















Inspiring Existence

# Welcome to INTEGRAL UNIVERSITY

Integral University has its own unique culture of inclusiveness, diversity, personal and intellectual integrity and value-based education. The curriculum has a strong focus on individual growth and the development of essential tools to make a mark in the corporate world and the field of technology. These are solidly supported by a highly qualified team of accomplished faculty and robust academic infrastructure. It always maintains a high standard of education and continuously strives to create a learning-friendly environment.

Integral University, because of its marvelous contribution in the field of science & technology in the very first decade of its existence, has established laudable credentials among the leading universities of the country. It is going to enter the orbit of the second decade with a fresh commitment to imparting value-based quality education and incukating the spirit of enquiry, humanity and civility in its students and to make them proud sons of Mother India.

The miraculous achievements of Integral University in the first decade of its journey beggars description. It strengthened the Engineering College and established the faculties of Pharmacy, Education, Health & Medical Sciences (Integral Institute of Medical Sciences and Research with a 360-bed hospital), Agriculture and distance education and two polytechnics.

By 2020 India would be having the youngest workforce. To cope with the global requirement and for India to play a vital role in outsourcing experts, the University is going to take up vocational training programmes to groom and hone new and skilled workforce. By utilizing the facilities of KCT (Information Communication Technology), the University has geared up to launch Massive Open Online Courses (MOOC) under the distance education programme to increase the rate of literacy and an inclusive development through education.

The university is at present giving stress on research programmes and the placement of students. Interactive efforts with eighteen renowned universities and research organizations through MOUs for research activities and campus selection of students by national and multinational organizations bear a testimony to these efforts. It is gratifying to note that integral University has had a successful placement history even at the height of recent recession. This has been made possible only through the ongoing interface with the corporate world, ensuring that we provide the best equipped talent to them for the growing economy and global demands.

The University has also taken affirmative action in the context of community welfare activities through NSS programmes in collaboration with the state government, which includes child health and deanliness of villages in the vicinity of the University campus, thereby creating an awareness among citizens regarding the need to be alert and sensitive to civic problems and finding solutions through participation.

Integral University is not only an academic institution but also a mission and a vision to make the country progressive and prosperous in all walks of life. I, therefore, invite all the aspirants who are in quest of quality education to join this University to serve the nation and the world at large.

5. W. Akhtar Vice-Chancelor



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# Read! In the Name of Your Lard, who has created (all that exists). - [ArQuran 96:1]



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Visitor Sri Ram Naik H.E., The Governor of U.P.

#### **University Authorities**

Chancelor Dr. S. R. Azmi Nadvi

Vice-Chancelor Prof. S. W. Akhtar

Prof. (Dr.) T. Usmani

Tressurer
Mr. Harnid Mustafa

Registrar Prof. (Dr.) Irfan Ali Khan

Controller of Examinations
Prof. (Dr.) Mohd. Rizwan Beg

MOGN

# Vision, Mission & Objectives

#### Vision

- To lead the teeming millions of the world through the wilderness of ignorance and illiteracy, as "Kindly Light" (Exodus 13:21) with the resounding divine prodamation "Read: Thy Lord is the most bounteous (Quran 30:96:3)." and to educate them in the most constructive and innovative way.
- To inculcate a spirit of confidence, self-respect and firm commitment in students alongwith far-sighted wisdom and understanding.
- To integrate the ebullience, intellect and dynamism of youth with decency, decorum, discipline and dedication through value-based quality education.

#### Mission

- To make every student a role model of intellectuals and torch bearers for others all over the world through his / her inspiring existence.
- To make India a self-reliant and dominant G-I country recognized for quality education, higher economic growth and valuable moral practices.

#### Objectives

 To harness technical education and technology in the service of mankind, as also to enable students to think globally and act nationally.





- To integrate spiritual and moral values with education and to develop human potential to its totality. To develop a sense of self-reliance and to create the awareness of higher self in the young generation.
- To ignite the latent potentialities of the young and budding generation through cutting-edge technology and state-ofthe-artacademic programmes.
- To bring about innovation in education by restructuring courses and adopting novel methods of teaching and learning to target multifaceted personality development.
- To identify the excellent heritage of our great and glorious past and to link it with the grand future. To cultivate and disseminate knowledge by providing research and extension facilities.
- To create and promote a congenial ambience and thereby further help in strengthening the spirit of national integration, secularism and international understanding to bring all the sections of society in the mainstream for an overall development of India and to provide modern, scientific and moral education for social upliffment.
- To empower the young generation with global perspectives in order to bring about peace, tranquility, prosperity and bliss to the entire world in general and to our country in particular.

#### Preamble

The arduous project of the establishment of an excellent Institution was embarked upon by Islamic Council for Productive Education (I.C.P.E.) consisting of a small group of dedicated, devoted and diligent educationists, engineers and intellectuals committed to achieving educational excellence in all spheres of modern technology, science and higher education. They started the project with a modest school in a thatched but on 3rd November, 1993. It was named Techno Academic School. In 1994 the Government of Uttar Pradesh permitted the entry of the private sector in higher technological education system of the State. This enabled the Society to launch its second major project of establishing Institute of Integral Technology at Ludonow. Conscious of the placement situation in the State, initially the Institute identified three areas for its U.G. programmes namely. Computer Science and Technology, Electronics Engineering and Architecture. Since Lucknow University was a non-affiliating University and for starting any degree-level programme, affiliation was a prerequisite, the Institute was affiliated to Dr. RML Awadh University, Faizabad in 1998. The Institute was recognized by the All-India Council for Technical Education (A.I.C.T.E.) and it admitted its first batch in 1998-99. Later on several programmes were added. With the inception of U.P. Technical University in the academic session 2000-2001, the Institute of Integral Technology got affiliated to it.

#### Role of ITians - The Midas Touch

A group of ITTians drawn from Government organizations, enterprises and educational institutions played a vital role in providing a strong and formidable academic foundation and curriculum for the phenomenal progress which the Institute of Integral Technology made in subsequent years. This group comprised Prof S.M. lobal, (IIT, Kanpur), Prof. D.C. Thapar (IIT, Kharagour), Late Prof. M.M. Hasan (IIT, Kanpur), Prof. M.I. Khan (IIT, Roorkee), Late Prof. Bal Gopal (IIT, Kanpur), Prof. Mansoor Ali (IIT, Rorkee), Er. M.S. Ansar (IIT, Kanpur), Prof. Subodh Shankar (IIT, Kharagour) and Prof. Qamar-uz-Zaman (IIT, Kharagpur). The Institute made rapid advancement as the years passed by. In infrastructure, it did not limit itself to the minimum standards laid down by the regulatory authorities but went far ahead of them. Its academic buildings, laboratories and workshops, though not luxurious, were surely efficient, appropriately designed and provided with the best possible equipments, and thus, could be compared to any well-established institute of the country. The Institute's strong emphasis on students' discipline, human values and character-building has had an enduring impact. Within a short span of time it established its own credentials and singular reputation. Shri Atal Bihari Vaipayee, the then Prime Minister of India, personally visited and blessed the Institute of Integral Technology on 30th June, 1999 and expressed his hope that the Institute of Integral Technology, sharing its initials with IIT, will attain the same standards and status as the IITs do in the country. The hope of the then Prime Minister of India was fulfilled in its totality with the transformation of this Institute into a full-fledged University in a record time, on account of its excellent reputation in the field of academics, in February, 2004. The Government of Uttar Pradesh passed a Bill in the Assembly followed by the Gazette Notification No.389/ -9-2004, dated: 27th February, 2004 and elevated the Institute to the status of a University under the Act No. 9 of U.P. State Legislature.

# THEUNI







# VERSITY







**Functioning of the University** 

Integral University, the first enacted Minority University in the country, started functioning from 1st April, 2004. The President of the Islamic Council for Productive Education, Dr. Saeed-ur-Rahman Azmi, and its General Secretary, Prof. Syed Waseem Akhtar, respectively took over as Founder Chancellor and Vice Chancellor of the University. Integral University was accorded recognition by U.G.C. under section 2(f) of U.G.C. Act, 1956. The University started its journey for providing quality education in 2004.

The existing faculties in the University were re-organized and new faculties of Science, Pharmacy, Education, Management Studies, Health & Medical Sciences, Agriculture Science & Technology and Humanities & Social Sciences were added. Besides this, progressively, a number of new programmes have been added, including Master level programmes in Biotechnology, Industrial Chemistry, Bectronics Circuits and Systems, Bioinformatics, Instrumentation Control, Microbiology, Production and Industrial Engineering, Machine Design, Computer Science, Civil Engineering, Power System and Drives etc.

At present the University has 11 faculties and 46 departments. It offers 30 undergraduate programmes, 33 postgraduate programmes and 15 diploma courses, 3 certificate courses and a RG. Diploma course. The University has also taken up research programmes on a priority basis in almost all the faculties. At present 451 research scholars are enrolled in the University under the Ph.D. Programmes and 118 scholars have already received doctoral degrees during the last seven years.

Most of the courses conducted are approved by the concerned statutory bodies like CoA, PCI, NCTE, MCI and accredited by NBA-AICTE etc. The University is also accredited by IAO (International Accreditation Organization), USA NAAC accreditation is under active process. India is facing critical challenges on many technological fronts like agriculture and food processing, education and healthcare, information and communication technology, infrastructure development including river networking and self-reliance in critical technologies, energy security, land and water conservation, environment protection, nuclear energy systems, non-conventional and renewable energy options, use of fossil fuels, disaster prevention and management, space technology etc. The University status provided the Institute with the required autonomy and a wide spectrum to work with. Integral University caters to national aspirations by offering modern and job-oriented courses to meet global requirements and future challenges ahead.

The University has a marvellous ambience and academically lively and vibrant environment, highly conducive to higher and dedicated academic pursuits. "Go Green" is also one of the mottos of Integral University. The campus has all the facilities like Medical Centre, Canteen, Students Activity Centre, Gymnasium, Sports-ground etc. In this constructive academic milieu, students adopt a superb savoir-faire et savoir-vivre to lead a respectable and fulfilling life. Integral University lays special emphasis on student fratemity and brotherhood. The poor and deserving students, irrespective of their caste and creed, are given scholarships, in the memory of the (Late) Hazrat Abul Hasan Ali Hasni Nadvi alias "Ali Miyan", the great thinker and philosopher.

The University maintains transparency in its governance. All functional levels inclusive of academic programmes, administration, admissions, examinations, training and placement activities, finance and library services are fully computerized.

L



In 1993 Islamic Council for Productive Education (I,C.P.E.), with Dr. Saeed-ur-Rahman Azmi as its President and Prof. Syed Waseem Akhtar as its General Secretary, started a school with the aim of developing it into an institution of higher education for promoting technical, scientific and professional aptitude in the masses of the country in general and the minority community in particular, by providing the best possible modern and moral education to prepare them for global challenges.

The foundation stone of the Institution was laid by the world-renowned Arabic scholar and philosopher, Hazrat Maulana Abul Hasan Ali Hasni Nadvi alias 'Ali-Miyan' on 3rd November, 1993. During his inaugural address Hazrat Maulana said:

"In fact, Industry, Technology and Scientific Research have greater importance and utility in the present-day scenario of democratic, political and academic domination and this is bound to enlarge. In India, our labour, knowledge and potentialities won't make us self-reliant, self-sufficient and honourable citizens until and unless we achieve expertise in these fields as well and put it to practice."

With the blessings of the great thinker and philosopher, Hazrat Maulana Ali Miyan, the I.C.P.E. has an absolute commitment to making the country self-reliant and self-sufficient in all the spheres of life.



**Discipline**: The University lays great emphasis on discipline and expects students to abide by the rules on and off the University campus. The Proctor, Deans, HODs, along with teachers of different faculties and departments are responsible for ensuring a decent, disciplined and decorous environment in the campus.

#### Students Interaction

As a tradition of this University seniors welcome the freshers and interact with them in a friendly and cordial atmosphere. Ragging in any form, at any place, on and off the University campus, is strictly banned.

An undertaking on a prescribed format is required to be submitted by all the students that they shall not indulge in any form of ragging on or off the University Campus and shall abide by the rules prescribed for this purpose by the University / Government. This ensures a complete ragging-free environment in consonance with the

decision of the Hon'ble Supreme Court of India.

#### Language Lab

The language lab is a state-of-theart multimedia laboratory that makes use of software. projectors and audio-visual systems for an efficient Computer Aided Language Learning (CALL) experience. It has been developed to assist students in developing excellent communication skills. An Industry requires not only a strong knowledge base from the professionals but also effective communication skills. For the above purpose, the language lab has employed 'Orell ODLL', a professional software for improving vocabulary, pronunciation, and other Soft Skills so that students may communicate well and efficiently.

#### Computer Centre

Computer Centre caters to the computing needs of the faculty, staff and students for their research, teaching and learning activities. The University has a fully air-conditioned, state-of-the-art computer centre with over a thousand computer terminals installed.



The Computer Centre has a number of high-end servers, from I.B.M. and Hewlett Packard. The machines are equipped with the latest configuration. Apart from hardware resources, Computer Centre also provides a wide range of systems and application softwares like statistical packages, image processing packages, R.D.B.M.S. softwares, various advanced and special purpose softwares such as Matlab, Netsim, Maya, Studio 8, Rational Rose etc.

The Computer Centre has a robust power-backup facility through online U.P.S. and a number of generator sets. It provides the campus with wireless network that connects all the academic departments, hostels, library and other central facilities. Internet has empowered and supported academic research and studies, enhancing knowledge through 1.8 Gbps shared internet connection on Integral University Campus.

I.T. Help Deak: This manages e-mail IDs of all personnels/ students and supports intranet applications for managing students attendance, sessional marks and other data for the entire University and also manages maintenance work.

#### Library

The Central Library is housed in a separate multi-storey building with a rich collection of books and journals. The objective of the Central Library is to serve the needs of the faculty, research scholars, students and members of the Library, it is the heart of the University and acts as a central resource for literature predominantly related to Science, Engineering, Technology, Medical science, Architecture, Pharmacy, Business Administration, Education, Library and Information Science and allied subjects aiming at developing a comprehensive collection for the users.

The Central Library possesses a rich collection of more than ninety one thousand books and subscribes to four hundred enriching print periodicals and magazines of repute. The library has also subscribed to several world-renowned databases and e-resources consortia comprising three thousand e-journals, more than two thousand e-books and fifteen hundred full texts and indexed articles on various subjects. All these resources are extensively used for teaching, research and reference purposes.

In order to fulfil the users' needs the library offers the following services:

- Book lending service to its members.
- National /International print and online journals facility.
- On-line Public Access Catalogue (OPAC) services.
- Provides photocopying and printing facilities on a nominal charge.
- The Library provides both reference and referral, and Newspaper dipping services.
- CD ROMs search and Read / Write facility/ Web Browsing facility.
- Library offers Current Awareness Services (C.A.S.) and Selective Dissemination of Information (S.D.I.) services.

The entire library functions in the Central Library are fully computerized. In-house library activities like Acquisition, Cataloguing, Circulation, Serials Control, Multimedia and Web Inquiry have been automated by using International Software "Softlink Asia's - Alice for Windows" which is extremely user-friendly. The Central Library also looks after various departmental libraries in order to promote direct use of the library collection. The Central Library and departmental libraries are interconnected through library Automation Software with Xeon Server.

In addition to these facilities, there are also thirty-five PCs exclusively dedicated to accessing CD-ROM databases, online resources and On-line Public Access Catalogue (O.P.A.C.) services, which allow the users to search documents by author's name, title, subject and accession numbers. The circulation activities through "barcode technology" help achieve maximum efficiency in providing accuracy, speed and reliability in issue and return procedures.

The IP based e-resources such as Oxford University Press, Cambridge University Press, ESBCOHOST, J-Gate, IEEE, ASPR, ASTM Digital Library, Springer, ASCE Acland Anatomy can also be BJM accessed through the campus network of the University.

The Central Library has also become an associate member of UGC-INFONET consortium by signing a Memorandum of Understanding with INFLIBNET and has the privilege of accessing a host of databases.





Honble Governor of U.P. Giving awards to a Gold Machine.



उत्तर प्रदेश सर्भी है योज

Prof. Abinishek Minima, State Minister U.S. Gook, receiving resonance from Hearlife V.C., length University in the programme of Lapsop distribution

# Centre For Career Guidance & Development (CCG&D)

Centre for Career Guidance and Development (CCG&D) of Integral University is a central facility of the University, managed by highly qualified and experienced professionals from industry. It is actively assisting the students in developing their personality, enhancing communication skills and general awareness through workshops, seminars, industrial Training and Career Counselling. This ultimately helps them in their final placement. High emphasis is paid on building Industry linkages and creating placement opportunities. The cell's working is automated and the records of the students' academic status, trainings, seminars, projects and placements etc. are available online.

#### The CCG&D

- Acts as a bridge between the corporate world and the University by providing a range of services to enhance students' job search and career management skills. It also provides career counseling to students.
- Continuously liaisons and networks with organizations and recruiters (Indian and Overseas) to generate ample opportunities for the placement of students.
- Provides exposure to the students for training/Internship in public sector or private organizations, both at national & International level.
- Improves active participation of the students and the faculty members in placement activities through formation of Student Placement Committee (SPCs), faculty committees and online discussiongroups.



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monster;

COLLEGE

- Augments corporate collaborations by signing MOUs for Training and Placement activities.
- Utilizes the latest state-of-the-art technology (web site, emails, bulk SMS, face bookets) for better efficiency.
- Utilizes independent and interactive web portals which link the various Job sites and corporate world facilitating information-sharing with both the students and the Recruiters.
- Encourages entrepreneurship among the students.
- Arranges interactions of students with Alumni members for sharing corporate experiences.

#### Special Features

- An in-house Aptitude Training Cell (ATC) has been established with sufficiently qualified trainers.
- Agreement has been signed with professional trainers for a value-added programmes on employability and skill enhancement of students within the campus premises.
- Full-time Corporate Relation Cell (CRC)
  has been established for building long term
  relations with corporate world.
- Live industry projects under the University Industry Interface initiative have been taken up where the students participate and improve their practical skills.
- SSB coaching by a dedicated defence trainer has been started for students interested in joining the Armed Forces and the Indian Coast Guard.

#### Industrial Training / Internship

As per the curriculum of the University, the students are required to undergo industrial Professional / Project Training. The Centre for Career Guidance & Development assists them in getting and organizing the training in organizations of repute like - ISRO, BHEL, HAL, SAIL (Bokaro, Rourkela, Dungapur, Salem, Bhilai, Asansol, Ranchi), NTPC NPCIL, SEL, Ordinance Factory, BARC, PCL, CORI, CMAP, NBRI, ITTRC, Biotech Park Ludonow, Indian Railways, Airport Authority of India, UPDPL Ludenow Godnei, L&T, TELCO. TATA MOTORS, TC5,TIC5O, Siemens, Cognizant, WhirlPool, Reliance Communications,

Pantaloons, Voltas, AVIVA LIC, TATA - AIG, Balal Alianze, Reliance Money, KARVY etc.

#### Seminars, Mock Interviews and Pre-placement Training

The CCG&D conducts dassroom interactions. Group Discussions, Quizes, Ю Tests and Mock Interviews under the Personality Development Programme. Tie-up has been made with reputed assessment agencies to provide sufficient rehearsal actitude tests under live company conditions in order to enrich the final and pre-final year students. Guest lectures by eminent career consultants, academicians and motivators are

arranged from time to time. Some of the speakers from this platform include Padam Shri Dr. Pritam Singh, former Director MDI Gurgson, Commander R.P. Singh, renowned career consultant Dr. Amrita Das, famous aptitudetraining copert Arun Sharma, Satvarn Sahai, Charu Srivastava, Meenakshi Sharma & CS Verma and others. The cell regularly organizes workshops through Entrepreneurship Development Institute of India, Ahmedabad (Northern Regional Office, Lucknow), aimed at guiding the students on becoming entrepreneurs. The students are encouraged to participate in creative and design competitions in order to sharpen their technical sidis. Students and experts are also networked

together in an online group in order to provide a 24-hourhelpline.

#### Industrial Tours

Organizing the Educational and Industrial Tours is also the responsibility of CCG&D. Our students have visited a number of Organizations such as L&T Switch Gears Systems Lucknow, HAL Korwa, Pumping Stations of U.P. lal Nigam Limited, NTPC, Remote Sensing Application Centre, Bokaro Steel Plant, UPDPL Ludonow Panki Thermal Power Station, NTPC Unchahar and various industrial organizations located at Baddi in Himachal Pradesh.

### PLACEMENTS

Integralities are well placed in top Indian & foreign companies. They are globally serving in reputed MNCs & fortune 500 companies. CCG&D organizes Campus drives, Pool campus drives and arranges off Campus interviews. Some of the employers who recruited our students during the last five years are as follows.

- Aamby Vally City
- Accenture
- Antara
- Aviva Life Insurance Co. Ltd.
- April Rank
- · B. L. Keshvap & Sons Ltd.
- Belal Allarg Lifebraurance Co. Ltd.
- · Be Billimoriya Construction Сотралу
- Bharti Ava Life Insurance Co. Ltd.
- · Birbsoft
- · Bosch Ltd.
- Capgeminlinda.Pvt.Ltd.
- Ciple Ltd
- Croc Ltd.
- Corrizant
- Convergees
- · Ce
- · Card Life
- Cummins
- Eldeco
- Fra Group
- 0 Gett
- Gloss Smith Kilms
- Group Coera, Argentina.
- Life Cell International

- " HCL, Boo
- · HCL Commet
- HCL Info Systems Ltd.
- HCL Technologies Ltd.
- HDFCLimited
- # HDFC Bank
- · HDFC Standard Life Insurance Co. Ltd.
- Helic Technologies Sol. Pvt. Ltd.
- Honda Siel Power Products Ltd.
- Hindustan Unilever Ltd.
- Hindustan Construction Co. Ltd.
- Husswel Technologies
- Hyderabad Industries Ltd.
- IBM India Ltd.
- ICICIPrudential Life Insurance Ltd.
- i-Flex

- · i-Gate
- Irufia Mart
- Indian Army
- Indian Air Force
- Indian Navy
- Infosys Technologies
- Ipca Laboratories Ltd.
- ₱ Ibm Group
- ◆ L&Tinfotech
- Larson & Toubro Ltd (acc Division)
- Lohla Starlingers Ltd.
- Mahindra Satyam
- Nagarjuana Construction Company Ltd.
- · Nestle India Ltd.
- Novertis Healthcare Pvt. Ltd.

- Oman Technical Contracting Lic Sanmar Group Sharjah
- Omaze Ltd.
- Oracle Financial Services Software Ltd
- Organics India Ltd.
- Oriental Structural Enginers
- Patil Group Of Companies
- Patni Computers
- \* Piper Limited
- Quartiz Technologies Ltd.
- Rave Technologies Ltd.
- Reliance Capital
- Reliance industries
- Relance Money
- Renault Nissan
- Rodewsli Automation

- Sehara Samsung India.
- Sapient Ltd
- Sooken
- Siements Ltd.
- Soma Enterprises Ltd.
- Sorevinda
- St Xavier Convent School
- Starting & Wilson
- \* Sunit Hil Tech
- Super House Leathers Ltd.
- Seen Genetech Ltd.
- Swritel
- Tata Air Life Insurance Ltd.
- Tata Consultancy Services
- Technosys Services Pvt. Ltd.

- Toment Power
- Unitech-ick Group Abu Dhabi
- Walmart
- · Wipro Boo
- Wipro Infotech
- Wipro Technologies
- Wirs Global Services Pvt. Ltd.
- Zvdus Cadia Healthcare Ltd.
- Data borough
- Orade
- G.V.K.Power&Infrastructure Ltd.
- Limited Solvit
- · Co. Cubes
- · Geti Ltd.
- Shobba Developers Ltd.
- IKCement
- DCM Shrivarn Consolidated Ltd.
- Sons Koyo Steering Systems Ltd.
- Vocizione
- Vibry Bootrlook Ltd.
- Spreadtrum
- Triveral Turbine I td.
- MRFI Imited
- Kandhhal Group
- Nucleus Software







#### **EDUSAT**

EDUSAT is the first Indian satellite built exclusively for serving the educational sector. It is mainly intended to meet the demand for an interactive satellite-based distance education system for the country. It strongly reflects India's commitment to using the latest technology for national development. It has been introduced in the University to create a virtual classroom with the basic objective of linking various institutes together for higher education.

