methods of integration (substitution, by pars, by partial fractions etc.) Definite integrals and properties of Definite Integrals, Areas under plane curves, Differential Equations only simple cases such as

(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.

Unit 9:-Probability and Statistics : Averages (Mean, Median and Mode), Dispersion (standard deviation and variance). Definition of probability, Mutually exclusive events, Independent events, Addition theorem.

COMPUTER AWARENESS

Computer Basics**:** Organization of a Computer, Central Processing Unit (CPU), Structure of instructions in CPU, input/ output devices, computer memory, back-up devices.

DATA REPRESENTATION

Representation of characters, integers and fractions, binary and hexadecimal representations, Binary Arithmetic : Addition, subtraction, multiplication, division, simple arithmetic and two's complement arithmetic, floating point representation of numbers, Boolean algebra, truth tables, venn diagram.

ANALYTICAL ABILITY AND LOGICAL REASONING

Questions in this section will test logical reasoning and quantitative reasoning.

(APPENDIX-II)
SYLLABUS FOR B.TECH. (LATERAL ENTRY) PART-1

MATHEMATICS

Unit 1:-Ordinary Differential Equation:

Differential equation of first order. Linear differential equation of second order (homogeneous and nonhomogeneous case). Cauchy, Euler's equation, Application of first order differential equations (mixture problem, Newton's law of cooling, orthogonal trajectory). Application to LCR circuits, Application to free and forced vibration of Mass spring system.

Unit-2 :-Series Method :

Properties of power series, Radius of convergence of power series, Legender's equation and Legender's polynomial, properties of Legender's polynomial, Gamma function, ordinary and singular point Frobenious method, Bessel's equation and properties of Bessel's function.

Unit-3 :- Laplace Transform:

Laplace transforms of standard function, periodic functions, Unit step function, Transforms of derivatives and integrals. Differentiation and integration of transforms, Linearity property, Inverse Laplace transform, Shifting theorems, Convolution. Application to solve differential and integral equations (initial value problem).

Unit 4:- Fourier Series:

Periodic function, Fourier series, Euler's formula, Even and odd functions, Fourier series expansions of even and odd function, half range expansion of functions, Expansion of functions with finite discontinuities.

Unit 5 :- Matrix :

Types of matrices, algebra of matrices, rank, solution of non-homogenous system of equations, consistency of the system of equations, Linear dependance and independance, solution of homogeneous system of equation. Eigen values and eigen vectors. Norm and inner product. Orthogonal and projection matrix.

Application of eigen values and vectors to solve the system of homogeneous linear differential equation.

Unit 6 :- Vectors:

Vector algebra, product of vectors, vector differentiation, vector differential operator, gradient, directional derivatives, divergence, curl, line integral, double integral, green's theorem.

ENGINEERING MECHANICS

Unit 1 :- Statics:

Conditions of equilibrium, concept of free body diagram, methods of moments and solution to engineering problems.

Friction : Static friction, ladder friction, problems with friction, Belt friction and screw jack, force analysis of plane trusses (method of joint, method of sections, plane frames, methods of members), Parallel forces in a plane, Centre of parallel forces, Pappus Guldinus theorems, MI of plane figures, parallel axis theorem, perpendicular axis theorem, Polar MI, Principle of virtual work for a single particle, rigid bodies, ideal systems and constrained bodies.

Unit 2:- Dynamics :

Force proportional to displacement, free vibration, D' Alembert's principle, momentum and impulse. Application to principle of linear momentum to a single particle, rigid bodies and ideal systems. Application to principle of angular momentum to a single particle and rotating rigid bodies. Principle of conservation of momentum.

Unit 3 :-Work and Energy:

Principle of work and energy for ideal system, Conservation of energy.

BASIC ELECTRICAL ENGINEERING

Unit 1:- Electrostatics

Coulomb's law, Electric charge, Potential, Field & Capacitance, Potential gradient due to spherical cylindrical and plane charges, Electric force, Flux density and permitivity. Calculation of Capacitance of spherical, coaxial, cylindrical and parallel plate condenser. Energy stored in a electric field.

Unit 2:- Electromagnetism :

Magnetic field due to current in conductor. Magnetic field intensity and Flux density. Permeability, B-H curves, Magnetisation, Concept in hystersis. Magnetomotive force and Magnetic reluctance.

Electrodynamic force:- Faraday's law of electromagnetic induction, Eddy current, emf induced in a conductor moving in a magnetic field. Energy stored in a magnetic field.

Unit 3:- D.C. Circuit :-

Current distribution in series and parallel circuit. Power and energy in electric circuit. Star-Delta conversion. Kirchoff;s law & its application and solve electric circuit by branch & loop current method & nodal method. Superposition theorem.

Unit 4:- A.C. Circuit:

Production of alternating current – Instantaneous, average & rms value of current and voltage. Peak factor, Form factor, Amplitude, Frequency, Phase difference, Addition and subtraction of alternating quantity. Phasor diagram, Resistance, Inductance, Capacitance, impedance and admittance- power and power factor-series and parallel circuits. Q factor-Three phase circuit. Star-Delta connection-Active and reactive power. Power measurement with one and two wattmeter methods-Calculation in RLC circuit, in series circuit.

Unit 5:- Instrument :

Construction and principle of operation-PMMC, MI and

dynamometer type ammeter, voltmeter and dynamometer type wattmeter. Power factor meter.

Unit 6:- Illumination :

Law of illumination- Solid angle, Luminous flux, Luminous intensity, illumination brightness and luminous efficiency.

Unit 7:- Production Light :

Filament lamp, Arc lamp, Electric discharge lamps, Sodium vapour lamp, Mercury vapour lamp-Theory of electrical energy radiation. Comparison between filament lamp and fluorescent lamp.

PART-II

MECHANICALENGG

Unit 1:- Strength of Material :

Simple stress and strain, Two dimensional stress system, Stresses in composite section, Thin cylinder and spherical shells under internal pressure, Shear force and Bending moment, Theory of simple bending, Combined axial and bending stress, Torsion, Testing of material.

Unit 2:- Thermal Engg:

Thermodynamics concept and properties, Laws of Thermodynamics, Properties and process of ideal gases, Internal combustion engine, Air compressors, Refrigeration, Air conditioning. Properties and process of vapours, Steam Generator, Steam Power cycle., Steam engine, Steam nozzle, Steam turbine, Condenser, Heat transfer, Gas turbine.

Unit 3 :-Machines & Machine Design :

Simple mechanism, Static friction, Friction in screw jack, Clutch, Bearings, Brakes, Power transmission in Belt, Pulleys, Gear drive, Governor & Flywheel, Balancing of machine parts, Vibration in machine parts.

Design of fastening elements, Design of shafts, Keys & Couplings, Design of levers, Design of belt drives & pulleys, Design of screw jack, Design of closed coil helical spring.

Unit 4:- Fluid Mechanics & Hydraulic Machines

Properties of fluids, Pressure measuring instruments, Bernoulli's equation and its application, Flow through orifices and notches, Flow through pipes, Impact of jet, Turbine, Centrifugal pump, Reciprocating pump.

Unit 5:- Manufacturing Science :

Material classification, Imperfection in crystal, Iron-Carbon system, Different heat treatment methods, Non-ferrous metals and alloys, Bearing material, Spring material, Polymers, Composites and Ceramics. Various forging processes, Different metal forming process such as rolling and extrusion, Foundry practice, Various welding process, Soldering, Brazing, Rivetting, Sheet metal works, Parts and functions of lathe machine, Shaper, Planing machine, Milling machine, Slotter, Grinding machine, Drilling machine, Describe cutting tools, Press tools, Jigs and Fixture, Special casting and powder process, Metrology.Non conventional machining process, Automation, Numerical control, Robot technology, Flexible manufacturing, CAD/CAM,CIM.

ELECTRICALENGG

Unit 1 :- Circuit and Network Theory:

i) DC and AC circuit: Power and energy, Ohm's law, Kirchhof's law, RMS value, Average value, J-operator, RL,RC,RLC series and parallel, Resonance, Transient response to DC circuit.

ii) Electrostatic and magnetic circuits : Magnetising force, mmf, Magnetic flux & intensity, Hysterisis loop, Magnetic circuit , Biot Savart law, Capacitor with composite dielectric, Grouping of capacitor, Coupled circuit.

iii) Network theorem : Mesh and nodal analysis, Superposition theorem, Thevenin's theorem, Norton's theorem, Max. power transfer theorem,Reciprocity theorem , Star-Delta transformation.

iv) Polyphase circuit : Relationship between line and phase quantity in star-delta connection, Measurement of 3-phase power, Active, reactive and apparent power.

v) Network functions and parameters: Network functions of one port and two port, network, z-parameter, y-parameter, ABCD parameter,h- parameter, their relationship.

vi) Filters: Ideal passive filter, Condition for pass band, stop band & cut off frequency prototype low pass, high pass, band pass and band stop filter.

Unit 2:- Power System and Utilisation Of Power :

i) Kelvin's law for economical size of conductor, Corona, Sag calculation, Performance of transmission lines (short and medium),EHV transmission for ac & dc, Distribution systems for ac & dc.

ii) Insulators and types, String efficiency, Ferranti effect and skin effect, Cables (types & testings), power factor improvement and economic aspects, Tarrif, Earthing of substation, transmission and distribution lines.

iii) Faults in power system, Fuse and circuit breaker(type & maintenance), Protective systems (primary & back up protection, types of relay), Lighting arrestors and surge diverter, Static relays.

iv) Faraday's law of electrolysis, Commercial use of electrolysis, Electrical heatings, Electrical welding, Laws of illumination and design of lighting schemes, Filament lamp & Discharge lamps.

v) Choice of electric drives, DC & AC traction motors, Control and braking of motors.

Unit 3:- Machines :

i) DC Machines : Types, Voltage, Power relation, Different characteristics, Starting & speed control, Calculation of efficiency, braking.

ii) Transformer : emf. equation, Construction, Cooling, Transformer on No load and On load, Equivalent circuit, Losses, OC and SC test, Efficiency, All day efficiency, Parallel operation, Auto transformer, CT and PT, Tap charging transformer, Connection of three phase transformer and parallel operation.

iii) Alternator : Types of alternator, Constructional detail, Armature winding, emf equation, Armature reaction, Alternator on load, Regulation & OC, SC test of alternator, Characteristics, Parallel operation and load division.

Synchronous motor : Construction & principle of operation, Torque, power development, Power angle characteristics, v- curve & application.

iv) Induction motor : Production of rotating magnetic field, Construction, Principle of operation, Torque- Slip curve, Characteristics, Method of starting, Speed control, Induction generator and application.

v) Rotating field theory of 1- phase induction motor, Ferrari's principle, Different 1- phase induction motor and ac commutator motor.

Unit 4:- Power Electronics & Drives :-

Construction and principle of operation of power devices (power diode, power transistor, MOSFET, SCR,IGBT,GTO,DIAC,TRIAC,UJT), protection of SCR Controlled rectifiers and inverters, DC and AC regulated power supply, DC motor control (control rectifier device for armature and field control), PLL control, AC motor control (induction motor).

