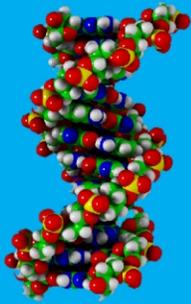


No.

INFORMATION BROCHURE



ADMISSION
to
FIRST YEAR DEGREE COURSES
in
ENGINEERING / TECHNOLOGY,
ARCHITECTURE,
MEDICINE / DENTISTRY,
&
PHARMACY



and

FIRST YEAR MASTER DEGREE COURSES

in
COMPUTER APPLICATION (MCA)
BUSINESS ADMINISTRATION (MBA)

and

LATERAL ENTRY

in
SECOND YEAR (THIRD SEMESTER)
ENGINEERING / TECHNOLOGY
&
PHARMACY



JOINT ENTRANCE EXAMINATION - 2006

ORISSA

1.	Sale of Information Bulletins at notified Syndicate Bank / State Bank of India	20.02.2006
2.	Last date of sale of Application form	20-03-2006
3.	Last date of receipt of Application form at the Bank from where the form is purchased	24-03-2006
4.	Last date of receipt of Application form at JEE Cell by Registered Post / Speed Post or through Registered Courier Service	24-03-2006
5.	Date of Despatch of Admit Card	02-05-2006
6.	Date of Examination	21-05-2006
7.	Publication of Results	12-06-2006

ADDRESS FOR COMMUNICATION

CHAIRMAN, JEE-2006
Biju Patnaik University of Technology
Rourkela - 769004 (ORISSA)

Phone No : (0661) - 2501346

FAX No : (0661) - 2501345

E.Mail ID : jee06@bput.org

Website : www.bput.org/jee06

Cost of the Brochure including examination fee : Rs. 500/- (Rupees five hundred only)

Service Charges Payable to Bank : Rs. 15/- (Rupees fifteen only)

Total : Rs. 515/- (Rupees five hundred fifteen only)

PROGRAMME FOR JOINT ENTRANCE EXAMINATION-2006

Date	1st Sitting		2nd Sitting 2.30 to 4.30 PM
21.05.2006	9.00 AM to 11.00 Noon	Physics / Chemistry / Diploma Paper- I	Biology / Aptitude test in Architecture/ Diploma Paper-II / Management Aptitude Test for MBA
	9.00 AM to 12.00 Noon	MCA	
	12.00 Noon to 01.00 Noon	Mathematics	

IMPORTANT NOTES

1. A machine will process the top portion of the application form. The machine picks up only dark marks. Therefore, darken the appropriate circles using HB pencil or Black/Blue ball pen only.
2. First, write in capital letters the required information in the boxes above the circles (wherever provided) and then darken the appropriate circle underneath each of them. What you write in the boxes is only for your guidance that you are darkening the correct circle. Ensure that you have darkened the correct circle, as you are responsible for any error in darkening.
3. Do not scribble, smudge, cut, tear, or wrinkle the application form. Do not put any stray marks anywhere on the application form.
4. Your photograph, signature and address are to be scanned by another machine that recognizes only good quality images, and from the specified areas of the form. Therefore, paste a **good black and white photograph in the space provided taken not more than two months earlier**, and write your address and sign in Black/Blue ball pen only in the space provided.
5. Write the complete address giving your name and PINCODE carefully and legibly. Please note that this block will appear as such in all our correspondence with you, and therefore, it should be very clearly written in Black/Blue ball pen only. If you make any mistake, cover the whole box with an exact size white paper slip and write your address on it. Your address must not overflow this box. You may, if possible, type your address on a slip not larger than the box and paste it neatly within the box.
6. Do not fold the form. The envelope matches with the size of the form. **Do not put any pin or staple**. Paste only the photograph and nothing else on the form.
7. You are advised to ensure the correctness of your mailing address, PINCODE, and telephone number, if any, with STD codes. Please note that JEE-2006 will not be responsible if communications do not reach you due to incomplete or illegible address/ phone number.
8. You must quote the six digit application number of your application form as a reference in all your future correspondence.
9. If the acknowledgement card does not reach you by April 21, 2006, you must check the website in the address given in back cover page.
10. Your application must be complete in all aspects. **Incomplete application or application filled in a language other than English will be summarily rejected.**
11. Options such as Category, Choice of examination center and Reservation filled by you in the application form can not be changed at a later stage.
12. Only give options with respect to category (S, ZZ, NR) and Reservation type (SC/ST/PH/GC/WO/MI) that you can substantiate with documentary evidence during counselling.
13. The cost of application material is non-refundable.
14. The High Court of Orissa at Cuttack alone shall have the jurisdiction to settle and decide all the disputes related to JEE-2006. No other Court in the country shall have jurisdiction in this regard.
15. Do not submit any document along with the application form to support your claim.
16. Original certificates, mark sheets and other documents will be verified at the time of counselling with respect to category and reservation that you are claiming.
17. **Your claim for admission will be rejected if you can not submit the certificates, mark sheets, other necessary documents at the time of counseling or if you have filled the form wrongly.**
18. Your admission may be cancelled at any time, if certificate/ mark sheets/ any other documents found to be forged or manipulated. A candidate will not be considered for admission if he/she fails to substantiate the claim with respect to reservation, category, nativity, date of birth, qualification etc.

PLEASE ENSURE BEFORE SUBMITTING THE APPLICATION THAT :

- a. You have followed all the instructions in filling the form. You have gone through the important notes carefully.
- b. You have written your address on the acknowledgement card correctly.
- c. You have enclosed the acknowledgement card with the application in the envelope provided if you are submitting by post.
- d. You have not used a stapler/ pin / tag.
- e. You have retained a photocopy of the application form.

Original document to be brought on the day of the counselling.

- a. Admit card.
- b. Rank letter.
- c. Original Date of Birth Certificate.
- d. 10+2 Certificate.
- e. 10+2 Mark sheet and 10th Mark sheet.
- f. Diploma certificate (for Lateral Entry of Diploma Candidates)
- g. Diploma Mark sheet (for Lateral Entry of Diploma Candidates)
- h. +3 Certificate (For MCA & MBA)
- i. +3 Mark sheet and +2 Mark sheet (For MCA & MBA)
- j. Certificate and mark sheet of Diploma in Architecture (For candidates claiming reservation having Diploma in Architecture)
- k. School/College Leaving Certificate.
- l. Residential Certificate in the prescribed form.
- m. Relevant SC/ST Certificate in the prescribed form.
- n. Green Card issued by Family Welfare Deptt. of Orissa in original for children of Green card holders.
- o. Relevant certificate of Defence/ Paramilitary service of candidate's parent/ spouse.
- p. Any other relevant certificate as mentioned in this Brochure.

BIJU PATNAIK UNIVERSITY OF TECHNOLOGY, ORISSA

Biju Patnaik University of Technology, Rourkela has been established by an Act of the Assembly, Government of Orissa in June 2002. All Engineering, Pharmacy, Architecture, HMCT, and most of the colleges offering MCA and MBA degree programmes are either constituent or affiliated colleges of this University.

All the students to be admitted (except those to be admitted to Medical and BDS colleges, Pharmacy and MCA Courses in other Universities of the State) through JEE 2006 will be registered students of the University. The University will ensure the quality and standard of technical education in the State. It adopts a non - negotiable academic calendar to ensure timely completion of the examinations and degree requirements.

VISION OF THE UNIVERSITY :

Biju Patnaik University of Technology, Rourkela is dedicated to building and nurturing a technical education system that shall produce technically skilled and professionally competent knowledge workers and entrepreneurs capable of meeting the challenges of global competition and that shall focus on basic and applied research in frontier areas of science, technology and management with special emphasis on societal needs of the State.

MISSION OF THE UNIVERSITY :

- Bringing all the existing / new technical institutions / colleges in the State under one umbrella.
- Effective, efficient and transparent system of examination, evaluation and publication of results.

- Providing all the Institutions with a state - of - the art Curricula and Syllabi.
- Preparing Course Material Packages for all the Programmes.
- Providing quality input to students through combination lecture, print and electronic media.
- Promoting entrepreneurship amongst the students of the University and its constituent / affiliated colleges.
- Training of all Teachers
- Career Development of Faculty through Post Graduate and Ph.D. Programmes.
- Developing at least two Centres of Excellence in Research in next 5 years.
- Lean and Transparent System for administration.
- Making the University self sufficient.
- Promoting Industry - Institute partnership.