#### Campus Wide Networking

All the academic departments, hostels, library and other central facilities are interconnected through access points to campus wide wireless network. The power of Internet and its capabilities to support the academic research and studies as well as sharing knowledge is well known. For the same purpose, the University provides internet access through a 1.8 Gbps shared internet connection. The campus network provides services and facilities such as electronic mail, internet and teaching software, office automation software, software utilities, online attendance, video conferencing and printing facilities.

#### Hostel

Hostels are the centres which provide a home away from home to students and foster friendship and brotherhood among them.

The University offers separate hostels for boys and girls. The hostels have single, double and triple occupancy rooms. Each floor of the hostels is furnished with a lounge area, a paritry and lavatory/shower facilities. Other facilities available in each hostel include common rooms, a reading room, a T.V. room and laundry. Hostels have internet facility in each room. Each hostel has its own Warden, Assistant Warden and faculty care-takers, looking after the welfare of its residents.

Students are eligible to apply for hostel admission only upon the confirmation of their admission to a particular course in the University. Allotment of rooms in the hostel is strictly on the 'first come, first serve' basis. Therefore, providing hostel accommodation to all the candidates is not an obligation.

Annual charges for food and lodging are required to be paid in advance at the time of hostel allotment. It will be incumbent on the students admitted in the hostel to join the Mess.

Note: Students (Boys/Girls) admitted in the first year shall be provided with triple and more occupancy rooms. Double and single occupancy rooms, depending upon their availability, are offered to senior students subsequently.

Laundry: laundry Facility is available in all the campus hostels

#### Salient features of the hostels

- Round the dock electricity is provided in the hostel.
- 2. Fully equipped gymnasium.
- Indoor sports facility in the respective common rooms and outdoor sports facility on the campus play-field.









- 4. Hostels are provided with sprawling lush green lawns and beautiful gardens.
- 5. Shaded parking facility is available with full security.
- 6. Mobile tea-shop, with snacks and soft drinks, is available even at night hours for Department which organizes sports meets and female students and hostel canteens are kept open until late at night.

  Sends teams to various inter-university
- The security deployed at the gate of the hostels keeps a close watch on each competitions.
- 8. Round the dockfirst-aid facility is also available in the hostels.
- An ambulance is available round the dock to take students to the Integral Institute of Medical Sciences and Research in case of medical emergency.
- 10. To deal with any untoward incidents such as fire, fire extinguishers and extra water supply through pipe lines are available in all the hostels.

- The University pays special attention to keeping the hostels environmentally hygienic and pollution free.
- 12. Students are properly looked after and taken care of by each and every warden in the respective hostel. Hostel wardens take regular rounds of the hostel rooms and sort out the day-to-day problems of the students efficiently.
- 13. To provide a ragging-free environment in the hostels, wardens are very vigilant so that the students are aware of the consequences thereby and refrain from any kind of indiscipline.
- 14. The chewing of paan masala and smoking on the campus premises are strictly prohibited. Those violating the rule are penalized with fines.

#### **Medical Facilities**

University has a full-fledged and well-equipped medical hospital with three hundred and fifty beds. The hospital now has eight OPDs and eighteen wards, a well-equipped modern Pathology Lab and Radio Diagnosis section.

Qualified and experienced Doctors and Medical Attendants are always available to look after students and employees of the University. A fully equipped ambulance is also available round the dock at the University campus. All emergencies are immediately attended to.

#### Sports and Recreational Activities

The University has a full-fledged Sports Department which organizes sports meets and sends teams to various inter-university competitions.

#### **Public Utilities**

The campus also has a Bank, Post Office and Cooperative offering various services to the students. Multiple canteens are provided to cater to the needs of various faculties.

### **COURSES AT A GLANCE**

PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE
FACULTY OF ENGINEERING			
B.Tech.(Computer Science & Engg.) B.Tech.(Electronics & Comm. Engg.) B.Tech.(Electrical & Electronics Engg.) B.Tech. (Electrical Engg.) B.Tech. (Mechanical Engg.) B.Tech. (Civil Engg.)	10+2 with Physics, Maths & One Subject out of Chemistry/Biotechnology/Computer Science, with a minimum of 45% marks in the aggregate from a recognized Board/University.	4 yrs	Test Course Test Course Test Course Test Course Test Course Test Course
B.Tech. Biotechnology B.Tech. Food Technology	10+2 with Physics, Chemistry & One Subjects out of Mathematics/Biology/ Biotechnology with a minimum of 45% marks in the aggregate from a recognized Board/University.	4 yrs	Test Course
B.Tech.(Lateral Entry) - For Diploma Holders	3 Years Diploma in any Branch of Engg. with a minimum of 50% marks in aggregate from a recognized Board/University.	3 yrs	Test Course
B.Tech.(Lateral Entry) - For B.Sc. Graduates with Science	B.Sc. Degree with a minimum of 50% marks in the aggregate from a recognized university and has passed XII class with Mathematic as a subject	3 yrs	Test Course
B.Tech.(Civil Engg.) Lateral Entry- Evening	3 Years Diploma in any Branch of Engg. with a minimum of 50% marks in the aggregate from a recognized Board/University.	3 yrs	Non-Test Course
B.Tech (Electrical Engg.) Lateral Entry- Evening	3 Year Diploma in any Branch of Engg. with a minimum of 50% marks in the aggregate from a recognized Board/University	3 yrs	Non-Test Course
M.Tech (Electronics Circuit & Systems) Full Time/ Evening	The candidates must have passed B.Tech. / B.E. examination in Electronics Engg. / Electronics & Communication Engg. or M.Sc. in Electronics or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	2/3 yrs	Test Course
M.Tech (Instrumentation & Control) Evening	The candidates must have passed B.Tech. / B.E. in Electrical Engg. / Electrical & Electronics Engg. / Electronics & Instrumentation Engg. or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	3 yrs	Test Course
M.Tech (Power System & Drives) Evening	The candidates must have passed B.Tech. / B.E. examination in Electrical & Electronics Engg./ Electrical Engg. or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	3 yrs	Test Course
M.Tech. (Production & Industrial Engg.) Full Time/Evening	The candidates must have passed B.Tech. / B.E. examination in Mechanical Engg. / Production Engg. or equivalent degree with a minimum of 55% from a recognized University.	2/3 yrs	Test Course

	COURSES AT A GLANCE		- 3
PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE
M.Tech. (Machine Design ) Evening	The candidates must have passed B.Tech. / B.E. examination in Mechanical Engg. / Production Engg. or equivalent degree with a minimum of 55% from a recognized University.	3 yrs	Test Course
M.Tech.(Biotechnology) Full Time/Evening	The candidates must have passed B.Tech. / B.E. examination in Bio-technology / Biochemical Engg. / M.Sc. in Life Science or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	2/3 yrs	Test Course
M.Tech (Bioinformatics) Full Time	The candidates must have passed B.Tech. / B.E. examination in Bio-technology / Biochemical Engg. / M.Sc. in Life Science or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	2 yrs	Test Course
M.Tech.(Structural Engg.) Full Time/ Evening	The candidates must have passed B.Tech./B.E. examination in Civil Engg. or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	2/3 yrs	Test Course
M.Tech.(Environmental Engg.) Full Time/Evening	A candidate must have passed B.Tech./B.E examination in Civil Engg./Biotech. Engg./Environmental Engg./Petroleum Engg. or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	2/3 yrs	Test Course
M.Tech.(Computer Science & Engg.) Evening	The candidates must have passed B.Tech. / B.E. examination in Comp. Sci. & Engg./ Electronics Engg./Information Technology/M.C.A. or equivalent degree with a minimum of 55% marks in the aggregate from a recognized University.	3 yrs	Test Course
FACULTY OF AGRICULTURE SCI	ENCE & TECHNOLOGY		
B.Tech.(Agricultural Engineering)	10+2 or equivalent with Physics, Chemistry & Mathematics (PCM) / Physics, Chemistry, Mathematics & Biology (PCMB) / Agriculture with a minimum of 50% marks in the aggregate from a recognized Board/University.	4 yrs	Test Course
B.Sc.(Hons) Agriculture	10+2 or equivalent with Physics, Chemistry & Mathematics (PCM) /Physics, Chemistry & Biology (PCB) / Physics, Chemistry, Mathematics & Biology (PCMB) / Agriculture with a minimum of 50% marks in the recognized Board/University		Test Course
B.Sc.(Hons) Hortirculture	10+2 or equivalent with physics, Chemistry & Mathematics (PCM) /Physics, Chemistry & Biology (PCB) Physics, Chemistry, Mathematics & Biology (PCMB) / Agriculture with a minimum of 50% marks in the aggregate from a recognized board/University.	/ 4yrs	Test Course
B.Sc.(Hons) Forestry	10+2 or equivalent with physics, Chemistry & Mathematics (PCM) /Physics, Chemistry & Biology (PCB) Physics, Chemistry, Mathematics & Biology (PCMB) / Agriculture with a minimum of 50% marks in the aggregate from a recognized board/University.	) / 4 yrs	Test Course

COURSES AT A GLANCE					
PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE		
B.Sc.(Hons) Home Science	10+2 or equivalent with Physics, Chemistry & One Subject out of Mathematics/Biology/ Agriculture /Home Sc. with a min. of 50% marks in the aggregate from a recognized Board/University	4 yrs	Non-Test Course		
Master in Agri-Business Management (M.A.B.M.)	B. Tech with Agricultural Engg./Biotechnology/B.Sc.(Hons.)- Forestry/Agriculture/ Horticulture/ Food Tech./Dairy Tech./Vet. Science & Animal Husbandry/Home Science with minimum of 50% marks in the aggregate from a recognized University	2yrs	Test Course		
FACULTY OF SCIENCE					
B.Sc. (Hons.) Biotechnology	10+2 or equivalent with Physics, Chemistry & Biology/ Biotechnology with a minimum of 50% marks in the aggregate from a recognized Board/University.	3 yrs	Non-Test Course		
B.Sc. (Hons.) Industrial Chemistry	10+2 in science with a minimum of 50% marks in the aggregate from a recognized Board/University.	3 yrs	Non-Test Course		
M.Sc.(Biotechnology)	B.Sc.with Biotechnology/ Biological Sci./ Agriculture/ B.V.Sc./ B.Sc. Hons.(Biotechnology) with a minimum of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		
M.Sc.(Microbiology)	B.Sc.with Biotechnology/Microbiology/Biological Sci./Agriculture/ B.V.Sc./B.Sc. Hons. (Biotech.) with a min. of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		
M.Sc.(Biochemistry)	B.Sc./B.Sc.(Hons.) with Biochemistry/Biotechnology/Microbiology/Life Sci./Biological Sci./Agriculture/B.V.Sc. with a min. of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		
M.Sc.(Bioinformatics)	B.Sc. with Biological Science/Physical Science/B.Tech./B.E./ B.Pharm./ B.V.Sc. with a minimum of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		
M.Sc.(Industrial Chemistry)	B.Sc.with Chemistry/ B.Sc.(Hons.) Chemistry with a min. of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		
M.Sc.(Physics) (Specialization 'Electronics')	B.Sc. with Physics, Chemistry and Mathematics (Physics should be a compulsory subject upto 3rd year)with a minimum 50% marks in the aggregate from a recognized University	2 yrs	Test Course		
M.Sc.(Mathematics)	B.Sc. with Mathematics (Mathematics must be a compulsory subject upto 3rd year) with a minimum of 50% marks in the aggregate from a recognized University	2 yrs	Test Course		
Post Graduate Diploma in Industrial Safety Health & Environment (PGDISHE)	A Bachelor Degree of Engg. in any discipline /B.Sc. in Science with a minimum of 50% marks in the aggregate from a recognized University.	l yr	Non-Test Course		

COURSES AT A GLANCE					
PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE		
FACULTY OF ARCHITECTURE					
B.Arch. (Bachelor of Architecture)	10+2 with 50% marks in aggregate & with Mathematics as a compulsory subjects from a recognized Board/University.  Candidates holding 3 years Diploma( $10+3$ ) with 50% marks in the aggregate, are also eligible.	4+1 yrs	Test Course		
M.Arch.(Full Time/ Part time)	B.Arch. or equivalent with a min. of 55% marks in the aggregate from a recognized University.	2/3 yrs	Non-Test Course		
FACULTY OF PHARMACY					
D.Pharm.	10+2 with Physics, Chemistry and (Maths/ Computer Science/ Biology/ Biotechnology) with a minimum of 50% marks in the aggregate from a recognized Board/University.	2 yrs	Non-Test Course		
B.Pharm.	10+2 with Physics, Chemistry and (Maths/ Computer Science/ Biology/ Biotechnology) with a minimum of 45% marks in the aggregate from a recognized Board/University.	4 yrs	Test Course		
Pharm. D.	10+2 with Physics, Chemistry and Maths/Biology with a minimum of 50% marks in the aggregate from a recognized Board/University.	5 yrs	Test Course		
M.Pharm.	B.Pharm. with a minimum of 50% marks in the aggregate. weightage will be given to GPAT qualified candidates.	2 yrs	Test Course		
B.Pharm.(Lateral Entry)	D.Pharm. with a minimum of 50% marks in the aggregate.	3 yrs	Test Course		
FACULTY OF COMPUTER APPL	CATION				
B.C.A.	10+2 in any discipline with a min. of 50% marks in the aggregate from a recognized Board/university.	3 yrs	Non-Test Course		
M.C.A.	A Bachelor's Degree of Min. 3 yrs Duration with mathematics at $10+2$ level or at graduate level with a minimum of 50% marks in the aggregate from a recognized University.	3 yrs	Test Course		
M.C.A. (Lateral Entry)	A Bachelor's Degree of Min. 3 yrs. Duration in B.C.A., B.Sc(I.T./Computer Science) with mathematics as a course at $10+2$ level or at graduate level with a minimum of 60% marks in the aggregate from a recognized University.	2 yrs	Test Course		
FACULTY OF MANAGEMENT AI	ND RESEARCH				
B.B.A	10+2 in any discipline with a min. of 50% marks in the aggregate from a recognized Board/University.	3 yrs	Non-Test Course		
M.B.A.	(10+2+3) in any discipline with a min. of 50% marks in the aggregate from a recognized University.	2 yrs	Test Course		

COURSES AT A GLANCE					
PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE		
M.B.A. (Agri-Business)	B. Tech with Agricultural Engg./Biotechnology/B.Sc(Forestry/Agriculture/Horticulture/Food Tech./Dairy Tech./Vet. Science & Animal Husbandry/Home Science with a minimum of 50% marks in in the aggregate from a recognized University	2 yrs	Test Course		
B.Com. (Hons.)	(10+2) in Commerce or Science (with Maths) with a minimum of 50% marks in the aggregate from a recognized Board/University.	3 yrs	Non-Test Course		
FACULTY OF HEALTH AND MED	DICAL SCIENCES				
M.B.B.S.	A candidate must have passed $(10+2)$ in the subjects of Physics, Chemistry, Biology and English Individually and must have obtained a min. of 50% marks taken together in Physics, Chemistry & Biology at the qualifying examination.	4½ yrs	Through IUPMT-2015		
B.P.Th.	10+2 with Physics, Chemistry & Biology with a minimum of 50% marks in the aggregate from a recognized Board/University.	4 yrs	Non-Test Course		
B.P.Th.(Lateral Entry)	D.P.Th. with a minimum of 60% marks in the aggregate, recognized from State Medical Faculty.	3 yrs	Non-Test Course		
M.P.Th. (Musculoskelatan, Neurology, Candiopulmonar & Sports Medicine)	B.P.T./ B.P.Th. with a minimum of 55% marks in the aggregate from recognized University.	2 yrs	Non-Test Course		
M.Sc. (Medical Anatomy)	M.B.B.S./B.D.S./B.H.M.S./B.A.M.S./B.U.M.S./B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. in Life Sciences or B.Sc. with Anthropology as the major subject or a degree equivalent to the above from any recognized University with a minimum of 50% marks in the aggregate.	2/3 yrs	Non-Test Course		
M.Sc. (Medical Physiology)	M.B.B.S./B.D.S./B.H.M.S./B.A.M.S./B.U.M.S./B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. in life Sciences or a degree equivalent to the above from any recognized University with a minimum of 50% marks in the aggregate.	2/3 yrs	Non-Test Course		
M.Sc. (Medical Biochemistry)	M.B.B.S./B.D.S./B.H.M.S./B.A.M.S./B.U.M.S./B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. with Anthropology as the major subject or a degree equivalent to the above from any recognized University with a min. of 50% marks in the aggregate.	2/3 yrs	Non-Test Course		
M.Sc. (Medical Microbiology)	M.B.B.S./B.D.S./B.H.M.S./B.A.M.S./B.U.M.S./B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Botany as the major subjects or B.Sc in Life Sciences as the major subjects or a degree equivalent to the above from any recognized University with a min. of 50% marks in the aggregate	2/3yrs	Non-Test Course		
FACULTY OF EDUCATION					
B.Ed.	A Graduate or Post Graduate degree in any stream with a min. of 50% marks in the aggregate from a recognized University.	2 yrs	Non-Test Course		

### **COURSES AT A GLANCE**

PROGRAMME	ELIGIBILITY	DURATION	TEST / NON TEST COURSE
M.Ed.	B.Ed. with a minimum of 55% marks in the aggregate from a recognized University.	2 yrs	Non-Test Course
FACULTY OF LIBRARY & INFORM	IATION SCIENCE		
M.L.I.Sc.	A candidate must have passed B.L.I.Sc./B.Lib.Sc. with a minimum of 50% marks from a recognized university.	I yrs.	Non-Test Course
FACULTY OF HUMANITIES & SO	CIAL SCIENCE		
M.A. (English)	B.A. in English as one of the subjects (upto 3rd year) with a minimum of 50% marks in the aggregate from a recognized University	2 yrs.	Non-Test Course
Master of Social Work (MSW)	Graduate in any discipline with a min. of 50% marks in the aggregate from a recognized university.	2 yrs.	Non-Test Course
Certificate of proficiency in Arabic	Secondary school certificate from ICSE/CBSE/Board of high-school & Intermediate or an equivalent examination with not less than 45% marks in the aggregate.	l yrs.	Non-Test Course
Certificate of proficiency in French	Secondary school certificate from ICSE/CBSE/Board of high-school & Intermediate or an equivalent examination with not less than 45% marks in the aggregate.	l yrs.	Non-Test Course
Certificate of proficiency in German	Secondary school certificate from ICSE/CBSE/Board of high-school & Intermediate or an equivalent examination with not less than 45% marks in the aggregate.	l yrs.	Non-Test Course
Diploma in Arabic	Certificate of proficiency in Arabic language or an equivalent examination with not less than 45% marks in the aggregate.	l yr.	Non-Test Course
Diploma in French	Certificate of proficiency in French language or an equivalent examination with not less than 45% marks in the aggregate.	lyr.	Non-Test Course
Diploma in German	Certificate of proficiency in German language or an equivalent examination with not less than 45% marks in the aggregate.	l yr.	Non-Test Course
UNIVERSITY POLYTECHNIC			
Diploma in Chemical Engg.		3 Yrs.	Test Course
Diploma in Civil Engg.		3 Yrs.	Test Course
Diploma in Electrical Engg.		3 Yrs.	Test Course
Diploma in Electronics Engg.		3 Yrs.	Test Course
Diploma in Mechanical Engg.		3 Yrs.	Test Course
Diploma in Mechanical Engg. (Automobile)	A candidate must have passed 10th standard or equivalent examination with Mathematics and	3 Yrs.	Test Course
Diploma in Civil (Construction	Science from a recognized Board/University.	3 yrs.	Test Course
Management & Safety) Engineering			
Diploma in Architecture Engg.		3 yrs.	Test Course
Diploma in Civil Engg. (Evening)		3 yrs.	Non-Test Course
Diploma in Electrical Engg. (Evening)		3 yrs.	Non-Test Course
Diploma in Mechanical (Production)		3 yrs.	Non-Test Course
Engineering (Evening)			

 $\label{temperature} \textbf{Test Course} = \textbf{In these courses candidates are required to appear in written entrance test.} \ \textbf{The selection shall be made according to marks obtained in written test.}$ 

Non-Test Course = In these courses candidates are not required to appear in written entrance test The selection shall be made strictly on merit prepared on the basis of marks obtained by the candidate in the qualifying examination and interview where it is prescribed, conducted by the concerning department.

Important Note:

Candidates who have appeared in the Intermediate Examination of the year 2015 and have also applied for admission in any Non-Test Undergraduate Course of this University should submit the Marks Sheet of the qualifying examination latest by 6<sup>th</sup> June, 2015.

### FEE STRUCTURE AT A GLANCE

S.N. Programme	I" Installment of the year	IInd Installment of the year
	(To be Deposited at the time of Admission)	(To be Deposited before 31 <sup>st</sup> December 2015)
I. B.Tech Computer Sci. & Engg.	₹70000/-	₹ 50000/-
2. B.Tech Electronics & Comm. Engg.	₹70000/-	₹ 50000/-
3. B.Tech Electrical & Electronics Engg.	₹ 70000/-	₹ 50000/-
4. B.Tech Electrical Engg.	₹70000/-	₹ 50000/-
5. B.Tech Mechanical Engg.	₹70000/-	₹ 50000/-
6. B.Tech Civil Engg.	₹70000/-	₹ 50000/-
	₹70000/-	₹ 50000/-
7. B.Tech Biotechnology	₹ 70000/- ₹ 70000/-	
8. B. Tech Food Technology		₹ 50000/-
9. B.Tech Agricultural Engg.	₹70000/-	₹ 50000/-
10. B.Tech Civil Engg. (Lateral Entry) - Evening Classes	₹70000/-	₹ 50000/-
11. B.Tech Electrical Engg. (Lateral Entry) - Evening Classes	₹70000/-	₹ 50000/-
12. B.Tech (Lateral Entry) - For Diploma Holder	₹ 70000/-	₹ 50000/-
13. B.Tech (Lateral Entry) - For B.Sc. Graduation with Science	₹70000/-	₹ 50000/-
14. M.Tech Power Systems & Drives- Evening	₹ 30000/-	₹ 20000/-
15. M.Tech Electrionics Circuit & Systems (Full Time)	₹ 50000/-	₹ 30000/-
16. M.Tech Electrionics Circuit & Systems (Part Time) - Evening Classes	₹30000/-	₹ 20000/-
17. M.Tech Instrumentation & Control (Part Time) - Evening Classes	₹ 30000/-	₹ 20000/-
18. M.Tech Production & Industrial Engg. (Full Time)	₹ 50000/-	₹ 30000/-
19. M. Tech Production & Industrial Engg. (Part Time) - Evening Classes	₹30000/-	₹ 20000/-
20. M.Tech Machine Design (Part Time) - Evening Classes	₹30000/-	₹20000/-
21. M.Tech Biotechnology (Full Time)	₹ 50000/-	₹30000/-
22. M.Tech Biotechnology (Part Time) - Evening Classes	₹ 30000/-	₹ 20000/-
23. M. Tech Bioinformatics (Full Time)	₹ 50000/-	₹ 30000/-
24. M.Tech Structural Engg. (Full Time)	₹ 50000/-	₹3000/-
25. M.Tech Structural Engg. (Part Time) - Evening Classes	₹ 30000/-	₹ 20000/-
26. M.Tech Environmental Engg. (Full Time)	₹ 50000/-	₹30000/-
27. M.Tech Environmental Engg. (Fart Time) - Evening Classes	₹30000/-	₹ 20000/-
27. M. Tech Environmental Engs. (Fart Time) - Evening Classes	₹ 30000/-	₹ 20000/-
28. M. Tech Comp.Sci.&Engg. (Part Time) - Evening Classes	<b>C</b> 30000/-	
29. B.Sc. (Hons.)- Agriculture	₹25000/-	₹15000/-
30. B.Sc. (Hons.)- Horticulture	₹25000/-	₹15000/-
31. B.Sc. (Hons.)- Forsetry	₹ 25000/-	₹ 15000/-
32. B.Sc. (Hons.)- Home Science	₹ 25000/-	₹15000/-
33. B.Sc. (Hons) Biotechnology	₹30000/-	₹ 20000/-
34. B.Sc. (Hons) Industrial Chemistry	₹ 20000/-	₹10000/-
35. M.Sc Physics (Specialization `Électronics`)	₹ 25000/-	₹ 15000/-
36. M.Sc Mathematics	₹ 25000/-	₹15000/-
37. M.Sc Biotechnology	₹30000/-	₹ 20000/-
38. M.Sc Biochemistry	₹ 25000/-	₹15000/-
39. M.Sc Bioinformatics	₹ 25000/-	₹ 15000/-
40. M.Sc Microbiology	₹ 25000/-	₹ 15000/-
41. M.Sc Industrial Chmeistry	₹ 25000/-	₹ 15000/-
42. M.A.B.M ( Masters in Agri-Business Management)	₹ 30000/-	₹ 20000/-
43. Post Graduate Diploma in Industrial Safety Health & Enviroment (PGDISHE)	₹ 20000/-	₹ 15000/-
44. B.Arch.	₹ 60000/-	₹ 40000/-
45. M.Arch. (Full Time)	₹ 50000/-	₹3000/-
46. M.Arch. (Part Time)	₹ 45000/-	₹ 25000/-
47. D.Pharm.	₹3000/-	₹ 20000/-
48. B.Pharm.	₹ 60000/-	₹ 40000/-
	₹ 80000/-	₹ /000/-
49. Pharm .D.	₹ 80000/-	₹ 60000/-