Unit 5:- Measurements:

Deflecting, Controlling & damping arrangements, Calibration of instrument, AC & DC voltmeter & ammeter and extension of range, Dynamometer type Wattmeter, Errors & corrections, Frequency meter, Power factor meter, Induction instruments, Measurement of resistance, Inductance and Capacitance, Types of Transducers (resistive, inductive and capacitive), Piezoelectric device, Photoelectric device, Hall effect, Tachogenerator (ac & dc), Digital trasducers, Thermometer, Thermocouple, Optical pyrometer.

ELECTRONICS & TELECOMMUNICATION ENGG.

Unit 1:- Analog and Digital Electronics :

Semiconductor Physics : Energy band theory of solids, Types of semiconductor, P-N Junction, Zener diode, Rectifier, Ripple factor, Filter circuits.

Transistor and circuit analysis : Types of transistor, Transistor configuration (CB,CE,CC) and characteristics, Relationship between α,β,γ, Q-point, Transistor-biasing, Stabilization, Stabilization factor, h-parameter, RC-coupled amplifier, power amplifier, Class-A, Class-B, Class-C, Class-AB, Push-pull amplifier.

Difference between BJT & FET, Characteristics of JFET, Parameters of JFET, MOSFET.

Feedback amplifier and oscillator : Classification of feedback amplifier, Advantages of negative feedback amplifier, Emitter follower, Oscillator, Types of oscillator, Barkhausen criteria.

Wave shaping circuit : Cliper, Clamper, Differentiator and integrator using RC, Schmitt trigger.

Op-amp : Characteristics of OPAMP, Application of OPAMP (integrator & differentiator, adder, subtracter, summing), OPAMP parameters like CMRR, Slewrate, SVRR, etc.

Number system : Binary, Octal, Decimal & Hexa decimal number system, Conversion of number system, I's complement, 2's complement, Binary arithmetic.

Binary codes : Weighted code and non-weighted code, BCD code, Gray code, Excess-3 code, ASCII code, EBCDIC code.

Logic gates :- AND, OR, NOR, NOT, X-OR, NAND, X-NOR.

Boolean algebra and combinational circuit: Concept of Boolean algebra, Theorem, Postulates, Minterm, Maxterm, POS,SOP, K-map, Don't care condition.

Sequential circuit : Flip- Flop, Counter, Shift Register, A/D-D/A converter.

Unit 2:- Communication and Microwave :

Analog communication: Amplitude, Frequency and phase modulation, Frequency spectrum, SSB Vs DSB, Power relation of Am wave, Vestigial sideband signal, Concept of multiplexing, Demodulation, Concept of PLL.

Digital Communication : Noise, Channel capacity formula, Digital modulation technique, ASK, FSK, PSK, QASK,QPSK, PCM, DPCM, Delta modulation.

Wave propagation and radio communication : Concept of electromagnetic waves, Wave radiation, Mechanism of radiation, Pattern of antenna, Parameters of antenna like Antenna gain, Directivity, Bandwidth, Beamwidth, Efficiency. Types of antenna like lens, Horn, Helix, Parabolic reflector, Yagi- uda antenna. TRF receiver, Superheterodyne receiver, Receiver characteristics.

Satellite and optical fiber communication : Geostationary satellite, Frequency allocation, GEO,LEO,MEO, INSAT, Optical fibers, Advantages and disadvantages, LASER,LED, PIN photodiode.

Microwave communication : Waveguide and Resonator, Klystron, Microwave tubes, Microwave devices, MASER Vs LASER, Tunnel diode, Gun diode, Snap diode.

Unit 3:-Circuit Theory :

Network elements : Ideal and controlled voltage and current sources, conversion of ideal sources, R.M.S value, Average value, Phase, Phase difference, vector representation of a.c. quantity, j-operator, RL – RC-RLC series and parallel combination, Power and Power factor, Resonance (series and parallel), Selectivity and Q factor, Transient response to DC circuits.

Network theorems : Mesh analysis, Nodal analysis, Superposition, Thevenin's, Norton, Maxmium power transfer theorem, Reciprocating theorem, Star – Delta transform.

Polyphase circuit : Line and phase quantity in Star – Delta connection, Measurement of 3-phase power.

Network function and parameters : Z,Y,ABCD,h-parameter, Relationship of parameters, T and π network and conversion, Input and Output impedance, Image parameters, Relationship between db and neper, Prototype and m-derived filters, Attenuators (symmetrical T & π type).

Unit -4:- Electronics Measurements :

Electronics Measurement : Measure voltage, current(DC&AC) by CRO, Measure unknown frequency by Lossajous figure, Measurement of phase angle of signal by CRO.

Electronic Measuring instruments : Advantage and disadvantages of electronic instruments over conventional meter,Voltmeter, Electronic multimeter, Ohm meter, Differential voltmeter.

Measurement of lumped circuit : Measure DC resistance, Equation of Bridge-balance, AC bridge,AC wheatstone bridge, Maxwell's bridge, Hay's bridge, Q-meter.

Waveform measurement : Wave analyzer, Heterodyne wave analyzer, Signal generator, Harmonic distortion analyzer..

Digital measurement : digital meter, digital voltmeter, digital frequency meter.

Unit 5:- Microprocessor

Introduction : Microprocessor Vs Microcomputer, Generation of Microprocessor.

8085 – Microprocessor : Architecture, BUS, Pin structure of 8085, Program counter, Stack pointer, Register, Flag register.

Instruction set of 8085 : Instruction, Addressing data, addressing mode, Branch, Subroutine, I/O machine control group, Assembly language programme, Timing diagram.

Interfacing I/O programming : PIN diagram of 8255,8259,Programming with I/O chips like 8255,8259, ADC and DAC.

8086 – Microprocessor : Architecture, Pin diagram, Concept of coprocessor .

CIVILENGG.

Unit 1:- Structural Engg :

a. Design of Structure :

R.C.C. :- Limit State Method of Design – For collapse of singly reinforced members in bending, For shear, For bend, Anchorage and development lengths Limit State method of design for beams, slabs and axially loaded columns, footing.

b. Steel Structure : Design of steel structure for tension and compression members and simple beams.

Unit 2:- Water Resource Engg :

Rainfall , Run off, Water requirements of crops, Flow irrigation, Diversion headwork's, Regulatory works, Cross drainage works.

Unit 3:- Transportation Engg :

a. Highway Engg : Introduction, Road Geometric, Road materials, Road pavements.

b. Railway Engg : Introduction, Permanent way, Track materials, Geometric of broad gauge, Points and crossing.

Bridges : Introduction, Foundations, Substructure and approaches, Permanent bridges.

Docks & Harbours : Introduction, Harbour, Break waters, jetties & quays, Docks.

Unit 4:- Concrete Technology :

a. Civil Engg Materials : Bricks, Cement, Mortar & concrete, Timber.

b. Construction Technology : Foundations, Walls Brick masonary, Stone masonary , Shoring & underpinning, Damp proofing.

c. Estimating & Construction Management : Detail estimate, Calculation of dry materials and Analysis of rates.

Construction management : Planning, Scheduling, PERT & CPM.

Unit 5:- Surveying & Environmental Engg :

a. Surveying : Levelling, Contouring, Theodolite surveying, Curves, Modern surveying, Instruments like EDM & total station.

b. Environmental Engg.

Water supply :- Introduction, Quantity of water, Quality of water, Treatment of water, Distribution system, Appurtences.

Sanitary :- Introduction, Quantity of sewage, Sewage characteristics, Sewage disposal, Sewage treatment.

COMPUTER SCIENCE & ENGG.

Unit 1:- Programming Languages C, C++ :

Data types, Variables, Operators, Expressions, Input – output operators, Control structure, Functions, Storage classes, Array, Pointer, Structure, Union, File handling.

Concepts of OOP, Data types, Operators, Functions, Classes, Objects, Constructor, Destructor, Operator overloading, Function overloading, Inheritance, Polymorphism.

Unit 2:- Data Structure and Operating Systems :

Time and space complexity, Array, String, Stack, Queue, Linked list, Tree, Graph, Different sorting and searching techniques.

Concepts regarding Batch systems, Multiprogrammed system, Time sharing systems, Distributed system, Real time system, Process, CPU scheduling, Synchronization Dead lock, Memory management, Virtual memory.

Unit 3:-Digital Electronics & Microprocessor :

Number system, Different coding methods, Boolean algebra, Logic gates, Minimization techniques, Combinational logic design, Flip flops, Sequential logic design i.e. counters & shift registers.

Pin diagram and Block diagram of 8085 microprocessors, Timing diagram, Instruction set Addressing modes, Assembly language programming, Interfacing peripheral devices, Data transfer schemes, 8255 PPL,8257 DMA, Dealy subroutine, Introduction to 8086 microprocessor.

Unit 4:-Computer Organisation & Architecture :

Basic organization of computer, Classification of computer, Introduction to compiler, Interpreter, Loader, Linker, Design of functional units like ALU & CU.

Memory organization :- Types of memory, RAM, ROM, Cache memory, Mapping functions, secondary memory, Virtual memory.

Input-output organization :- Methods of interfacing, Address-space partitioning, Data transfer techniques, Interrupts.

Unit 5:- Computer Network & Dbms :

OSI reference model, TCP/IP model, Network topologies, Transmission media, Switching, Multiplexing, Error detection & correction, IEEE LAN standards, Routing methods.

Introduction to database, Advantages of database system, Data independence, Architecture of database, Different models-Relational, Hierarchical, Network, E-R models, Relational algebra, Calculus, Normal forms, SQL query.

INFORMATION TECHNOLOGY

Unit 1:- Programming Languages C, C++ :

Data types, Variables, Operators, Expressions, Input – output operators, Control structure, Functions, Storage classes, Array, Pointer, Structure, Union, File handling

Concepts of OOP, Data types, Operators, Functions, Classes, Objects, Constructor, Destructor, Operator overloading, Function overloading, Inheritance, Polymorphism.

Unit2:- Data Structure and Operating Systems :

Time and space complexity, Array, String, Stack, Queue, Linked list, Tree, Graph, Different sorting and searching techniques.

Concepts regarding Batch systems, Multiprogrammed system, Time sharing systems, Distributed system, Real time system, Process, CPU scheduling, Synchronization Dead lock, Memory management, Virtual memory.

Unit 3 :-Digital Electronics & Microprocessor :

Number system, Different coding methods, Boolean algebra, Logic gates, Minimization techniques, Combinational logic design, Flip flops, Sequential logic design i.e. counters & shift registers.

Pin diagram and Block diagram of 8085 microprocessors, Timing diagram, Instruction set, Addressing modes, Assembly language programming, Interfacing peripheral devices, Data transfer schemes, 8255 PPI,8257 DMA, Delay subroutine, Introduction to 8086 microprocessor.

Unit 4:-Computer Network & Web Technology :

OSI reference model, TCP/IP model, Network topologies, Transmission media, Switching, Multiplexing, Error detection & correction, IEEE LAN standards, Routing methods.

Internet security, Models of E-commerce, electronic payment system, Digital signature, Use of debit cards & credit cards in E-commerce, M-commerce, HTML, Search engines.

Unit 5:- Software Engg. & Multimedia :

Different software life cycle models, software project management, Requirement analysis & specification, Software design, Coding, Testing, Implementation, Maintenance.

Multimedia concepts, Application of multimedia, Multimedia software products, Sound & audio, Image and graphics, Motion video, Data compression.

ELECTRONICS & ELECTRICAL ENGG.