OBJECTIVES OF THE UNIVERSITY :

- Unifying the curriculum and the syllabi for all the courses and replacing the current ones (six in number) by state-of-the art curricula and syllabi for all Degree programmes.
- Organizing the examination, evaluation in a way that will ensure timely completion of the degree requirements.
- Improving the quality and content of instruction to give value for the money to the ultimate beneficiaries (i.e., students).
- Preparation and dissemination of instruction material through electronics media to improve the quality and standard of teaching.
- Starting a Science and Technology Entrepreneurship Park.
- Monitoring the quality and standard of teaching and evaluation in constituent and affiliated colleges.
- Initiating the teachers training and quality improvement programmes.
- Starting of M.Tech. and Ph.D. Programmes with focus on teachers of constituent and affiliated Colleges.
- Creating Research Centres on few specific areas such as : Biotechnology, Disaster Mitigation Engineering and Management and Natural Resource Management.
- Promote Sponsored Research and Industrial Consultancy.
- Creation of a state – of – the art University Management System leveraging on technology for smooth and transparent administration.

SPECIAL FEATURES OF THE UNIVERSITY :

- Non - negotiable Academic Calender.
- Variable Pace academic programme to match with the individual student's capability.
- Faculty training and development.
- Wholesome education.
- Continuous evaluation.

GENERAL INFORMATION

- 1.1 Application form duly filled in should be submitted in person at the Bank from which you have purchased the form or by Registered / Speed post / registered courier service to the JEE Cell in the address given in the back cover page, so as to reach on or before March 24, 2006.
- Hand-delivery of forms at the JEE cell will not be accepted.
 - Any application received after the due date will not be considered.
 - The JEE-2006 committee will not accept responsibility for any postal delay or irregularity or loss in postal transit of the application form.
 - While submitting the application form by hand at the Bank, from where you have purchased the form, collect duly signed and stamped acknowledgement card from the Bank at the time of submission. The last date of submission of application form to the Bank is 24.03.2006.

- 1.2 The Joint Entrance Examination-2006 will be held on **Sunday, May 21, 2006** as per following programme.

Date	1st Sitting		2nd Sitting 2.30 to 4.30 PM
21.05.2006	9.00 AM to 11.00 AM	Physics / Chemistry / Diploma Paper - I	Biology / Aptitude test in Architecture / Diploma Paper - II / Management Aptitude Test for MBA
	9.00 AM to 12.00 Noon	MCA	
	12.00 Noon to 1.00 PM	Mathematics	

- 1.3 In no case the application form be stapled/pinned/ tagged or folded. The acknowledgement card is to be collected from the Bank at the time of submitting the completed application. Those who send their application by post should duly fill up the acknowledgement card, affix postage stamp of denomination Rs.10/- and enclose the same inside the envelope meant for submission of application form.

- 1.4 A single application form is sufficient for any possible combination of course to be opted. Do not send extra/ duplicate forms which will be rejected. Not more than one set of application form shall be submitted in one envelope. If the envelope contains more than one application form, the whole content will be rejected.

- 1.5 Any correspondence in future, should mention the application number printed below the bar code of the application form. The candidates are advised to keep the photocopy of the application form.

- 1.6 If an applicant does not receive the Admit Card for the examination by May 10, 2006 he/she must contact the JEE-2006 cell, or through our website in the address given in back cover page of this brochure.

1.7 Availability of Courses :

JEE-2006 will be conducted to draw the merit list of successful candidates for admission into :

- Degree course in Engineering / Technology in different branches for government engineering colleges / institutes in the State of Orissa. A list of colleges/ institutes in Orissa and discipline wise seats available are given in Table - II.
- MBBS/BDS courses in the colleges as per list given in Table - III.
- B.Pharm. course in the colleges/institutes as per list given in Table-IV.
- MCA course in the colleges/institutes as per list given in Table - V.
- 3rd semester of Engineering/ Technology stream for diploma holders under lateral entry scheme. 10% of intake capacity of last year in appropriate discipline of engineering will be available for lateral entry of diploma holders at third semester level. These seats will be over and above the intake capacity.
- MBA course in the colleges/ institutes as per list given in Table - VI.

Note: List of Colleges/Institutes and availability of seats therein are tentative and may be changed with intimation from appropriate authorities.

1.8 Fee Structure :

1.8.1 Fees payable to colleges :

Fees payable to colleges at the time of admission will be decided by the competent authority and shall be published in the counselling brochure to be provided to each of the JEE qualified candidates alongwith the rank card. The same will also be published in our website.

1.8.2 Fees payable to the University

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

1.	One time Curriculum Development Fee	Rs.1500/-
2.	One time Fees payable towards Welfare Fund for Students	Rs.500/-
3.	One time University Registration Fee	Rs.500/-
4.	Subject wise Registration Fee in each Semester /Trimester	Rs.100/- (Per subject)
5.	Semester / Trimester Examination Fee	Rs.700/- (Per semester/ trimester)
6.	Insurance Fee (One Time)	
	Five Year Programme	Rs 300/-
	Four Year Programme	Rs 250/-
	Three Year Programme	Rs 200/-
	Two Year Programme	Rs 150/-
7.	One Time Sports & Cultural Fee	Rs 250/-

1.9 Age limit :

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

1.10 Medical Fitness :

JEE will not be responsible if a candidate faces difficulty in employment on medical ground. Candidates claiming reservation under physically handicapped category will have to go through a Medical Board (Clause 2.1.3). The decision of the Medical Board will be final and binding.

1.11 Merit List :

Separate merit list for all qualifying candidates shall be drawn on the basis of JEE- 2006 results in the following manner.

- One for candidates seeking admission to Engineering/Technology degree courses on the basis of marks obtained in Physics, Chemistry and Mathematics,
- One for candidates seeking admission to Medical/Dental degree courses on the basis of marks obtained in Physics, Chemistry and Biology,
- One for candidates seeking admission to Pharmacy degree course on the basis of marks obtained either in Physics, Chemistry and Mathematics or in Physics, Chemistry and Biology whichever is higher,
- One on the basis of marks obtained in Physics, Chemistry and Mathematics with 50% weightage and 50% weightage of the marks obtained in Aptitude test for Architecture for candidates seeking admission to Architecture,
- One for candidates (discipline wise and according to subject grouping) seeking admission under Lateral Entry scheme to engineering and technology and pharmacy courses,
- One for candidates seeking admission to MCA courses,
- One for candidate seeking admission to MBA Courses.

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

2. Categories :

2.1 Orissa State Candidates (S- Category)

For admission to colleges under state category one has to satisfy at least one of the following three criteria. They will be eligible for admission to Government colleges on the basis of their merit rank. However, for MBBS/ BDS course and lateral entry for diploma holders, the parents of the candidate must be permanent resident of Orissa.

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

Reservation of Seats under State Categories :

The reservation of seats in different colleges under various categories will be as per the policy of the Government of Orissa.

2.1.1. The percentage of reservation of seats to be reserved for different categories such as Scheduled Tribe and Scheduled Caste (for candidates by birth and not by marriage or adoption), Green Card, Military category, Physically Handicapped, and Non-resident Oriya (NR) are subject to change and the decision of the State Government as on the date of admission will be applicable.

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

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

NOTE : Scheduled caste/ Scheduled tribe persons who have migrated from their state of origin to another state for the purpose of seeking education, employment etc., will be deemed to be scheduled caste/ tribe of the state of their origin and will be entitled to derive benefits from the state of origin and not from the state to which they have migrated. (Vide Govt. India Letter No. BC/ 160 14.1.82 SC & BCD/ dated 22nd Feb,1985). Thus, SC/ST candidates from Orissa who are staying outside the State have to produce SC/ST certificate from the competent authority of Orissa State during counselling.

2.1.3. Candidates applying under Green Card category shall furnish the Green card of their parents issued by Family Welfare Department, **Government of Orissa**, in original **at the time of counselling**.

2.1.4. Candidates are eligible to be consider under Physically Handicapped Category for admission to engineering / technology courses with 40% disabilities in consonance with section-39 of the Persons with Disabilities (Equal opportunities, Protection of Rights and Full participation) Act, 1995. 3% of total MBBS

seats of three Govt. medical colleges of the state and BDS stream in SCB Medical College are reserved for persons with disabilities and they have to meet the medical standard of Locomotory disability of lower limbs between 50 to 70% (may change subject to the verdict of the Hon'ble Supreme Court of India). The medical standard of PH category candidates will be decided by a medical board specifically constituted with Senior Professors of the premier medical college and hospital: SCB Medical College, Cuttack, and Chairman JEE-2006 or his representative under the Chairmanship of Principal, SCB Medical College, that they are eligible to be categorized as physically handicapped candidates and capable of undergoing each part of the requirements for Engineering/Architecture/Medical studies. **The decision of this Board will be final.** They SHOULD NOT therefore, submit along with the application form any medical certificate to the effect that they are physically handicapped.