### FEE STRUCTURE AT A GLANCE

S.N. Programme	I <sup>st</sup> Installment of the year (To be Deposited at the time of Admission)	II <sup>nd</sup> Installment of the year (To be Deposited before 31 <sup>st</sup> December 2015)
50, M.Pharm.	₹ 60000/-	₹ 40000/-
51. B.Pharm. (Lateral Entry For Diploma Holder)	₹ 60000/-	₹ 4000/-
52. B.C.A.	₹30000/-	₹ 20000/-
53. M.C.A.	₹ 45000/-	₹ 25000/-
54. M.C.A. (Lateral Entry)	₹ 60000/-	₹ 40000/-
55. B.B.A.	₹35000/-	₹ 25000/-
56. M.B.A.	₹ 60000/-	₹ 40000/-
57. M.B.A. (Agri Business)	₹ 60000/-	₹ 40000/-
58. B.Com. (Hons.)	₹ 20000/-	₹ 10000/-
59. M.B.B.S.	₹ 90000/-	per annum
60. B.P.Th.	₹35000/-	₹ 25000/-
61. B.P.Th. (Lateral Entry)	₹35000/-	₹ 25000/-
62. M.P.Th. (Musculoskelatal, Neurology, Cardiopulmonary & Sports Medicine)	₹ 50000/-	₹3000/-
63. M.Sc. (Medical Anatomy)	₹30000/-	₹ 20000/-
64. M.Sc. (Medical Physiology)	₹3000/-	₹ 20000/-
65. M.Sc. (Medical Physiology)	₹3000/-	₹ 20000/-
66. M.Sc. (Medical Microbiology)	₹3000/-	₹ 20000/-
67. B.Ed.	₹ 45000/-	₹ 30000/-
68. M.Ed.	₹3500/-	₹ 25000/-
69. M.L.I.Sc.	₹ 2000/-	₹ 10000/-
70. M.A. in English	₹ 20000/-	₹ 10000/-
71. Master of Social Work (MSW)	₹ 25000/-	₹ 15000/-
71. Plaster of Social Work (1997) 72. Certificate of proficiency in Arabic	₹ 6000/-	(13000)-
73. Certificate of proficiency in French	₹ 6000/-	
74. Certificate of proficiency in German	₹ 6000/-	
75. Diploma in Arabic	₹ 10000/-	
76. Diploma in French	₹ 10000/-	
77. Diploma in German	₹ 10000/-	
78. Diploma in Civil Engg.	₹ 25000/-	₹ 15000/-
79. Diploma in Mechanical Engg.	₹ 25000/-	₹ 15000/-
80. Diploma in Mechanical Engg. (Automobile)	₹ 25000/-	₹ 15000/-
81. Diploma in Electrical Engg. (Automobile)	₹ 25000/-	₹ 15000/-
82. Diploma in Electronic Engg.	₹ 25000/-	₹ 15000/-
83. Diploma in Chemical Engg.	₹ 25000/-	₹ 15000/-
84. Diploma in Civil (Construction Management & Safety)	₹ 25000/-	₹ 15000/-
85. Diploma in Architechture Engg.	₹ 25000/-	₹ 15000/-
86. Diploma in Civil Engg. (Evening)	₹ 25000/-	₹ 15000/-
87. Diploma in Mechanical Engg. (Production) Evening	₹ 25000/-	₹ 15000/-
88. Diploma in Electrical Engg. (Evening)	₹ 25000/-	₹ 15000/-
Last date of submission of form is <b>April 10<sup>th</sup></b> , <b>2015</b> Cheques will be accepted.  Last Date of submission of form alongwith Late Fee i.e. 8 The caution money deposited by the students at the		Single Occupancy Room ₹60,000/- Double Occupancy Room ₹55,000/-
₹300/- is <b>April 20</b> <sup>th</sup> , <b>2015</b> . of admission in the University shall be refunded o		Triple / More Occupancy Room ₹ 50,000/-
3 Architecture students are also required to pay NATA Fee completion of the course or withdrawl after clear	ring all • ₹1000/- for Test Courses	Mess Deposits (Refundable) ₹ 5,000/-
of ₹200/- and Educational Tour Fee of ₹1200/- the dues. The same shall be claimed within 12 m		Laundry Charges (Compulsory) ₹4,800/-
4 Students shall have to go for Summer Training / Project otherwise it will be forfeited. The caution money s		M.B.B.S. Fee Details
work arranged by the CCG & D or by themselves. transferred into the account of the students in the b	pranch Application form can also be downloaded from university	Tuition Fee ₹9,00,000/- peryear
5 Please visit the Integral University website for NRI fee of Punjab National Bank situated in the campi		Security Fee ₹1,00,000/- (one time refundable)
structure. students are advised to open their account in the		Hostel Fee ₹1,00,000/- per year
6 Bus Fee will be charged on the basis of location / distance. branch and provide the account number i		Enrollment Fee ₹35,000/- (one time)
7 The fee shall be paid only through DD drawn in favour of concerned section.	Hostel & Mess Fee per year :	
"Treasurer, Integral University", Lucknow. No Cash / 9 The students should ensure that his/her perm	aneny	









### Important Information & Rules

 Any candidate who has been admitted to the University shall have to abide by the University rules and regulations, or any other amendments made therein from time to time. No litigation shall therefore be tenable.

Every student must carry/bear his/her identity card while being

in campus.

 Students should be regular and punctual in classes, extracurricular/co-curricular activities from the start to the end of the semester.

Ragging and eve-teasing is strictly prohibited.

 Students should follow a decenit dress code when they come to the university.

Students are expected to be have in a responsible manner and

maintain the decorum.

 Ragging is totally prohibited on and off the campus, if any candidate is found indulging in any form of ragging, he/she is

liable to be punished as per University rules.

• This University strictly follows the directions of the Hor/ble Supreme Court and regulations of the University Grants Commission for preventing and curbing the menace of ragging in Educational Institutions. These regulations, in full, are displayed on notice boards and are also posted on the website of this University. All the candidates, in their own Interest, are advised to study and follow these regulations in both letter and spirit during their studies and stay in this University. Similarly a complaint committee of women against sexual harassment has also been formed to deal with any such unitoward cases, as per the directions of the Hon/ble Supreme Court of India.

Admission entitlement is not by virtue of a right, even if a

candidate is otherwise eligible.

 50% of total seats are reserved for Muslim minorities and 50% of the seats are open. Reservation for girls, physically handicapped and NRI are also available within these categories.

 Candidates shall have to submit a transfer/migration certificate, from the university or college where he/she was studying earlier, at the time of reporting for admission to a course in this

University.

 At any stage, if it is found that a candidate has used some fraudulent means to seek admission, or has made incorrect statement (s), he/she shall not be granted admission or if already admitted, such admission shall be cancelled at any stage.

Applications of the candidates whose qualifying examinations are recognized by the University shall only be considered for

admission.

 During processing or verification of the documents, if any error or omission is found, the University shall have the right to cancel such admissions.

Eligibility criteria shall not be relaxed.

 The candidate must himself/herself ensure his/her eligibility to appear in the entrance examination. If a candidate, who is ineligible to appear in the examination, does so, he/she will not have any claim whatsoever on admission.

Candidates are required to produce the original documents such as marks sheet and certificates of the qualifying examination at the time of interview/ reporting for admission. Candidates in respect of whom, the result of the qualifying examination has not been declared by the date of admission, due to any reason whatsoever, shall not be eligible for admission under any circumstances.

 The candidates selected for admission counselling to different courses shall be intimated by post. The applicant can also check the admission counselling dates from Integral University website. The University shall not be responsible for any delay

or non delivery of letter.

 The chance of candidate not reporting for the admission on the due date and time, shall be forfeited and the offer of admission shall be made to the next candidate in order of merit. No correspondence in this regard shall be entertained.

 No intimation shall be sent to the students not selected and their application / fee / photocopy of certificates / documents

shall not be returned.

Canvassing in any form shall render an applicant disqualified.

 Application form shall be filled in applicant's own handwriting with utmost care to avoid rejection.

No candidate shall be allowed to take admission

simultaneously in two courses.

 Late applications / incomplete applications / applications without requisite fee / application not submitted on the prescribed form, shall not be entertained.

 No candidate shall be allowed to take admission in the same course / dass (or its equivalent course) which he/she has

already passed.

 The university has not appointed any consultant or outside agency for admission. Candidates should remain cautious and directly contact the university office for any query or assistance regarding admission.

 The candidates should not make any payment anywhere except at the university accounts office and obtain a proper

receipt.

 A full-time student of this university will not be allowed to join any full time or part-time job anywhere. If found otherwise, his/her admission will stand cancelled.

All disputes / legal matters shall be covered under Lucknow

jurisdiction only.

The University has the following rights

Not to disclose the marks obtained by a candidate in any

admission test/interview/aptitude test etc.

Not to admit a candidate to a course of study, even if a notification inviting applications for admission to the same has been issued, if the number of applications received for admission is less than 40% of the sanctioned intake for a particular course.

Not to admit any of the candidates on valid grounds without

intimating reasons to candidate / parents.

# Faculty of Engineering

#### **UNDER GRADUATE COURSES**

(A) Course of Study - Bachelor of Technology

B. Tech, programmes are available in the following branches:

Branch	Intake	Duration	Branch	Intake	Duration
Computer Science and Engg.	180°	4 yrs.	Mechanical Engg.	*OB1	4 yrs.
Electronics & Comm. Enge.	60°	4 yrs.	Electrical Engg.	60	4 yrs.
Biotechnology	60*	4 yrs.	Electrical & Electronics Engg.	60	4 yrs.
Food Technology	60	4 yrs.	Civil Engg.	180*	4 yrs.

<sup>\* (</sup>A maximum of 30 seats shall be reserved within this intake for Dual Degree Programmes in 8. Tech - M. Tech.). Lateral Entry Classes shall be held in two shifts.

B. Tech. (Lateral Entry) in Civil Engg.:

Evening Classes for Three Years Diploma Holders with an intake of 60.

B. Tech. (Lateral Entry) in Electrical Engg.: Evening Classes for Three Years Diploma Holders with an intake of 40.

#### (B) ELIGIBILITY

I. B.Tech.:

A candidate must have passed 10+2 with Physics, Maths and Chemistry / Biotech. / Computer Science with a minimum of 45% marks in aggregate from a recognized Board/University.

II. B.Tech. (Blotechnology / Food Technology)

A candidate must have passed 10+2 with Physics, Chemistry and Maths /Computer Science / Biology /Biotech. with a minimum of 45% marks in aggregate from a recognized Board/University.

Ili. B. Tech: (Lateral Entry) for Diploma Holders:

A candidate must have passed 3 years diploma in any branch of Engineering with a minimum of 50% marks in aggregate.

M. B.Tech. (Lateral Entry) for B.Sc. Graduates:

A candidate must have passed B.Sc. with a minimum of 50% marks in aggregate from a recognized university and also have passed XII class with Mathematics as a subject.

#### (C) MODE OF ADMISSION

Through combined Entrance Test of IUET-2015.

ii. For details of the test refer to the section "Important Instructions & Syllabi: IUET - 2015.

ii. List of the candidates selected for counselling to B. Tech Programme on the basis of merit in the entrance test shall be displayed on the notice board/website of the university on 18th May 2015.

iv. An intimation letter shall also be sent to selected candidates for communicating the date of counselling on which they have to report for completing admission formalities.

v. Admission to B. Tech. programmes shall be carried out through the counselling and according to the merit of the Entrance Test.

vi. NRI/left over seats shall be filled on the basis of merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.











#### **POSTGRADUATE COURSES**

(A) COURSE OF STUDY - Master of Technology The field of specialization of various M.Tech. programmes offered are:

#### **ELECTRONICS & COMM. ENGINEERING Bectronic Circuit & Systems**

	Intake	Duration
Full Time	30	2 yrs.
Evening	20	3 yrs.
ELECTRICAL ENGINEERING Instrumentation & Control		
Evening	20	3 yrs.
MECHANICAL ENGINEERING		
Production & Industrial Engg.		
Full Time	30	2 yrs.
Evening	20	3 yrs.
Machine Design		10.00
Evening	20	3yrs.
ELECTRICAL & ELECTRONICS E Power System & Drives	NGINEER	ING

Evening	20	3 yrs.
CMLENGINEERING		
Structural Engg.		
Full Time	30	2 yrs.
Evening	20	3 yrs.
Environmental Engg.		
Full Time	30	2 yrs.
Evening	20	3 yrs.

#### BIOENGINEERING Blotschnology Full Time 30 2 yrs. Evening 3 yrs. Bioinformatics

#### COMPUTER SCIENCE & ENGG.

Computer	Science	å	Engg.	
Evening				

Full Time

#### (B) ELIGIBILITY

1. M.Tech. (Electronic Circuit & Systems): The candidates must have passed B.Tech. / B.E. examination in Electronics Engg. / Electronics & Communication Engg. or M.Sc. in Electronics or equivalent degree with a minimum of 55% marks in aggregate from a recognized University.

2. M.Tech. (Instrumentation & Control): The candidates must have passed B.Tech. / B.E. in Bectrical Engr. / Bectrical & Electronics Engg. / Bectronics & Instrumentation Engg. or equivalent degree with a minimum of 55% marks in aggregate

from a recognized University.

3. M.Tech. (Production & Industrial Engg): The candidates must have passed B.Tech. / B.E. examination in Mechanical Engg. / Production Engg. or equivalent degree with a minimum of 55% marks from a recognized University.

4. M.Tech.-(Machine Design): The candidates must have passed B.Tech. / B.E. examination in Mechanical Engs. / Production Engg. or equivalent degree with a minimum of 55%

marks from a recognized University.

5. M.Tech. (Structural Engq.): The candidates must have passed B. Tech./B.E. examination in Civil Engr. or equivalent degree with a minimum of 55% marks in aggregate from a

recognized University. 6. M.Tech. (Environmental Engg.): A candidate must have passed B. Tech./B.E examination in Civil Engg/Biotech. Engg/ Environmental Engg./Petroleum Engg. or equivalent degree with a minimum of 55% marks in aggregate from a recognized

University.

2 yrs.

3 yrs.

7. M.Tech. (Blotechnology): The candidates must have passed B.Tech. / B.E. examination in Bio-technology / Biochemical Engg. / M.Sc. in Life Science or equivalent degree with a minimum of 55% marks from a recognized University.

8. M.Tech (Bioinformatics): The candidates must have passed B.Tech. / B.E. examination in Bio-technology / Biochemical Engg. / B. Pharm. / M.Sc. in Life Science or equivalent degree with a minimum of 55% marks from a recognized University.

9. M.Tech (Computer Science & Engg.): The candidates must have passed B.Tech. / B.E. examination in Comp. Sci. & Engg./ Bectronics Engg./Information Technology/M.C.A. or equivalent degree with a minimum of 55% marks in appreciate from a recognized University.

10.M.Tech (Power System & Drives): The candidates must have passed B.Tech. / B.E. examination in Electrical & Electronics Engr./Electrical Engr. or equivalent degree with a minimum of 55% marks in aggregate from a recognized University.



#### (C) REQUIREMENTS

- Candidates applying for admission to M. Tech. courses shall submit attested photocopies
  of marks sheet/grades sheet of qualifying examinations from first year to final year.
- Candidates appearing in final year B.Tech./B.E./M.C.A./M.Sc. Examination may also apply. However, they have to submit the self-attested copy of their final year mark sheet /grade sheet at the time of admission.

#### (D) ADMISSION

An objective type written test of one hour duration shall be conducted by the respective department followed by an interview. The candidates are advised to reach Integral University. Lucknow on the date and time given below. No separate intimation letter for test / interview shall be sent to candidates.

Course Test Date Time M.TECH. 13° june 2015 9:30 am

(Electronics Circuit & Systems/Environmental Engg./Production & Industrial Engg./Machine Design /Structural Engg./Computer Sd. & Engg/Biotechnology/ Bioinformatics/Instrumentation & Control Engg.)/Power System & Drives

Interviews shall be conducted immediately after the evaluation of the written test. The list of candidates selected for admission shall be displayed on 19<sup>th</sup> June 2015 on the notice board / website of the University.

#### (E) RESERVATIONS

50% of the total intake is reserved for the minority community.

#### INTEGRATED DUAL DEGREE PROGRAMME

It will be a five-year programme. On the completion of the programme, B. Tech.-M. Tech. degree would be awarded to successful candidates. For deficient students having back papers, the department may review their progress after the completion of first seven semesters and may recommend them for a single B. Tech. degree.

The students will have the option regarding continuation in the Dual Degree Programme or to curtail it for a single B. Tech. degree only upto the third year. Thereafter, no changes shall be accepted.

#### DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.





# Faculty of Architecture

#### **ARCHITECTURE**

Study of Architecture, concerned with design and construction of buildings, offers a wide range of career opportunities in government and private sector. However, the most endearing option, preferred by architects, is self-employment, where in addition to equitable financial rewards, the profession ensures the satisfaction of the development of economic and rural uplift, recognized by economic planners and social, scientists, it now provides unlimited employment opportunities in the new scheme of major thrust areas of all governmental policies.

Faculty of Anchitecture, Integral University runs 4+1-years undergraduate degree programmes in architecture leading to the award of Degree of Anchitecture. The B.Anch. course of the University are duly recognized by the Council of Anchitecture, India. In addition, the Faculty also has post graduate programmes, both full and part-time, and a research programme (Ph.D.) for candidates having academic and research interests.

#### **UNDER GRADUATE COURSES**

(A) COURSE OF STUDY

Course	Intalos	Duration
B.Arch.	70	4+1 yrs.

#### (f) B. Arch. - Curriculum

The curriculum of B.Arch, undergraduate programme lays stress on creative development, visual communication and the technical inputs necessary for an architect. In consonance with the state-of-the-art infrastructure available in the University, the emphasis on knowledge of architectural software and the wide variety of electives offered, ensure for the students' diversification to other career options and better placements. The degree holders in architecture have 100% placement-salaried on self-employment.

#### (B) ELIGIBILITY

(f) The candidate must have passed 10+2 evern, with at least 50% marks in aggregate with Mathematics as a compulsory subject from a recognized Board/ University.

O

(II) 10+3 year Diploma (any stream) recognized by State Governments with 50% marks in the aggregate.

#### (C) MODE OF ADMISSION

- Through an Aptitude Test in Architecture to be held along with combined Entrance Test: IUET – 2015.
- For details of the test, refer to section "Important Instructions & Syllabi: IUET-2015."
- iii. The list of the candidates according to their order of merit in entrance examination and selected for counseling to B.Arch. Course shall be displayed on Notice Board/ Website of the University on 18" May 2015. However, the intimation letter shall be sent only to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- iv. NRI / left over seats shall be filled on the basis of combined merit of the qualifying examination and an Aptitude Test like National Aptitude Test in Architecture (NATA), AIEEE or UPSEE etc.

#### NOTES:

(I) NATA (National Aptitude Test in Architecture) is conducted by National Institute of Advanced Studies (NIASA) of the Council of Architecture (COA), which is offered between April to September every year at designated test centers in India. Details about NATA can be downloaded from COA's website www.coa.gov.in or www.nata.in. Integral University, Lucknow is one of the authorized Test Centre for NATA exam of the Council of Architecture (COA).



- (2) As per COA, only such candidates will be admitted to B.Arch. course, who have qualified an Aptitude Test in Architecture with minimum 40% marks.
- (3) Any new guidelines / directives, if issued by COA, shall be followed.
- (4) Direct admission (Lateral Entry) to second year (for diploma holders) shall not be made.

#### (D) RESERVATION

50% of the total intake is reserved for the candidate from the minority community.

#### (E) ADMISSION

The list of the candidates selected for admission to B.Arch course shall be displayed on the Notice Board / website of the University. However, the intimation letter shall only be sent to selected candidates communicating the date on which they have to report for completing the admission formalities.

#### **POSTGRADUATE COURSES**

A	COURSE OF STUDY -	Intake
	Master of Architecture (Full - Time)	20
	Master of Architecture (Part - Time)	10

#### (B) BUGIBILITY

- The candidates must have passed B.Arch Degree examination or equivalent with atleast 55% marks in aggregate from a recognized University.
- Candidates appearing in their final year B.Arch. examination may also apply subject to the condition that they are able to submit the attested copy of the final year marks sheet latest by 13<sup>a</sup> June 2015.
- iii. Candidates seeking admission to the M.Arch. course, shall submit self-attested photocopies of their qualifying exam as stated above along with First to Final year marks sheet/grades sheet.

#### (C) ADMISSION

- The candidates shall have to appear for an interview for selection for admission on 13<sup>th</sup> June, 2015 at 10.30 am at Integral University, Kursi Road, Lucknow. No separate intimation letter for the interview shall be sent to the candidates.
- ii The list of selected candidates shall be displayed on 19<sup>th</sup> June 2015 on the Notice Board / Website of the University.
  In addition, the intimation letters, confirming their

In addition, the intimation letters, confirming their admission to the course, shall be sent to the selected candidates communicating the date on which they have to report at the University for completing the admission formalities.

#### (D) RESERVATIONS

50% of the total intake is reserved for candidates from the Minority community.

Suitable financial assistance may be made available to Faculty members of Integral University as well as of other institutions / organizations admitted to 3-year M.Arch. (Part-Time) course.

#### DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.







# Faculty of Pharmacy

#### **DIPLOMA COURSE**

(A) COURSE OF STUDY- Diploma in Pharmacy
Course Intake Duration
D.Pharm. 60 2 yrs.

(B) ELIGIBILITY

D. Pharm.: The candidate must have passed 10+2 with Physics, Chemistry and Maths /Computer Science / Biology /Biotech. with minimum 50% marks in aggregate from a recognized Board/University.

(C) MODE OF ADMISSION

 100% of total intake of diploma pharmacy course shall be filled on the basis of merit of the qualifying examination.

- ii The list of the eligible candidates for admission courselling to Diploma Pharmacy course shall be displayed on Notice Board/Website of the University on 6" June 2015. However, the intimation letter shall be sent to eligible candidates only for communicating the date of courselling on which they have to report for completing the admission formalities.
- ii. NRI / left over seats shall be filled on the merit of qualifying examination.
- (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### **UNDER GRADUATE COURSE**

(A) COURSE OF STUDY- Bachelor of Pharmacy
Course Intake Duration
B.Pharm. 60 4 yrs.

(B) ELIGIBILITY

 B.Pharm.: The candidate must have passed 10+2 with Physics, Chemistry and Maths /Computer Science / Biology /Biotech. with minimum 45% marks in aggregate from a recognized Board/University.

B.Pharm.: (Lateral Entry) for Diploma Holders
 A candidate must have passed 2-year diploma in Pharmacy with minimum 50 % marks in appreciate.

(C) MODE OF ADMISSION

i. Through combined entrance test of IUET-2015

 For details of the test refer to section "Important Instructions & Syllabi: IUET -2015.

 The list of the candidates according to their order of merit in entrance examination and selected for counselling to B.Pharm / B.Pharm. Lateral Entry. Courses shall be displayed on Notice Board / University Website on 18th May 2015.

However, the intimation letter shall also be sent only to selected candidates for communicating the date of counseling on which they have to report for completing the admission formalities.

- Selection for admission to Pharmacy courses shall be in order of merit of Entrance Test.
- NRI / left over seats shall be filled on the merit of qualifying examination.

#### **POSTGRADUATE COURSE**

#### (A) COURSE OF STUDY:

Course	Intake	Duration		
*M.Pharm.	30	2 yrs.		
Pharm. D	30	2 yrs. 5° yrs.		
*05 seats each in Pharmaceutical Chemistry,				
Pharmacognosy - Phyt				

Pharmaceutics and in Pharmacology disciplines.

Fulltime course followed by one year compulsoary rotatory internship.

#### (B) EUGIBILITY

 M. Pharm.: The candidate must have passed B. Pharm. course with a minimum of 5096 marks. Weightage will be given to GPAT qualified candidates.