Unit 1:- Analog and Digital

Electronics

Semiconductor Physics : Energy band theory of solids, types of semiconductor, P-N junction, Zener diode, Rectifier, Ripple factor, Filter circuits.

Transistor and circuit analysis : Types of transistor, Transistor configuration (CB,CE,CC) and characteristics, Relationship between á,â,ã, Q-point, Transistor biasing, Stabilization, Stabilization factor, h-parameter, RC-coupled amplifier, Power amplifier, Class-A, Class-B, Class-C, Class-AB, push-pull amplifier.

Difference between BJT & FET, Characteristics of JFET, Parameters of JFET, MOSFET.

Feedback amplifier and oscillator : Classification of feedback amplifier, Advantages of negative feedback amplifier, Emitter follower, Oscillator, Types of oscillator, Barkhausen criteria.

Wave shaping circuit :Cliper, Clamper, Differentiator and integrator using RC, Schmitt trigger.

Op-amp : Characteristics of OPAMP, Application of OPAMP (integrator & differentiator, adder, subtracter, summing), OPAMP parameters like CMRR, Slewrate, SVRR etc.

Number system : Binary, Octal, Decimal & Hexa decimial number systems, Conversion of number system, 1's complement, 2 s complement, Binary arithmetic .

Binary codes : Weighted code and non-weighted code, BCD code, Gray code, Excess-3 code, ASCII code, EBCDIC code.

Logic gates : AND,OR, NOR,NOT, X-OR,NAND, X-NOR.

Boolean algebra and combinational circuit :

Concept of Boolean algebra, Theorem, Postulates, Minterm, Maxterm, POS, SOP, K-map, Don't care condition.

Sequential circuit : Flip-Flop, Counter, Shift Register, A/D-D/A converter.

Unit 2:- Circuit and Network

Theory :

i) DC and AC circuit : Power and energy, Ohm's law, Kirchhof's law, RMS value, Average value, j-operator, RL,RC,RLC series and parallel, Resonance, Transient response to DC circuit.

ii) Electrostatic and magnetic circuits : Magnetising force, mmf, Magnetic flux & intensity, Hysterisis loop, Magnetic circuit, Biot Savart law, Capacitor with composite dielectric, Grouping of capacitor, Coupled circuit.

iii) Network theorem : Mesh and nodal analysis, Superposition theorem, Thevenin's theorem Norton's theorem, Max. Power transfer theorem, Raciprocity theorem, Star-Delta transformation .

iv) Polyphase Circuit : Relationship between line and phase quantity in star-delta connection, Measurement of 3-phase power, Active, reactive and apparent power.

v) Network functions and parameters : Network functions of one port and two port network, z-parameter, y-parameter,ABCD parameter, h-parameter, their relationship.

vi) Filters : Ideal passive filter, Condition for pass band, stop band & cut off frequency prototype low pass, high pass, band pass and band stop filter.

Unit 3:- Electrical & Electronics Measurement :

Electrical Measurement : Deflecting, Controlling & damping arrangements, Calibration of instrument, AC & DC voltmeter & ammeter and extension of range, Dynamometer type Wattmeter, Errors & correction, Frequency meter, Power factor meter, Induction instruments, Measurement of resistance, Inductance and Capacitance, Types of Transducers(resistive, inductive and capacitive), piezoelectric device, Photoelectric device, Hall effect, Tachogenerator (ac & dc), Digital trasducers, Thermometer, Thermocouple, Optical pyrometer.

Electronics Measurement : Measure voltage, current (DC & AC) by CRO, Measure unknown frequency by Lossajous figure, Measurement of phase angle of signal by CRO.

Waveform measurement : Wave analyzer, Heterodyne wave analyzer, Signal generator, Harmonic distortion analyzer.

Digital Measurement : Digital meter, Digital voltmeter, Digital frequency meter.

Unit 4:- Microprocessor :

Introduction :- Microprocessor Vs Microcomputer, Generation of microprocessor.

8085 Microprocessor : Architecture, BUS, Pin structure of 8085, Program-counter, Stack pointer, Register, Flag register.

Instruction set of 8085 : Instruction, Addressing data, addressing mode, Branch, Subroutine, I/ O machine control group, Assembly language programme, Timing diagram.

Interfacing I/O programming : PIN diagram of 8255, 8259, Programming with I/O chips like 8255, 8259, ADC and DAC.

8086 Microprocessor : Architecture, Pin diagram, Concept of coprocessor like 80186, 80286, 80386.

Unit 5:-Electrical Machines :

i) DC Machines : Types, Voltage, Power relation, Different characteristics, Starting & speed control, Calcultion of efficiency.

ii) Transformer : emf equation, Construction, Cooling arrangement, Basic working of transformer, Transformer on No load and On load, Equivalent circuit, Losses, OC and SC test, Efficiency, All day efficiency. Voltage regulation.

iii) Alternator : Types of alternator, Constructional detail, emf equation, Armature reaction, Regulation & OC,SC test of alternator Parallel operation and load sharing.

iv) Synchronous motor : Construction & principle of operation, Torque, Power development, Power angle characteristics, v-curve & application.

v) Induction motor (3phase): (Production of rotating magnetic field, Construction, Principle of operation, Torque-slip curve, Characteristics, Method of starting, Speed control.

vi) Induction motor (1 phase): Revolving field theory, Ferrari's principle, Different starting method of 1-phase induction motor.

APPENDIX-III
SYLLABUS FOR M.SC. (BIOTECHNOLOGY)/ M.SC. (MICROBIOLOGY)

BIOLOGY (10+2+3 Standard)

Unit 1:- General Biology

Taxonomy; Heredity; Genetic variation; Conservation; Principles of ecology; Evolution; Techniques in modern biology.

Unit 2 :-Biochemistry and Physiology

Carbohydrates; Proteins; Lipids; Nucleic acids; Enzymes; Vitamins; Hormones; Metabolism; Photosynthesis. Nitrogen Fixation, Fertilization and Osmoregulation; Nervous system; Endocrine system; Vascular system; Immune system; Digestive system, Reproductive System.

Unit 3 :-Basic Biotechnology

Tissue culture; Application of enzymes; Antigen-antibody interaction; Antibody production; Diagnostic aids.

Unit 4 :-Molecular Biology

DNA; RNA; Replication; Transcription; Translation; Proteins; Lipids; Membranes; Gene transfer.

Unit 5:-Cell Biology

Cell cycle; Cytoskeletal elements; Mitochondria; Endoplasmic reticulum; chloroplast; Golgi apparatus; Signaling.

Unit 6:-Microbiology

Isolation; Cultivation; Characterization and enumeration of virus; Bacteria; Fungi; Protozoa; Pathogenic micro-organisms.

CHEMISTRY (10+2+3 Standard)

Unit 1 :-Atomic Structure

Bohr's theory and Schrodinger wave equation; Periodicity in properties;Chemical bonding; Properties of s, p, d and f block elements; Complex formation; Coordination compounds; Chemical equilibria; Chemical thermodynamics (first and second law); Chemical kinetics (zero, first, second and third order reactions); Photochemistry; Electrochemistry; Acid-base concepts; Stereochemistry of carbon compounds; Inductive, Electromeric, conjugative effects and resonance.

Unit 2 :-Chemistry of Functional Groups

Hydrocarbons, alkyl halides, alcohols, aldehydes, ketones, carboxylic acids, amines and their derivatives; Aromatic hydrocarbons, halides, nitro and amino compounds, phenols, diazonium salts, carboxylic and sulphonic acids; Mechanism of organic reaction; Soaps and detergents; Synthetic polymers; Biomolecules-aminoacids, proteins, nucleic acids, lipids and carbohydrates (polysaccharides); Instrumental techniques – chromatography (TLC, HPLC), electrophoresis, UV-Vis-IR and NMR spectroscopy, mass spectrometry, etc.

MATHEMATICS (10+2 Standard)

Sets, Relations and Functions, Mathematical Induction, Logarithms, Complex numbers, Linear and Quadratic equations, Sequences and Series, Trignometry, Cartesian System of Rectangular Coordinates, Straight lines and Family, Circles, Conic Sections, Permutations and Combinations, Binomial Theorem, Exponential and Logarithmic Series, Mathematical Logic, Statistics, Three Dimensional Geometry, Vectors, Stocks, Shares and Debentures, Average and Partition Values, Index numbers, Matrices and Determinants, Boolean Algebra, Probability, Functions, limits and Continuity, Differentiation, Application of Derivatives, Definite and Indefinite Integrals, Differential Equations, Elementary Statics and Dynamics, Partnership, Bill of Exchange, Linear Programming, Annuities, Application of Calculus in Commerce and Economics.

PHYSICS (10+2 Standard)

Physical World and Measurement, Kinematics, Laws of Motion, Work, Energy and Power Electrostatics, Current electricity, Magnetic Effects of Current and Magnetism, Electromagnetic Induction and Alternating Current, Electromagnetics waves, Optics, Dual Nature of Matter and Radiations, Atomic Nucleus, Solids and Semiconductor Devices, Principles of Communication, Motion of System of Particles and Rigid Body, Gravitation, Mechanics of Solids and Fluids, Heat and Thermodynamics, Oscillations, Waves.

(APPENDIX-IV)
SYLLABUS FOR B.TECH.(4 YEARS) & INTEGRATED M.SC. BIOTECH. (5YEARS)

PHYSICS

Unit 1 : Units and Measurement

Units for measurement, system of units-S.I., fundamental and derived units. Dimensions and their applications.

Unit 2: Description of Motion in One Dimension

Motion in a straight line, uniform and non-uniform motion, their graphical representation. Uniformly accelerated motion, and its application.

Unit 3 : Description of Motion in Two and Three Dimensions

Scalars and vectors, vector addition, a real number, zero vector and its properties. Resolution of vectors. Scalar and vector products, uniform circular motion and its applications projectile motion.

Unit 4 : Laws of Motion

Force and inertia-Newton's Laws of Motion. Conservation of linear momentum and its applications, rocket propulsion, friction-laws of friction.

Unit 5 : Work, Energy and Power

Concept of work, energy and power. Energy-Kinetic and potential. Conservation of energy and its applications, Elastic collisions in one and two dimensions. Different forms of energy.

Unit 6 : Rotational Motion and Moment of Inertia

Centre of mass of a two-particle system. Centre of mass of a rigid body, general motion of a rigid body, nature of rotational motion, torque, angular momentum, its conservation and applications. Moment of inertia, parallel and perpendicular axes theorem, expression of moment of inertia for ring, disc and sphere.

Unit 7 :- Gravitation

Acceleration due to gravity, one and two- dimensional motion under gravity. Universal law of gravitation, variation in the acceleration due to gravity of the earth. Planetary motion, Kepler's laws, artificial satellite-geostationary satellite, gravitational potential energy near the surface of earth, gravitational potential and escape velocity.

Unit 8 : Solids and Fluids

Inter-atomic and Inter-molecular forces, states of matter.

(A) Solids: Elastic properties, Hook's law, Young's modulus, bulk modulus, modulus of rigidity.

(B) Liquids : Cohesion and adhesion. Surface energy and surface tension. Flow of fluids, Bernoulli's theorem and its applications. Viscosity, Stoke's Law, terminal velocity.

Unit 9 : Oscillations

Periodic motion, simple harmonic motion and its equation of motion, energy in S.H.M., Oscillations of a spring and simple pendulum.