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

2.1.54 Candidates applying under Military reserved category shall furnish a certificate in the prescribed format provided in this brochure as Appendix-IV **at the time of counselling.**

The following prioritisation will be followed for filling up the seats reserved under military category as per DO. No.3547 AS(R)94 dated 3.6.94 issued by Ministry of Defence, Govt. of India.

- Priority - I : Widows / wards of Defence personnel killed in action.
- Priority - II : Wards of serving personnel and Ex-Servicemen disabled in action.
- Priority - III : Widows / Wards of Defence personnel who died in peace time with death attributable to military service.
- Priority - IV : Wards of Defence personnel disabled in peace time with disability attributable to military service.
- Priority - V : Wards of Ex-Servicemen personnel and serving personnel who are in receipt of Gallantry Awards.
- (1) Param Vir Chakra
 - (2) Ashok Chakra
 - (3) Sarvottam Yudh Seva Medal
 - (4) Maha Vir Chakra
 - (5) Kirti Chakra
 - (6) Uttam Yudh Seva Medal
 - (7) Vir Chakra
 - (8) Shaurya Chakra
 - (9) Yudh Seva Medal
 - (10) Sena, Nau Sena, Vayusena Medal
 - (11) Mention-in-Des
- Priority - VI : Wards of Ex-Servicemen.
- Priority - VII : Wards of serving personnel.
- Priority - VIII : Wards of Paramilitary personnel
- (i) Deceased in action.
 - (ii) Permanently disabled in action.
 - (iii) Serving

On the day of counseling, a list will be drawn under each priority category and allotment will be made as per the priority category mentioned above.

2.1.6 30% of the seats in all the categories are reserved for women candidates in all Govt. engineering colleges of Orissa .

2.1.7 12.5% of seats in B.Arch. course are reserved for diploma holders in Architecture in CET, Bhubaneswar.

NOTES :

1. All reservations shall apply to the permanent residents / native of Orissa state only.
2. Seats available under General Category in any course are those available after deduction of the number of seats pertaining to all the Reserved Categories from the total number of seats available for that particular course.
3. For Engineering Stream a candidates belonging to categories 2.1.1, 2.1.2, 2.1.3, 2.1.4, 2.1.5, 2.1.6 and 2.1.7 can also compete under general category provided they satisfy all conditions of eligibility for the same. At the time of counselling for admission, a candidate figuring in the merit list for both Reserved and General Categories may first exercise his/her option for the college and discipline for admission under reserve category. A candidate who forgoes his/her option under reserved categories is entitled to exercise his/her option subsequently for the college and discipline for admission according to his/her merit position under general category.
4. For Medical / BDS stream, candidates belonging to aforesaid categories can compete with General category candidates if they satisfy the eligibility condition. At the time of counselling, a candidate figuring in both General and Reserved category merit list will first exercise his/her option for General category seats. A candidate who foregoes his/her option for General category seat is entitled to exercise option for Reserved category as per his/her merit rank.
5. If a candidate does not report during scheduled hour of counselling, he/she will be treated as absentee and no seat will be kept reserved for him/her. A candidate failing to report for counselling will not be permitted to participate in the counselling subsequently under any circumstances.
6. Seats, if any, remaining vacant in the ST reserved category can be filled in by candidates belonging to General category. If all the seats belonging to SC reserved category are not filled up due to non-availability of candidates belonging to SC category, such vacant seats may be filled up by candidates belonging to General category for the benefit of students / institutions.
7. Seats reserved under all other category will be filled up by general category candidates in case the same are not filled up.

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

2.2. Outside state category : (ZZ)

Outside state candidates are not eligible for admission in Government Colleges to Engineering/Technology, Architecture, Pharmacy, MBA, MCA, MBBS / BDS and admission under lateral entry Programme. They shall be no examination centres outside the State of Orissa.

2.2.1 Non resident Oriyas : (NR)

Candidates, applying under this category, should have passed M.E. standard oriya conducted by Board of Revenue, Orissa or equivalent to be in Class-X Board examination of the concerned state (except Orissa). If necessary JEE committee may conduct a test of Oriya for NR candidates as part of the examination during counselling.

2.3. Enquiry Regarding Admission :

Information regarding admission may be obtained from the Chairman, JEE-2006.

Note : All enquires and correspondences with JEE authorities must bear the candidate's Application number. After receiving the admit card the candidate should also quote the Roll No. allotted to him/her in the correspondence, if any. **Telephonic enquiry will be attended during 4 PM to 6 PM only.**

2.4. Choice of College and Discipline :

Selection for admission will be strictly on the basis of rank secured in the JEE-2006 merit list subject to the availability of seats in colleges and disciplines at the time of counselling for admission.

A candidate failing to report for counselling on the date and time prescribed will not be given chance subsequently under any circumstances.

2.5. Centres of Examination :

Following is a tentative list of places where JEE-2006 Examination will be conducted.

Angul, Balasore, Bargarh, Baripada, Bhawanipatna, Berhampur, Bhadrak, Bhubaneswar, Bolangir, Burla, Cuttack, Dhenkanal, Jagatsinghpur, Jajpur, Jeypore, Jharsuguda, Kendrapara, Keonjhar, Koaraput, Nayagarh, Paralakhemundi, Phulabani, Puri, Rayagada, Rourkela, Sambalpur, Sarang and Sundargarh.

2.6. Option for Examination Centres :

Candidates should give three places of examination of their choice (as given in clause 6.9) in order of preference. Allocation of centre will be made subject to availability and facilities existing. If sufficient candidates in the centre(s) chosen by a candidate are not available, a candidate may be allotted to a centre not included in his / her choice for operational convenience. The decision of the JEE-2006 committee in the allocation of the centre shall be final. Change of allotted centre is not permissible under any circumstance.

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

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

3. Admission Rules And Procedure

JEE refers to the Joint Entrance Examination conducted by the State of Orissa for admission to Engineering / Technology / Architecture / Medicine / Dentistry / Pharmacy and Master in Computer Application (MCA) / Master in Business Administration (MBA) / and Third Semester of Degree Courses in Engineering / Technology and Pharmacy under Lateral Entry in the academic year 2006 - 2007.

3.1. The reservation policy of the Government of Orissa and the Government approved procedure given in the brochure for allocation of seats during counselling will be strictly followed.

3.2. Admission is strictly based on JEE-2006 merit rank and choice of the candidate with respect to Institution and course given during the counselling.

3.3. Candidates will be called for counselling as per a schedule to be despatched along with the Rank Card.

3.4. During Counselling all certificates in original will be verified. No further verification at college level is required. For records of the college, a set of attested copies of the certificates/marksheet etc. will be collected during counselling and sent to the colleges.

3.5. A candidate selected through the counselling for a course in a college automatically is admitted as a registered student of Biju Patnaik University of Technology, if the college is a constituent / affiliated college of the University. The student receives a Registration number and a University Registration card. Against this Registration card, a student is automatically admitted as a student into the course and the college that he/she is assigned during counselling on payment of balance fees at college level.

Completion of counselling thus completes the admission process except for the payment of balance fee (if any) at the college level.

3.6. Each candidate has to pay a counselling fee of Rs.200/- and the same is non-refundable. This amount is payable through an Account Payee Bank Draft in favour of "JEE - 2006" drawn on any Nationalised Bank payable at Bhubaneswar.

3.7. A candidate has to pay Rs.16,000/- through a separate A/c Payee Bank Draft drawn in favour of "JEE-2006" on any Nationalised Bank payable at Bhubaneswar. The balance after deduction of the University fee of Rs.4,500/- (for 4-year programme; as per clause 1.8.2) shall be paid to the admitting college for adjustment against the tuition and other fees payable to the college. The fees payable to various colleges will be given in the Counselling Brochure.

3.8. A candidate must demand a receipt with the headwise break up of fees that he/she pays at the college level.

3.9. A candidate once admitted through the counselling to a college forfeits the fee of Rs.16,000/- paid by him/her, if he/she later decides not to join the college / course in the allotted college.

3.10. Candidates who do not receive the JEE - 2006 rank card or have lost the rank card can get a duplicate rank card from JEE Cell at Rourkela on payment of Rs.200/- in the form of Bank draft in favour of "JEE-2006" drawn on any nationalised bank payable at Rourkela on July 04 & 05,2006.