 Pharm. D.: 10+2 with Physics, Chemistry and Maths/ Biology with a minimum of 50% marks in aggregate from a recognized Board/University.

Note: Age should not be less then 17 yrs, at the time of admission for Pharm, D. & D. Pharm, courses.

#### (C) MODEOFADMISSION

#### M. Pharm:

- 100% of total intake shall be fulfilled on basis of Entrance Examination and Interview.
- ii. An objective type written test shall be conducted on 13<sup>th</sup> June, 2015 at 09:30 am followed by an interview. The candidates are advised to reach Integral University, Lucknow on given date and time. No separate intimation letterfortest/interviewshall be sent to candidates.
- iii. The list of the candidates selected for admission to M.Pharm. course shall be displayed on 19th June 2015 on Notice Board/Website of University. However, the

for communicating the date of counseling on which they have to report for completing the admission formalities.

 MRI / left over seats shall be filled on the merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### Pharm. D.:

- Through combined entrance test of IUET-2015
- For details of the test refer to section "Important Instructions & Syllabi: IUET-2015.
- iii. The list of the candidates according to their order of merit in entrance examination and selected for courseling to Pharm.D. Course shall be displayed on Notice Board / University Website on 18th May 2015. However, the intimation letter shall also be sent only to selected candidates for communicating the date of courselling on which they have to report for completing the admission formalities.
- Selection for admission to Pharmacy courses shall be in order of merit of Entrance Test.iv.
- NRI / left over seats shall be filled on the merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

### DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.







# Faculty of Science

#### **UNDER GRADUATE COURSES**

#### (A) COURSES OF STUDY

Course	Discipline	Intake	Duration
B.Sc. (Hons)	Biotechnology	40	3 yrs.
B.Sc. (Hors)	Industrial Chemistry	40	3 yrs.

#### (B) ELIGIBILITY

B.Sc. (Hors) Biotechnology: (10+2) or equivalent with Physics, Chemistry & Biology / Biotechnology with min. 50% marks in the aggregate from a recognized Board/University.

B.Sc. (Hors.) Industrial Chemistry: (10+2) or equivalent in Science with Chemistry as one of the subjects with minimum 50% marks in the aggregate from a recognized Board/University.

#### (C) MODE OF ADMISSION

100% of the total intake shall be filled on the basis of the merit of the qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### (E) ADMISSION

The list of the eligible candidates for admission counselling to B.Sc.(Hons.)-Biotechnology and B.Sc. (Hons.) Industrial Chemistry courses shall be displayed on Notice Board/Website of the university on 6th June 2015. However, the intimation letter shall be sent to eligible candidates only for communicating the date of counselling on which they have to report for completing the admission formalities.

#### **POSTGRADUATE COURSES**

#### (A) COURSE OF STUDY - Master Courses

Annual Control of the	pline of various departments shall be :		
Course	Discipline	Intake	Duration
M.Sc.	Biotechnology	50	2 yrs.
M.Sc.	Microbiology	50	2 yrs.
M.Sc.	Biochemistry	40	2 yrs.
M.Sc.	Bioinformatics	40	2 yrs.
M.Sc.	Industrial Chemistry	40	2 yrs.
M.Sc.	Physics (Specialization Electronics')	40	2 yrs.
M.Sc.	Mathematics	40	2 yrs.
P.G.D.I.S.H.E.	Environmental Science	60	lyr.





#### (B) ELIGIBILITY

- M.Sc. (Biotechnology): The candidate must have passed B.Sc. with Biotechnology / Biological Science / Agriculture / B.V.Sc. / B.Sc (Hons.) Biotechnology with a min. of 50% marks in the aggregate from a recognized university.
- IL M.Sc. (Microbiology): The candidate must have passed B.Sc./B.Sc. (Hons.) with Biological Science / Biotechnology / Microbiology / Agriculture / B.V.Sc. with a minimum 50% marks in the aggregate from a recognized university.
- M.Sc. (Biochemistry): The candidate must have passed B.Sc./B.Sc. (Hors.) with Life Sciences/Biological Sciences/Biochemistry/Biotechnology/Microbiology/Agriculture/B.V.Sc. with a min. of 50% marks in the aggregate from a recognized university.
- iv. M.Sc. (Bioinformatics): The candidate must have passed B.Sc./B.Sc. (Hons.) with Biological Science / Physical Science / B.Tech./ B.E./ B.Pharm. / B.V.Sc. / Biochemistry / Biotechnology with a minimum of 50% marks in the aggregate from a recognized university.
- M.Sc. (Industrial Chemistry): The candidate must have passed B.Sc./B.Sc. (Hons.) with Chemistry with a minimum of 50% marks in the aggregate from a recognized university.
- vt. M.Sc. (Physics): The candidate must have passed B.Sc. with Physics, Chemistry and Mathematics (Physics should be a compulsory subject upto 3rd year) with a min. of 50% marks in the aggregate from a recognized university.
- vii. M.Sc. (Mathematics): The candidate must have passed B.Sc. (Mathematics should be a compulsory subject upto 3rd year) with a min. of 50% marks in the aggregate from a recognized university.
- viii. P.G.Dip. In Industrial Safety Health & Environment: A bachelor degree of Engg. in any branch/B.Sc. with science with a minimum of 50% marks in the aggregate from a recognized university.

#### (C) MODE OF ADMISSION

i. An objective type written test of one hour duration shall be conducted by the respective faculty/departments. The candidates are advised to reach Integral University, Lucknow on the date and time given below. No separate intimation letter for test / interview shall be sent to candidates. For syllabus of the test refer to the section important instructions of Syllabi 2015.

Course	Test Date	Time	
M.Sc.	13.06.2015	9:30 am	

\*(Biotechnology, Microbiology, Biochemistry, Bioinformatics, Industrial Chemistry, Mathematics & Physics)

 The list of the candidates according to their order of merit in written test, and selected for counselling to M.Sc. courses shall be displayed on Notice Board / Website of the University on 19th June, 2015.

However, the intimation letter shall also be sent only to selected candidates for

- communicating the date of counselling on which they have to report for completing the admission formalities.
- Selection for admission to M.Sc. courses shall be done through the counselling and in the order of the merit of the written test.
- Admission in RG.D.I.S.H.E. shall only be on the basis of the merit of the qualifying examination.



- w. The list of the eligible candidates for admission counselling to PGDISHE course shall be displayed on Notice Board/Website of the University on 2° July 2015. However, the intimation letter shall be sent to eligible candidates only for communicating the date of counselling on which they have to report for completing the admission formalities.
- vi. NRI / left over seats shall be filled on the merit of the qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### DOCTOR OF PHILOSOPHY (FLD.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.



# Faculty of Computer Application

#### **UNDER GRADUATE COURSE**

#### (A) COURSE OF STUDY

Bachelon of Computer Application.

Course	Intake	Duration
BCA	180	3 yrs.

#### (B) ELIGIBILITY

The applicant must have passed 10+2 in any discipline from a recognized Board/University with a minimum of 50% marks in aggregate.

#### (C) MODE OF ADMISSION

100% of total intake shall be filled on the basis of the merit in the qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### (E) ADMISSION

The list of the candidates eligible for admission counselling to BCA course shall be displayed on the notice board/website of the University on 6<sup>th</sup> June, 2015. However, intimation letter shall be sent only to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### **POSTGRADUATE COURSE**

#### (A) COURSE OF STUDY

Master of Computer Application

Course	Intake	Duration
M.C.A.	60	3 Yrs.
M.C.A. (Lateral Entry)	60	2Yrs.

#### (B) ELIGIBILITY

- M.C.A.: The applicant must have passed a Bachelor's Degree of minimum 3 yrs duration with mathematics at 10+2 level or at graduate level with a minimum of 50% marks in aggregate from a recognized University.
- M.C.A. (Lateral Entry): The applicant must have passed. Bachelor's Degree of minimum 3 yrs. duration in B.C.A., B.Sc.-(I.T./Computer Science) with mathematics as a course at 10+2 level or at graduate level with a minimum of 60% marks in aggregate from a recognized University.



#### (C) MODE OF ADMISSION

i. An objective type written test of two hours duration shall be conducted by the department. The candidates are advised to reach Integral University, Lucknow on the date and time given below. No separate intimation letter for test / interview shall be sent to candidates. Candidates appearing in their final year graduation examination may also apply.

#### Date and Time of Written Test: 13\* June, 2015 at 9:30 am

- ii The list of selected candidates in order of merit in the written test for counselling to M.C.A./M.C.A. (Lateral Entry) courses shall be displayed on Notice Board / Website of the University on 19th June, 2015. However, the intimation letter shall be sent only to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- Selection for admission to M.C.A./M.C.A. (Lateral Entry) courses shall be carried out in order of merit of the written test through the counselling.
- NRI / left over seats shall be filled on the merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.



# Faculty of Management & Research

#### **UNDER GRADUATE COURSES**

#### (A) COURSES OF STUDY

Course	Intake	Duration
B.B.A.	120	3 yrs.
B.Com (Hors)	180	3 yrs.

#### (B) ELIGIBILITY

- B.B.A.: The applicant must have passed 10+2 in any discipline from a recognized Board/University with a minimum of 50% marks in aggregate.
- B.Com (Hons): The candidate must have passed 10+2 with commerce or science (with maths) with a minimum of 50% marks in aggregate from a recognized board/university.

#### (C) MODE OF ADMISSION

I 00% of total intake shall be filled on the basis of the merit in the qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### (E) ADMISSION

The list of the merit based selected candidates for admission/counselling to BBA/B.Com (Hons) courses shall be displayed on the notice board/website of the University on 6<sup>th</sup> June, 2015. The intimation letter shall be sent to only qualified candidates, for communicating the date of counselling on which they have to report for completing the admission formalities.

#### **POSTGRADUATE COURSE**

#### (A) COURSE OF STUDY-

Master of Business Administration - MBA

Course	Intake	Duration
ªM.B.A.	120	2 yrs.
M.B.A. (Agri-Business)	60	2 угв.

Dual Specializations Offered: Finance, Marketing, Human Resource & Information Technology.

#### (B) ELIGIBILITY

- M.B.A.: The applicant must have passed graduate course (10+2+3) in any discipline with a minimum of 50% marks in aggregate from a recognized University.
- M.B.A. (Agri-Business): B. Tech with Agricultural Engg./Biotechnology/B.Sc.-(Forestry/Agriculture/Horticulture/Food Tech.
  /Dairy Tech./Vet. Science & Animal Husbandry/Home Science with a minimum of 50% marks in in aggregate from a recognized University

#### (C) MODE OF ADMISSION

i. Through Entrance Test of IUET – 2015 followed by Group Discussion & Personal Interview. Only those candidates who will



qualify in the written test shall be called for Group Discussion & Personal Interview.

- ii. For details of the test refer to section "Important Instructions & Syllabi: IUET 2015".
- The list of the candidates who qualify the written test will be displayed in the evening on 9<sup>th</sup> May, 2015 (the same day) on the Notice Board / Website of University.
- iv. The Group Discussion & Personal interview will be held from 10th May, 2015 to 12th May, 2015.
- List of the selected candidates for counselling according to the order of merit for M.B.A./M.B.A. (Agri-Business) course shall be displayed on 18<sup>th</sup> May, 2015 on the Notice Board / Website of the University.
- vi. An intimation letter shall also be sent to the selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- vii. NRI/left over seats shall be filled on the merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.



# Faculty of Health & Medical Sciences

#### **UNDER GRADUATE COURSES**

#### (A) COURSE OF STUDY

Course	Intake	Duration
M.B.B.S.	100	4 1/2" years
B.P.Th.	60	4º years
# Full time course f	ollowed by I year o	compulsory rotatory
internship.		

"Full time course followed by 6 months compulsory rotatory internship.

#### (B) ELIGIBILITY:

- M.B.B.S. A candidate must have passed(10+2) in the subjects of Physics, Chemistry, Biology and English Individually and must have obtained a min. of 50% marks taken together in Physics, Chemistry & Biology at the qualifying examination.
- B.P.Th.- A candidate must have passed 10+2 or equivalent with Physics, Chemistry and Biology from a recognized Board/University securing min 50% marks in aggregate.
- iii. B.P.Th.(Lateral entry) A candidate seeking admission to the B.P.Th.-IInd Year must have passed Diploma in Physiotherapy securing minimum 60% marks in the aggregate from a recognized institute affiliated to State Medical Faculty/University.

#### (C) MODE OF ADMISSION:

#### M.B.B.S.:

- Through entrance test of IUPMT-2015
- Details oftest are as per MCI norms and syllabus
- Schedule of test and related details will be made available on the university website.
- A separate notification for IUPMT-20 | 5 shall be advertised in due courses of time.
- An intimation letter shall be sent to selected candidate for communicating the date of counselling on which they have to report for completing admission formalities.
- Admission to MBBS programme shall be carried out through the counselling and according to the merit fithe entrance test

B.P.Th.: 100% of total intake of B.P.Th. course shall be filled on the basis of merit in the qualifying examination. The list of the eligible candidates for admission to B.P.Th. course through counselling shall be displayed on Notice Board/Website of the University on 6° June, 2015. However, the intimation letter shall only be sent to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### (D) RESERVATION:

50% of the total intake is reserved for the minority community.

#### **POSTGRADUATE COURSE**

#### (A) COURSEOFSTUDY

Course	Intake	Duration
M.Sc. (Medical Anatomy) *	15	3 & 2 Yrs
M.Sc. (Medical Physiology) *	15	3 & 2 Yrs
M.Sc. (Medical Biochemistry) *	15	3 & 2 Yrs
M.Sc. (Medical Microbiology) *	15	3 & 2 Yrs
M.P.Th.(Musculoskelatal)	05	2 Years
M.P.Th. (Neurology)	05	2 Years
M.P.Th. (Cardiopulmonary)	05	2 Years
M.P.Th. (Sports Medicine)	05	2 Years

\* M.Sc. for B.Sc. Candidates - 3 Years (6 semesters)
M.Sc. for MBBS/BDS/BHMS/BAMS/BUMS/B.PTh./B.Sc.

Nursing Candidates - 2 Years (4 semesters)

#### (B) ELIGIBILITY:

#### I. M.Sc.(Medical Anatomy)

A Candidate seeking admission must have passed MBBS/BDS/BHMS/BAMS /BUMS/B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. in Life Sciences or B.Sc. with Anthropology as the major subject or a degree equivalent to the above from any recognized University with 50% marks in aggregate. Candidates who are appearing in the qualifying examination can also apply.

#### II. M.Sc. (Medical Physiology)

A Candidate seeking admission must have passed MBBS/BDS/BHMS/BAMS/ BUMS/B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. in Life Sciences as the major subject or a degree equivalent to the above from any recognized University with 50% marks in aggregate. Candidates who are appearing in the qualifying examination can also apply.

#### iii. M.Sc. (Medical Biochemistry)

A Candidate seeking admission must have passed MBBS/BDS/BHMS/BAMS/ BUMS/B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Chemistry as the major subjects or B.Sc. in Life Sciences or B.Sc. with Anthropology as the major subject or a degree equivalent to the above from any recognized University with 50% marks in aggregate. Candidates who are appearing in the qualifying examination can also apply.

#### lv. M.Sc. (Medical Microbiology)

A Candidate seeking admission must have passed MBBS/BDS/BHMS/BAMS /BUMS/B.P.Th./B.Sc. Nursing or B.Sc. with Zoology and Botany as the major subjects or B.Sc. in Life Sciences as the major subject or a degree equivalent to the above from any recognized University with 50% marks in aggregate. Candidates who are appearing in the qualifying examination can also apply.

M.P.Th. (Musculoskelatal, Neurology, Cardiopulmonary & Sports Medicine)

A candidate seeking admission must have Passed B.P.T. /B.P.Th. on a regular basis and should have secured at least 55% marks in the aggregate from a recognized University.

Desirable that applicant should have worked as a qualified physiotherapist for at least one year in a Hospital/Institute

#### @ MODE OF ADMISSION:

- The candidates seeking admission in M.Sc. Medical Sciences courses, the 100% of total intake shall be filled on the basis of the merit in the qualifying examination.
- ii. The candidates seeking admission to M.P.Th. (Musculoskelatal, Neurology, Cardiopulmonary & Sports Medicine) shall have to appear for an interview for selection to admission on 13<sup>th</sup> June 2015 at 10 am at Integral University, Kursi Road, Lucknow. No separate intimation letter for the interview shall be sent to the candidates.

#### (D) RESERVATION:

50% of the total intake is reserved for the minority community.

#### (E) ADMISSION:

- The list of selected candidates of M.P.Th. shall be displayed on 19<sup>th</sup> June 2015 on the Notice Board / Website of the University.
- ii. The list of the eligible candidates for admission counselling to M.Sc. (Medical Anatomy), M.Sc. (Medical Physiology), M.Sc. (Medical Biochemistry), and M.Sc. (Medical Microbiology), courses shall be displayed on Notice Board/Website of the University on 2<sup>nd</sup> July 2015. However, Intimation letter shall only be sent to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University website accordingly.



# Integral Institute of Agriculture Science & Technology (IIAS&T)



Inauguration of Integral Institute of Agriculture Science & Technology by Horibia Nessern Ahmed, Chairman, Minority Commission, Govt. of India and Horibia S.W. Aldrar, V.C., Integral University

In an agriculture driven country like India wherein greater emphasis is naturally placed on augmenting teaching, research and extension activities in the field of agriculture, integral University has established integral Institute of Agriculture Science and Technology (IAST). Keeping in pace with recent advances in different areas of agriculture, the institute offers various courses; B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Home Science, B.Sc. (Hons.) Forestry, B. Tech. Agricultural Engineering, Master in Agri-business Management. The objective of these courses is to nurture young students, tap their potentials and groom them to become significant contributors to the much needed second. Green revolution. IIAST is committed to providing excellence in undergraduate and postgraduate courses, and offers platform, opportunities and vast experience through which they become aware of the latest developments in the area of agriculture science and technology, explore and plan for a career. IIAST holds symbiotic relationship with various, esteemed universities, institutes

and agro-based industries of India. Various MoU's have also been signed with BioTech Park Ludonow, CISH Ludonow, IISR Ludonow, AMU Algarh, Jamia Hamdard New Delhi, NDUAT Falzabad, Biowed Research Institute of Agriculture and Technology Allahabad, DSR Mau, NBAIM Mau and MGCGU Satria for facilitating and availing the inter institutional research and training in the area of agriculture science and technology. This will help our students to imbibe the best skills and knowledge from these institutions. To improve the programmes, curriculum and delivery strategies, a National Advisory Board (NAB) has been established under the chairmanahip of Hon'ble Vice Chancellor; Integral University. The Vice Chancellors, Directors and representatives from different esteemed universities and prestigious research institutions are the members of this board. The Institute also has a distinction of providing good placement to the students in association with Centre for Career Guidance & Development (CCG&D).

# Faculty of Agriculture Science & Technology

### UNDER GRADUATE COURSES (A) COURSE OF STUDY

Course	Intaks	Duration
B. Tech. Agricultural Engineering	60	4
B.Sc. (Hons) Agriculture	60	4
B.Sc. (Hons) Horticulture	60	4
B.Sc. (Hons) Home Science	60	4
B.Sc. (Hons) Forestry	60	4

#### (B) ELIGIBILITY:

B.Tech. (Agricultural Engineering): 10+2 or equivalent with Physics, Chemistry & Mathematics (PCM)/ Physics, Chemistry, Mathematics & Biology (PCMB) / Agriculture with a minimum of 50% marks in the aggregate from a recognized Board/University

B.Sc.(Hons) Agriculture: 10+2 or equivalent with Physics, Chemistry & Mathematics(PCM)/ Physics, Chemistry, Mathematics & Biology (PCMB) /Agriculture with a minimum of 50% marks in the aggregate from a recognized Board/University

B.Sc.(Hons) Horticulture: 10+2 or equivalent with Physics, Chemistry & Mathematics(PCM)/ Physics, Chemistry, Mathematics & Biology (PCMB) /Agriculture with a minimum of 50% marks in the aggregate from a recognized Board/University

B.Sc.(Hons) Forestry: 10+2 or equivalent with Physics, Chemistry & Mathematics(PCM)/ Physics, Chemistry, Mathematics & Biology (PCMB) /Agriculture with a minimum of 50% marks in the aggregate from a recognized Board/University

B.Sc.(Hors) Home Science: 10+2 or equivalent with

Physics, Chemistry & Mathematics/Biology or Agriculture/Home Science with a minimum of 50% marks in the aggregate from a recognized Board/University

#### (C) MODE OF ADMISSION:

#### B. Tech-Agricultural Engg.:

- Through combined Entrance Test of IUET-2015.
- For details of the test refer to the section "Important Instructions & Syllabi: IUET – 2015.
- iii. List of the candidates selected for counselling to B. Tech Programme on the basis of merit in the entrance test shall be displayed on the notice board/webside of the university on 18<sup>th</sup> May 2015.
- iv. An intimation letter shall also be sent to selected candidates for communicating the date of counseling on which they have to report for completing admission formalities.
- Admission to B.Tech. programme shall be carried out through the counselling and according to the merit of the Entrance Test.
- NRI /left over seats shall be filled on the basis of the merit of qualifying examination.

### B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Horticulture & B.Sc. (Hons.) Forestry:

An objective type written test of one hour duration shall be conducted by the respective departments. The candidates are advised to reach the Integral University, Lucknow on the date and time given below. No separate intimation letter for test / interview shall be sent to candidates. For detail of the test's syllabus refer to the section "Important Instruction of syllabi: IUET-2015".

Course	Test Date	Time
B.Sc. (Hons.) Agriculture	13.06.2015	9:30 am
B.Sc. (Hons.) Horticulture	13.06.2015	9:30 am
B.Sc. (Hons.) Forestry	13.06.2015	9:30 am





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- Selection for admission to B.Sc. courses shall be done through the counselling and in the order of merit of the written test.
- The list of the candidates according to their order of merit in written test and selected for counselling to B.Sc. courses shall be displayed on Notice Board / Website of the University on 19<sup>th</sup> June, 2015.

However, the intimation letter shall also be sent only to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

 NRI / left over seats shall be filled on the merit of the qualifying examination.

#### B.Sc. (Hons.) Home Science

- 100% of the total intake of B.Sc. Home Sc. shall be filled on the basis of merit of the qualifying examination.
- ii. The list of the candidates eligible for admission courselling to B.Sc. Home Sc. course shall be displayed on the notice board/website of the University on 6<sup>th</sup> June, 2015. However, intimation letter shall be sent only to eligible candidates for communicating the date of courselling on which they have to report for completing the admission formalities.

#### (D) RESERVATION:

50% of the total intake is reserved for the minority community.

#### POSTGRADUATE COURSE

#### (A) COURSEOFSTUDY

Course	Discipline	Intake	Duration
M.A.B.M	Agri-Business	60	(year) 2
A Laborator	Management		

#### (B) ELIGIBILITY:

Master in Agri. Business Mgmt.: B. Tech with Agricultural Engg./Biotechnology/B.Sc.(Hons.)—Forestry/Agriculture/Horticulture/Food Tech./Dairy Tech./Vet. Science & Animal Husbandry/Home Science with minimum of 50% marks in the aggregate from a recognized University

#### (C) MODE OF ADMISSION

An objective type written test of two hour duration shall be conducted by the respective faculty/ departments. The candidates are advised to reach Integral University, Lucknow on the date and time given below. No separate intimation letter for test / interview shall be sent to candidates. However the admission to the course will be on the basis of a composite merit comprising of marks in the entrance test, group discussion and interview combined weightage for group discussion and interview shall be 20% of the marks of the written test. For syllabus of the test refer to the section 'Important Instructions of Syllabi 2015'.

Course Test Date Time M.A.B.M 13.06.2015 9:30 am

- The list of the candidates according to their order of merit in written test, and selected for counselling to M.A.B.M. course shall be displayed on Notice Board / Website of the University on 19<sup>th</sup> June, 2015.
  - However, the intimation letter shall also be sent only to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- Selection for admission to M.A.B.M. course shall be done through the counselling and in the order of merit of the written test.
- vi. NRI / left over seats shall be filled on the merit of the qualifying examination.

# Faculty of Education

#### **UNDER GRADUATE COURSE**

(A) COURSE OF STUDY

Bachelor of Education

Course	Intales	Duration
B.Ed.	100	2 yrs.

#### (B) ELIGIBILITY

Candidate with atleast 50% marks either in the Bachelor's degree and / or in the Master's degree or any other qualification equivalent there to, are eligible for admission to the programme.