Unit 10 : Waves

Wave motion, speed of a wave, longitudinal and transverse waves, superposition of waves, progressive and standing waves, free and forced Oscillations, resonance, vibration of strings and air-columns, beats, Doppler effects.

Unit 11 : Heat and Thermodynamics

Thermal expansion of solids, liquids and gases and their specific heats, Relationship between Cp and Cv for gases, first law of thermodynamics, thermodynamic processes. Second law of thermodynamics, Carnot cycle efficiency of heat engines.

Unit 12 : Transference of Heat

Modes of transference of heat. Thermal conductivity. Black body radiations, Kirchoff's Law, Wien's law, Stefan's law of radiation and Newton's law of cooling.

Unit 13 : Electrostatics

Electric charge-its unit and conservation, Coulomb's law, dielectric constant, electric field, lines of force, field due to dipole and its behaviour in a uniform electric field, electric flux, Gauss's theorem and its applications. Electric potential, potential due to a point charge. Conductors and insulators, distribution of charge on conductors. Capacitance, parallel plate capacitor, combination of capacitors, energy of capacitor.

Unit 14 : Current Electricity

Electric current and its unit, sources of energy, cells-primary and secondary, grouping of cells resistance of different materials, temperature dependence, specific resistivity, Ohm's law,Kirchoff's law, series and parallel circuits. Wheatstone Bridge with their applications and potentiometer with their applications.

Unit 15 : Thermal and Chemical Effects of Currents

Heating effects of current, electric power, simple concept of thermo-electricity-Seeback effect and thermocouple, Chemical effect of current-Faraday's laws of electrolysis.

Unit 16 : Magnetic Effects of Currents

Oersted's experiment, Bio-Savert's law, magnetic filed due to straight wire, circular loop and solenoid, force on a moving charge in a uniform magnetic field (Lorentz force), force and torques on currents in a magnetic field, force between two current carrying wires, moving coil galvanometer and conversion to ammeter and voltmeter.

Unit 17 : Magnetostatics

Bar magnet, magnetic field, lines of force, torque on a bar magnet in a magnetic field, earth's magnetic field, para, dia and ferro magnetism, magnetic induction, magnetic susceptibility.

Unit 18 : Electromagnetic Induction and Alternating Currents

Induced e.m.f., Faraday's Law,Lenz's Law, Self and Mutual Inductance, alternating currents, impedance and reactance,

power in a.c. Circuits with L.C. And R Series Combination, resonant circuits. Transformer and A.C. generator.

Unit 19 : Ray Optics

Reflection and refraction of light at plane and curved surfaces, total internal reflection, optical fibre; deviation and dispersion of light by a prism; Lens formula, magnification and resolving power, microscope and telescope.

Unit 20: Wave Optics

Wave nature of light; Interference- Young's double slit experiment. Diffraction-diffraction due to a single slit. Elementary idea of polarization.

Unit 21: Electromagnetic Waves

Electromagnetic waves and their characteristics, Electromagnetic wave spectrum from gamma to radio waves-propagation of EM waves in atmosphere.

Unit 22: Electron and Photons

Charge on an electron, e/m for an electron, photoelectric effect and Einstein's equation of photoelectric effect.

Unit 23 : Atoms, Molecules and Nuclei

Alpha particles scattering experiment, Atomic masses, size of the nucleus; radioactivity; Alpha, beta and gamma particles/ rays and their properties, radioactive decay law, half life and mean life of radio-active nuclei, binding energy, mass energy relationship, nuclear fission and nuclear fusion.

Unit 24: Solids and Semi-Conductors Devices

Energy bands in solids, conductors, insulators and semi-conductors, pn junction, diodes, diode as rectifier, transistor action, transistor as an amplifier.

CHEMISTRY

Unit 1: Some Basic Concepts:

Measurement in chemistry (Precision, significant figures, S.I. units, Dimensional analysis). Laws of chemical combination. Atomic Mass, Molecular Mass, mole concept, Molar Mass, determination of Molecular formula. Chemical equation, stoichiometry of Chemical reactions.

Unit 2 : States of Matter

Gaseous state, measurable properties of gases, Boyle's Law, Charle's Law and absolute scale of temperature, Avogadro's hypothesis, ideal gas equation, Dalton's law of partial pressures.

Kinetic molecular theory of gases (the microscopic model of gas), deviation form ideal behaviour.

The solid state (classification of solids, X-ray studies of crystal lattices and unit cells, packing of constituent particles in crystals). Imperfection in solids, electrical, magnetic and dielectic properties of solids. Liquid state (Properties of liquids, Vapour pressure, Surface tension, Viscosity).

Unit 3 : Atomic Structure

Constituents of the atom (discovery of election, rutherford model of the atom).

Electronics structure of atoms-nature of light and electromagnetic waves, atomic spectra, bohr's model of hydrogen, shortcomings of the bohr model.

Dual nature of matter and radiation. de-Broglie relation. The uncertainty principle, Quantum Mechanical Model of the atom, Orbitals and Quantum numbers. Shapes of orbitals. Aufbau principle, Pauli Exclusion principle, Hund's Rule, Electronics Configuration of atoms.

Unit 4 : Solutions

Types of solutions, Units of concentration, Vapour-pressure of solutions and Raoult's law. Colligative properties. Determination of molecular mass. Non-ideal solutions and abnormal molecular masses. Volumetric analysis-concentration unit.

Unit 5 : Chemical Energetics and Thermodynamics

Energy changes during a chemical reaction, Internal energy and Enthalpy, Internal energy and Enthalpy changes, Origin of Enthalpy change in a reaction, Hess's Law of constant heat summation, numericals based on these concepts. Enthalpies of reactions (Enthalpy of neutralization, Enthalpy of combustion, Enthalpy of fusion and vaporization).

Sources of energy(conservation of energy sources and identification of alternative sources, pollution associated with consumption of fuels. The sun as the primary source).

First law of thermodynamics; Relation between Internal energy and Enthalpy, application of first law of thermodynamics.

Second law of thermodynamics: Entropy, Gibbs energy, Spontaneity of a chemical reaction, Gibbs energy change and chemical equilibrium, Gibbs energy available for useful work.

Unit 6 : Chemical Equilibrium

Equilibria involving physical changes (solid-liquid, liquid-gas equilibrium involving dissolution of solids in liquids, gases in liquids, general characteristics of equilibrium involving physical processes)

Equilibria involving chemical systems (the law of chemical equilibrium, the magnitude of the equilibrium constant, numerical problems).

Effect of changing conditions of systems at equilibrium (change of concentration, change of temperature, effect of catalyst-Le Chateliar's principle).

Equilibria involving ions- ionization of electrolytes, weak and strong electrolytes, acid-base equilibrium, various concepts of acids and bases, ionization of water, pH scale, solubility product, numericals based on these concepts.

Unit 7 : Redox Reactions and Electrochemistry

Oxidation and reduction as an electron transfer concept. Redox reactions in aqueous solutions- electrochemical cells. e.m.f. of a galvanic cell. Dependence of e.m.f. on concentration and temperature (NERNST equation and numerical problems based on it).Electrolysis, Oxidation number (rules for assigning oxidation number, redox reactions in terms of oxidation number, nomenclature). Balancing of oxidation-reduction equations.

Electrolytic conduction. Molar conductivity, Kohlrausch's Law and its applications, Voltaic cell, Electrode potential and Electromotive force, Gibb's energy change and cell potential.

Electrode potential and products of electrolysis, Fuel cells, corrosion and its prevention.

Unit 8 : Rates of Chemical Reactions and Chemical Kinetics

Rate of reaction, Instantaneous rate of reaction and order of reaction. Factors affecting rates of reactions- factors affecting rate of collisions encountered between the reactant molecules, effect of temperature on the reaction rate, concept of activation energy catalyst. Effect of light of rates of reactions. Elementary reactions as steps to more complex reactions. How fast are chemical reactions?

Rate law expression. Order of a reaction (with suitable examples).Units of rates and specific rate constant. Order of reaction and effect of concentration (study will be confined to first order only). Temperature dependence of rate constant – Fast reactions (only elementary idea). Mechanism of reaction (only elementary idea). Photochemical reactions.

Unit 9 : Surface Chemistry

Surface : Adsorption – physical and chemical adsorption, adsorption isotherms.

Colloids-Preparation and general properties, Emulsions, Micelles.

Catalysis : Homogeneous and heterogeneous, structure of catalyst, Enzymes, Zeolites.

Unit 10 : Chemical Families Periodic Properties

Modern periodic law, Types of elements –Representatives elements (s & p block, Transition elements – d-block elements, inner transition elements-f-block elements. Periodic trends in properties-ionization enthalpy, electron gain enthalpy, atomic radii, valence, periodicity in properties of compounds).

Unit 11: Chemical Bonding and Molecular Structure

Chemical bonds and Lewis structure, shapes of molecules (VSEPR theory), Quantum theory of the covalent bond, hydrogen and some other simple molecules, carbon compounds, hybridization, Born and Beryllium compounds.

Coordinate covalent bond, ionic bond as an extreme case of polar covalent bond, ionic character of molecules and polar molecules. Bonding in solid state ionic, molecular and covalent solids, metals. Hydrogen bond, Resonance.

Molecules : Molecular orbital. Theory-bond order and magnetic properties of H_2,O_2,N_2,F_2 on the basis of MOT. Hybridisation involving s, p and d orbitals (including shapes of simple organic molecules), Dipole moment and structure of molecules.

Unit 12 : Chemistry of Non-Metals - 1

Hydrogen (unique position in periodic table, occurrence, isotopes, properties, reactions and uses), Hydrides-molecular, soline and interstitial

Oxygen (occurrence, preparation, properties and reactions, uses),simple oxides; ozone

Water and hydrogen peroxide, structure of water molecule and its aggregates, physical and chemical properties of water, hard and soft water, water softening, hydrogen peroxide-preparation, properties, structure and uses.

Nitrogen- Preparation, properties, uses, compounds of Nitrogen-Ammonia, Oxides of Nitrogen, Nitric Acid-preparation, properties and uses.

Unit 13: Chemistry of Non-metals-II

Boron-occurrence, isolation, physical and chemical properties, borax and boric acid, uses of boron and its compounds.

Carbon, inorganic compounds of carbon-oxides, halides, carbides, elemental carbon.

Silicon- occurrence, preparation and properties, oxides and oxyacids of phosphorus, chemical fertilizers.

Sulphur – occurrence and extraction, properties and reactions, oxides, Sulphuric acid –preparation, properties and uses, sodium thiosulphate.

Halogens- occurrence, preparation, properties, hydrogen halides, uses of halogens.

Noble gases- discovery, occurrence and isolation, physical properties, chemistry of noble gases and their uses.

Unit 14 : Chemistry of Lighter Metals

Sodium and Potassium- occurrence and extraction, properties and uses. Important compounds-NaCl, Na_2CO_3,$NaHCO_3$, NaOH, KCI,KOH.

Magnesium and calcium-occurrence and extraction, properties and uses. Important compounds $Mgcl_2$, $MgSO_4$, CaO, $Ca(OH)_2$,$CaCO_3$, $CaSO_4$ Plaster of paris, Bleaching Powder.

Aluminium –occurrence, extraction properties and uses, compounds-$AlCI_3$, alums.