3.11. The counselling shall start on July 10,2006 and ends on August 04,2006. Counselling for admission to MBBS and BDS courses will be completed by July 31, 2006. **MBBS and BDS classes will begin from August 1, 2006.**

3.12. The Admission process shall close by August 20, 2006. No admission can be done there after.

3.13. No candidate can be admitted to a college on the basis of marks scored in qualifying examination.

3.14. The students admitted against vacant seats have to be registered in the University by August 20, 2006.

3.15. **The class of all streams affiliated to BPUT begins on August 21, 2006.**

3.16. A student admitted to a college against a course cannot be transferred to another course in the same college in the First year.

3.17. A student admitted to a college cannot be transferred to another college in the First year in same course or in another course.

4. Minimum Eligibility Criteria :

4.1 For admission to 1st Year Degree courses in Engineering/Tech., Pharmacy & Architecture

4.1.1 Engineering & Technology :

(i) Pass or appearing in 2006 in 10+2 examination of CHSE or equivalent, with Physics and Mathematics alongwith one of the following subjects : Chemistry/ Biotechnology / Computer Science / Biology.

4.1.2. Pharmacy :

Pass or appearing in 2006 in 10+2 examination with Physics and Chemistry along with one of the following subjects: Mathematics/Biotechnology / Computer Science / Biology.

4.1.3. Architecture :

(i) Pass or appearing in 2006 in 10+2 examination of CHSE or equivalent, with Mathematics and one of the following subjects : Physics/ Chemistry/Engineering Drawing / Computer Science / Biology. Such candidates are to secure minimum 50% marks in aggregate in +2 examination.

OR

(ii) Pass in Diploma in Architecture conducted by State Council of Technical Education & Vocational Training, Orissa or equivalent thereto, securing at least 60% marks in aggregate. Such candidates should also have passed 10+2 examination with Physics, English and Mathematics and securing minimum 50% marks in aggregate for availing the specified reservation.

OR

(iii) The entry level qualification which provides for admission of candidates possessing qualification equivalent to 10+2, shall also cover 3-Years diploma (10+3) recognized by Central/State Government provided the candidate passed the diploma examination with 50% marks in aggregate.

There is no age limit to appear at JEE-2006 for admission into Engineering & Technology, Pharmacy and Architecture courses.

4.2 For admission to 1st Year Medical Stream (MBBS / BDS) :

(i) Pass in 10+2 or appearing in 2006 examination of CHSE, Orissa or equivalent, with Physics, Chemistry & Biology (Botany and Zoology) with at least 50% marks in aggregate (Physics, Chemistry & Biology taken together) for general category candidates and 40% marks in aggregate for SC/ST candidates. The candidate must be a permanent resident/native of Orissa. They are to submit the Permanent Resident Certificate (Appendix - I) at the time of counselling.

AGE : The lower age shall be 17 years as on July 31, 2006. The upper age shall be 25 years as on July 31, 2006. The upper age limit may be relaxed by three years for SC/ST candidates.

4.3 For admission to 2nd year Degree courses in Engineering, Pharmacy & Architecture courses under Lateral Entry for Diploma holders :

Pass in 3 years diploma course in Engineering with at least 60% marks in aggregate from State Council of Technical Education and Training (SCTE & VT), Orissa or equivalent and for Pharmacy, pass in 2 years diploma course in Pharmacy with minimum 60% of marks in aggregate from Orissa State Board of Pharmacy (OSBP) or SCTE & VT for direct

admission to the third semester degree courses specific to the diploma discipline of the candidate (See Table - I). The candidate must be a permanent resident/native of Orissa. Results of final diploma examination must be available on the date of counselling. Candidates whose results are not available on the day of counselling, will not be allowed to participate. There is no reservation of seats in various categories in lateral entry to degree engineering / Technology courses.

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

Choice of Discipline : (for Lateral Entry Stream)

Candidates having Diploma in Engineering in the disciplines indicated under Column – I are eligible to be admitted to the corresponding discipline only mentioned under Column - II (Table - I).

4.4 M.C.A. :

Pass or appearing in 2006, for the Bachelor's Degree examination of three years duration in any discipline from any University of Orissa or equivalent recognised by UGC and having passed in Mathematics at 10+2 level or in +3 level.

OR

Pass or appearing in 2006 for the Bachelors degree examination of three years duration in any discipline from any University of Orissa or equivalent with Mathematics as one of the subjects.

There is no age limit to admission to MCA course.

4.5 M.B.A. :

Pass or appearing in 2006, for the Bachelor's Degree examination of three years duration in any discipline from any University of Orissa or equivalent recognised by UGC. There is no age limit to for admission to MBA course.

NOTES :

- (i) Candidates should fulfil the requirements of reservations under clauses 2.1 as applicable.
- (ii) Women and Physically handicapped candidates are not eligible for admission to Mining engineering course.
- (iii) Candidates desirous to be admitted to Engineering colleges/ institutes of outside state under DTE&T quota seats have to fulfil other conditional eligibility requirements of the institute concerned, as per data to be received by JEE from D.T.E.&T, Orissa.
- (iv) **The Govt. of Orissa will not be responsible for any regulation of service where such requirement for age exists. The student should take admission at his/her own risk, as regards to ages.**

5. Subjects for appearing at JEE-2006 :

- a) All candidates seeking admission to 1st year degree courses in Engineering/Technology/ Architecture will have to appear in Physics, Chemistry and Mathematics.
- b) In addition to subjects mentioned in (a) above all candidates seeking admission to B.Arch. including the diploma holders in Architecture will have to appear an Aptitude test.
- c) Candidates seeking admission to MBBS/BDS course will have to appear in Physics, Chemistry and Biology.
- d) Candidates seeking admission to B.Pharm. course will have to appear in Physics, Chemistry and either in Mathematics or Biology or both.

TABLE - I

COLUMN - I	COLUMN - II
If you have Diploma in Engineering in the discipline :	You are eligible to be admitted to :
Civil Engg / Rural Technology	Civil Engineering
Mechanical Engg. / Tool & Die Making	Mechanical Engg. /Manufacturing Sc. and Engineering.
Automobile Engineering	Mechanical Engineering
Electrical Engineering	Electrical Engg. / Elect. & Electronics.
Electronics & Telecommunication Engg. / Applied Electronics & Instrumentation Engineering	Applied Electronics and Instrumentation Engg., Instrumentation & Electronics Engg. / Electronics & Communication Engg.
Metallurgical Engineering	Metallurgical Engineering
Mining Engineering	Mining Engineering / Mechanical Engg.
Chemical Engineering	Chemical Engineering
Textile Technology	Textile Technology
Computer Science & Engg. / Computer Application Programming	Computer Science & Engineering
Information Technology	Information Technology
Pharmacy	Pharmacy
Drilling Technology	Mining or Mechanical Engineering

The upper age limit for these candidates is 28 years as on 30.10.2006.

- e) All candidates seeking admission to MCA course will have to appear in Mathematics and Computer Awareness (in one sitting).
- f) All candidates seeking admission to **2nd year** Degree courses under Lateral Entry scheme are to appear for two papers as follows (except for Pharmacy stream):
 Paper - I : First year Degree courses in Mathematics, Basic Electrical Engineering, and Engineering Mechanics.
 Paper - II : Third year Diploma course in the relevant discipline of diploma for session 2005 - 2006 of SCTE&VT, Orissa.
- g) All candidates seeking admission to MBA course will have to appear an aptituded test in verbal and analytical reasoning, general knowledge, comprehension and computer and business fundamentals (in one sitting). Detailed syllabi are given under clause-8.
- For Pharmacy stream, Paper - I and Paper - II shall cover the syllabus of part - I and part - II respectively of Diploma in Pharmacy as per the Education Regulation - 1991 of Pharmacy Council of India.

DISCIPLINES

The disciplines at degree level available collegewise (for government engineering colleges) are indicated below :

TABLE- II

The number of colleges and seats available in each of the colleges may change before counselling depending on the approval from the MHRD/AICTE/State Government.

AVAILABILITY OF SEATS (DISCIPLINE WISE) IN ENGINEERING AND TECHNOLOGY STREAM (2005-06)

INSTITUTES/ DISCIPLINE (*)	CHE	CIV	CSE	ELE	ELN	ETC	IEL	IT	MEC	OTHERS
University College of Engineering, Burla		30	30	60		30		30	60	Mfg. Sc.-30
College of Engineering & Technology, BBSR		30	60	45			30	60	45	Architecture -20
Indira Gandhi Institute of Technology, Sarang	20	20		35					35	Metallurgy-20
Institute of Textile Technology, Choudwar	Textile Technology -40									
Orissa School of Mining Engineering, Koenjhar				30					30	Mining-30

- First four colleges are government colleges and the last one is an Autonomous College.
- Ten percent of intake capacity of 2005 - 2006 in appropriate discipline of engineering will be available for lateral entry of diploma holders at third semester level. These seats will be over and above the intake capacity. The upper age limit for such candidates is 28 years as on October 30, 2006.