#### (C) MODE OF ADMISSION

 100% of total intake shall be filled on basis of merit of the qualifying examination and interview conducted by the University. The dates of interview shall be as follows:

Candidates from Arts Stream : 16<sup>th</sup> June 2015 from 9:30 am onwards

Candidates from Science and Commerce Stream : 17" June 2015 from 9:30 am onwards

The candidates are advised to reach Integral University, Lucknow alongwith mark sheets of Intermediate, Graduation (I, II & III years) and PG courses on the given date and time. No separate intimation letter for interview shall be sent to the candidates.

- ii. Candidates appearing for the final year graduation examination may also apply. They must produce the Marksheet of their qualifying examination at the time of interview, failing which their candidature for admission in B.Ed. course will not be considered.
- iii. The list of the selected candidates for counselling to admit in B.Ed. course shall be displayed on the notice board/website of the University on 22<sup>nd</sup> June, 2015. However, the intimation letter shall only be sent to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- NRI / left over seats shall be filled on the basis of merit of qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for candidates belonging to the minority community.

#### POSTGRADUATE COURSE

#### (A) COURSE OF STUDY

Master of Education

Course	Intake	Duration
M.Ed.	50	2 yrs.

#### (B) ELIGIBILITY

The candidate must have passed B.Ed. with min. 55% marks in the aggregate from a recognized University. The candidates appearing for their B.Ed. exam may also apply.

#### (C) MODEOFADMISSION

- 100% of total intake shall be filled on the basis of merit and interview to be conducted on 30<sup>th</sup> June 2015 from 10:30 am. No separate intimation letter would be sent to the candidates.
- Candidates appearing for B.Ed. final examination may also apply.
- iii. The list of selected candidates for admission through counselling will be displayed on 4<sup>th</sup> July, 2015 on the Notice Board / website of the University. However, an intimation letter shall also be sent to the selected candidates only, communicating there in the date of counselling on which they have to report for completing the formalities for admission.
- NRI / left over seats shall be filled on the basis of the merit of the qualifying examination.

#### (D) RESERVATION

50% of the total intake is reserved for the minority community.

#### DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.





# Faculty of Library & Information Science

#### **POSTGRADUATE COURSE**

#### (A) COURSE OF STUDY

Master of Library & Information Science

Course	Intake	Duration
M.L.I.Sc.	30	l yr.

#### (B) ELIGIBILITY

The candidate must have passed B.L.I.Sc./ B.Lib.Sc. with min. 50% marks in the aggregate from a recognized University. The candidates appearing for their B.L.I.Sc./B.Lib.Sc. exam may also apply.

#### (C) MODE OF ADMISSION

100% of total intake shall be filled on the basis of merit of the qualifying examination.

#### (D) ADMISSION

The list of the candidates eligible on the basis of merit for admission counselling to M.L.I.Sc. course shall be displayed on the notice board/website of the University on 2" July, 2015. However, the intimation letter shall only be sent to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### (E) RESERVATION

50% of the total intake is reserved for the minority community.

#### **DOCTOR OF PHILOSOPHY (Ph.D.) PROGRAMME**

A separate entrance test shall be conducted for admission to the Ph.D. programme in the month of Jan / Feb and July / August. An advertisement for this test shall be published in prominent News papers/University Website accordingly.



# Faculty of Humanites & Social Sciences

#### (A) COURSES OF STUDY- Certificate Courses

Course	Intake	Duration
Certificate of proficiency in Arabic	40	lYear
Certificate of proficiency in French	40	l'Year
Certificate of proficiency in German	40	Mear

#### (B) ELIGIBILITY

Secondary school certificate from ICSE/CBSE/Board of highschool & intermediate or an equivalent examination with not less than 45% marks in the aggregate.

#### (C) COURSES OF STUDY- Diploma Courses

Course	Intake	Duration
Diploma in Arabic	40	l year
Diploma in French	40	l year
Diploma in German	40	l year

#### (D) ELIGIBILITY

Certificate of proficiency in the concerned language or an equivalent examination with not less than 45% marks in the aggregate.

#### (E) MODE OF ADMISSION

100% of the total intake shall be filled on the basis of the merit of the qualifying examination.

#### (G) ADMISSION

The list of the eligible candidates for admission counseling to Certificate courses shall be displayed on Notice Board/Website of the University on 6 June 2015. However, the intimation letter shall be sent to eligible candidates only for communicating the

date of counseling on which they have to report for completing the admission formalities.

#### (F) RESERVATION

50% of the total intake is reserved for the minority community.

#### **POSTGRADUATECOURSES:**

(A) COURSES OF STUDY

Course	Intake	Duration
M.A. (English)	40	2yr.
M.S.W. (Master in Social Work)	40	2 ут.

#### (B) ELIGIBILITY:

M.A (English): B.A. in English as one of the subjects (upto 3rd year) with a minimum of 50% marks in the aggregate from a recognized University.

M.S.W.: The candidate must have passed graduate course in any discipline with a minimum 50% marks in the aggregate from a recognized university.

#### (C) MODE OF ADMISSION:

100% of the total intake shall be filled on the basis of the merit of the qualifying examination.

#### (D) ADMISSION

The list of the eligible candidates for admission counseling to Post graduate courses shall be displayed on Notice Board/Website of the University on 2 July 2015. However, the intimation letter may be sent to eligible candidates only for communicating the date of counselling on which they have to report for completing the admission formalities.

#### (E) RESERVATION

50% of the total intake is reserved for the minority community.





## University Polytechnic (At Lucknow)

#### DIPLOMA COURSES

#### (A) COURSE OF STUDY:

Diploma in Engineering

The Diploma Engineering courses are available in the

following branches:

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Branch	Intake	Duration
Chemical Engineering	60	3 Yrs
Bectronics Engineering	60	3 Yrs
Bectrical Engineering	120	3 Yrs
Mechanical Engineering	120	3 Yrs
Civil Engineering	120	3 Yrs
Mechanical Engineering-	120	3 Yrs
(Automobile)		
Civil (Construction Management	60	3 Yrs
& Safety) Engg.		
Architecture Engg.	60	3 Yrs.
Civil Engg(Evening)	60	3 Yrs
Electrical Engg(Evening)	60	3 Yrs
Mechanical (Production)	60	3 Yrs
Engg(Evening)		

(B) Eligibility:

A candidate must have passed 10th standard or equivalent (i) exam with Mathematics and Science with a min. of 35% marks in aggregate from any recognized Board/ University.

#### (C) Mode of Admission

- (i) Through combined Entrance Test of IUET-2015
- (ii) For details of the test refer to the section "Important Instruction & Syllabi: IUET-2015".
- (iii) The list of the candidates according to their order of merit in entrance examination and selected for the counselling to Diploma course shall be displayed on the Notice Board/website of the University on 18th May 2015. The intimation letter will be sent to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

(iv) Selection for admission to Diploma Courses will be done through counselling & in order of merit of Entrance Test.

Diploma in Engineering (Evening)

- 100% of toal intake of Diploma in Engg. (Evening) Courses shall be filled on the basis of merit of qualifying examination.
- (ii) The list of the candidates eligible on the basis of merit for admission counselling to Diploma in Engy.- Civil/ Bectrical/Mechanical Production (Evening) courses shall be displayed on the notice board/website of the University on 6th June, 2015. However, the intimation letter shall only be sent to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### (D) Reservation

50 % of the total intake is reserved for minority community.



# Integral University (Shahjahanpur Campus)

#### **DIPLOMA COURSES**

#### (A) COURSE OF STUDY:

Diploma in Engineering

The Diploma Engineering courses are available in the following branches:

Branch	Intake	Duration
Bectrical Engineering	120	3 Yrs
Mechanical Engineering	120	3 Yrs
Civil Engineering	120	3 Yrs

#### (B) Eligibility:

A candidate must have passed 10° standard or equivalent examination with Mathematics and Science with a min. of 35% marks in aggregate from any recognized Board/University.

#### (C) Mode of Admission

- (i) Through combined Entrance Test of IUET-2015.
- (ii) For details of the test refer to the section "Important Instruction & Syllabi: IUET-2015".
- (ii) The list of the candidates according to their order of merit in entrance examination and selected for the counselling to Diploma course shall be displayed on the Notice Board / website of Integral University on 18th May 2015. The intimation letter will be sent to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.
- (iv) Selection for admission to Diploma Courses will be done through counselling & in order of merit of Entrance Test.

#### (D) Reservation:

50 % of the total intake is reserved for minority community.



#### **UNDER GRADUATE COURSES**

#### (A) COURSE OF STUDY:

Bachelor courses are available as follows:

Branch	Intake	Duration
B.TechElectrical Engg.	60	4 Yrs
B.TechMechanical Engs.	60	4 Yrs
B.Tech. Civil Engg.	60	4 Yrs
B.B.A.	60	3 Yrs
B.C.A.	60	3 Yrs

#### (B) Eligibility:

B.Tech.: A candidate must have passed 10+2 with Physics, Math & Chemistry/Bio-Tech/Computer Science with a minimum of 45% marks in aggregate from any recognized Board/University.

**B.B.A./B.C.A.**: A candidate must have passed 10+2 in any discipline with a minimum of 50% marks in aggregate from any recognized Board/University.

#### (C) Mode of Admission

#### B.Tech:

- (i) Through combined Entrance Test of IUET-2015.
- (ii) For details of the test refer to the section "Important Instruction & Syllabi: IUET-2015".
- (ii) Selection for admission to B.Tech. Courses will be

done through counselling & in order of merit of Entrance Test.

(iv) The list of the candidates according to their order of merit in entrance examination and selected for the courselling to B.Tech, course shall be displayed on the Notice Board / website of Integral University on 16th May 2015. The intimation letter will be sent to selected candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### B.B.A. & B.C.A.:

- 100% of total intake of BBA and BCA courses shall be filled on the basis of merit of qualifying examination.
- (ii) The list of the candidates eligible on the basis of menit for admission counselling to B.B.A. and B.C.A. courses shall be displayed on the notice board/website of the University on 6<sup>th</sup> June, 2015. However, the intimation letter shall only be sent to eligible candidates for communicating the date of counselling on which they have to report for completing the admission formalities.

#### (D) Reservation:

50 % of the total intake is reserved for minority community.



Entrance of Engg. Block

Bio-Engineering Block

A Side View Of Campus

Civil Block

Play-ground

# Integral University Entrance Test (IUET - 2015)

#### I. GENERAL INFORMATION:

#### I.I Admission to First Year:

Entrance Test for admission to first year of (4+1) year course of B.Arch.,(5+1) years course of Pharm.D., 4-year course of B.Tech / B.Tech. (Biotechnology / Food Technology)/ B.Tech.-Aggricultural Engg.) / B.Pharm. 2-Year course of M.B.A./M.B.A. (Agri-Business) and lateral entry to B.Tech. / BPharm. and 3-year course of Diploma in Engineering will be known as Integral University Entrance Test (IUET-2015).

### 1.2 Direct Admission to second year of B.Tech. / B.Pharm. (for Diploma Holders)

The eligible candidates seeking direct admission to second year of B.Tech. / B.Pharm. are required to appear in the Entrance Test (IUET-2015). The candidates are required to submit the application forms to the Co-ordinator, Admission Committee, IUET-2015 Integral University, Lucknow upto the last date i.e. April 10<sup>th</sup>, 2015. The list of successful candidates for admission through counselling to B.Tech. / B. Pharm. courses will be displayed on the Notice Board / Website of the University on May 18<sup>th</sup>, 2015.

#### 1.3 Admission of N.R.I. Candidates

The eligible NRI candidates may get direct admission on reserved seats for which they should download the application form from the website of the University and submit the same to the Co-ordinator, Admission Committee, Integral University, Lucknow, latest by 30<sup>th</sup> June 2015. Such candidates need not appear in the Entrance Test. The admission to N.R.I. candidates will be given on 'first come, first serve'

basis. The desirous candidates must have secured at least 50% marks in aggregate in the qualifying examination.

#### 2. IMPORTANT INSTRUCTIONS:

- 2.1 Candidates are advised to read instructions very carefully. The Integral University, Lucknow reserves the right to change the rules and regulations without any prior notice.
- 2.2 All the provisions given in this Prospectus shall be binding on and acceptable to the students and their parents / guardians. Any change made from time to time in the rules, regulations and fee of the University shall mutatis mutandis apply to the admitted candidates.
- 2.3 The application form, complete in all respects, should reach the Co-ordinator, Admission Committee IUET-2015. Integral University, Lucknow. The Integral University, Lucknow will not be responsible for any delay either on the part of the postal department or for any other reason whatsoever.
- 2.4 Besides 50% reservation for Muslim Minorities, 20% of the total seats in each course are reserved for girl candidates and 3% seats are reserved for physically handicapped candidates. Candidates seeking the advantage of reserved categories, weightage etc. are required to enclose relevant supporting certificates with the application form. These certificates in original will have to be produced at the time of admission along with one attested copy of each one of them.
- 2.5 Candidates who are due to appear in the qualifying

examination or have appeared, but their results are awaited, are also eligible to appear. Candidates in respect of whom the result of the qualifying examination has not been declared by the last date of admission in Integral University due to any reason whatsoever (incomplete or withheld result or supplementary examination etc.), shall not be eligible for admission under any circumstances. However, the eligibility for admission shall remain forfeited if the candidate is unable to produce the original marks sheet of the qualifying examination within a week's time after the declaration of the result of their respective Boards / Universities.

2.6 DO NOT FOLD OMR APPLICATION FORM. One envelope should contain one OMR application form only.

#### ENTRANCE TEST SCHEME:

IUET-2015 will be conducted with objective-type questions, The candidates are required to opt papers and subjects for appearing in the Entrance Test as mentioned in the table given at Sl. No. 4 and 5 on the following page.

#### Date of Entrance Test

(For B.Tech/ B.Tech.-Biotech./Food Tech.)/ B.Tech. Agricultural Engg./B.Pharm./ Pharm.D. / B.Arch./ M.B.A./
M.B.A. (Agri-Business)/Lateral Entry
for B.Tech. and B.Pharm) and Diploma Engg.

- Saturday, 9<sup>th</sup> May, 2015

The Choice Based Credit System (CBCS) will be introduced from the next Academic Session.

### Integral University Entrance Test (IUET - 2015)

4	FN	JTR/	NCE	TEST	<b>DETAILS</b>

Papers		Subjects	Number of Questions	Marks
Paper I	Part -A	Physics and Chemistry	100 objective type questions with equal weightage to Physics and Chemistry	200
	Part-B	Mathematics	50 objective type questions	100
	Part-C	Biology	50 objective type questions	100
Paper 2		Aptitude Test for MBA/MBA (Agri-Business)	200 objective type questions	400
Paper 3		Aptitude Test for	100 objective type questions	200
		B.Tech. IInd year (Diploma Holders)		
Paper 4		Aptitude Test for	100 objective type questions	200
		B.Tech. IInd year (B.Sc. Graduates)		
Paper 5		AptitudeTest for	100 objective type questions	200
		B. Pharm. II year (Diploma Holders)		
Paper 6		Aptitude Test for Architecture –	50 Objective questions and	200
		Part A, and Drawing Test- Part B	3 questions to test drawing aptitude	
Paper 7		Physics, Chemistry, Maths	100 objective type questions	200
Paper 8		Agriculture	150 objective type questions from 12th class Agriculture group	300

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#### 5. REQUIREMENT DETAILS FOR DIFFERENT COURSES:

PAPER
Paper I (Part - A and Part - B)
Paper I (Part - A and Part - B/Part - C)
Paper I (Part - A and Part - B) OR Paper 8
Paper 2
Paper 3
Paper 4
Paper 5
Paper 6
Paper 7

#### 6. SCHEDULE OF ENTRANCE TEST:

[For B. Tech/B.Tech.(Biotech./Food Tech.)/B. Tech (Agricultural Engg.) /B. Pharm. D./B. Arch./M.B.A. (Agri-Business)/ (Lateral Entry for B. Tech. and B. Pharm.) and Diploma in Engg.] Date of Entrance Test: Saturday. 9<sup>th</sup> May. 2015

Dipiorna in Ei	1881] Date of Entra	166 163th <b>Saturday</b> , 7 1 1ay, 2015		
Paper		Name of Subjects	Timings	Duration
Paper - I	Part - A	Physics and Chemistry	9:00 am to 12:00 noon	3.00 Hrs
	Part - B	Mathematics		
	Part - C	Biology		
Paper - 2		Aptitude Test for MBA/MBA (Agri-Business)	9:00 am to 12:00 noon	3.00 Hrs.
Paper - 3		Aptitude Test for B.Tech. IInd Year (Diploma Holders)	9:00 am to 11:00 am	2.00 Hrs.
Paper - 4		Aptitude Test for B.Tech. IInd Year (B.Sc. Graduates)	9:00 am to 11:00 am	2.00 Hrs.
Paper - 5		Aptitude Test for B.Pharm.IInd Year (Diploma Holders)	9:00 am to 11:00 am	2.00 Hrs.
Paper - 6		Aptitude Test for Architecture	1:00 pm to 4:00 pm	3.00 Hrs.
Paper - 7		Physics, Chemistry and Mathematics	9:00 am to 12.00 noon	3:00 Hrs.
Paper - 8		Agriculture	9:00 am to 12.00 noon	3:00 Hrs.



A separate test for B.Sc. (Agriculture/Horticulture/Forestry)/ M.A.B.M./M.Tech. / M. Pharm./ M.Sc. / MCA / MCA - Lateral Entry programmes shall be held on the dates given in the respective sections of the Prospectus.

#### 7. RESERVATION:

50% seats are reserved for muslim minority and 50% are open; reservation for girls, physically handicapped and NRI are also available in each category.

#### 8. CITY OF EXAMINATION:

The IUET-2015 will be held at Lucknow. Additional Examination centres may be established in a region, if sufficient numbers of candidates apply from the same.

#### 9. MEDICAL STANDARDS:

The candidates should have good general physique with following minimum requirements of physical fitness:

Height: Not less than 1.5 meter for male candidate and not less than 1.4 meters for female candidates.

Weight: Not less than 41 Kg, for male candidate and not less than 37 Kg, for female candidates.

Chest measurement: Not less than 69 cm. with satisfactory limits of expansion and contraction (applicable to male candidates only).

Heartand Lungs: No abnormality

Hernia, Hydrocele, Piles etc.: Presence of any of these is a temporary disqualification and is to be corrected before Johning.

Vision: Normal. If defective, it must be got corrected

to 6/9 in the better eye and 6/12 in the worse one.

Eyes should be free from congenital or any other disease.

Hearing: Normal. If defective, it must be got corrected before joining.

Last Date for Submission of Application Form April 10<sup>th</sup>, 2015

Last Date For Submission of Forms alongwith late fee April 20", 2015

Date of "Integral University Entrance Test" (IUET)-2015 Saturday, May 9th, 2015

#### PAPER I- PART A (PHYRICS)

#### UNIT-I

Metter In One & Two Dimensions: Average velocity, instantaneous velocity, one dimensional motion with constant acceleration, freely falling landies.

Measurement: Dimensional analysis and error estimation, dimensional cornetibility and significant figures.

Laws Of Motion: Force and Inertia, Newton's laws of motion and their significance. Tension instrings, system of pulleys.

Motion in Two Dimensions: Projectile motion, uniform circular motion, tangential and radial acceleration in curvilinear motion, relative motion.

Werk, Power And Energy: Work done byl constant and variable forces, kinetic and potential energy, power, conservative and non-conservative forces, conservation of energy, gravitational energy, work energy theorem, potential energy stored in a spring.

Unear Momentum & Collisions: Linear momentum & impulse, conservation of linear momentum for two particle system, collisions, collision in one dimension, collision in two dimensions, rocket propulsion.

Rotation Of A Rigid Body About A Flood Add: Angular valodity and angular acceleration, rotational kinematics, rotational motion with constant angular acceleration, relationship between angular and linear quantities, rotational energy, moment of inertia for a ring, rod, spherical shell, sphere and plane lamina, torque and angular acceleration, work and energy in rotational motion, rolling motion of a solid sphere and cylinder, friction and energy dissipation.

#### UNIT-2

Grantation: Grantational field, Kepler's laws and motion of planets, planetary and satellite motion, geostationary satellite, escape velocity.

Oscillatory Motion: Harmonic motion, motion of mass attached to a spring, motion of mass attached to system of springs, kinetic & potential energy. Time Period of a simple pendulum, comparing simple harmonic motion with uniform circular motion, forced oscillations, damped oscillations and resonance.

Mechanics Of Solids And Fluids: States of matter Young's modulus, Bulk modulus, Shear modulus of rigidity, variation of pressure with depth, Buoyant forces and Archimedes principle, Pascal's law, Bernoull's theorem and its applications, surface energy, surface tension, angle of contact, capillary rise, coefficient of viscosity, viscous force, terminal velocity, Stoke's law, stream line motion, Reynold's number.

Heat:And Thermodynamics: First law of thermodynamics, specific heat of an ideal gas at constant volume and constant pressure, and relation between them. Thermal processes, (reversible, irreversible, isothermal, adiabetic), second law of thermodynamics, concept of entropy and absolute scale, efficiency of a Carnot engine, thermal conductivity, Newton's law of cooling, black body radiation, Wien's displacement law, Section's law.

#### UNIT-3

Wisse: Wave motion, phase, amplitude and velocity of a wave, Newton's formula for longitudinal waves, propagation of sound waves in all, effect of temperature and pressure on velocity of sound, Laplace's correction, Principle of superposition, formation of standing waves, standing waves in strings and organ pipes, beats, Doppler's effect in sound & light.

Where Optics: Coherent and incoherent sources of light, interference, Young's double sit experiment, diffraction due to a single sit, linearly polarized light, Polaroid.

Bectmostatic: Coulomb's law, electric field and potential due to point charge, dipole and its field along the axis and perpendicular to axis, electric flux. Gauss's theorem and its applications to find the field due to infinite sheet of charge and inside the hollow conducting sphere, capacitance, parallel plate Capacitor with air and dielectric medium between the plates, Series and penallel combination of capacitors, energy of a capacitor, displacement current.

Current Electricity: Concept of free and bound electrons, drift velocity and mobility, electric current, Ohrms law, resistivity, conductivity, resistance in series and parallel combination, Kirchhoffs law and their application to network of resistances, principle of potentiometer, effect of temperature or resistance and its applications.

Magnetic Effect Of Current: Magnetic field due to current, Biot-Savart's law, magnetic field due to solenoid, motion of charge particle in a magnetic field, force on current carrying conductors and torque on current loop in a magnetic field, magnetic flux, forces between two parallel current carrying conductors, moving coil galvanometer and its conversion into animeter and volumeter.

Mignetism in Matter: The magnetization of substance due to orbital and spin motions of electrons, magnetic moment of atoms, diamagnetism, paramagnetism, ferromagnetism, earth's magnetic field and its components and their measurement.

#### UNIT-4

**Electromagnetic Induction :** Induced E.M.F., Faraday's laws, Lenz's law, electromagnetic induction, self-and mutual induction, B-H curve, hysteresis loss and its importance, eddy currents.

Ray Optics And Optical Instruments: Sources of light, luminous intensity, luminous flux, illuminance, photometry, wave nature of light, Huygen's theory for propagation of light and rectilinear propagation of light, reflection of light, total Internal reflection, reflection and refraction at spherical surfaces, focal length of a combination of lenses, spherical and chromatic aberration and their removal, refraction and dispersion of light due to a prism, simple and compound microscope, reflecting and refracting telescope, magnifying power and resolving power.

#### UNIT-5

Modern Physics: Photo-electric effect, matter waves, quantization, Plancks hypothesis, Bohr's model of hydrogen atom and its spectra, jorisation potential, Rydberg constant, solar spectrum and Fraunhofer lines,

fluorescence and phosphorescence, X-Rays and their productions, characteristic and continuous spectra. Moseley law, de Brogie weve length, Nuclear Instability, radioactive decay laws, Emission of a, b and grays, Mass - defect, Mass Energy equivalence, Nuclear Fassion, Nuclear Reactors, Nuclear Fusion, Classification of conductors, Insulators and semiconductors on the basis of energy bands in solids, PN junction, PN Diode, junction Transistors, Transistor as an amplifier and Oscillator, Principles of Logic Gates (AND, OR and NOT), Analog Vs Digital communication, Difference between Radio and television, Signal propagation, Principle of LASER, and MASER, Population Inversion, Spontaneous and stimulated Emissions.