Cement.

Biological role of Sodium, Potassium, Magnesium and Calcium.

Unit 15 :- Heavy Metals

Iron – Occurrence and extraction, compounds of iron, oxides, halides, sulphides, sulphate, alloy and steel.

Copper and Silver- occurrence and extraction, properties and uses, compounds-sulphides, halides and sulphates, photography.

Zinc and Mercury- occurrence and extraction, properties and uses, compounds-oxides, halides; sulphides and sulphates.

Tin and Lead- occurrence and extraction, properties and uses, compounds-oxides, sulphides, halides.

Unit 16: Chemistry of Representative Elements

Periodic properties- Trends in groups and periods (a) Oxides-nature (b) Halides-melting points (c) Carbonates and sulphates-solubility.

The chemistry of s and p block elements, electronics configuration, general characteristic properties and oxidation states of the following:-

Group 1 elements	- Alkali metals
Group 2 elements	- Alkaline earth metals
Group 13 elements	- Boron family
Group 14 elements	- Carbon family
Group 15 elements	- Nitrogen family

Group 16 elements - Oxygen family

Group 17 elements - Halogen family

Group 18 elements - Noble gases & Hydrogen

Unit 17 : Transition Metals Including Lanthanides

Electronic configuration : General characteristic properties, oxidation states of transition metals. First row transition metals and general properties of their compounds-oxides, halides and sulphides.

General properties of a second and third row transition elements (Groupwise discussion).

Preparation and reactions, properties and uses of Potassium dichromate Potassium permanganate.

Inner Transition Elements: General discussion with special reference to oxidation states and lanthanide contraction.

Unit 18 : Coordination Chemistry and Organo Metallics

Coordination compounds, Nomenclature: Isomerism in coordination compounds; Bonding in coordination compounds, Werner's coordination theory. Applications of coordination compounds.

Unit 19 : Nuclear Chemistry

Nature of radiation from radioactive substances. Nuclear reactions; Radio-active disintegration series; Artificial transmutation of elements; Nuclear fission and Nuclear fusion: Isotopes and their applications: Radio carbon-dating.

Unit 20: Purification and Characterisation of Organic Compounds

Purification (crystallization, sublimation, distillation, differential extraction, chromatography).

Qualitative analysis, detection of nitrogen, sulphur, phosphorus and halogens.

Quantitative analysis- estimation of carbon, hydrogen, nitrogen, halogens, sulphur, phosphorus
(basic principles only)

Determination of molecular mass-Silver salt method, cholroplatinate salt method

Calculation of empirical formula and molecular formula.

Numerical problems in organic quantitative analysis, modern methods of structure elucidation.

Unit 21 : Some Basic Principles

Classification of Organic Compounds.

Tetravalency of Carbon, Homologous series. Functional groups- - C=C-,-C C-,and groups containing halogen, oxygen, nitrogen and sulphur. General introduction to naming organic compounds-Common names and IUPAC nomenclature of alphatic, aromatic and Cyclic Compounds. Illustration with examples of Compounds having not more than three same of different functional groups/ atoms. Isomerism-Structural and stereoisomerism (geometrical and optical). Chirality-Isomerism in Compounds having one and two chiral Centres. Enantiomers, diastereoisomers, recemic forms, recemisation & resolution.

Covalent bond fission-Homolytic and Heterolytic: free radicals carbocations and carbanions. Stability of Carbocations and free-radicals. Electrophiles and Nucleophiles.

Electron displacement in a covalent bond-inductive effect, electromeric effect, resonance Common types of organic reactions- Substitution, addition, elimination and rearrangement reactions. Illustration with examples.

Unit:- 22 Hydrocarbons

Classification. Sources of hydrocarbons:

Alkanes- General methods of preparation (from unsaturated hydrocarbons, alkylhalides, aldehydes, ketones and carburoxylic acids). Physical properties and reactions (Substitution), Oxidation and miscellaneous). Conformations of alkanes(ethane, popane butane) and cyclohexane, sawhorse and Newman projections)-mechanism of halogaration of alkanes.

Alkanes and Alkynes- General methods of preparation physical peorperties, Chemical reactions-Mechanism of electrophilic addition reactions in alkenes-Markowni Koff's Rule, peroxide effect. Acidic character of alkynes. Polymerisation of alkenes.

Aromatic hydrocarbons- Benzene and its homologues, Isomerism, Chemical reactions of benzene. Structure of benzene, resonance. Directive influence of substituents.

Petroleum – Hydro Carbons from Petroleum, Cracking and reforming, quality of gasoline-Octane number, gasoline additives.

Unit 23:- Organic Compounds Containing Halogens

(Haloakanes and Haloarenes)

Methods of preparation, physical properties and reactions. Preparation, properties and uses of Chloroform and lodoform.

Unit 24:- Organic Compounds Containing Oxygen

General methods of preparation, correlation of physical properties with their structures, chemical properties and uses of Alchols, polyhydric alcohols, Ethers, aldehydes, ketones, carboxylic acids and their derivatives, Phenol, Benzaldehyde and Benzoic acid -their important methods of preparation and reactions. Acidity of carboxylic acids and phenol effect of substituents on the acidity of carboxylic acids.

Unit 25 :- Organic Compounds Containing Nitrogen

(Cyanides, isocyanides, nitrocompounds and amines)

Nomenclature and classification of amines, cyanides, isocyanides, nitrocompounds and their methods of preparation; correlation of their physical properties with structure, chemical reactions and uses- Basicity of amines.

Unit 26:- Synthetic and Natural Polymers

Classification on Polymers, natural and synthetic polymers (with stress on their general methods of preparation) and important uses of the following.

Teflon, PVC, Polystyrene, Nylon-66, terylene, Bakelite)

Unit 27 :- Bio Molecules and Biological Processes

The Cell and Energy Cycle

Carbohydrates : Monosaccharides, Disaccharides, Polysaccharides

Amino acids and Peptides- Structure and classification.

Proteins and Enzymes-Structure of Proteins, Role of enzymes.

Nucleic Acids-DNA and RNA

Biological functions of Nucleic acids-Protein synthesis and replication.

Lipids – Structure, membranes and their functions.

Unit 28:- Chemistry In Action

Dyes, Chemicals in medicines (antipyretic, analgesic, antibiotics & tranquilisers), Rocket propellants.

(Structural formulae non-evaluative)

Unit 29 :- Environmental Chemistry

Environmental pollutants; soil, water and air pollution; major atmospheric pollutants; acid rain, Ozone and its reactions causing ozone layer depletion, effects of the depletion of ozone layer, industrial air pollution.

MATHEMATICS

Unit 1:- Sets, Relations and Functions

Sets and their Representations, Union, intersection and complements of sets, and their algebraic properties, Relations, equivalence relations, mappings, one-one, into and onto mappings, composition of mappings.

Unit 2 : Complex Numbers

Complex numbers in the form a+ib and their representation in a plane. Argand diagram. Algebra of complex numbers, Modulus and Argument (or amplitude) of a complex number, square root of a complex number. Cube roots of unity, triangle inequality.

Unit 3 : Matrices and Determinants

Determinants and matrices of order two and three, properties of determinants, Evaluation of determinants. Area of triangles using determinants; Addition and multiplication of matrices, adjoint and inverse of matrix. Test of consistency and solution of simultaneous linear equations using determinants and matrices.

Unit 4: Quadratic Equations

Quadratic equations in real and complex number system and their solutions. Relation between roots and co-efficients, nature of roots, formation of quadratic equations with given roots; Symmetric functions of roots, equations reducible to quadratic equations-application to practical problems.

Unit 5 : Permutations and Combinations

Fundamental principle of counting; Permutation as an arrangement and combination as selection,

Meaning of P (n,r) and C (n,r). Simple applications.

Unit 6 : Mathematical Induction and Its Application

Unit 7 : Binomial Theorem and Its Applications

Binomial Theorem for a positive integral index; general term and middle term; Binomial Theorem for any index. Properties of Binomial Co-efficients. Simple applications for approximations.

Unit : 8 Sequences and Series

Arithmetic, Geometric and Harmonic progressions. Insertion of Arithmetic Geometric and Harmonic means between two given numbers. Relation Between A.M., G.M. and H.M. Special series: Sn, Sn^2, Sn^3. Arithmetico-Geometric Series, Exponential and Logarithmic series.

Unit : 9 Differential Calculus

Polynomials, rational, trigonometric, logarithmic and exponential functions, Inverse functions. Graphs of simple functions. Limits, Continuity; differentiation of the sum, difference, product and quotient of two functions: differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions; derivatives of order upto two. Applications of derivatives: Rate of change of quantities, monotonic-increasing and decreasing functions, Maxima and minima of functions of one variable, tangents and normals, Rolle's and Lagrange's Mean Value Theorems.

Unit 10 :- Integral Calculus

Integral as an anti-derivative. Fundamental integrals involving algebraic, trigonometric, exponential and logarithmic functions. Integration by substitution, by parts and partial fractions. Integration using trigonometric identities. Integral as limit of a sum. Properties of definite integrals. Evaluation of definite integrals; Determining areas of the regions bounded by simple curves.

Unit 11:- Differential Equations

Ordinary differential equations, their order and degree. Formation of differential equations. Solution of differential equations by the method of separation of variables. Solution of homogeneous and linear differential equations, and those of the type

$$\frac{d^2y}{dx^2} = f(x)$$

Unit 12:- Two Dimensional Geometry

Recall of Cartesian system of rectangular co-ordinates in a plane, distance formula, area of a triangle, condition of the collinearity of three points and section formula, centroid and in-centre of a triangle, locus and its equation, translation of axes, slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axes.

The straight line and pair of straight lines

Various forms of equations of a line, intersection of line, angles between two lines, conditions for concurrence of three lines, distance of a point from a line Equations of internal and external bisectors of angles between two lines, coordinates of centroid, orthocenter and circumcentre of a triangle, equation of family of lines passing through the point of intersection of two lines, homogeneous equation of second degree in x and y, angle between pair of lines through the origin, combined equation of the bisectors of the angles between a pair of lines, condition for the general second degree equation to a represent a pair of lines, point of intersection and angle between two lines.

Circles and Family of Circles

Standard form of equation of a circle, general form of the equation of a circle, its radius and centre, equation of a circle in the parametric form, equation of a circle when the end points of a diameter are given, points of intersection of a line and a circle with the centre at the origin and conditions for a line to be tangent to the circle, length of the tangent, equation of the tangent, equation of a family of circles through the intersection of two circles, condition for two intersecting circles to be orthogonal.

Conic Sections

Sections of cones, equations of conic sections (parabola, ellipse and hyperbola) in standard forms, condition for $y = mx+c$ to be a tangent and point (s) of tangency.

Unit 13 : Three Dimentsional Geometry

Coordinates of a point in space, distance between two points; Section formula, direction ratios and direction cosines, angle between two intersecting lines. Skew lines, the shortest distance between them and its equation. Equations of a line and a plane in different forms; intersection of a line and a plane, coplanar lines, equation of a sphere, its centre and radius. Diameter form of the equation of a sphere.

Unit 14 : Vector Algebra

Vectors and Scalars, addition of vectors, components of a vector in two dimensions and three dimensional space, scalar and vector products, scalar and vector triple product. Application of vectors to plane geometry.