(*) **Abbreviation for Disciplines :**

- CHE - Chemical Engg.
 CIV - Civil Engg.
 CSE - Computer Science Engg.
 ELE - Electrical Engg.
 ELN - Electrical & Electronics Engg.
 ETC - Electronics & Telecommunication Engg.
 IEL - Instrumentation & Electronics Engg.
 IT - Information Technology
 MEC - Mechanical Engg.

TABLE-III
Government Medical Colleges

Sl.	College	MBBS	BDS
1.	SCB Medical College, Cuttack	91	17
2.	VSS Medical College, Burla	91	Nil
3.	MKCG Medical College, Berhampur	91	Nil

TABLE-IV
Pharmacy College of Orissa

Sl.No.	College	Seats
1.	Utkal University, Bhubaneswar	45

TABLE-V
List Of Institutes & Availability Of Seats (MCA)

Sl. No.	Name of the Institute	No. of Seats
1.	University College of Engineering, Burla	30
2.	Institute of Management and Information Technology, Cuttack	32
3.	Indira Gandhi Institute of Technology, Sarang	30
4.	College of Engineering & Technology, Bhubaneswar	30
5.	Centre for IT Education, Bhubaneswar	150
6.	Utkal University, Bhubaneswar	30
7.	Fakir Mohan University, Balasore	24
8.	Berhampur University, Berhampur	30
9.	Sambalpur University, Burla	30
10.	Revenshaw College (Autonomous), Cuttack	30
11.	G. M. College, Sambalpur	30
12.	Khalikote College, Berhampur	30
13.	North Orissa University, Baripada	15

TABLE-VI
LIST OF MBA COLLEGES

Sl. No.	College / Institute	No. of Seats
1.	Institute of Cooperative Management, Bhubaneswar	45
2.	Institute of Management & Information Technology, Cuttack	32
3.	Utkal University, Bhubaneswar	30
4.	Fakir Mohan University, Balasore	40
5.	North Orissa University, Baripada	15
6.	Berhampur University, Berhampur	30
7.	Gangadharmehar (Autonomous) College, Sambalpur	48

6. INSTRUCTIONS FOR COMPLETING JEE APPLICATION FORM

Notes :

- Please note down the six-digit application number for future reference. Read the instructions carefully before filling the application form. Refer to the sample filled in application form provided on the last two pages.
- First write in capital letters the required information in rectangular boxes above the circles (wherever provided) and then darken the appropriate circle underneath each letter. What you write in these boxes is only for your guidance and for verification that you are darkening the correct circle.
- A machine will process the top portion of the application form. The machine picks up only dark marks. Therefore, darken the circles carefully using HB pencil or blue / black ball pen only. Please see the illustration on the application form to learn how to darken the circles.
- If you wish to change a marking, erase the darkened circle completely and then darken the appropriate circle. This is possible if you are using pencil. Otherwise, you can use white correction fluid for covering wrongly darkened circle.
- Do not scribble, smudge, cut, tear, or wrinkle the application form. Do not put any stray marks anywhere on the application form.
- Do not write or mark on the Barcodes.
- Your photograph, signature and address are to be scanned by another machine that recognize only good quality images, and from the specified areas of the form. Therefore **paste a good black and white photograph taken not more than two months earlier**, and write your address and sign in **black / blue ball pen** only.
- Please note that your name, your parents/guardian's name, and your date of birth should exactly be the same as in your High school or your first Board / Pre-University examination certificate. Any departure, whenever discovered, may lead to cancellation of your candidature.

- i) Your application must be complete in all aspects. Incomplete application or application filled in a language other than English will be summarily rejected without any notice.
- j) Options filled by you in the application form can not be changed at a later stage.
- k) **It is suggested that you make a photocopy of the application form before filling and use that first for practice.**

6.1 Name of the Candidate: (Item - 1)

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

6.2 Category : (Item - 2)

Refer Clause No 2 of this brochure for ascertaining the category to which you belong.

6.3 Reservation : (Item - 3)

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

Category	Code
General	GE
Scheduled Caste	SC
Scheduled Tribe	ST
Physically Handicapped	PH
Children / Spouse of Defence and Paramilitary personnel	MI
Women	WO
Diploma in Hotel Management & Catering	DH
Children of Green Card Holder	GC
Diploma Holders in Architecture	DA

6.4 Nationality : (Item - 4)

Darken the appropriate circle.

6.5. Gender : (Item - 5)

Darken the appropriate circle.

6.6 Course : (Item - 6)

Enter the appropriate codes in the boxes provided at the top and darken the corresponding circles below them against the course code (given below) that you want to appear. (e.g Engineering, Medical, MCA, MBA, Lateral entry in a particular discipline or possible combinations.) For example if you are appearing for Engineering only darken the circle 01. If you are appearing for both the Engineering and Medical, darken circle 05. Examination timetable will not permit other combinations of courses.

Qualifying Examination	Course	Course Code
10 + 2	Engineering Only	01
	Medical only	02
	Pharmacy only	03
	Architecture only	04
	Engineering Medical	05
	Engineering and Pharmacy	06
	Engineering and Architecture	07
	Medical and Pharmacy	08
	Pharmacy and Architecture	09
	Engineering and Medical and Pharmacy	10
	Engineering and Pharmacy and Architecture	11
Bachelor Degree	MBA	31
	MCA	32
	MBA and MCA	33
Diploma	Applied Electronics & Instrumentation	51
	Automobile Engineering	52
	Chemical Engineering	53
	Civil Engineering/Rural Technology	54
	Computer Application & Programming	55
	Computer Science and Engineering	56
	Electrical Engineering	57
	Electronics & Telecommunication Engg.	58
	Information Technology	59
	Mechanical Engg./Tool and Die Making	60
	Metallurgical Engineering	61
	Mining Engineering	62
	Pharmacy	63
	Textile Engineering	64
	Drilling	65

6.7. Mother Tongue : (Item - 7)

Use the language codes given below to indicate your mother tongue and darken the appropriate circle.

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

6.8 Date of Birth : (Item - 8)

Enter the date, month and year of your birth as per the English calendar and as recorded in your School / Board / Pre-University examination certificate. Use numerals 01 to 31 for DATE, abbreviations JAN, FEB etc. for MONTH, and the last two digits of the YEAR of birth. For example, if born on 8th March 1988, the date should be entered as follows : 08 MAR 88. Darken the appropriate circle in each column.

6.9 Choice of Examination Centres : (Item - 9)

Table – VIII gives a list of the numerical codes of the places where centers for the JEE-2006 will be located. Select three different places in order of your preference. Enter the appropriate codes in the boxes provided at the top and darken the corresponding circles below them. The first preference must be entered under column-I and the second and the third preferences under column-II & III respectively.

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

TABLE-VIII			
TENTATIVE LIST OF JEE - 2006 CENTRES WITH CENTRE CODE			
Inside Orissa :			
Place	Code	Place	Code
Angul	11	Jeypore	25
Balasore	12	Jharsuguda	26
Bargarh	13	Kendrapara	27
Baripada	14	Keonjhar	28
Bhawanipatna	15	Koraput	29
Berhampur	16	Nayagarh	30
Bhadrak	17	Paralakhemundi	31
Bhubaneswar	18	Phulabani	32
Bolangir	19	Puri	33
Burla	20	Rayagada	34
Cuttack	21	Rourkela	35
Dhenkanal	22	Sambalpur	36
Jagatsinghpur	23	Sarang	37
Jajpur	24	Sundargarh	38

6.10 Year of Qualifying Examination : (Item - 10)

(For Engineering / Medical / Architecture / Pharmacy)

- Those who have already passed 10+2 or an equivalent qualifying examination should indicate the year of passing and darken the appropriate circles.
- MCA / MBA : Those who have already passed Bachelors Degree or an equivalent qualifying examination should indicate the year of passing and darken the appropriate circle.
- Lateral Entry : Those who have already passed Diploma examination should indicate

the year of passing and darken the appropriate circle.

- Those who are appearing for their qualifying examination in 2006 should darken the circles corresponding to 2006.

NOTE : Results (Marksheets and Provisional Certificate) of qualifying examination has to be produced on the day of counselling. Without the final result of the qualifying examination, a candidate is not eligible to participate in the counselling.