#### CHEMISTRY

#### UNIT-1

Acomic Structure : Bohr's atomic model, Electronic Configuration, Quantum number, Aufbau Principle, Hund's Rule, Paul's Exclusion Principle, De Brogjie's equation, Heisenberg Principle, Shape of Orbitals.

Chemical Bonding And Molecular Structure: Electrovalent Bond, Covalent Bond, Hydrogen Bond, Hybridization involvings, pland diorbitals, Shapes of molecular, VSEPR-Theory, Molecular Orbital Theory.

Solid States: Classification of solids, Seven crystal systems, Structure of simple lonic solids, space lattice and unit cell.

Chemical Equilibrium: Law of mass action, Equilibrium constant, Le-Orstellers's Principle (Effect of temperature, pressure and concentration) lonic equilibrium, Ostwald's Dilution law, Salt hydrolysis, pH and buller solution, solubility and solubility product, Acid and Bases (Bronsted and Lew's concept).

#### UNIT-2

Chemical Kinetics: Rate of chemical reaction, Molecularity and order of reaction, Rate constant, First and second order reactions, Half life period and its dependence on concentration in 1st and 2nd order reactions. Temperature dependence of rate constant (Anthenius equation)

Bectrachemistry: Specific, equivalent and molecular conductances, Blieds of concentration on equivalent conductivity, Kohirausch's law of independent migration of ions, electrochemical cells and cell reactions. Standard electrode potential, Nemstequation and electrochemical series.

Catalysis And Colloids: Types of catalysis, Kinetics of homogenous catalysis, Theories of catalysis. Colloids-Types, preparation and general properties.

#### **UNIT-3**

Energetics: First law of Thermodynamics-Internal energy, work, heat and pressure - volume, work, Enthalpy, Heat's law of constant heat summation, Fusion and vapourization. Heat of reaction, Heat of formation, Heat of combustion and Heat of neutralization, Second law of thermodynamics, Entropy, Free Energy, Criterion of spontaneity.

Solution: Requit's law: molecular weight determination from lowering of vapour pressure, Elevation of boiling point, Depression of freezing point,

Osmotic pressure, vant Hofffactor.

**Gas Laws:** Ideal gas equation, Kinetic molecular theory of gases, deviation from ideal behavior, vander Waal's equation. Average, Root Mean Square (RMS) and most probable velocities and their relation.

#### UNIT-4

#### Inorganic Chemistry

**Periodic Table :** Classification of elements on the basis of electronic configuration, Ionisation potential, Electronegativity and Electron affinity.

#### Preparation And Properties Of The Following:

Hydrogen Peroxide, Phosphorous, Aluminium, Iron, Copper, Silver, Lead, Cement, Glass, Copper Sulphate, Silver Nitrate, Plaster of Paris, Borax, Mohr's Salt, Alums, White and Red Lead, Micro cosmic salt and Bleaching powder, Sodium Thiosulphate, Soap.

Principles Of Qualitative Analysis: Group I to V

 $(Ag^+, Hg^{2+}, Cu^{2+}, Pb^{2+}, Bi^{3+}, Fe^{3+}, Cr^{3+}, Al^{3+}, Zn^{2+}, Ni^{2+}, Co^{2+}, Ca^{2+}, Ba^{2+}, Si^{2+})$ 

**Nuclear Chemistry:** Radioactivity, Isotopes and Isobars. Properties of Alpha, Beta and Gama rays, Nuclear fission and fusion, Kinetics of radioactivity.

#### UNIT-5

**Organic Chemistry**: Shape of organic compounds, Free radicals, Ions, Electromeric and Resonance effects, Types of organic reactions [Cannizzaro, Friedel-Craft, Perkin reaction, Aldol condensation], Isomerism [Structural, Geometrical and Optical].

General preparation and functional group properties of the following with emphasis on points noted against each of them.

- (a) Alkane (Free radical substitution), Alkenes [Electrophilic. addition, Markownikoff's addition. Peroxide effect] and Alkynes. Petroleum [Cracking, Octane Number, Anti knocking compounds].
- (b) Alcohol, [Distinctions, Haloform reaction].
- (c) Carbonyl Compound [Aldehydes, Ketones, carboxylic acids & Esters, Ether, Primary Amines [Classification, Distinction, Basic nature]. Benzene [Resonance], Toluene, Phenol, Nitrobenzene, Aniline, Benzaldehyde, Benzoicacid.

#### **PAPER - I - PART B (MATHEMATICS)**

#### UNIT-I

**Algebra**: Sets, relations & functions, De-Morgan's Law, Mapping, Inverse relations, Equivalence relations, Peano's axioms, Definition of rationals and integers through equivalence relation, Indices and Surds, solutions of simultaneous and quadratic equations, A.P., G.P. and H.P., Partial fraction, Binomial Theorem for any index, exponential series, Logarithmic Series, Determinants and their use in solving simultaneous linear equations, Matrices, algebra of matrices, inverse of a matrix, Use of matrix for solving linear equations.

**Trigonometry:** Identities, Trigonometric equations, properties of triangles, height and distance, Inverse function, Complex numbers and their properties, Cube roots of unity, De-Moivre's theorem.

#### UNIT-2

**Co-ordinate Geometry:** Cartesian system of rectangular co-ordinates in a plane, distance formula, section formula, locus and its equation & translation of axes.

Straight Lines: Slope of a line, parallel and perpendicular lines, intercepts of a line on the coordinate axes. Various forms of equations of a line, intersection of lines, angles between two lines, condition for concurrence of three lines, distance of a point from a line, equations of internal and external bisectors of angles between two lines, coordinates of centroid, orthocenter and circumcentre of a triangle, equation of family of lines passing through the point of intersection of two lines.

Circle & Conic Sections: Standard form of equation of a circle, general form of the equation of a circle, its radius and centre, equation of a circle when the end points of a diameter are given, points of intersection of a line and a circle with the centre at the origin and condition for a line to be tangent to a circle, equation of the tangent. Sections of cones, equations of conic sections (parabola, ellipse and hyperbola) in standard forms.

#### UNIT-3

Differential Calculus: Limit, Continuity and Differentiability: Real valued functions, algebra of functions, polynomials, rational, trigonometric, logarithmic and exponential functions, inverse function. Graphs of simple functions. Limits, continuity and differentiability. Differentiation of the sum, difference, product and quotient of two functions. Differentiation of trigonometric, inverse trigonometric, logarithmic, exponential, composite and implicit functions; derivatives of order upto two. Rolle's and Lagrange's Mean Value theorems. Applications of derivative: Rate of change of quantities, monotonic - increasing and decreasing functions, Maxima and minima of functions of one variable, tangent and normal.

#### LINIT.4

Integral Calculus: Integral as an anti- derivative, Fundamental integrals involving algebraic, trigonometric, exponential and logarithmic functions. Integration by substitution, by parts and by partial fractions. Integration using trigonometric identities.

**Evaluation Of Simple Integrals**: Integral as limit of a sum, Fundamental theorem of calculus, Properties of definite integrals. Evaluation of definite integrals, determining areas of the regions bounded by simple curves in standard form.

#### UNIT-5

**Vector Algebra**: Vector and scalar quantities, addition of vectors, components of a vector in two dimensional and three dimensional space, scalar and vector double and triple product.

**Statistics And Probability :** Mean, median, mode and standard deviation. Probability of an event, addition and multiplication theorems of probability, Baye's theorem.

#### PAPER-I, PART-C (BIOLOGY)

#### Unit 1: Evolution and Biodiversity

**Origin of life**: Oparin's theory, Miller's experiment, Viruses structure, properties, distribution, classification and pathogenesis (eg. AIDS, Cancer, etc.), viriods & prions, biotic balance.

**Organic evolution :** Relationship among organisms and evidences of organic evolution- principles of evolution, Lamarckism, Darwinism and speciation.

**Mechanism of organic evolution**: Variations-definition, causes and types, mutations (principle of *Hugo devries*), role of mutation in speciation. Evolution through ages and human evolution.

Biology – its meaning and relevance to mankind. What is living; Taxonomic categories and aids (Botanical gardens, herbaria, museums, zoological parks); Systematics and Binomial system of nomenclature. Introductory classification of living organisms (Two-kingdom system, Five-kingdom system); Major groups of each kingdom alongwith their salient features (Monera, including Archaebacteria and Cyanobacteria, Protista, Fungi, Plantae, Animalia); Viruses; Lichens

**Plant kingdom** – Salient features of major groups (Algae to Angiosperms); **Animal kingdom** – Salient features of Nonchordates up to phylum, and Chordates up to class level.

#### Unit 2: Cytology and Genetics

**Cell**: The Unit of Life; Structure and Function: Cell wall; Cell membrane; Endomembrane system (ER, Golgi apparatus/ Dictyosome, Lysosomes, Vacuoles); Mitochondria; Plastids; Ribosomes; Cytoskeleton; Cilia and Flagella; Centrosome and Centriole; Nucleus; Microbodies.

Structural differences between prokaryotic and eukaryotic, and between plant and animal cells. Cell cycle (various phases); Mitosis; Meiosis.

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

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

**Genetics**: Mendelian inheritance; Chromosome theory of inheritance; Gene interaction; Incomplete dominance; Co-dominance; Complementary genes; Multiple alleles; Linkage and Crossing over; Human hereditary traits, study of twins, A, B, O blood groups and their inheritance, Rh factor, sex determination, chromosomal aberration, important human syndromes, sex-linked characters and their inheritance, applied genetics-eugenics, euthenics, euphenics & I.Q. test.

 $\label{eq:DNA-its} \textbf{DNA}-\text{its organization and replication; } \textbf{Transcription and Translation; } \textbf{Gene} \\ \text{expression and regulation; } \textbf{DNA} \text{fingerprinting.}$ 

Steps in recombinant DNA technology – restriction enzymes, DNA insertion by vectors and other methods, regeneration of recombinants. Applications of r-DNA technology. In human health –Production of Insulin, Vaccines and Growth hormones, Organ transplant, Gene therapy.

#### Unit 3: Plant Physiology

**Absorption**: Absorption of water through root hairs, osmosis, translocation and root pressure, nitrogen cycle.

**Nutrition:** Special modes of nutrition in plants (autotrophic, heterotrophic, parasites, saprophytes, symbionts, insectivorous and their ecological relation.

**Photosynthesis:** Chloroplast, light, chlorophyll and carbon dioxide, mechanism of photosynthesis, formation of ATP and its functions and importance of photosynthesis.

**Transpiration:** Factors and importance, mechanism of opening and closing of stomata, ascent of sap.

**Respiration**: Aerobic, anaerobic respiration, mechanism of respiration (glycolysis, Kreb's cycle, electron transport chain).

**Growth and movement:** Definition of growth, region of growth and their measurements, types of movements in plants, growth hormones.

**Diffusion and Osmosis :** water potential, osmotic pressure, turgor pressure.

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

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

#### Unit 4: Animal Physiology

**Animal Nutrition:** Food, balanced diet, nutritional imbalances and deficiency diseases, digestion, absorption, assimilation of food.

**Animal excretion and osmoregulation:** Chemical nature of excretory products in various animals, physiology of excretion, functions of liver and kidneys, formation of urine, osmoregulation by kidneys.

**Respiratory system:** Exchange and transport of gases  $(O_2$  and  $CO_2)$ , factors affecting their transport, cellular respiration, different lung volumes, breathing and sound production.

**Nervous system**: central, autonomic and peripheral nervous system, receptors, effectors, reflex action, nature and conduction of nerve impulse, synapse and sense organs- structure and working of eye and ear, biochemistry of vision and taste buds.

**Endocrine system**: Different endocrine glands and hormones- definition, types, characteristics and their functions (in relation to human beings), hormonal disorders and pheromones.

**Circulatory system:** circulation of body fluids-blood and lymph, open and closed vascular systems, structure and working physiology of heart, comparison between arteries and veins, lymphatic system.

 $\mbox{\bf Reproductive system}$  : histology, structure and organizations of different systems.

#### Unit 5: Environment and Applied Biotechnology

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

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

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

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

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

Adolescence and drug/alcohol abuse;

babies and amniocentesis.

Plant Breeding and Tissue Culture in crop improvement.

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

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

### PAPER – 2 (Aptitude test in M.B.A./M.B.A Agri-Business) UNIT-I

**English**: This will consist of the Grammar, Comprehension, Antonyms, Synonyms and general usage.

UNIT- 2 Data Interpretation: This will be in Graphical, Tabular and Pictorial form.

**UNIT-3 Reasoning:** This will be a mixture of verbal and non verbal aspects of reasoning.

**UNIT- 4 Quantitative Aptitude:** This will test the quantitative aptitude of the Candidate.

**UNIT- 5 General Knowledge:** This will test the General Awareness regarding Current Affairs, Sports, Books, History, Geography & Science.

**Group Discussion (GD):** Qualified candidates of the written test will be required to appear for group discussion. They will be divided into groups and allocated a topic to discuss in presence of a panel. The candidate shall get credit for originality of ideas, initiative, general behaviour and communication skills.

**Personal Interview (PI)**:- The final step would be a Personal Interview (PI). This will be conducted by a panel of experts and will proceed like a normal interview does.

#### **DISTRIBUTION OF MARKS:**

(i) Written 400

(ii) GD 100

(iii) PI 100

Note: The Group Discussion and Personal Interview shall be held on the same day.

### PAPER -3 (Aptitude Test for B.Tech. -IInd Year) for Diploma Holders

Engineering Mechanics, Engineering Graphics, Basic Electrical Engg., Basic Electronics Engg., Elements of Computer Science, Basic Workshop Practice and Physics/Chemistry/Maths of Diploma standard English Language and General Knowledge.

### PAPER -4 (Aptitude Test for B.Tech. IInd Year) for B.Sc. Graduates

#### Unit-I

**Differential Calculus**: Successive differentiation, n<sup>th</sup> order derivative using Leibnitz theorem, Partial derivatives, Expansion of function for one variable and two variables by Maclaurin's and Taylor's theorem, maxima and minima, maxima and minima by Lagrange's Multiplier method.

Integral Calculus: Evaluation of definite integrals using standard formulae, Gamma and Beta functions, Dirichlet's integral, multiple integrals.

**Vector Calculus :** Gradient ,divergence and curl, directional derivatives, line, surface and volume integrals, Gauss , Stoke's and Green's theorem.

#### Unit-2

Matrix Theory: Matrix Algebra, System of linear equations, solution of linear system of homogeneous and non-homogeneous equations by matrix. Eigen values and Eigen vectors. Cayley Hamilton theorem, complex matrices.

Statistics and probability: Mean, Median, Mode and standard deviation, correlation and regression analysis, Random variables, Conditional probability, Discrete and continuous distributions: Binomial, Poisson and Normal distributions. Sampling theory.

#### Unit-3

**Differential Equations :** First order equation (linear and non linear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's differential equations ,Initial and boundary value problems, linear partial differential equations with constant coefficients of 2nd order and their classifications and variable separable method.

#### Unit-4

Complex Variables: Analytic functions, Cauchy's integral theorem and integral formula, Taylor's and Laurent's series, Residue theorem, contour integrals.

**Fourier Series**: Periodic functions, Trigonometric series, Fourier series of period  $2\pi$  Euler's formulae, functions having arbitrary period, Change of interval, Even and odd functions, Half range sine and cosine series.

#### Unit-5

**Transform Theory**: Laplace transform of derivatives and integrals, Inverse

Laplace Transform, Laplace transform of periodic functions, Convolution theorem, Application to solve simple linear and simultaneous differential equations, Fourier integral, Fourier complex transform, Fourier sine and cosine transforms and applications to simple heat transfer equations. Z-transform and its application to solve difference equations.

#### PAPER 5 - Aptitude Test for B. Pharm. (IInd YEAR)

- 1. Pharmaceutics-I
- 2. Pharmaceutical Chemistry-I
- 3. Pharmacognosy
- 4. Biochemistry and Clinical Pathology
- 5. Human Anatomy and Physiology
- 6. Health Education & Community Pharmacy
- 7. Pharmaceutics-II
- 8. Pharmaceutical Chemistry-II
- 9. Pharmacology and Toxicology
- 10. Pharmaceutical Jurisprudence
- 11. Drug Store and Business management
- 12. Hospital and Clinical Pharmacy

#### **PAPER 6 - Aptitude Test for Architecture**

The test is in two parts. A paper based Aptitude Test counsisting of 50 objective type questions for one hour and a paper based Drawing Test counseling of three questions for two hours. The test measures architectural aptitude of the candidate through two sections – aesthetic sensitivity and drawing.

#### Part A: Aptitude Test

The Architecture Aptitude Test measures perception, imagination and observation, creativity and communication along with architectural awareness and comprises of –

- Visualizing three dimensional objects from two dimensional drawings.
- Visualizing different sides of three dimensional objects.
- Identifying commonly used materials and objects on their textural qualities.
- Analytical reasoning.
- Mental Ability (Visual and Numerical).
- Imaginative comprehension and expression.
- Architectural awareness of persons, places, buildings and materials.

#### Part B: Drawing Test

The primary emphasis in scoring the drawing test is on the candidate's drawing, imagination and observation skills. The candidate's sense of proportion and perspective is also evaluated together with sense for colour composition.

The Drawing Aptitude Test is judged on the following aspects –

- Ability to sketch a given object proportionately and rendering the same in visually appealing manner.
- Visualizing and drawing the effects of light on the objects and shadows

cast on surroundings.

- Sense of perspective drawing.
- Combining and composing given three dimensional elements to form a building or structural form.
- Creating interesting two dimensional compositions using given shapes and forms.
- Creating visual harmony using colours in given composition.
- Understanding of scale and proportions.
- Drawing from memory through pencil sketch on themes from day to day experiences (public space, market, festivals, street scenes, monuments, recreational spaces etc.)

**NOTE**: Candidates must bring their own pencils, geometry box set, erasers, colour pencils, sketch pens and crayons for the Drawing Test.

#### PAPER 7 - Syllabus for Diploma Engineering

Paper 7- Syllabus for Diploma Engineering Candidates Physics (मौतिक विज्ञान)

#### Unit-I

General Properties of Matter: Measurements, vectors, dynamics, mechanics (Laws of motion, moment and parallel forces), work energy and power, simple pendulum, gravitation, hydrostatics, Archimedes's principle., Newton's laws.

#### Sound: Vibration, types of waves and sound waves.

यूनिट— 1 पदार्थों के सामान्य गुण: मापन, वैक्टर, गतिकीय, यांत्रिकी (गति के नियम, आधूर्ण एवं समान्तर बल) कार्य, ऊर्जा तथा सामर्थ्य, द्रव स्थैतिकी, आर्किमिडीज का सिद्धान्त, न्युटन के नियम।

ध्वनि:- कम्पन, तरंगों के प्रकार तथा ध्वनि तरंगे।

Unit-II Heat: Molecular theory of matter, temperature scale, thermal expansion, thermal energy (joule, calories, specific heat and latent heat), thermal radiation, work and heat.

यूनिट— 2 कष्मा : पदार्थ का अणुगति सिद्धान्त, ताप के पैमाने, कष्मीय प्रसार, कष्मीय कर्जा (जूल, कैलोरी, विशिष्ट कष्मा एवं गुप्त कष्मा), कष्मीय विकिरण, कार्य एवं कष्मा।

**Unit-III Light:** Some facts related to light, reflection, reflection at spherical mirrors, refraction, refraction at thin lenses, human eye, optical instruments. (simple microscope, compound microscope), prism spectrum.

यूनिट— 3 प्रकाश : प्रकाश संबंधी कुछ तथ्य परावर्तन, गोलीय दर्पणों पर परावर्तन, अपवर्तन, पतले लेन्सों से अपवर्तन, मानव नेत्र प्रकाशिक यंत्र (साधारण सूक्ष्मदर्शी, संयुक्त सूक्ष्मदर्शी), स्पैक्ट्रम।

Unit-IV Electro Statics: Electron model of electrification, charges, Coulomb's law. Current Electricity: Electric current, potential difference, electric cell, Ohm's law, specific resistance, series and parallel combination of resistances and cells, applications of electricity, House hold electricity.

यूनिट- 4 स्थिर विद्युत : वैद्युत का परमाणुवीय माडल, आवेश, कूलाम का

नियम ।

धारा विद्युत : विद्युत धारा, विभावान्तर, विद्युत सेल, ओम का नियम, विशिष्ट प्रतिरोध, प्रतिरोधों एवं सेलों का श्रेणी एवं समान्तर संयोजन, विद्युत के अनुप्रयोग, घरेलू उपयोगों में विद्युत उपकरण।

Unit-V Electromagnetism: Magnetic field, force on a moving charge, force on a current carrying conductor, Lorentz force, electromagnetic induction, Radioactivity.

यूनिट— 5 विद्युत चुम्बकत्व : चुम्बकीय क्षेत्र, गतिमान आवेश पर बल, धारावाही चालक पर बल, लारेंज बल, विद्युत चुम्बकीय प्रेरण, रेडियोएक्टिवता।

#### Chemistry (रसायन विज्ञान)

**Unit – I General Chemistry:** Science and scientific method, matter and its states, atom, molecule law of chemical combination, basic concepts of atomic structure, valency, symbol, radical formula, chemical equations, chemical reactions, numerical problems.

यूनिट—1 सामान्य रसायन: विज्ञान और वैज्ञानिक विधि, द्रव्य तथा द्रव्य की अवस्थायें, परमाणु, अणु, रासायनिक संयोग के नियम, परमाणु संरचना के मूलभुत सिद्धांत, संयोजकता, प्रतीक मूलक, सूत्र, रासायनिक समीकरण, रासायनिक अभिक्रियाएं आंकिक प्रश्न।

Unit –II Physical Chemistry: Radio activity and nuclear energy, gaseous law, Avogadro's hypothesis, equivalent weight, atomic weight and molecular weight, electrolysis, acid base and salt, catalysis and catalyst, solution, numerical problems.

यूनिट—2 मौतिक रसायन : रेडियो ऐक्टिवता तथा नामिकीय ऊर्चा, गैसीय नियम, एवोगेड्रो परिकल्पना, तुल्याकीय भार, परमाणु भार तथा अणुभार, वैद्युत अपघटन, अम्ल, क्षार एवं लवण, उत्प्रेरण तथा उत्प्रेरक, विलयन, ऑकिक प्रश्न।

**Unit – III Inorganic Chemistry**: Classification of elements, periodic table, water and hardness of water, metal- non metal metallurgy of aluminum, inert gases.

यूनिट-3 अकार्बनिक रसायन : तत्वों का वर्गीकरण, आवर्त सारणी, पेयजल एवं जल की कठोरता, धातू—अधातू, ऐल्युमिनियम का धातुकर्म, अक्रिय गैंसें।

**Unit** – **IV Method of preparation and properties of gases**: Hydrogen, Nitrogen, Oxygen, Chlorine, Ammonia, Sulphur-dioxide, Hydrogen sulphide and hydrogen chloride.

यूनिट—4 गैस बनाने की विधि एवं गुण: हाईड्रोजन नाइट्रोजन, ऑक्सीजन, क्लोरीन, अमोनिया, सल्फर डाईआक्साइड, हाईड्रोजन सल्फाईड एवं हाइड्रोजन क्लोराईड।

**Unit –V Organic Chemistry**: Classification of organic compounds, paraffin's and unsaturated hydrocarbons (ethylene and acetylene) methods of preparation and properties, important chemical compounds, plastics and detergents.

यूनिट-5 कार्बनिक रसायन: कार्बनिक यौगिकों का वर्गीकरण, पैराफीन तथा असंतृप्त हाईड्रोकार्बन (एथीलीन एवं एसीटिलीन) बनाने की विधियाँ तथा गुण, प्लास्टिक तथा डिटर्जन्टों का सरल परिचय।

#### Mathematics (गणित)

 $\mbox{\bf Unit}$  -I  $\mbox{\bf Simple Arithmatics}$  : Speed and time, work and time, compound interest.

यूनिट—1 अंकगणित (Arithmatics) : चक्रवृद्धि ब्याज, चाल तथा समय, कार्य तथा समय, कर प्रणाली ।

**Unit- 2 Algebra :** Number system, laws of indices, logarithm, factors, LCM, HCF, Quadratic equations, principal of equations.

**Trigonometry**: Circular measure, circular functions angle of circular functions, trigonometric functions of sum and difference (C-D) of two angles, some other formulae on trigonometric functions, heights and distances.