Unit 15 : Measures of Central Tendency and Dispersion

Calculation of Mean, median and mode of grouped and ungrouped data. Calculation of standard deviation, variance and mean deviation for grouped and ungrouped data.

Unit 16 :- Probability

Probability of an event, addition and multiplication theorems of probability and their application; Conditional probability; Bayes' Theorem, probability distribution of a random variate; Binomial and Poisson distributions and their properties.

Unit 17 : Trigonometry

Trigonometrical identities and equations. Inverse trigonometric functions and their properties. Properties of triangles, including centroid, incentre, circum-centre and orthocenter, solution of triangles. Heights and Distances.

Unit 18: Statics

Introduction, basis concepts and basic laws of mechanics, force, resultant of forces acting at a point, parallelogram law of forces, resolved parts of a force, Equilibrium of a particle under three concurrent forces, triangle law of forces and its converse, Lami's theorem and its converse, Two parallel forces, like and unlike parallel forces, couple and its moment.

Unit 19 :- Dynamics

Speed and velocity, average speed, instantaneous speed, acceleration and retardation, resultant of two velocities. Motion of a particle along a line, moving with constant acceleration. Motion under gravity. Laws of motion, Projectile motion.

BIOLOGY (BOTANY AND ZOOLOGY)
(Only for Int. M.Sc.(Biotech))

Unit 1 : Diversity in Living World

Biology – its meaning and relevance to mankind

What is living; Taxonomic categories and aids (Botanical gardens, herbaria, museums, zoological parks); Systematics and Binomial system of nomenclature.

Introductory classification of living organisms (Two-kingdom system, Five-kingdom system); Major groups of each kingdom alongwith their salient features (Monera, including Archaebacteria and Cyanobacteria, Protista, Fungi, Plantae, Animalia); Viruses; Lichens

Plant kingdom – Salient features of major groups (Algae to Angiosperms);

Animal kingdom – Salient features of Nonchordates up to phylum, and Chordates up to class level.

Unit 2 : Cell : The Unit of Life ; Structure and Function

Cell wall; Cell membrane; Endomembrane system (ER, Golgi apparatus/Dictyosome, Lysosomes, Vacuoles); Mitochondria; Plastids; Ribosomes; Cytoskeleton; Cilia and Flagella; Centrosome and Centriole; Nucleus; Microbodies.

Structural differences between prokaryotic and eukaryotic, and between plant and animal cells.

Cell cycle (various phases); Mitosis; Meiosis.

Biomolecules – Structure and function of Carbohydrates, Proteins, Lipids, and Nucleic acids.

Enzymes – Chemical nature, types, properties and mechanism of action.

Unit 3 : Genetics and Evolution

Mendelian inheritance; Chromosome theory of inheritance; Gene interaction; Incomplete dominance; Co-dominance; Complementary genes; Multiple alleles;

Linkage and Crossing over; Inheritance patterns of hemophilia and blood groups in humans.

DNA –its organization and replication; Transcription and Translation; Gene expression and regulation; DNA fingerprinting.

Theories and evidences of evolution, including modern Darwinism.

Unit 4 : Structure and Function – Plants

Morphology of a flowering plant; Tissues and tissue systems in plants;

Anatomy and function of root, stem(including modifications), leaf, inflorescence, flower (including position and arrangement of different whorls, placentation), fruit and seed; Types of fruit; Secondary growth;

Absorption and movement of water (including diffusion, osmosis and water relations of cell) and of nutrients; Translocation of food; Transpiration and gaseous exchange; Mechanism of stomatal movement.

Mineral nutrition – Macro- and micro-nutrients in plants

including deficiency disorders; Biological nitrogen fixation mechanism.

Photosynthesis – Light reaction, cyclic and non-cyclic photophosphorylation; Various pathways of carbon dioxide fixation; Photorespiration; Limiting factors .

Respiration – Anaerobic, Fermentation, Aerobic; Glycolysis, TCA cycle; Electron transport system; Energy relations.

Unit : 5 Structure and Function - Animals

Tissues;

Elementary knowledge of morphology, anatomy and functions of different systems of earthworm, cockroach and frog.

Human Physiology – Digestive system - organs, digestion and absorption; Respiratory system – organs, breathing and exchange and transport of gases. Body fluids and circulation – Blood, lymph, double circulation, regulation of cardiac activity; Hypertension, Coronary artery diseases.

Excretion system – Urine formation, regulation of kidney function

Locomotion and movement – Skeletal system, joints, muscles, types of movement.

Control and co-ordination – Central and peripheral nervous systems, structure and function of neuron, reflex action and sensory reception; Role of various types of endocrine glands; Mechanism of hormone action.

Unit : 6 Reproduction, Growth and Movement in Plants

Asexual methods of reproduction; Sexual Reproduction - Development of male and female gametophytes; Pollination (Types and agents); Fertilization; Development of embryo, endosperm, seed and fruit (including parthenocarpy and apomixis).

Growth and Movement – Growth phases; Types of growth regulators and their role in seed dormancy, germination and movement; Apical dominance; Senescence; Abscission; Photo- periodism; Vernalisation; Various types of movements.

Unit 7 : Reproduction and Development in Humans

Male and female reproductive systems; Menstrual cycle; Gamete production; Fertilisation; Implantation; Embryo development; Pregnancy and parturition; Birth control and contraception.

Unit 8 : Ecology and Environment

Meaning of ecology, environment, habitat and niche.

Ecological levels of organization (organism to biosphere); Characteristics of Species, Population, Biotic Community and Ecosystem; Succession and Climax.

Ecosystem – Biotic and abiotic components; Ecological pyramids; Food chain and Food web; Energy flow; Major types of ecosystems including agroecosystem.

Ecological adaptations – Structural and physiological features in plants and animals of aquatic and desert habitats.

Biodiversity – Meaning, types and conservation strategies (Biosphere reserves, National parks and Sanctuaries)

Environmental Issues – Air and Water Pollution (sources and major pollutants); Global warming and Climate change; Ozone depletion; Noise pollution; Radioactive pollution; Methods of pollution control (including an idea of bioremediation); Deforestation; Extinction of species (Hot Spots).

Unit 9 : Biology and Human Welfare

Animal husbandry – Livestock, Poultry, Fisheries; Major animal diseases and their control. Pathogens of major communicable diseases of humans caused by fungi, bacteria, viruses, protozoans and helminths, and their control.

Cancer; AIDS.

Adolescence and drug/alcohol abuse;

Basic concepts of immunology.

Plant Breeding and Tissue Culture in crop improvement.

Biofertilisers (green manure, symbiotic and free-living nitrogen-fixing microbes, mycorrhizae);

Biopesticides (micro-organisms as biocontrol agents for pests and pathogens); Bioherbicides;

Microorganisms as pathogens of plant diseases with special reference to rust and smut of wheat, bacterial leaf blight of rice, late blight of potato, bean mosaic, and root - knot of vegetables.

Bioenergy – Hydrocarbon - rich plants as substitute of fossil fuels.

Unit 10 : Biotechnology and its Applications

Microbes as ideal system for biotechnology;

Microbial technology in food processing, industrial production (alcohol, acids, enzymes, antibiotics), sewage treatment and energy generation.

Steps in recombinant DNA technology – restriction enzymes, DNA insertion by vectors and other methods, regeneration of recombinants.

Applications of R-DNA technology. In human health – Production of Insulin, Vaccines and Growth hormones, Organ transplant, Gene therapy. In Industry – Production of expensive enzymes, strain improvement to scale up bioprocesses. In Agriculture – GM crops by transfer of genes for nitrogen fixation, herbicide-resistance and pest-resistance including Bt crops.

(APPENDIX – V)
EXAMINATION CENTRE FOR KIITEE-2008

Name of the State / City	Exam. Centre	Centre Code
Andaman Nicobar	Port Blair	01
Andhra Pradesh	Hyderabad	02
	Vishakhapatnam	03
	Vijaywada	04
Assam	Guwahati	05
	Silchar	06
Bihar	Bhagalpur	07
	Gaya	08
	Patna	09
Chhatisgarh	Bilaspur	10
	Raipur	11
Delhi	New Delhi	12
Gujarat	Ahmedabad	13
Goa	Panjim	14
Himachal Pradesh	Shimla	15
Jharkhand	Bokaro	16
	Dhanbad	17
	Jamshedpur	18
	Ranchi	19
Jammu Kashmir	Jammu	20
Kerala	Kochi	21
	Thiruanantapuram	22
Karnataka	Bangalore	23
	Belgaum	24
Madhya Pradesh	Bhopal	25
	Gwalior	26
	Indore	27
Maharashtra	Mumbai	28
	Nagpur	29
	Pune	30
Manipur	Imphal	31
Meghalaya	Shillong	32
Nagaland	Dimapur	33
Orissa	Angul	34
	Balasore	35
	Baripada	36
	Berhampur	37

	Bhawanipatna	38
	Bhubaneswar	39
	Bolangir	40
	Cuttack	41
	Keonjhar	42
	Koraput	43
	Paralakhemundi	44
	Rourkela	45
	Sambalpur	46
Punjab	Chandigarh	47
	Ludhiana	48
Pondicherry	Pondicherry	49
Rajasthan	Jaipur	50
	Kota	51
Sikkim	Gangtok	52
Tamil Nadu	Chennai	53
	Coimbatoor	54
	Vellore	55
Tripura	Agartala	56
Uttar Pradesh	Allahabad	57
	Banaras	58
	Bareilly	59
	Gorakhpur	60
	Kanpur	61
	Lucknow	62
Uttaranchal	Dehradun	63
	Pant Nagar	64
West Bengal	Durgapur	65
	Kharagpur	66
	Kolkata	67
	Siliguri	68

* For Foreign Nationals/PIOs, KIITEE-2008 will be 'online' on 4th may 2008. Rest of the terms and conditions will remain same.