6.11 Percentage of Marks : (Item - 11)

- Write the actual percentage of aggregate marks obtained in the 10th class or equivalent examination, under column- I.
- Write the actual percentage of aggregate marks obtained in the **qualifying examination** under column – II if the results are available. Otherwise, leave it blank. Enter only integer part of the percentage of marks and ignore the decimal point. For example 76.15, 76.57 or 76.90 be taken as 76 only. Darken the appropriate circles against each entry.

6.12 Photograph : (Item - 12)

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

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

6.13 Complete Mailing Address : (Item - 13)

Write the complete postal address to which any communication is to be sent till August 2005. The address must include your name, C/o name if required, and other details including the PINCODE for the mail to reach you. Indicate phone number, if any, with STD code. Please note that this block will be machine scanned and therefore, it should be written very clearly in **black / blue ball pen** only (not in pencil). If you make any mistake, cover the whole box with an exact sized white paper slip and write your address on it. You may also paste a typed address slip inside the box. Your address must not overflow this box.

6.14 Signature : (Item - 14)

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

- 6.15 Left Hand Impression (Item -15)**
Put your Left Hand Thumb Impression in the specified box.
- 6.16 Board of Qualifying Examination : (Item - 16)**
Darken the appropriate circle.
- 6.17 PINCODE of Address for Communication : (Item - 17)**
Write PINCODE in the space provided. Darken the appropriate circle against each digit.
- 6.18 Phone Number including STD Code : (Item - 18)**
Write your phone number, if there is any, with STD code, on which you can be contacted or a message can be left for you. Darken the appropriate circles below the phone number.
- 6.19 This Attempt at JEE : (Item - 19)**
Will JEE-2006 be your first, second or a higher attempt? Darken the appropriate circle.
- 6.20 Name of one Parent / Gurdian : (Item - 20)**
Write the name of one of your parent or guardian exactly as in your 10th class or equivalent certificate, if given. Write the name of your father if no name is given in the 10th certificate. Write a single letter in a box. Within any word of the name, do not leave any blank box. Leave one and only one blank box between any two words of the name. Darken the appropriate circle under each letter of the name. If the name has several initials, leave one blank after each of them.
- 6.21 Relationship : (Item - 21)**
Indicate your relationship with the parent/ guardian named in item 6.19 by darkening the appropriate circle.
- 6.22 Candidate's Residence district (Item - 22)**
Candidate's belonging to S-category (Orissa State candidates) should mention the code against the name of the district where he/she studied +2 course in Government Colleges/Institutions.

District's Name	Code	District's Name	Code
Angul	01	Kandhamal	16
Balasore	02	Kendrapara	17
Bargarh	03	Keonjhar	18
Bhadrak	04	Khurda	19
Bolangir	05	Koraput	20
Boudh	06	Malkanagiri	21
Cuttack	07	Mayurbhanj	22
Deogarh	08	Nabarangpur	23
Dhenkanal	09	Nayagarh	24
Gajapati	10	Nuapada	25
Ganjam	11	Puri	26
Jagatsingpur	12	Raygada	27
Jajpur	13	Sambalpur	28
Jharsuguda	14	Sonepur	29
Kalahandi	15	Sundergarh	30

- 6.23 SERIAL Number of 10th Class Certificate (Item- 23)**
Enter the serial number of your 10th class certificate in the boxes provided at the top (only digits) , darken the corresponding circles below them. If there is any alphabet before or after the serial number omit the same.
- 6.24 Parent's / Guardian's Total Annual Income : (Item - 24)**
Darken the appropriate circle.
- 6.25 Parents' Educational Background : (Item - 25)**
Darken the appropriate circle.
- 6.26 Place of Residence : (Item - 26)**
Darken the appropriate circle.
- 6.27 Declaration by the Candidate : (Item - 27)**
The candidate must sign the declaration in **black / blue ball pen**. The place and date should also be entered. Two signatures; the one below the declaration and the other in the box below your photograph, should be identical. Applications without signatures or with different signatures at the two places will be treated as incomplete and rejected. The declaration by the candidate must be countersigned by Parent/ Guardian. Write the name of Parent/ Guardian in the space provided.
- 6.28 Enclosures with Application Form :**
You have to enclose the Acknowledgement Card duly filled in.
Those who submit the application in the notified Bank should collect the Acknowledgement Card duly signed and stamped by the authorized person of the concerned bank.
SHOULD NOT enclose any copies of certificates/ marksheets/appendix forms with the application form.
ADMIT CARDS :
- a) Admit Cards will be despatched around 20 days before the date of examination. If an applicant does not receive the admit card ten days before the examination (i.e. by May 10, 2006) he/she must search the website or may contact the JEE cell indicating the application number.
- b) If a candidate does not receive or lose his/ her admit card , the Centre Superintendent may issue him/her a duplicate admit card on receiving Rs.20/- (Rupees Twenty only) with an application written by the candidate and two attested recent passport size photographs of the candidate identical with the photograph pasted on the original application. Two numbers of the duplicate admit cards will be prepared by the Centre Superintendent; one of them will be issued to the candidate and the other is to be sent along with the answer books, to the Chairman, JEE-2006. No complaints will be entertained for non receipt of admit cards after Joint Entrance Examination is over.

7. Rules for Entrance Examination :

- i) The Joint Entrance Examination will be held as per the scheduled date and time mentioned.
- ii) The medium of examination is English.
- iii) The examination hall shall be opened to the candidates half an hour before the examination commences. No candidate will be allowed to enter in the examination hall without a valid original / duplicate admit card.
- iv) Candidates are required to take their respective seats at least 15 minutes before the commencement of the examination, strictly according to the sitting chart notified earlier by the Centre Superintendent.
- v) In no case a candidate be allowed to enter the examination hall after the examination starts.
- vi) Attendance will be taken by the invigilators on the Attendance Roll sheets provided with full signature of candidates against their Roll Numbers, fifteen minutes before the commencement of examination. During examination the candidates have to enter against their Roll Number, the Application Number and the answer sheet serial number on the Attendance Roll sheets which shall be verified by the invigilators.
- vii) No candidate will be allowed to leave the hall without surrendering his/ her question booklet and answer sheet until the examination is over. Ordinarily no candidate shall be allowed to leave the hall temporarily during the examination.
- viii) Candidates suffering from any disease which renders their presence in the examination hall undesirable in the interest of other candidates will not ordinarily be allowed to enter the examination hall. Candidates are not allowed to have substitute writer.
- ix) Candidates should bring their own black / blue ball pens, HB pencils for writing and blackening the circle. Books, printed papers (other than their Admit Cards), manuscripts, or electronic gadgets such as mobile phones, cell phones and electronic diary calculators etc, should not be taken into the examination hall. Use of HB pencils & eraser, black / blue ball pen for all papers and use of colour pencils (12 nos), B, 2B pencils, sketch pen, scale etc for Aptitude Test for Architecture are permitted.
- x) The candidates are advised to inspect the question booklet and answer sheet about its completeness before attempting to answer. In case page/pages are found missing, torn or not in order, the candidates should immediately report to the invigilator and get a

fresh question answer book issued after surrendering the defective one.

- xi) Candidates are not permitted to talk to each other in the examination hall. No one should receive any help from or assist another in any manner. Malpractice of any form detected during or after the examination would entail not only cancellation of candidature but also more severe punishment as deemed fit by the JEE committee.
- xii) A candidate should write his/her roll number as assigned in his/her admit card and sign in the space provided in the question booklet and answer sheet. He/she should on no account write anywhere in the answer sheet his/her own name, roll number or any thing else that is not strictly connected with the answers to the question given. Writing of any such thing or a false Roll Number is a serious offence. The answer sheet without the candidate's roll number clearly written in the space provided will not be examined.
- xiii) A candidate wishing to say anything should stand up in his/her seat and remain standing until the invigilator attends to him/her. He/she should on no account leave the seat or make any noise to draw the invigilator's attention.
- xiv) In any other matter not provided in these rules, the Centre Superintendent is empowered to take necessary decisions.

7.1 Examination Procedure / Valuation methodology :

There will be multiple choice type question (except some of the questions for aptitude test for Architecture). The number of questions will be sixty(60) per each hour of examination. Each question shall have four answers (including one or more correct answer(s)) and the examinee shall have to blacken only the appropriate circle(which he/she considers most correct) in HB pencil or black / blue ball point. Each correct answer shall fetch four marks whereas each incorrect answer will lead to deduction of one mark. Each unattempted question will fetch zero. If more than one circles are darkened for one question, it will be treated as an incorrect answer and one mark will be deducted.