यूनिट—2 बीजगणित (Algebra) : संख्या पद्धति, घातांकी नियम, लघुगणक, गुणनखण्ड, लघुत्तम तथा महत्तम समापवर्तक, द्विघात बहुपद तथा द्विघातीय समीकरणों एवं समीकरणों के सिद्वान्त।

त्रिकोणिमिति (Trigonometry): वृत्तीय माप, वृत्तीय फलन, दो कोणों के योग तथा अंतर के त्रिकोणिमितीय अनुपात, ज्या तथा कोज्या के योग एवं अन्तर को गुणनफलों में (C-D सूत्र) तथा गुणनफलों को योग एवं अन्तर में व्यक्त करना, कोणों के अपवर्त्य, ऊँचाई तथा दूरी।

**Unit -3 Statistics :** Central measure, mean, median, mode, mean deviation and standard deviation, measures of dispersion.

Mensuration: Cube, Cuboid prism, pyramid, cylinder, cone, sphere.

यूनिट—3 सांख्यिकी (Statistics) : केन्द्रीय माप, माध्य, माध्यिका, बहुलक, माध्य विचलन तथा मानक विचलन ।

**ठोस ज्यामिति (Mensuration)**— आयतन, घन, प्रिज्म, पिरैमिड, बेलन, शंकु, गोला तथा गोले के पृष्ठीय तल।

**Unit -4 Geometry**: Pythagoreas principle and its extension, theorems related triangle and circle, tangent to circle, locus, similarities of linear plane figures.

यूनिट—4 रेखागणित (Geometry)— पाइथागोरस प्रमेय एवं उसका विस्तार, त्रिभुज तथा वृत्त सम्बन्धी प्रमेय, स्पर्श रेखा, बिन्दु पथ, समरूपता संबंधी प्रमेय। Unit—5

Coordinate Geometry: Point (distance between two points, ratio formulae, centriod, area of triangle and quadrilateral) straight line (equations, angle between two lines, length of perpendicular, equations of parallel and perpendicular lines).

यूनिट-5 निर्देशांक ज्यामिति (Co-ordinate Geometry)- बिन्दु ( दूरी सूत्र, अनुपातिक सूत्र, केन्द्रक, त्रिभुज तथा चतुर्भुज का क्षेत्रफल)

सरल रेखा: (विभिन्न समीकरण, दो रेखाओं के बीच का कोण, लम्ब की लम्बाई, समान्तर व लम्ब रेखाओं का समीकरण)।

#### PAPER - 8 (Apptitude test for B.Tech.- Agricultural Engg.)

The syllabus prescribed for Intermediate (Agriculture) as recommended by U.P. Board will be followed for students from agriculture stream seeking admission in B. Tech. - Agricultural Engg.

#### Syllabus for MCA

Part – I: Verbal Reasoning & Non Verbal Reasoning Verbal Reasoning

General Mental Ability: Series completion, Analogy, Classification, Coding- Decoding, Blood Relation, Puzzle Test, Sequential output tracing, Direction sense test, Logical Venn Diagram, Alphabet Test, Number, Ranking & Time test, Logical sequencing of words, Arithmetical Reasoning, Data Sufficiency.

**Logical Deduction:** Statements-Arguments, Statements-Assumption, Statements-Course of Action, Theme detection, Cause & effect reasoning, Non Verbal Reasoning

Classification, Analytical Reasoning, Cube & Dice, Completion of incomplete patterns, Construction of sequence & triangles.

#### Part -II: Mathematics

**Algebra:** Surds, solution of simultaneous and quadratic equations, arithmetic, geometric and harmonic progression, logarithms, exponential and logarithmic series, determinants.

**Probability:** Definition, dependent and independent events, numerical problems on addition and multiplication of probability, theorems of probability.

**Trigonometry:** Simple identities, trigonometric equations, properties of triangles, use of mathematical tables, solution of triangles, height and distance inverse functions.

**Co-Ordinate Geometry:** Co-ordinate geometry of the straight lines, pair of straight lines, circle, parabola, ellipse and hyperbola and their properties. **Calculus:** Differentiation of function of functions, tangents and normal,

simple examples of maxima of minima, limits of function, integration of function.

**Vectors:** Position vector, addition and subtraction of vectors, scalar and vector products and their applications.

**Statistics**: Theory of probability, Mean, Median, Mode, Dispersion and Standard Deviation.

#### Syllabus for MCA (Lateral Entry)

#### $Part-I: Verbal\ Reasoning\ \&\ Non\ Verbal\ Reasoning$

#### Verbal Reasoning

**General Mental Ability:** Series completion, Analogy, Classification, Coding-Decoding, Blood Relation, Puzzle Test, Sequential output tracing, Direction sense test, Logical Venn Diagram, Alphabet Test, Number, Ranking & Time test, Logical sequencing of words, Arithmetical Reasoning, Data Sufficiency.

**Logical Deduction:** Statements-Arguments, Statements-Assumption, Statements-Course of Action, Theme detection, Cause & effect reasoning. **Non Verbal Reasoning** 

Classification, Analytical Reasoning, Cube & Dice, Completion of incomplete patterns, Construction of sequence & triangles.

#### Part -II: Proficiency of Computers

**Computer Fundamentals:** History, Generation and Application of Computer, Number System, Input Output Devices, Memory Types.

**Discrete Mathematics:** Set Theory, Relations, Functions, Lattices, Theory of Groups, Boolean algebra, Recurrence Relations, Numeric Functions.

Computer Networks: Network Topology , Transmission Mode , OSI Model ,TCP/IP Protocol suite, Transmission Media , Multiplexing and Demultiplexing ,Error detection and correction , IEEE 802.3 and 802.4 , Data Link Layer Protocol , Internet Address , Subnetting.

**Data Structure:** Stack, Link List and Queue, Tree Traversal, Hashing, Sorting and Searching.

**Programming in C:** Keywords, Identifiers, Modifiers, Variable, Operators, Conditional and Control Statements, Arrays, Functions, Pointers, Structure, Union.

**Object Oriented Concepts Using C++ and Java:** Object and Classes, Abstraction, Encapsulation, Inheritance, Polymorphism, Constructor and Destructors, Operator and Function Overloading, Virtual and Pure Virtual Class.

Database Management System: E-R Model, Relational Model, SQL Queries, Referential Integrity, Normal Form (1 NF, 2 NF, 3 NF and BCNF).

Operating System: Introduction, Process Concept, Multithreading, Process Scheduling, Synchronization and Deadlock, Memory Management, Virtual Memory Management, Disk Scheduling.

Web Technology: History and Growth of Web, HTML, Introduction to DHTML and XML, lava Script, Cascading Style Sheet.

#### Syllabus for B.Sc. (Hons.) Agriculture/Horticulture/Forestry

Same as Physics and Chemistry (Paper I - Part A), Mathematics(Paper I - Part B), Biology (Paper I - Part C) and Agriculture(Paper 8)

#### Master in Agri.-Business Management (M.A.B.M)

Test of Reasoning, Data Interpertation & Numerical Ability, English Comprehension, General Knowledge, Aptitude Test & Agricultural Sciences.

### Syllabus for M.Sc. Section A - (Physical Science)

#### **Physics**

**Structure of Matter:** Mechanics of a system of particles; linear momentum, angular momentum and energy.

**Theory of relativity:** Michelson Morley experiment, Lorentz Transformations and its Applications, Variation of Mass with Velocity.

**Thermodynamics:** Many Particle system, work, energy and heat. The Law of Entropy.

**Statistical Mechanics:** Statistical equilibrium, Maxwell Boltzmann Distribution Law and its experimental verification, thermal equilibrium, Magnetism, electrodynamics, interaction of electro-magnetics waves with matter.

Optics: Interference, diffraction, polarization, principle of LASERS,

#### fibre optics communication.

**Quantum Mechanics fundamentals:** Particles and wave packets, wave functions. X-Ray scattering by crystals, Bragg's Law.

Nuclear Processes: Radioactive decay, nuclear reaction, nuclear fusion and fission.

**Solid State Physics:** Free electron theory, semi-conductors and super conductors.

**Electronics:** p-n junction diode, transistors (common base, common emitter and common collector configurations), principle of oscillators, FET, MOSFET, SCR, h-parameters, CRO.

#### Chemistry

The gas laws, properties of gases electrolytes, chemical equlibria, chemical kinetics, concept of pH and buffer, molecular orbital theory, the chemical bonds and the forces involved therein, periodic table; Aliphatic and aromatic hydrocarbons, Organic substitution reactions, electrophilic and nucleophilic reactions; Isomerism

#### **Mathematics**

**Algebra:** Definitions and simple properties of Groups and Subgroups, Cyclic group, Co-sets, Lagrange's theorem on the order of subgroups of a finite order group, Morphism of groups, Cayley's theorem.

**Calculus:** Partial differentiation, Maxima and Minima of functions of two variables, Multiple Points, Double and Triple Integral.

**Real Analysis:** Real sequence - Limit and Convergence of a sequence and Monotonic sequences, Cauchy's sequences and sub sequences; Series - Infinite series and convergent series, Tests for convergences of a series, Rolle's theorem, Cauchy's and Lagrange's mean value theorems.

**Numerical Analysis:** Numerical solutions of algebraic and Transcendental equations (Bisection, Regula False, iteration and Newton-Raphson's methods). Solution of systems of linear algebraic equations using Gauss elimination method. Finite differences, Newton's interpolation formula, Lagrange interpolation formula. Numerical integration, Numerical solutions of ODEs using Picard, Euler, modified Euler and fourth order Runge-Kutta methods.

**Differential Equations:** Degree and order of a differential equation, Equations of first order and first degree, Equations in which the variables are separable, Homogeneous, reducible to homogeneous, Linear equations, reducible to linear form, Exact differential equation, reducible to exact form, First order & higher degree differential equations, linear differential equations with constant coefficients, C. F. and Pl.

**Vector Calculus:** Scalar point functions, Vector point functions, Differentiation and Integration of vector point functions, Directional derivative, differential operators, Gradient, Divergence and Curl.

**Statistics:** Bar chart, Pie chart, Histogram and Frequency curve, Mean, Median, Mode, Mean deviation, Standard deviation and coefficient of variation. Basic concept of Probability and its definitions, addition and multiplication theorems (only definition)

#### Section B - (Biological Science)

**General Biology:** Systematic of plants and animals, Ecology, cytology and physiology of plants, Pro- and eukaryotic organisms; Cell organelle and their function; multicellular organisms; Energy transformations; Internal transport systems of plants; Respirations; Regulations of body fluids and excretory mechanisms; Cellular reproduction; Mendelian genetics and heredity; Biology of population and communities; Evolution; Genesis and diversity of organisms; Animal behavior; plant and animal diseases.

**Physiology of plants and animals:** Vitamins; Hormones; Metabolism; Photosynthesis. Nitrogen fixation, Fertilization and Osmoregulation; Nervous system; Endocrine system; Vascular system; Immune system; Digestive system, Reproductive system.

**Basic Biotechnology:** Tissue culture; Application of enzymes; Antigenantibody interaction; Antibody production; Diagnostic aids.

**Cell Biology:** Cell cycle; Cytoskeletal elements; Mitochondria; Endoplasmic reticulum; Chloroplast; Golgi apparatus; Signaling.

#### Microbiology

Historical development in Microbiology, Morphology, Cytology; Reproduction and genetics of bacteria, yeasts and moulds; Culture technique and identification; Stains and staining techniques; Growth; Nutrition and physiology of micro-organisms; Economic importance of bacteria, yeast and moulds; Food contamination, control and food safety; General principles of food preservation; Microbiological standards.

#### Biochemistry and Molecular Biology

Enzymes, coenzymes and cofactors; hormones, carbohydrate, protein, fat and nucleic acid metabolism, vitamins and their functions in the body, minerals and their functions in the body. DNA and RNA: Structure and functions, DNA as a genetic material, Central dogma, Replication, transcription and translation, Operon concept (Lac and Trp).

#### Syllabus for M.TECH. (Biotechnology)

**Test paper format:** All questions shall be of multiple choice type and carry four marks each. All questions are compulsory. For each wrong answer one mark will be deducted.

#### UNIT- I

#### **CELL BIOLOGY & GENETICS**

**Cell Classification:** Cell variability (size, shape, complexity, function); Prokaryotes and Eukaryotes: cell structure; Sub-cellular organelles and components.

Cell division and cell cycle: Mitosis & Meiosis, different phases of cell cycle,

basics of signal transduction.

**Mendel's Laws of Inheritance :** Chromosomes structure and functions, Mendelian laws, Back cross & Test cross, Epistasis, Complimentary genes **Sex determination in plants and animals :** sex-linkage; crossing over, chromosomal theory of inheritance.

**Mutations**: Spontaneous, induced; Chemical and physical mutagens; Carcinogenesis., Recombinant DNA technology; vectors; Gene library; Selection and screening of recombinations; Applications of transgenic plants and animal.

#### UNIT-2

#### **BIOCHEMISTRY & MICROBIOLOGY**

#### Biomolecules:

Chemical structure, general properties and functions of simple carbohydrates, lipids, proteins and nucleic acid, structures and biological functions of vitamins, enzymes, coenzymes and hormones.

#### Molecular Biology:

 Nucleic acid as genetic information carriers; Central dogma of Molecular biology. Basis of Replication, Transcription, Translation; concept of operon.

#### Bioenergetics & Biomembranes:

Biological membranes and transport across them, bioenergetics.

#### Metabolism and Immunity:

 Major anabolic and catabolic pathways, Carbohydrates, lipid, nucleic acid metabolism; Photosynthesis. Fundamentals of Immunology; Cells and organs of immunity; Memory; specificity, diversity; Self vs. non-self discrimination; Structure of primary and secondary lymphoid organs; Cell mediated vs. humoral immunity; T and B lymphocytes; Nature of antigen and antibody: Antigen vs. Immunogen, Structure of antibody: constant and variable regions; vaccines.

#### Microorganisms:

- Types, general characteristics and classifications of main groups of microorganisms; Structure and reproduction of Bacteria, Yeast, Mold, Algae and Viruses.
- Role of microorganisms in industrial and pharmaceutical applications.
- Microbial growth and nutrition: Definition of growth; Mathematical expression of growth; Measurement of growth and growth yields; Synchronous and asynchronous growth.

#### UNIT-3

#### **Environmental Sciences And Ecology**

- Ecosystem, fresh water and marine ecology, carbon, nitrogen, sulphur and water cycle. Ecological niche, succession, phytoremediation.
- Pollution and its control, depletion of ozone layer, population ecology. Bio-diversity and wildlife conservation. Global warming,

Impact of UV-B radiation.

#### UNIT-4

#### Physical, Chemical & Mathematical Sciences

- Functions and Graphs: Functional relation, notation and representation. Graphs. Review of basic functions. Functions of several variables.
- 2D coordinate geometry: Equation of a line, circle, ellipse, parabola, hyperbola.
- 3D geometry: Equation of sphere, cone.
- Basic trigonometric functions.
- Vector: Colon instead of hyphen Addition, subtraction, dot, cross, scalar triple product.
- Matrix algebra: Addition, substraction, multiplication, transpose inverse.
- Concept of pH, pK, chemical equilibrium, Henderson- Hasselbach equation, structure of water, chemical forces, hydrophilic and hydrophobic forces, electronic structure of molecules, chemical, ionic, covalent, hydrogen bonds.

#### Calculus: Differential & Integral:

 First law of thermodynamics, isothermal process, entropy and second law of thermodynamics, reversible and irreversible process; free energy and chemical potential; Gibbs free energy.

#### UNIT-5

#### Basic Bio-engineering And Technology

Basic concepts/principles in mechanical engineering, electrical and electronics engineering: Chemical Engineering: Computer applications in chemical engineering- chemistry process industries instrumentation methods of chemical analysis- thermodynamics- stoichiometry - fluid dynamics- mechanical operations- heat and mass transfer operationschemical kinetics/reaction engineering- process instrumentation dynamics and control process equipment design. Principles of Biochemical Engineering: Enzyme catalysis (Michaelis Menton Kinetics) and reactor design. Material & Energy balances of fermentation processes. Kinetics of microbial growth and product formation (Monod model, Leudekins- Piert model). Nature of fermentation processes. Transport phenomena in biochemical reactors- Mass transfer in immobilized enzyme systems and Oxygen transfer in submerged fermentation process, examples of primary metabolites, secondary metabolites and enzymes. Bioreactor operation and design, reactor sterilization. Batch, fed-batch and continuous culture process and cell recycle processes. Modelling of non-ideal behavior in bioreactors. Novel bioreactors, air-lift reactors, membrane bioreactors and fluidized bed reactors. Filtration and membrane based separations. centrifugation, extractions absorption and chromatography.

#### UNIT-6

#### Basic Computer Engineering

History of Computers: Evolution, Generation of computers (I, II, III,

#### IV,V).

- Overview and functions of a computer system.
- Input and output devices.
- Storage devices: Hard Disk, Diskette, Magnetic Tape, RAID, ZIP devices, Digital Tape, CD-ROM, DVD.
- Introduction to operating systems: Operating System concept
- The Internet and its Resources, World Wide Web (www) Associated tools, services, resources and various terminologies.

### Syllabus for M.Tech (Bioinformatics)

#### UNIT-I

#### Basics to Bioinformatics:

Introduction to Biological Databases: Nucleic Acid and Protein Sequence Data Banks. GenBank, SwissProt, PDB, ExPASY. Introduction to data retrieval systems: ENTREZ, SRS, DBGET/DBLINK. Sequence Alignment: Pairwise sequence alignment: Needleman Wunsch and Smith Waterman algorithm; Multiple Sequence alignment; CLUSTAL, PAUP. Database similarity searching: FASTA and BLAST. Substitution matrix: PAM matrix, BLOSUM matrix. Phylogenetic analysis: PHYLIP, Concept of Protein Structure analysis and prediction: Homology Modeling, MODELER, Swiss Model Workspace. Application of Bioinformatics in the field of Drug Designing: Molecular Docking and QSAR studies. Basic concepts of Genetic Algorithms and Neural Networks.

#### UNIT-2

#### **Bio-Statistics and Bio-Mathematics:**

Handling of data: tabulation and diagrammatic representation of data - bar diagram and pie diagram. Measures of central tendency: mean, median and mode. Measures of dispersion: range, quartile deviation, mean deviation and standard deviation. Coefficient of variation. Continuous random variables, Distributions Function, Density Function. Fibonacci series. Tests of significance: Null hypothesis and alternative hypothesis, Z-test, Student's distribution, Paired t - test, F-test for equality of population variances. Contingency table, Chi-square test for goodness of fit and independence of attributes.

#### UNIT-3

#### Computers, Programming Languages and Network Architectures:

Computer basics; Operating systems; Hardware, Software, DOS; Programming in Visual Basic: Introduction to application development using Visual Basic; Basics of OOP, Fundamental characteristics & benefits of OOP, Comparison of OOP with procedural programming, Application of OOP, Introduction to Java: Features of java, difference between C++ and Java Fundamentals: Type of Java programs, Applets, Servelets, Java Architecture, JDK tool JSL. The Internet: The TCP/IP; Routing: Internet Tools-E-mail, Telnet, FTP, Gopher, Archie, Web Technologies, Browser, and HTML. Network Architectures; Layered Protocols: Local Area Networks, Wide area Networks components: Modems, Hubs, Repeaters, Bridges, Routers

#### and Structured Cabling.

#### UNIT-4

#### Biochemistry and Principles of Genetics:

Nucleic acids: bases, nucleotides, RNA and DNA; Secondary and tertiary structures of nucleic acids; Different structural forms of DNA; Denaturation, renaturation and hybridization of DNA; Different types of RNA. Proteins, amino acids and peptides; Classification of proteins; Primary, secondary, tertiary and quaternary structures; Basics of protein folding. Signal transduction: Signaling by hormones and neurotransmitters; receptors, G-proteins, protein kinases and second messengers; Cell cycle and its regulation; events during mitosis and meiosis. Mendelian principles of inheritance, sex linked inheritance, Concept of linkage, linkage maps and recombination. Epistasis, Pleiotropy and Eugenics. Pharmacogenomics: Concept of Genomic medicine, Human Genome project. Etiology of Cancer: Tumor suppressor genes and Apoptosis.

#### UNIT-5

#### Genomics and Proteomics:

Annotation of the Genome: Structural annotation (Locating coding regions and other structural elements of the gene); ORF prediction, Gene prediction in prokaryotes, Evaluation of gene prediction methods, Functional annotation: (Prediction of gene function). Proteome analysis: 2D Electrophoresis, Immobilized pH gradient, Sample preparation, First dimension criteria, second dimension criteria, Stabilization, Detecting protein on gel: Electroblot, Image analysis, Digital imaging, Gel matching; Data analysis: Database for 2D gel. Protein expression analysis; Microarrays.

#### Metabolomics:

Metabolism: Carbohydrate metabolism, Amino acid metabolism, Nucleotide metabolism, Lipid metabolism, Transport metabolism; Feedback control of metabolic pathways; Shuttle pathways. Classification of enzymes; Enzymes, Compounds and Reactions databases: LIGAND-Biochemical compounds and reactions, ENZYME-Enzymes, BRENDA-Comprehensive Enzyme Information System. Metabolic Pathway databases: KEGG, EMP, Malaria parasite metabolic pathways, EcoCyc, Flybase.

#### UNIT-6

#### Techniques In Biotechnology:

Techniques in r-DNA Technology: DNA sequencing; PCR, Variants of PCR, Antisense RNA technology; RNA interference; Cosuppression, Molecular markers: RFLP, RAPD, AFLP, EST. Selectable markers, Reporter genes, Preparation of probes, Colony hybridization, Southern hybridization, Northern hybridization, Dot blots, Western blotting, Immunological techniques; Public concerns related to recombinant DNA technology; Safety guidelines of rDNA research. Cloning vectors viz. Plasmids, M13 phages, Yeast cloning vectors, Plant and animal viruses, Cosmids, Phagemids, Phasmids, Ti plasmid based vectors; Stringent and relaxed plasmids; Cloning strategies used with different vectors; Expression

vectors; Linkers, Adaptors, Homopolymer tailing.

## Syllabus for M. TECH. (Production & Industrial Engineering/ Machine Design)

#### UNIT-I

Stress and strain, stress-strain relationship and elastic constants, Mohr's circle for plane stress and plane strain, thin cylinders, shear force and bending moment diagrams, bending and shear stresses, deflection of beams, torsion of circular shafts, Euler's theory of columns, strain energy methods, thermal stresses. Displacement, velocity and acceleration analysis of plane mechanisms, dynamic analysis of slider-crank mechanism, gear trains, flywheels. Free and forced vibration of single degree of freedom systems, effect of damping, vibration isolation, resonance, critical speeds of shafts.

Design for static and dynamic loading; failure theories, fatigue strength and the S-N diagram, principles of the design of machine elements such as bolted, riveted and welded joints, shafts, spur gears, rolling and sliding contact bearings, brakes and clutches.

#### UNIT-2

Fluid properties; fluid statics, manometry, buoyancy; control-volume analysis of mass, momentum and energy; fluid acceleration; differential equations of continuity and momentum; Bernoulli's equation; viscous flow of incompressible fluids, boundary layer; elementary turbulent flow; flow through pipes, head losses in pipes, bends etc. Rankine, Brayton cycles with regeneration and reheat. I.C. Engines: air-standard Otto, Diesel cycles. Vapour refrigeration cycle, heat pumps, gas refrigeration, Reverse Brayton cycle. Turbomachinery: Pelton-wheel, Francis and Kaplan turbines - impulse and reaction principles, velocity diagrams.

#### UNIT-3

Modes of heat transfer; one dimensional heat conduction, resistance concept, electrical analogy, unsteady heat conduction, fins; dimensionless parameters in free and forced convective heat transfer, various correlations for heat transfer in flow over flat plates and through pipes; thermal boundary layer; effect of turbulence; radiative heat transfer, black and grey surfaces, shape factors, network analysis; heat exchanger performance, LMTD and NTU methods.

Zeroth, First and Second laws of thermodynamics, thermodynamic system and processes, Carnot cycle. irreversibility and availability, behaviour of ideal and real gases, properties of pure substances, calculation of work and heat in ideal processes, analysis of thermodynamic cycles related to energy conversion.

#### UNIT-4

Design of patterns, moulds and cores, solidification and cooling, riser and gating design, design considerations. Plastic deformation and yield criteria; fundamentals of hot and cold working processes; load estimation for bulk (forging, rolling, extrusion, drawing) and sheet (shearing, deep drawing,

bending) metal forming processes; principles of powder metallurgy. Physics of welding, brazing and soldering; adhesive bonding; design considerations in welding.