APPENDIX – VI(a)
SALE OF KIITEE - 2008 APPLICATION FORMS & PROSPECTUS
INSTITUTION COUNTER

SL. NO.	ADDRESS
01	At/Po – KIIT Bhubaneswar – 751024 (Information Centre & Koel Campus) Tel No.- 0674 – 2741998, 2742103 Fax No.- 0674-2741465
02	621, NMH Complex, 80 Feet Road, 4th block Koramangala – 560034 Bangalore Tel No.- 080 – 25633192, 41309988 Fax No.-080-41309988
03	Jyotimohan Deshmukh Tower, 6, Ideal Colony, Paud Road, Pune – 411029 Tel No.- 020 – 25469591, 25465209 Fax No.-020-25469591

APPENDIX – VI(b)
ALLAHABAD BANK COUNTERS

NAME OF THE BRANCH **ADDRESS**

STATE / TERRITORY	SL. NO.	BRANCH
ANDAMAN & NICOBAR ISLAND	1	Port Blair (SU) Post Box-304,Gandhi Bhawan, Mahatma Gandhi Road, Dist: Andaman Pin: 744101 Tel. No.- 03192-230267 ,Fax No.- 03192-230267
ANDHRA PRADESH	2	Hyderabad DR. No. 3-6-435, IST & 2nd Floor, Main Road, Himayatnagar,Pin: 500029 Tel. No.- 040- 27673940,27638798 Fax No.- 040-27632391
	3	Secunderabad (M) Sarojini Devi Road, Minerva Complex, Secunderabad, Dist: Hyderabad,Pin: 500003 Tel. No.- 040 – 27842949 Fax No.- 040-27843032
	4	Vijayawada (U) H.No. 21/12/75, Ist Floor, Alibeig Street, Governorpet Dist: Krishna,Pin: 520002 Tel No.- 0866 – 2578582
	5	Guntur (U) Jinnah Tower,Door No.-22-4-105 Lalapet, Near Jinnah Tower,Pin: 522003 Tel No.- 08632-224942,Fax No.- 08632-228271
	6	Tirupati (U) Opp. V.V. Mahal,Mosque Road, Tirupati Dist: Chitoor,Pin: 517501 Tel No.- 0877 – 2220722
	7	Visakhapatnam (U) 30-15-171 Daba Space Gardens Near Saraswati Park Pin: 530020 Tel No.- 0891-2567933
ASSAM	8	Guwahati Panbazar, C.K. Road, Ranibasi,Panbazar,Pin-781001 Tel No.-0361-2545218,2631989
	9	Jorhat (U), Garali P.O. & Dist. Jarhat,Pin: 785001 Tel No.- 0376-2320696, Fax No.- 0376-2320696
	10	Silchar (U) & RBB Kusum Mansion, Hospital Road, Silchar Dist: Cachar , Pin: 788001 Tel No.- 03842 – 245342,247923, Fax No.- 03842-247923
BIHAR	11	Patna(Main) Budh Marg, Patna Gaya Road Pin: 800001 Tel No.- 0612-2220159,Fax No.- 0612-2233951

APPENDIX – VI(c)

	12	Muzaffarpur Saraiyaganj Main Road, Muzaffarpur – 842001 Tel No.- 0621 – 2225057, Fax No.- 0621 – 2214372 Email id: allamuz@yahoo.com
	13	Gaya 57, K.P.Road, chowk Gaya,Pin: 823001 Tel No.- 0631-2421182
	14	Bhagalpur Chandralok Complex, Ghantaghar,Bhagalpur,Bihar Patna-0641-2420223
CHANDIGARH	15	Allahabad Bank, 2nd Floor, Bank Square, Sector-17B,Pin: 160017 Tel No.- 0172 – 2702735,Fax No.- 0172 – 2704752 Email id: albkchd@sancharnet.in / rochd@allahabadbank.co.in
CHHATISHGARH	16	Raipur Amrit Sanesh Bhawan,G.E. Road, Dist: Raipur,Pin: 492001 Tel No.-0771-2226648,2226218
	17	Bilaspur (U) Niranjan Palace, Opp Telephone Exchange Bus Stand Road,Pin: 495001 Tel No.- 07752-230491, 229129, Fax No.- 07752-/229129
DELHI	18	New Delhi Parliament Street Allahabad Bank Building 17, Sansad Marg,Pin: 110001 Tel No.- 011-23743694, 23361286 Fax No.-011-23363694
GUJARAT	19	Ahmedabad, Sardar Patel Nagar, Navin House,2nd Floor Opp. Sardar Patel Seva Samaj Bhavan Near Navarangpura telephone Exchange C.G.Road, Navrangpura, Ellis Bridge,Pin: 380006 Tel No.- 079-26468450 ,Fax No.- 079-6400946
	20	Rajkot .(U) 17, Mill Para, Dr Nar Shihbhai Sanatorium , 1st Floor, Dhebar Road (South) Pin: 360002 Tel No.- 0281-2231830,Fax No.- 0281-2241172
	21	Surat, Nanpura(Main Branch)M Alaknanda Apartment 864,Athugar Street nanpura ,Pin: 395001 Tel No.- 0261-2461879,2470024, 2471156 Fax: No.-0261-2471156
	22	Baroda Shanti Bhawan Giridhar Chamber,1st Floor, opposite Hathipole Vadodara, Gujarat, Ahmedabad Ph.No.-0265-2433276, 0265-2435482
HARYANA	23	Ambala Cantt (SU) Nicholson Road, Ambala Cantt. Pin: 130009 Tel No.- 0171-2630946, Fax No.- 0171-2643971

APPENDIX – VI(d)

	24	Faridabad Badshah Khan Hospital Road, NIT, Faridabad,Pin: 121001 Tel No.- 0129-2413554, 2412942 Fax No.- 0129-2412942
	25	Karnal Plot No.-1199, Sector-6, Po-Karnal, Haryana Chandigarh,Pin-132001 Ph.No.-0184-2284266, 2285161, Fax-0184-2285161
	26	Hissar SCF-90, Green Square Market Hissar, Haryana, Chandigarh, Pin-125001, Ph.No.-01662-238169
HIMACHAL PRADESH	27	Simla (SU) Aloka Cottage,Mail Road Simla Pin: 171001 Tel No.- 0177-2802527
	28	Dharamshala (SU) Adda Kachari Dharmsala Dist: KANGRA Tel No.- 01892-222019
JAMMU & KASHMIR	29	Jammu (U) 67, Vir Marg (Residency Road) PO & Dist: Jammu Jammu & Kashmir,Pin: 180001 Tel No.- 0191-2560568,2573486 Fax No.-0191-2560568
	30	Srinagar Stadium Road, Opp. Iqbal Park, Srinagar Jammu and Kashmir Tel No.-0194-2455700
JHARKHAND	31	Bokaro Steel City Sec-IV B-7, City centre,Bokaro Steel city Pin: 827004 Tel No.- 06542-233175, 220019,240257
	32	Ranchi Main Branch Main Road,Ranchi Budhiya Building, Dist: Ranchi ,Pin: 834001 Tel No.-0651-2208034,2301234
	33	Jamshedpur Main (U) R.Road Bistupur Dist-East Singhbhum, Pin-831001, Tel No.-0657-2756258,2425793,2432370
	34	Dhanbad (U) & R.B.B. Chauda Mansion, Katras Road, Dist-Dhanbad,Pin-826001, Tel No.-0326-2303458
KARNATAKA	35	Bangalore Branch Chamber Of Commerce, Building No.- 2, Kempe Gowde Road, Bangalore – 560009 Tel Ph.No.-080-22262064,22261599 Fax No.-080-22253402

APPENDIX – VI(e)

	36	Mangalore (U) No.20-7-435/9 Hamilton Circle, Near D.C Office, Mangalore Dist: Dakshin Kannada Pin: 575001 Tel No.- 0824 – 2420159 / 2428551
	37	Belgaum (U) Behind Hari Mandir, Plot No.-407A,1-Cross,BhagyaNagar, Dist-Belgaum,Pin-590006, Tel No.-0831-480107
KERALA	38	Trivandrum Thiruvannthapuram (U) T C 38/687 Gayathri Bldg. Thiruvanntha,Pin: 695203 Tel No.- 0471-2471552
	39	Ernakulum (U) & RBB M G Road, 1837/38/F Ernakulum,Pin: 682035 Tel No.- 0484-2351267, 2354925 Fax No.- 0484-2374870
	40	Kochi (U) Post Box No.-210 5/848, Palace Road, Kochi,Dist-Ernakulum, Pin-682002, Tel No.-0484-2227112
MADHYA PRADESH	41	Indore (M) Ambacy Tower, A-1 New Palasia P.O-Indore,Pin: 452002 Tel No.- 0731-4065218,5065218,Fax No.- 0731-2545253
	42	Bhopal Corporation Building, Bus Stand 3 Hamidia Road, Bhopal – 462001 Tel No.-0755-2747530
	43	Gwalior (U) Sanatan Dharam Mandir Marg,Pin: 474001 Tel No.- 0751-2322064
	44	Jabalpur Civil Lines, P.B. No-9, Residency Road,Pin: 482001 Tel No.- 0761-2620376,517346, Fax No.- 0761-2620041
MAHARASHTRA	45	Mumbai Manish Commercial Centre 216A, Dr. Annie Besant Road Worli, Mumbai,Dist: Greater Mumbai Pin: 400025 Tel No.- 022-24930744, Fax No.- 022-24964644
	46	Aurangabad(U) Shreeraj Building,Khadkeshwar Marg Pin: 431001 Tel No.- 0240-2331601
	47	Nagpur Palm Road, Civil Lines, Pin : 440001 Tel No.- 0712 – 2533255, 2521460 Fax No.- 0712 – 2521460 Email id: rongp@allahabadbank.co.in

APPENDIX – VI(f)

	48	Pune Branch, Seva Sadan Society Buildings, Laxmi Road, 613/14, Sadashiv Peth, Pune-411030 Maharashtra Tel No.-020-24455079,Fax No.-020-24453783
	49	Sholapur 487, East Mangalwar Peth Post Box No.191 Sholapur Dist: Greater Mumbai,Pin: 413002 Tel No.- 0217-2325024
MANIPUR	50	Imphal(U) Paona Bazar,Dist: Imphal (West) Pin: 795001 Tel No.- 0385-2450902,2220902,Fax No.- 0385-2441423
MEGHALAYA	51	Shillong (U) & RBB Slong House (1st Floor) G.S.Road Bara Bazar,(Quilla Patty),Dist-East Khasi Hills Meghalaya, Pin-793002 Tel No.-0364-2240643,Fax No.-0364-2243344
NAGALAND	52	Dimapur At-Gurmuk Singh Building,Po-Gurudwara Road Dist-Dimapur ,State-Nagaland Pin - 797112 Ph.No.-03862-226597
ORISSA	53	159, Bapujinagar, Bhubaneswar Dist: khurda,Pin: 751009 Tel No.- 0674 – 2532745 / 2536216 Fax No.- 0674-2533240
	54	Plot No.3/1-B,I.R.C. Village-Civic Centre Nayapalli Bhubaneswar-751015 Tel No.- 0674-2555194, Fax No.- 0674 - 2557564 Email id: robbsr@allahabadbank.co.in
	55	Bhadrak, Main Road, (opp. Jail & Post Office),Po/dist: Bhadrak Pin: 756100 Tel No.-06784-240248
	56	Cuttack (Main) (U) Naya Sarak Cuttack,Pin: 753002 Tel No.- 0671-2308394
	57	Puri (U) Mochi Sahi Chhak,PIN Code: 752001 Tel No.- 06752-222779 ,Fax No.- 06752-232177
	58	Khurda (SU) Main Road, Khurda,Pin: 752055 Tel No.- 06755 – 220560
	59	Berhampur (Ganjam) U Fire Station Road,PIN Code: 760001 Tel No.- 0680-2224586, 2222195 Fax No.-0680-2230195
	60	Paradeep (VL) (SU) & RBB Admn. Building, Rear Wing, Paradeep Port, Jagatsingpur – 754142 Tel No.- 06722 – 222023 Fax No.- 06722-222023

APPENDIX – VI(g)