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

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

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

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

7.2 Retotalling and Review :

The JEE Answer sheet are all machine evaluated with adequate care that machine evaluation is made error free. The Joint Entrance Examination is held only for preparing a relative merit list. There is no award of class. Marksheets are not issued in general. A

candidate, may however request for verification with a verification fee of Rs.500/- (Rupees five hundred only) in the shape of an Account payee demand draft in favour "JEE-2006" drawn on any nationalized bank at Rourkela should reach the JEE office **within seven calender days** of the publication of result. A committee will manually verify the results and its decision will be final and binding. No Xerox copy of the answer sheet(s) will be made available to the candidate.

7.3 Wrong /Correct ways of Marking :

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

Wrong & Correct Methods of showing your answer

WRONG METHOD	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
WRONG METHOD	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
WRONG METHOD	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WRONG METHOD	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
WRONG METHOD	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
CORRECT METHOD	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CORRECT METHOD	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
CORRECT METHOD	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
CORRECT METHOD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

7.4 Issue of Marks

Candidates desirous of knowing subjectwise marks secured by them should make a written request enclosing a demand draft of Rs.200/- (Rupees two hundred only) in favour of "JEE-2006" drawn on any Nationalised Bank at Rourkela, so as to reach the JEE office within 10 days of the publication of result.

7.5 Sample Questions

- With reference to their units which of the following is different from other three.
 - Phase difference
 - Mechanical Equivalent of heat
 - Loudness of sound
 - Poission's Ratio
- One of the most common enzyme found in peroxisome is
 - hydrolase
 - catalase
 - dehydrogenase
 - reductase

- Silicon tetrafluoride gas hydrolised by water to produce

- $\text{Si}(\text{OH})_4$
- $\text{Si}(\text{OH})_3$
- $\text{Si}(\text{OH})_2$
- SiO_2

- The integral $\int_0^2 1-x \, dx$ equals :

- 1
- 0
- 3
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8.1 SYLLABI FOR (ENGG / MEDICAL / BDS / ARCHITECTURE / PHARMACY)

The Syllabi given hereunder for JEE-2006 are only illustrative and not exhaustive. The syllabi are in line with courses of studies in Science stream for the Higher Secondary Examination 2006 of CHSE, Orissa. Since JEE is conducted with a view to preparing merit lists for admission the decision of the JEE Committee as regards the scope of the syllabus is FINAL.

8.1.1 PHYSICS :

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

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

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

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

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

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

Electricity : Electric field and potential at a point and capacitor, Kirchhoff's laws and their application, wheatstone bridge. Joule's law of heat. Faraday's law of electrolysis. Biot-Savert's law, Field due to circular coil

at its centre. Moving coil galvanometer (dead beat only). Force on a moving charge in magnetic fields. Lenz's law. Faraday's laws of electromagnetic induction rotating coil in a magnetic field. Alternating current, self and mutual induction, phase relation between voltage and current in a pure resistance, inductance and capacitance, dynamo, motor, transformer, elementary idea on electromagnetic waves. Capacitance, dielectric constant and its effect on capacitance. Permeability susceptibility, diamagnetic, paramagnetic and ferromagnetic substance.

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

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

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

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

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

8.1.2 CHEMISTRY :

General behaviour of matter

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

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

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

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

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

Chemical bonds : Ionic, Covalent, Coordinate and Hydrogen bond, Hybridisation- SP^3 , SP^2 , and SP .

periodic classification : Periodic table and periodic laws, s,p, d and f block elements, Periodicity in properties such as atomic and ionic radii, Dalton's atomic theory, Laws of

chemical combination, Ionisation energy, Electro negativity and Oxidation state.

Chemical energetics, equilibrium and kinetics :

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

Equilibria : Reversible reaction, Laws of mass action, Equilibrium constant K_p , K_c and their relation. Its application to ammonia synthesis and dissociation of HI, Decomposition and thermal dissociation, Solubility product, Common ion effect, Ionic product of water, pH Hydrolysis of salt, Buffer solution.

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

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

Non-metals : Group study, Preparation, Properties and uses of elements of compounds of hydrogen (ortho and para hydrogen, isotopes of hydrogen, D_2O and H_2O_2). Allotropes of carbon, Silicones, Silicon carbide, Nitrogen family (NH_3 and HNO_3). Oxygen and sulphur family (O_2 , H_2S , SO_2 , H_2SO_4 , contact process), Halogens, Hydrogen halides and Interhalogen compounds.

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

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

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

Organic chemistry: Introduction, Functional Groups, Nomenclature, Isomerism, Polymerisation, sp^3 , sp^2 , sp hybridization, Preparation and properties of simple alkanes, alkenes, alkynes and monohalogen derivatives. Preparation and properties of aliphatic nitro paraffins, types of aliphatic amines, Preparation and properties of simple primary amines.

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

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

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

Industrial chemistry : General idea on fertilizers, pesticides, polymers (nylon, terylene, neoprene, buna-s pvc, Teflon bakelite) and medicine-analgesic,

antipyretic, antibiotic and antiseptic (structure and preparation not required).

8.1.3 MATHEMATICS

Logic : Statement, Negation, Implication, Converse, Contra-positives, Conjunction, Disjunction, Truth Table.

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

Number system : Real numbers (algebraic and order properties, rational and irrational numbers), Complex numbers, Algebra of complex numbers, Conjugate and square root of a complex number, Cube roots of unity, De Moivre's theorem with simple application. Permutations and combinations-simple applications, Mathematical induction, Binomial theorem.

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

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

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

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

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

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

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

Differential equations (only simple cases)

(i) $dy/dx = f(x)$

(ii) $dy/dx = f(x) \cdot g(y)$

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

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

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

8.1.4 BOTANY

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

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

Cell inclusions, physical and chemical nature and functions of enzymes, Vitamins and hormones, mode of enzyme action, cell cycle.

Complexities of plant life : Meristematic tissues, permanent, simple and complex tissues, Internal structure of dicot and monocot systems and roots, Internal structure of Isobilateral and Dorsiventral with functions of different tissues, Normal, secondary growth in dicot stems.

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

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

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

Microorganisms and diversities of plant life : Elementary idea and economic importance of virus, bacteria, fungi, algae and lichen, Elementary idea of gymnophytes, pteridophytes and gymnosperms.

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

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

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

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

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

8.1.5 ZOOLOGY

Animal world : Definition, Scope and branch of Zoology.

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

Diversity of life

Kingdom-protista : General characters of the phylum, protozoa, Classification-amoeba, entamoeba, paramoeba, euglena, trypanosoma, plasmodium.

Kingdom-animalia : Concept of body plan, symmetry, coelom, germ layers.

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

Multi Cellularity in Animals :-

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

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

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

Types of Respiration - Structure and function of respiratory system in man : Respiratory organs, mechanics of pulmonary respiration, plunomary exchange of gas, transport of gases, Glycolysis & Krebs's cycle.

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

Excretory Reproduction in Man - Structure and function of kidney.

Control and coordination in Man - Nervous system- central, peripheral and autonomic sense organs, endocrine system.

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

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

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

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

Environmental Biology - Biosphere and ecosystem.

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

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

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

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

8.1.6 APTITUDE TEST FOR ARCHITECTURE

The Test shall comprise of :

A) **Aesthetic Sensitivity :**

- (i) Visualising three dimensional objects from two dimensional drawings.
- (ii) Visualising different sides of three dimensional object.
- (iii) Identifying commonly used material and objects based on their textural qualities.
- (iv) Analytuical Reasoning.
- (v) Mental Ability.
- (vi) Imaginative comprehension and expression.
- (vii) Architectural awareness.

B) **The Drawing aptitude :**

- (i) Ability to sketch a given object proportionately and rendering the sane in visually appealing manner.
- (ii) Visualising and drawing the effects of light on the object and shadows cast on the surroundings.
- (iii) Sense of perspective drawing.
- (iv) Combining and composing given three dimensional elements to form a building or structural form.
- (v) Creating interesting two dimensional composition using given shapes or forms.
- (vi) Creating visual harmony using colours in given composition.
- (vii) Understanding of scale and sense of proportion.
- (viii) Drawing from memory through pencil sketch on themes from day to day experiences .

Note : Pencil : (HB, B, 2B), Colour pencils (12 nos), sketch pen, scale eraser etc, are to be brought by candidates

8.2 SYLLABI FOR LATERAL ENTRY STREAM

The syllabi given here for JEE - 2006 (Lateral Entry of Diploma Holders in Engineering and Technology) is only illustrative and not exhaustive . Since JEE - 2006 is conducted with a view to preparing a relative merit list only for admission, the decision of the JEE - 2006 Committee as regards to the scope of the syllabi is final.

This paper is common to all the disciplines, except Pharmacy.