Mechanics of machining, single and multi-point cutting tools, tool geometry and materials, tool life and wear; economics of machining; principles of non-traditional machining processes, principles of work holding, principles of design of jigs and fixtures

#### UNIT-5

Limits, fits and tolerances, linear and angular measurements, comparators, gauge design, interferometry, form and finish measurement, alignment and testing methods, tolerance analysis in manufacturing and assembly. Basic concepts of CAD/CAM and their integration tools. Forecasting models, aggregate production planning, scheduling, materials requirement planning.

Deterministic and probabilistic Inventory models, safety stock inventory control systems. Linear programming, simplex and duplex method, transportation, assignment, network flow models, simple queuing models, PERT and CPM for project scheduling.

### Syllabus for M. TECH. (Structural Engineering)

#### UNIT-I

- Concept of stress and strain, Elastic constants and Principal Stresses.
- Shear force and Bending Moment Diagram for beams and Frames.
- Torsion of Shafts, Simple Theory of Bending, Shearing Stress in Beams, Deflection of Beams.
- Columns and Struts: Effective length, Euler`s and Rankine's Theory

#### UNIT-2

- Static and Kinematic Indeterminacy, Analysis of Indeterminate Structures by Different Methods, Influence Line diagram for Beams and Trusses.
- Betti`s Law and Maxwell`s Law of Reciprocal Deflection, Analysis of Two and Three Hinged Arches.
- Matrix methods for Analysis of Beams and Trusses.

#### UNIT-3

- Properties of Fresh and Hardened Concrete.
- Design Philosophies, Design of Beams and Slabs, Flexural and Anchorage Bond Stresses.
- Design of axially and eccentrically Loaded Columns and their Foundation.
- Pre-stressed Concrete: Methods and System of pre-stressing, Losses in Pre-stress, Analysis and Design of Simple Pre-stressed Sections.

#### UNIT-4

Origin and Formation of Soils, Classification of soils, Permeability of soils, Seepage nets, Compaction and Consolidation of soil.

- Stress distribution, Shear strength, Lateral Earth Pressure, Stability of slopes.
- Bearing Capacity of soil, Types of Foundation- Shallow and Deep Foundation.

#### UNIT-5

- Basic of Plastic Analysis, Application of Static and Kinematics theorem of Plastic Analysis of Beams and Frames.
- Rolled Steel Sections, Bolted and Welded connections.
- Design of Tension and Compression Members, Beams, Plate Girder and Trusses.

### Syllabus for M.TECH. (Environmental Engineering)

#### UNIT-I

Quantitative aptitude, Decision Making bases on available data and to draw inferences from various given situations and their availability to use logic and general intelligence, Numerical Methods and applied Statistics, Probability.

#### UNIT-2

Water and wastewater Quality Parameters and their Standards, Water Resources and Requirements, Basics of water and wastewater treatment Technologies, Domestic and Industrial waste water quality and Quantity, Characteristics of Sewage and Disposal Standards, Basics of Sewage treatment Technologies, Water Borne Diseases and their Controls, Hydraulics of Sewers, effluent Discharge Standards.

#### UNIT-3

Global Environmental issues such as Global Warming, Climate Change, Green House Gases, Ozone Layer Depletion and Acid Rain etc. Natural Chemical Cycles in the Biosphere, Geospehere, Hydrosphere and Atmosphere. Consequences of Anthropogenic Disturbances, Structure of Atmosphere and Photochemistry of atmosphere.

Air pollution and its Sources, Impact on Human, Pollutants Dispersion and emission Standards Air pollution Control Devices and their Application, Global implications of Air Pollution, Noise Pollution their Impacts and Standards

#### Unit-4

Water Conservation and Rain water Harvesting, Solid and Hazardous Waste management, Pollutants in Environment, Environmental Impact assessment, Ecosystem, Sustainable Development, Conventional and Non Conventional Sources of Energy, Eutrophication and Macrophytes in water bodies, Physical and Chemical Characteristics of Solid Waste, Solid Waste treatment Technologies.

#### Unit-5

Agricultural Source of Pollution (Pesticide, Commercial, Fertilizers, Syndets, on-farm food processing waste and Animal Manure) and their effects on total Environment. Physical, Chemical and Biological Properties of Agricultural Waste Materials. Technologies for utilization of Agricultural

Waste for Biogas production and animal feeds.

### Syllabus for M.TECH. (Computer Science And Engineering)

#### UNIT I:

Mathematical Logic: Propositional Logic; First Order Logic.

**Set Theory & Algebra:** Sets; Relations; Functions; Groups; Partial Orders; Lattice; Boolean Algebra.

**Graph Theory:** Connectivity; spanning trees; Cut vertices & edges; covering; matching; independent sets; Coloring; Planarity; Isomorphism. **UNIT 2**:

**Digital Logic:** Logic functions, Minimization, Design and synthesis of combinational and sequential circuits; Number representation and computer arithmetic (fixed and floating point).

Computer Organization and Architecture: Machine instructions and addressing modes, ALU and data-path, CPU control design, Memory interface, I/O interface (Interrupt and DMA mode), Instruction pipelining, Cache and main memory, Secondary storage.

Operating System: Processes, Threads, Inter-process communication, Concurrency, Synchronization, Deadlock, CPU scheduling, Memory management and virtual memory, File systems, I/O systems, Protection and security.

#### UNIT 3:

**Programming and Data Structures:** Programming in C: Functions, Recursion, Parameter passing, Scope, Binding; Abstract data types, Arrays, Stacks, Queues, Linked Lists, Trees, Binary search trees, Binary heaps.

Algorithms: Analysis, Asymptotic notation, Notions of space and time complexity, Worst and average case analysis; Design: Greedy approach, Dynamic programming, Divide-and-conquer; Tree and graph traversals, Connected components, Spanning trees, Shortest paths; Hashing, Sorting, Searching. Asymptotic analysis (best, worst, average cases) of time and space, upper and lower bounds, Basic concepts of complexity classes — P, NP, NP-hard, NP-complete.

#### UNIT4:

**Theory of Computation:** Regular languages and finite automata, Context free languages and Push-down automata, Recursively enumerable sets and Turing machines, Un-decidability.

**Compiler Design:** Lexical analysis, Parsing, Syntax directed translation, Runtime environments, Intermediate and target code generation, Basics of code optimization.

**Databases:** ER-model, Relational model (relational algebra, tuple calculus), Database design (integrity constraints, normal forms), Query languages (SQL), File structures (sequential files, indexing, B and B+ trees), Transactions and concurrency control.

#### UNIT 5:

Information Systems and Software Engineering: information gathering, requirement and feasibility analysis, data flow diagrams, process

specifications, input/output design, process life cycle, planning and managing the project, design, coding, testing, implementation, maintenance.

Computer Networks: ISO/OSI stack, LAN technologies (Ethernet, Token ring), Flow and error control techniques, Routing algorithms, Congestion control, TCP/UDP and sockets, IP(v4), Application layer protocols (icmp, dns, smtp, pop, ftp, http); Basic concepts of hubs, switches, gateways, and routers. Network security — basic concepts of public key and private key cryptography, digital signature, firewalls.

Web Technologies: HTML, XML, basic concepts of client-server computing.

### Syllabus for M. TECH. (Electronic Circuits & Systems)

#### UNIT-I

- **(A) Networks:** Network graphs: matrices associated with graphs; incidence, cut set and circuit matrices. Nodal and mesh analysis. Network theorems, Wye-Delta transformation. Linear differential equations; Time domain and frequency domain analysis of simple RLC circuits using Laplace transform, 2-port networks, driving point and transfer functions. State equations for networks.
- (B) Electronic Devices: Energy bands in silicon, intrinsic and extrinsic semiconductors. Carrier transport, mobility, and conductivity, Generation and recombination of carriers, diffusion and drift currents, P-N junction diode, schottkey, zener, tunnel, LED, LASER, PIN and photo diodes, BJT, JFET, MOSFET characteristics, Small Signal Equivalent circuits of diode, BJT and MOSFET.

#### UNIT-2

- (A) Analog Circuits: Diode circuits, rectifier, clipping, clamping,. Biasing and bias stability of transistor and FET amplifiers. Amplifiers: single-and multi-stage, differential, operational, feedback, and power amplifier circuits. Frequency response of amplifiers, Op-Amp characteristics, Op-amp circuits. Filters, Sinusoidal oscillators, Function generators and waveshaping circuits, analog CMOS circuits
- **(B) Digital Circuits:** Boolean algebra, minimization of Boolean functions, logic gates, Digital IC families (DTL,TTL, ECL, MOS & CMOS), Combinational circuits: arithmetic circuits, code converters, MUX, decoders. Sequential circuits: latches and flip-flops, counters and shift-registers. Sample and hold circuits, ADCs, DACs. Semiconductor memories. RAMs and ROMs. Microprocessor (8085): architecture, programming, memory and I/O interfacing.

#### UNIT-3

(A) Microelectronic Technology: IC generations, Fabrication of R, C, Diode, BJT and MOS, oxidation, diffusion, ion implantation, photolithography, Epitaxy, itching, n-tub, p-tub and twin-tub CMOS process, defects, VLSI Faults and Testing

**(B) VLSI Design :** CMOS inverter characteristics, Propagation delay , Power disipation, micron and submicron devices, second order effects, parasitics, MOS implementation of digital circuits, RAM and ROM and PLAs circuits, ASICs, FPGA.

#### UNIT-4

- (A) Signals and Systems: Definitions and properties of Laplace transform, continuous-time and discrete-time Fourier series, continuous-time and discrete-time Fourier Transform, DFT and FFT, z-transform. Sampling theorem. Linear Time-Invariant (LTI) Systems: definitions and properties; causality, stability, impulse response, convolution, poles and zeros, parallel and cascade structure, frequency response, group delay, phase delay. Signal transmission through LTI systems.
- **(B) Control Systems:** Basic control system components, reduction of block diagrams. Open loop and closed loop (feedback) systems, Signal flow graphs and their use in determining transfer functions of systems, transient and steady state analysis of LTI control systems and frequency response. Stability of LTI control system analysis: root loci, Routh-Hurwitz criterion, Bode and Nyquist plots. Control system compensators: lead and lag compensation, Elements of PID control.

#### UNIT-5

- (A) Electromagnetics: Vector analysis, coordinate systems, divergence and curl, Gauss' and Stokes' theorems, Maxwell's equations. Wave equation, Poynting vector, Plane waves: propagation through various media, reflection and refraction, phase and group velocity, skin depth. Transmission lines: characteristic impedance, impedance transformation, impedance matching, Waveguides: modes in rectangular waveguides, boundary conditions, cut-off frequencies, dispersion relations. Basics of propagation in optical fibers. Basics of Antennas: Dipole antennas, radiation pattern, antenna gain.
- (B) Communications: Random signals and noise: probability, random variables, probability density function, autocorrelation, power spectral density. Analog communication systems: amplitude and angle modulation and demodulation systems, spectral analysis of these operations, analog communication systems: AM,FM,signal-to-noise ratio (SNR), superheterodyne receivers. Fundamentals of information theory and channel capacity theorem. Digital communication systems: PCM, DPCM, digital modulation, ASK, PSK, FSK, matched filter receivers, bandwidth consideration and probability of error calculations for these schemes. Basics of TDMA. FDMA and CDMA and GSM.

### Syllabus for M. TECH. (Instrumentation & Control)

#### AC and DC Network Analysis

Nodal and Mesh Analysis, Theorems: Superposition, Thevenin, Norton, Maximum Power Transfer, Substitution, Compensation, Millman and Tellegan. Graph theory. Steady State and Transient Response of Networks. Resonance. Basic Filters. Two Port Networks, Three Phase Circuits. Signals

and Systems, Fourier Series representation of continuous periodic signal, Sampling theorem, Fourier, Laplace and Z-Transforms.

#### Control Systems

Mathematical Modelling of Physical Systems. Principles of Feedback. Transfer Function. Block Diagrams. Signal Flow Graphs. Time Domain Analysis of Control System. Stability Concepts. Routh-Hurwitz's Stability Criterion. Steady State Errors. Routh and Nyquist Techniques. Bode's Plot. Root-Locus Plots. Polar Plot. Design of Proportional, Integral, Derivative, PI, PID Controllers. Lag, Lead and Lead-Lag Compensation. Control System Analysis using State Space Technique. State Transition Matrix.Controllability and Observalibility. Conversion of State Variable Models to Transfer Functions.

#### Measurement & Instrumentation

Error Analysis. Measurement Standards. Classification of Instruments; Moving iron instruments, Torque equation, Moving Coil Instruments, Permanent Magnet and Dynamometer types. Thermal, Electrostatic, Induction, Rectifier Instruments. Ammeter Shunts on DC and AC. Voltmeter multipliers. Instrument transformers: Current Transformer (CT) & Potential transformer (PT). Power measurement in single phase and three phase circuits. Classification of Energy meters. Single and multi phase watt meter. Power Factor meter, Frequency meter and Synchroscope. Measurement of Resistance. AC Bridge. Magnetic measurements. Transducers: Thermistors, LVDT. Measurement of Non-electrical quantities: displacement, strain, pressure, torque, velocity, temperature.

#### **Electronics and Communications**

Diode and Transistor Characteristics. Biasing and Stability. Frequency Response. Oscillators and Feedback Amplifiers. Operational Amplifiers. Logic Gates. Boolean Algebra, Minimization Techniques. Combinational circuits, A/D and D/A converters. Flip-Flops. Registers and Counters. 8-bit Microprocessors; Architecture, Programming and Interfacing. Amplitude Modulation: its generation and detection. Frequency Modulation: its generation and detection. Sampling theorem. Pulse Modulation; PAM, PWM, PPM. Pulse Code Modulation (PCM); Quantization, Encoding, Quantization Error. Delta Modulation. TDM. FDM.

#### **Power Electronics**

Characteristics and Operation of Power Diodes, MOSFET, IGBT and Thyristor Family: SCR, TRIAC,GTO. Triggering Circuits. Principles and Operation of Single Phase; Half Wave, Full Wave Converters and Choppers.

### Syllabus for M. TECH. (Power System & Drives)

**Electrical Machines**: Construction, performance, testing and Parallel operation of transformers, Autotransformers and three-winding transformer, Construction, performance starting and testing of threephase and single – phase induction motors, Induction generators. Construction, modeling and performance of salient and non-salient pole synchronous machines. DC Machines; Construction, working principle and characteristics of de motor and generator. Starting and testing of dc

machines. Special motors: Universal motor, permanent magnet DC machines, hysteresis motor, reluctance motor, stepper motor etc.

**Power System Engineering :** Electrical Characteristics of O.H. Lines, Performance of OH transmission lines, insulators and mechanical design of OH lines, under ground cables, installation and substation. Load flow analysis, economic operation of power system, fault analysis, stability analysis, distribution systems. Electrical Power Generation : Thermal power plants, hydro electric power plants, nuclear power plants, diesel and gas plants, cogeneration and captive power generation. Power System Protection : Protective relay, protection scheme, circuit breakers, Power system transients

Electrical Measurement and Instrumentation: Standards and Errors of Measurement, Electromechanical Instruments, Bridges and Potentiometers, Instrument Transformers and Recorders, wattmeters and energy meters. Digital instruments, Display Devices Data transmission: Transducers. Special Instruments: Synchroscope, maximum demand indicator, trivector meter, measurement of iron loss, measurement of high voltage by sphere-gap.

Circuit Theory: Network analysis and transient response, resonance and magnetic circuit, network theorems, network functions, two port networks. Special networks and multiport networks, electric filters, realization of network function, graph theory and network equation, state variable analysis.

**Power Electronics**: Power Semiconductor Devices and their Characteristics, Triggering Circuits. AC-DC Converters, DC-DC Converters, Inverters, AC voltage regulators, SMPS and UPS, Thyristor controlled resistors, inductors and capacitors. Resonant converters. Dual and cyclo converters.

**Electric Drives**: Characteristics of different types of mechanical loads, stability of motor-load systems. Thermal loading of motors, estimation of motor rating for different types of loads. Different methods of speed control and electric braking of DC motors. Rectifier controlled and chopper controlled DC motor drives. Methods of speed control and electric braking of induction motors. Closed Loop AC and DC Drives. Microprocessor controlled Electric Drives.

Control System: Components of control system, Mathematical modeling of mechanical and electrical systems. Block diagram and signal flow diagram representation and transfer function of control systems. Time domain and frequency domain analysis. Control System Design: Phase lead and lag compensation. System analysis using state variables. Discrete Data System, Digital controllers, Stability of digital control system. State Feedback Technique for continuous and discreet systems-their analysis and stability Analysis and Stability of non-linear Systems.

**Microprocessor System**: Elements of Microcomputer, Architecture and assembly language programming of 8085 and 8086 microprocessors. Input-output techniques and data transfer. Memory and Input – output interface.

Electromagnetic Field Theory: Electrostatic field, magnetostatic fields,

time varying field, application of field theory.

**Signal and Systems:** Signal representation, system representation and modeling, system analysis techniques, digital filters.

#### Syllabus for M. PHARM.

#### UNIT: I

Pharamacognosy and Phytochemistry: Tests, isolation, characterization and estimation of phytopharmaceuticals belonging to to the group of Alkaloids, Glycosides, Terpenoids, Steroids, Bioflavanoids, Purines, Guggul lipids. Pharmacognosy of crude drugs which contain the above constituents. Standardisation of raw materials and herbal products; WHO guide lines. Ouantitative microscope including modern techniques used for evaluation Biotechnology principles and techniques for plant development and Tissue culture.

#### UNIT: II

Medicinal Chemistry: Structure, nomenclature, classification synthesis, SAR and metabolism of the following category of drugs which are official in Indian Pharmacopoeia, Hypnotic and Sedatives, Analgesics, NSAI DS, Neuroleptics, Antidepressants, Anxiolytics, Anticonvulsants, Antihistamines, Local anaesthetics, Cardio Vascular drugs - Antinginal agents, Vasodilators, Adrenergic & cholinergic drugs, Cardiotonics, Diuretics, Antihypertensive drugs, Hypoglycemic agents, Antilipidemic agents, Coagulants, Anticoagulants AntiplateJet agents. Chemotherapeutic agents- Antimalarial, Anticancer, Antiamoebic drugs. Diagnostic agents. Preparation and storage and uses of official Radiopharmaceuticals Vitamins and Hormones.

#### UNIT: III

**Pharmacology:** General pharmacological principles including toxicology, Drug interaction. Pharmacology of drugs acting on Central nervous system, Cardiovascular system, Autonomic Nervous System, Gastrointestinal system, Pharmacology, of Autacoids, Hormones, Chemotherapeutic agents including anticancer drugs. Bioassays, Immunopharmacology.

#### UNIT: IV

**Pharmaceutics**: Development, manufacturing standards, labelling, packing as per the pharmacopoeial requirements, Storage of different dosage forms and novel drug delivery systems. Biopharmaceutics and Pharmacokinetics and their importance in formulation. Formulation and preparation of cosmetics, lipstick, shampoo, creams, nail preparations and dentifrices. Pharmaceutical calculations. Dosages forms and their evaluations.

**Pharmaceutical Jurisprudence:** Legal aspects of manufacture; storage, sale of drugs, D and C Act and rules,.

#### UNIT: V

Pharmaceutical Analysis: Principles, instrumentation and applications of the following. Absorption spectroscopy (UV; visible & IR), Fluorimetry; Flame photometry; Potentiometry, Conductometry and Polarography. Pharmacopoeial assays, Principles of NMR, ESR, mass spectroscopy, X-ray diffraction analysis and different chromatographic methods.

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### Instructions for Filling OMR Application Form (For Test Courses)

(i) Use only the OMR Application form purchased from any of the designated sale centers.

- (ii) Write in rectangular boxes ([]) in all the items of OMR Application with BLACK BALL PEN and darken the corresponding circles (0); with HB PENCIL only.
- (iii) Erase completely to change the response.
- (iv) Read carefully the entire Information Brochure before filling the OMR Application Form.



- (i) Do not cut, scribe, tear, fold, staple, pin, wrinkle, tag the OMRApplication form.
- (ii) Do not use photocopy/ reproduction/ duplicate copy of OMRApplication form.

### CLARIFICATIONS FOR FILLING UP OMR APPLICATION FORM

- I. NAME OF THE CANDIDATE: Write your FULL NAME (in Capital English Letters) as recorded in your High School or equivalent examination certificate. Write one letter in one rectangular box ([]) and leave a box blank between any two parts of the name. Darken the corresponding circle (0) below each letter. Do not darken any circle below a blank box. Do not overshoot the boxes. Do not use prefix such as, Shri/Mr. / Km.I Ms. etc. with your name. Abbreviate the middle name only if necessary to accommodate your name in the boxes provided.
- 2. FATHER'S NAME: Write full name (in Capital English Letters) as recorded in your High School or equivalent examination certificate. Write one letter in one rectangular box ([]) and leave a box blank between any two parts of the name. Darken the corresponding circle (0) below each letter. Do not darken any circle below a blank box. Do not overshoot the boxes. Do not use prefix such as Shri/Mr./Dr./Late etc. with the father's name.
- 3. DATE OF BIRTH: Write your date of birth exactly as recorded in your High School or equivalent examination certificate. Use English numerals 01 to 31 for filling the date; first three letters of the month for filling the month; and English numerals to write in the two rectangular boxes ([]) for filling the year of birth. Then, darken the corresponding circles (0) below for date, month and year of birth.
- **4. NATIONALITY**: Write code of your Nationality, Indian (1), NRI (2) or others (3) in the rectangular box ([ ]) and darken the corresponding circle (0).
- 5. SEX: Write 1, 2 or 3 depending upon your sex, Male (1), Female (2) or Transgender (3) in the rectangular box ([]) and darken the corresponding circle (0) below.

- **6. MINORITY STATUS**: Write (1) inside the rectangular box ([]) if you are a Muslim candidate, (2) if not applicable, darken the corresponding circle (0) below.
- 7. QUALIFYING EXAM: Depending upon whether the candidate has passed in Intermediate (10+2)/Graduation/Post Graduation/Diploma respectively and darken the corresponding circle (0).
- 8. PASSED/APPEARED IN QUALIFYING EXAMINATION: Write 1 or 2 inside the box depending upon whether you have passed or appearing in qualifying examination and darken the corresponding circle (0).
- 9 A. SUBJECTS in 10+2: Darken the subject circles depending upon the subject group in which you have passed / are appearing in Intermediate (10+2) or equivalent examination.
- **9 B.** Applied for Admission in: Write 1 or 2 inside the box depending upon whether you want to get admission in Lucknow Campus or Shahjahanpur Campus and darken the corresponding circle (0).
- 10. MARKS OBTAINED IN QUALIFYING EXAMINATION: Write your Maximum marks, Marks obtained and Percentage of Marks in the rectangular box ([]) and darken the corresponding circle (0).

#### II. CITY FOR EXAMINATION:

Lucknow. Additional examination centers may be established in a region, if sufficient number of candidates applies from the same.

#### 12. PHYSICALLY HANDICAPPED:

Write I if you are Handicapped otherwise write 2 in the rectangular box ([]) and darken the corresponding circle (0) below.

#### 13. CONTACT PHONE NUMBER:

Write in English numerals of the STD code and your

contact phone in the rectangular boxes ([]) and darken the corresponding circles (0).

#### 14. COURSE APPLIED:

Write code in rectangular box ([]) and darken the corresponding circles (0) for the chosen course.

#### 15. PAPERS WHICH YOU NEED TO APPEAR IN JUET:

Refer the Instructions given in the Prospectus for the paper which you need to appear in I.U.E.T.-2014 and accordingly darken the corresponding circle. This field will be filled only by those condidates they are applying for B.Tech, B.Tech.(Biotech/Food Tech.)/B.Tech. (Agriculture)/B.Pharm., Pharm. D./B.Arch., M.B.A./M.B.A. (Agri-Business), Diploma Engg. & Lateral Entry for B.Tech./B.Pharm..

#### 16. PIN CODE OF YOUR POSTAL ADDRESS:

Write the Pin code of your Postal Address in the rectangular boxes ([]) and darken the corresponding circles (0).

#### 17. DECLARATION:

Make the declaration by putting your signature at the prescribed place. Get it countersigned by your parent / Guardian. Also write the date on which the declaration has been made.

#### 18. POSTAL ADDRESS:

Write your name, father's Name, complete postal address, PIN CODE number and phone / mobile number with black ball pen in CAPITAL LETTERS ONLY inside the box.

#### 19. PHOTOGRAPH:

Paste your 3.5 cm. x 4.5 cm. latest, unattested coloured photograph inside the rectangular box. Do not staple it.

#### 20. SIGNATURE OF CANDIDATE:

Put your signature with black ball point pen in the box given.

#### 21. THUMB IMPRESSION OF CANDIDATE:

Put your left hand thumb impression in the box given.

Do



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