	61	Kendrapada (SU) Tarini Market Complex,Tinimohini Tel No.- 06727 – 220766
	62	Sambalpur (U) Golbazar, Gaity Road,Pin: 768001 Tel No.- 0663 - 2521017
	63	Bolangir Ramji para road,Pin: 767001 Tel No.- 06652 - 232632
	64	Sunabeda (SU) Dist: Koraput Tel No.- 06853 - 220373
	65	Bhawanipatna Dist: Kalahandi Tel No.-06670-233060
	66	Rourkela (U). Daily Market Main Road Dist-Sundergarh ,Pin - 769001 Tel No.- 0661-2511129 Fax No.- 0661-2500839
	67	Barbil (SU) Vill. & P.O. Barbil,Dist: keonjhar Pin: 758035 Tel No.- 06767 – 275426
	68	Phulbani (SU) AT & P.O-Phulbani,Pin: 762001 Tel No.-06842-253813
	69	Baripada (SU) P.O. Station Bazar AT & P.O – Baripada Dist: Mayurbhanj,Pin: 757001 Tel No.- 06792 – 262284
	70	Jajpur Road Bank Street, Dist: Jajpur,Pin: 755019 Tel No.-06726-220231,
	71	Jharsuguda Branch At/ P.o – Jharsuguda Dist: Jharsuguda,Pin: 768201 Tel No.-06645-272531
	72	Balasore Branch Saheed Park, Po-Motiganj, Dist-Balasore, Pin-756001. Ph.No.-06782-262447,Fax No.-06782-268871
PONDICHERRY	73	Pondicherry Venkatnagar (U) 93, Kamarajar Salai, Pin-605011 Tel No.-0413-2337013
PUNJAB	74	Patiala(U) House No.-82,83,84,85, The Mall Pheel Khana Road, Tel No.- 0175-2227883, 2228191
	75	Jalandhar Ground Floor, Civil Lines, G.T. Road, Pin: 144001 Tel No.- 0181-2224453, 2225812,2457760 Fax No.-0181-2244181

APPENDIX – VI(h)

	76	Service Branch Ludhiana(M) Attar Singh Street, Near Clock tower Dist: Ludhiana,Pin:141008 Tel No.-0161-2745868,Fax No.-0161-2749646
	77	Bathinda Teen Kuni, Goniana Road, Near Mann Petrol Pump Bathinda, Punjab, Ludhiana Ph.No..-0164-2236171, 2235361,
RAJASTHAN	78	Jaipur Subhash Nagar, Shopping Centre, Shastri Nagar,Jaipur , Pin: 302016 Tel No.- 0141 – 2281528, 22280616 Email id: albrojprjp@sanchernet.in
	79	Udaipur (U) 3, Bapu Bazar ,PIN Code: 313001 Tel No.- 0294-2420014, 2521129 Fax No.-0294-5102912
	80	Kota (U) 27, Jhalawar Road,Post Box No.-108, Dist: Kota,Pin: 324007 Tel No.- 0744-2361488, 2363668
	81	Jodhpur (U) 803, Chopasani Road,Pin: 342003 Tel No.- 0291-3296341,2630894
SIKKIM	82	Gangtok Metro Pt. Sikkim Trade Intt Building Sikkim, Silguri Pin-737101 Ph. No. -03592-201289
TAMILNADU	83	Chennai International Branch (M) 40 & 41, Mount Road, Chennai 600 002 Pin: 600002 Tel No.- 044-28546272, 28547497, 28524900 Fax No.- 044-28555959
	84	Chennai Mylapore (M) 69, Royapettah High Road, Myla pore, Chennai Pin: 600004 Tel No.- 044-24980671
	85	Coimbatore Priya Complex (First Floor) 44, Mill Road, PIN: 641001 Tel No.- 0422-2472333,Fax No.- 0422-2473542
	86	Madurai (U) 1,2,2-A, Amman Sannadhi Street, Madurai 625 001 Tel No.- 0452-2345609,2341665, 2621664
	87	Tiruchirapally Ganapathy Nagar (U) 71, Ganapathy Nagar, Main Road Po-T.V.Koil,Pin: 620005 Tel No.-0431-2433644
TRIPURA	88	Agartala (U) 27,Hariganga Basack Road, Agartala, Dist: West Tripura Pin: 799001 Tel No.-0381-2386353,Fax No.- 0381-202116

APPENDIX – VI(i)

UTTAR PRADESH	89	Lucknow Aliganj (M) & RBB Kapoorthala Complex Arif Chambers – 1, 1st Floor Aliganj, Dist: Lucknow Pin: 226020 Tel No.- 0522 - 2323242
	90	Varanasi Taksal, Theatre Buildings Nadesar Tel No.- 0542-2505039,Fax No.- 0542-502775
	91	Bareilly City P.O.-City Office, Qutubkhana Post Box No.-4,Pin: 243001 Tel No.- 0581-2574265
	92	Agra City (Hing-Ki-Mandi) 9/635 Hing-Ki-Mandi,Pin: 282002 Tel No.- 0562-2260584,Fax No.- 0562-2260585
	93	Gorakhpur, Journal Office Mohaddipur Kashya Road,P.O. Kuraghat,Pin: 273008 Tel No.- 0551-2200912,2333009,2204254 Fax No.- 0551-2200008
	94	22,Purushottam Das, Tandon Road Civil Lines Allahabad-211001 Pin: 211001 Tel No.- 0532-6451043,Fax No.- 0532-2420325
	95	Kanpur City (M) 55/67A, Kahoo Kothi, Kanpur Pin: 208001 Tel No.- 0512-2352820
UTTARANCHAL	96	Dehradun 1,Gandhi road, 2nd Floor, Clock Tower,Pin: 248001 Tel No.- 0135-2657339,Fax No.-0135-2713957
	97	Hardwar (U) Opp. Railway Sation, Hardwar Pin: 249401 Tel No.- 01334-227169,Fax No.- 01334-227169
	98	Roorkee (SU) Batra Complex, 18,Civil Lines, New Hardwar Road Roorkee\ Dist: Haridwar,Pin: 247667 Tel No.- 01332-274225
	99	Nainital (SU) Pt. Govind Ballav,Pant Road Dist: Nainital Tel No.- 05942-236029
	100	Rudrapur ,Main Market, Dist-Udham Singh Nagar,State -Uttranchal Ph.No.-05944-243384
WEST BENGAL	101	Kolkata Main 14,India Exchange Place,Kolkata Dist-Kolkata,Pin-700001 Tel No.-033-22308375/76/77, 22205028 Fax No.-033-22203015
	102	Salt Lake City (U) BD-98, Salt Lake City,Kolkata - 700064 Tel No.- 033-23374808

APPENDIX – VI(j)

	103	Siliguri Main Branch Rajani Bagan,Hillcart Road, Silliguri, Dist: Darjelling – 734401 Tel No.-0353-2430197 Fax No.-0353-2534083
	104	Kolkata, Gariahat(M) 51/D, Gariahat Road, Kolkata Pin: 700019 Tel No.- 033-24619726,Fax No.- 033-24540147
	105	Kolkata Park Street (V.L)(M) 57, Park Street Pin: 700016 Tel No.- 033-22297692,22295971 Fax No.- 033-22295796
	106	Bidhan Sarani (M) Shop No. B-12-14 College Street Market, Kolkata,Pin: 700007 Tel No.- 033 – 22410595
	107	Behala 4, Syed Amir Ali Avenue, 1st Floor, Park Circus, Kolkata-700017 Tel No.- 033-24680247, 24680247,24989185,Fax No.- 033-22470698
	108	Kharagpur Rly. Market Branch Railway Market, KGP,Midnapur – 721301 Tel No.- 03222 - 255716
	109	Durgapur (U) Benachity, Nachan Road P.O. Durgapur, Dist: burdwan Tel No.- 0343 – 2564109,2582756 Fax No.-0343-2584510
	110	Kolkata, Burrabazar 140, Utkal Moni, Gopabandhusarani Pin: 700007 Tel No.- 033 – 2268-6288
	111	Asansol Udrej Bhawan , 2nd Floor, 8, G.T. Road (West), Near B.N.R. Bridge Pin: 713304 Tel No.- 0341 -2204802, 2281569,2282056 Fax No.- 0341 – 2209568 Email id: dgp_albank@sanchar.net.in

APPENDIX – VI(k)
POST OFFICE COUNTERS

State	Sl. No.	Address of Post Offices
Orissa	1	Head Post Office Koraput Pin : 764020 Ph. No.- 0681-230235
	2	Mukhya Daka Ghar Malkangiri Pin : 764045 Ph.No.-0681-230235
	3	Head Post Office Keonjhargarh Dist. Keonjhar Pin : 758001 Ph.No. 06766-25513
	4	Head Post Office Titlagarh Dist. Balangir Pin : 767033 Ph.No. 06655-220403
	5	Head Post Office Paralekhamundi Dist. Gajapati Pin : 761200 Ph.No. 06815-222266
	6	Mukhya Daka Ghar Salepur, Dist. Cuttack Pin : 754202 Ph.No. 0671-2352230
	7	Mukhya Daka Ghar Talcher Dist. Angul Pin : 759100 Ph.No. 06760-240258
	8	Mukhya Daka Ghar Deogarh Pin : 768108 Ph.No. 06641-226440
	9	Head Post Office Angul. Pin : 759122 Ph.No. 06764-230595
	10	Head Post Office Bhanjanagar Dist. Ganjam Pin : 761126 Ph.No. 06821-241088
	11	Head Post Office Jagatsinghpur Pin : 754103 Ph.No. 06724-220026
	12	Head Post Office Dhenkanal Pin : 752001 Ph.No. 06762-226542
	13	Mukhya Daka Ghar Burla Dist. Sambalpur Pin : 768017 Ph.No. 0663-2430410

APPENDIX – VI(*I*)
POST OFFICE COUNTERS

State	Sl. No.	Address of Post Offices
Goa	1	Head Post Office Panaji Pin : 403001 Ph.No. 0832-223704
Punjab	2	Mukhya Daka Ghar Chandigarh, Pin : 160017 Ph.No. 0172-703716
Tamilnadu	3	Head Post Office Vellore, North Arcot Pin : 632001 Ph.No. 0416-232151
	4	Mukhya Daka Ghar Tirunelvli Pin. : 607001
Andhra Pradesh	5	Supt. of Post Office Warangal- 11 Pin : 506002 Ph. No. 0870-2449218
Himachal Pradesh	6	Mukhya Daka Ghar Solan Pin : 173212 Ph. No. 01972-24356
Kerala	8	Mukhya Daka Ghar Kozhikode Pin : 673001 Ph. No. 0495-722935
	9	Head Post Office Kottayam Pin : 686001 Ph.No. 0481-599151
Uttaranchal	10	Head Post Office Pant Nagar Pin : 263145 Ph.No. 06766-25513

INFORMATION BROCHURE

CONTENTS

KIITEE - 2008

COURSES AVAILABLE

B.Tech. (4 years)
Civil Engineering
Mechanical Engineering
Electrical Engineering
Electronics & Tele-Communication Engineering
Computer Science & Engineering
Information Technology
Electronics & Electrical Engineering

B.Tech.-Lateral Entry (3years)
Civil Engineering
Mechanical Engineering
Electrical Engineering
Electronics & Tele-Communication Engineering
Computer Science & Engineering
Information Technology
Electronics & Electrical Engineering

M.C.A. (3 years)

B.C.A. (3 years)

M.Tech. (2 years)
Computer Science & Engineering
Electronics & Tele-Communication Engineering
Electrical-Power Electronics & Drives
Mechanical-Manufacturing Process & System
Civil-Construction Engineering & Management

M.Sc. Biotechnology (2 years)

M.Sc. Microbiology (2 years)

Integrated M.Sc. Biotech. (5 years)

B.B.A. (3 years)

Integrated Law Programme
BA LLB (5 years)
BBA LLB (5 years)
B.Sc. LLB (5 years)