8.2.1 PAPER - I

(A) BASIC ELECTRICAL ENGINEERISNG

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

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

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

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

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

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

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

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

8.2.2 (B) MATHEMATICS

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

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

Laplace Transforms : The Laplace transforms (L.T), L.T. of derivatives and integrals, derivatives and integrals of Laplace transforms, L.T. of periodic functions, Inverse Laplace transforms, Convolution theorem, Application of

L.T. to solution of differential equations, special techniques.

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

Matrices : Notation and terminology, Solution of simultaneous equations by Gaussian elimination, Rank, Computation of rank by reduction of Row echelon normal form, Algebra of matrix, inverse determinants, linear dependence and independence, solution of homogeneous and non-homogeneous systems.

Norms and products, Gram-schmidt Process, Projection matrix, eigenvalues, eigenvectors, Symmetric and simple matrix, System of linear differential equations the homogeneous case.

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

8.2.3. (C) ENGINEERING MECHANICS

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

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

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

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

8.2.4. PAPER - I (Pharmacy)

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

8.2.5. PAPER - II

Its syllabus is the same as the 3rd year Diploma courses in Engineering & Technology in the relevant discipline (except for Pharmacy) for the session 2005-2006, in the subjects published under the authority of State Council for Technical Education and Vocational Training, Orissa.

8.2.6. PAPER-II (Pharmacy)

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

8.3 SYLLABUS FOR MCA STREAM

8.3.1 MATHEMATICS :

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

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

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

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

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

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

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

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

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

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

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

(i) $dy/dx = f(x)$

(ii) $dy/dx = f(x)g(y)$

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

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

8.3.2 COMPUTER AWARENESS :

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

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

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

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

8.4 Syllabus For MBA Stream :

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

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

8.4.2 Sample Questions :

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

Section A : Verbal Reasoning

- In two years time my father will be exactly three times as old as I am now. My father is thirty seven. How old am I ?
 - 13
 - 14
 - 15
 - 12
- Five boys took part in a fitness test. Tony scored higher than Sam who didn't have the lowest score. Jack had the highest score and Gerry scored more than Paul but less than Tony. Who had the lowest score?
 - Tony
 - Sam
 - Jack
 - Don't Know
- My watch is 6 minutes fast and the train which should have arrived at my station at 11.30 am was 5 minutes late. What time was it by my watch when the train arrived?
 - 11.41 am
 - 11.40 am
 - 11.38 am
 - Don't Know

Section B : Analytical Reasoning

- Find the next in the sequence : BC CE EG GK ?
 - KN
 - KU
 - KM
 - None

2. Find the values for the following problem :
 $f(X) = 2X-1 + f(X-1)$ if X is not equal to zero and if $f(X=0)=0$ Value of $f(5)$
- 15
 - 24
 - 22
 - None
3. The Arithmetic mean of two numbers X and Y is :
- $(X + Y)/2$
 - 24
 - $(X * Y)^{0.5}$
 - $1/X + 1/Y$

Section C : General Knowledge

- Former USSR is now a Commonwealth of :
 - 12 States
 - 15 States
 - 18 States
 - 13 States
- Phalke award for 1996 was awarded to :
 - Naushad
 - Dr. Raj Kumar
 - Ashok Kumar
 - Dileep Kumar
- Konkan Railway runs between ?
 - Mumbai and Goa
 - Goa and Mangalore
 - Mangalore and Trivendrum
 - Mumbai and Mangalore

Section D : Comprehension

In the long run a government will always encroach upon freedom to the extent to which it has the power to do so : this is almost a natural law of politics, since whatever the intentions of the men who exercise political power, the sheer momentum of government leads to a constant pressure upon the liberties of the citizen. But in many countries society has responded by throwing up its own defences in the shape of social classes or organised corporations which enjoying economic powers and popular support have been able to set limits to the scope of action of the executives. Such for example, in England was the origin of all our liberties won from government by the stand first of the feudal nobility, then of the churches and political parties and latterly of trade unions, commercially organisations, and societies for promoting various causes. Even in European lands which were arbitrarily ruled, the power of the monarchy, though absolute in theory, were in their exercise checked in a similar fashion. Indeed the fascist dictatorships of today are the first truly tyrannical governments which Western Europe has known for centuries, and they have been rendered possible only because on coming to power they destroyed all forms of social organisations which were in any rivals to the state.

- The main idea of this paragraph is best expressed as :
 - Limited powers of monarchies
 - The ideals of liberal government

- Ruthless ways of dictators
 - Safeguards of individual liberty
- Evangelist : Sin :: ?
 - Policeman : Robber
 - Picket : Employer
 - Physician : Disease
 - Surgeon : Appendix
 - Pertinent means :
 - Understood
 - Discontented
 - Puzzling
 - Relevant

Section E : Computer & Business Fundamentals

- Which of the following is a System Software ?
 - MS-Word
 - Linux
 - Oracle 9i
 - COBOL
- What is the maximum number of shareholders in a Private Limited Company ?
 - 20
 - 50
 - Unlimited
 - None of the above
- How many Stock Exchanges are there in India ?
 - 21
 - 22
 - 26
 - None of the above

APPENDIX - I

Office of the
Miscellaneous Certificate Case No. of 2006.

PERMANENT RESIDENT CERTIFICATE FOR JEE-2006

This is to certify that Shri/Smt/Miss.....
Son/daughter/wife of Shri is a
native of the district of in the State of
Orissa and he/she belongs to P.S. Tahasil.....

The certificate is being granted only for the purpose of JEE-2006 , Orissa.

Full Signature of the Applicant

Signature of Revenue Officer

Date :

Round Seal of the Office

Designation (with Seal of Office)

- Note:** 1. Revenue Officer means the Chief Officer in charge of Revenue Administrative in the District, Sub-Division of Tahasil and includes an Additional District Magistrate and Additional Tahasildar.
2. No part of the form should be mutilated in any manner. In case of mutilation the certificate is liable to be rejected.

APPENDIX - II

(Clause 2.1 of Information Brochure of JEE - 2006)

Certificate of employment of candidate's parent / spouse

Employer - Government of Orissa / Government of India / Government of India Undertakings and Government of Orissa Undertakings located in Orissa at the time of application.

(Strike off which ever is not applicable)

1. Name and Address of Organisation/
Office in which employed
2. Name and Designation of the certifying authority
(Employer/Head of Office/Organisation)
3. a) Name in full and designation of employee
to whom certificate is being issued.
b) Whether in permanent employment
c) Present Place and State of posting
d) Permanent address as per service records
4. Name of the candidate in full
5. Relationship of the employee with the candidate
6. Details of the Institution from which the
candidate has passed / appeared at 10+2 level
7. Particulars of employment of the employee

Place Date of Joining Period of Service

Full Signature of Employee

Signature of the Employer/
Head of Office/Organisation

Date.....

Designation with Seal of Office

- Note :** In case the employee is on deputation either from Government of Orissa or India, the above certificate should be signed by the original employer.

APPENDIX – III
SC/ST CERTIFICATE BY BIRTH FOR JEE - 2006

This is to certify that Sri/Smt/Miss
Son/daughter / wife of Shri of village/
Town P.S Tahasilin
the district of of the State of Orissa belongs to the
Caste/Tribe which is recognized as Scheduled Caste/Tribe under Constitution (Scheduled Castes) order
1950/ the Constitution (Scheduled Tribes) Order , 1950 as amended by the Scheduled Castes and Scheduled
Tribes (Amendment) Orders Act 1976.

The Place of birth of Sri/Smt/Miss..... is village/
townP.S Tahasil
in the district of of the State of Orissa.

Full Signature of the Applicant

Signature

Round Seal of Office

Date

Designation with Seal of Office

Note : This certificate should be issued by the Tahsildar of the place of residence of parent in Orissa . No part of the form should be mutilated in any manner. In case of mutilation the certificate is liable to be rejected.

APPENDIX - IV

(Clause 2.1.4 of Information Brochure of JEE - 2006)
Certificate of Defence / Paramilitary Service of Candidate's Parent / Spouse

1. Name of the Candidate
2. Full name of employee/person
3. Permanent address as per service records
4. Whether serving/permanently disabled/killed in war/hostilities
5. Rank in Defence Service
6. Full name of the candidate
7. Relationship of the employee/person with the candidate
8. Present place of posting including details of unit (in case of serving personnel)
9. Last place of posting including details of unit (in case of Ex-Serviceman)
10. Awards recieved in any

Full Signature of Station Commander /
Officer Commanding /
Officer – in – charge / Secretary
Zilla / Rajya Sainik Board

Full Signature of

Candidate's Parent Date Designation with Seal of Office

