

Important Dates for Ph.D. Admission

• Ph.D. Prospectus available at Sale Counter : From 14.11,2014 To 12.12.2014

• By Post : From 14.11.2014 To 09.12.2014

Last Date for submission of Application : 12.12.2014 upto 5.00 pm.

Form for Entrance Test

university website - www.gjust.ac.in

• Date of Entrance Test : 15.12.2014

• Date of display of Entrance Test's Result on : 18.12.2014

• Date of Interview-cum-Counseling for admission in Pre- Ph.D. Programme : 22.12.2014 (at 10.00 am)

• Commencement of Classes : 12.01.2015

Pre-Ph.D. Examination : Last week of June, 2015

Submission of award to the Controller of : First week of July, 2015

Examinations by the Chairperson/Director of the department concerned

Declaration of Result of Pre-Ph.D. Examination : Second week of July, 2015

Though every care has been taken to carry out the instructions set out by Govt./Ordinance correctly, yet in case of any doubt the candidate(s) may seek clarification form the university before filling the form for admission to Ph.D. programme.







Dr. R.S. Sharma
Vice-Chancellor
Guru Jambheshwar University
of Science & Technology,
Hisar- 125 001(HARYANA)

FOREWORD

Guru Jambheshwar University of Science & Technology, Hisar was established in 1995 under the Act of State Legislature which in its preamble states that the aim of the University is to promote studies and research in the emerging areas of higher education with focus on new frontiers of technology, environmental studies, non-conventional energy sources, media studies, pharmaceutical sciences and management studies. I am happy to note that this university has introduced Ph.D. programmes in all its PG departments in keeping with this spirit. The research endeavours of the faculty members of this university have led to awarding more than 400 Ph.D. degrees to the scholars of various departments right since inception of the university. The growing number of registrations to Ph.D. programmes have also contributed towards increasing number of research publications in national and international journals. It is not only the provisions of UGC (Minimum standards and procedure for award of Ph.D. degree) Regulation, 2009 are being followed in letter and spirit, the university has also created its own checks and balances so as to induce researchers to produce quality research works. The preparation for research proposals starts during the Pre-Ph.D course work and then research proposals are subjected to presentation and discussions during the meetings of Departmental Research Committee (DRC), Board of Studies (BOS), Faculty and the Academic Council. As a pre condition to submitting the thesis each scholar has to present the draft thesis in front of the DRC, publish two research papers in reputed journals. This has surely added to the quality standards of research work in this university.

In order to insure transparency, weed out plagiarism and give a wider publicity to research proposals and the research outcomes in the form of thesis, the university has taken a policy decision to enter into an MoU with INFLIBNET. I am sure all these efforts would fructify into research outcomes of the standards expected of any Center of Excellence in higher education and research. I convey my best wishes to the research scholars and their research supervisors in their future research pursuits.





Prof. R.S. Jaglan
Registrar
Guru Jambheshwar University
of Science & Technology,
Hisar- 125 001(Haryana)

WELCOME

Institutions are not market places; neither education is a commodity traded on demand and supply. Institutions are knowledge spaces and education is a value in itself to distinguish between fair and unfair, just and unjust. On the other hand the Universities being leaders in academics and research are expected to generate knowledge and impart the training for various academic professions. The Universities stand at the centre of social expectations and as such all their actions including basic and applied researches are expected to be socially useful. 'Technical Education' as 'Skill Education' in this new era has to prepare the engineering students to become the frontier men of technical education. We have to prepare them to place their skills at the service of the people. This social push will produce great changes in the life of the common man of India. It has to inculcate value like sacrifice, sensitivity to sufferings, courage to fight for justice and fairness, to stand up for the dispossessed and marginalized, the determination to stand against the odds for the sake of good cause.

Guru Jambheshwar University of Science & Technology as a fledgling institution is shaping such aspirations. As a institution, it will play a significant role to prepare aspiring young minds to be the Scientists, Engineers and Managers who shape and work towards the betterment of other institutions. This University has been established with a mandate to transform and redefine the face of technical education, thereby culminating into a conference of thought, knowledge and practice to facilitate the fullest development of individuals. Vivekananda rightly said 'the ideal of all education, all training, should be... man-making'. Education is not the amount of information, that is, put into your brain and runs rot there, undigested, all your life. We must have life-building, man-making assimilation of ideas. If you have assimilated five ideas and made them your life and character, you have more education than any man who has got by heart a whole library. The physical infrastructure development on the campus is in true with the rapid progress on the academic front and is significant step to be one of leading institutions of technical education in the country. There is one consistent effort at Guru Jambheshwar University of Science & Technology: we are here to ensure that you succeed not only professionally but also personally.

I look forward to see you fulfilling the aspirations of the society and the mission of the Guru Jambheshwar University of Science & Technology, Hisar.

Welcome to the Guru Jambheshwar University of Science & Technology, Hisar.

With best wishes.

OFFICERS OF THE UNIVERSITY

Hon'ble Chancellor His Excellency Prof. Kaptan Singh Solanki Governor, Haryana

Vice-Chancellor	Dr. R.S. Sharma	01662-276192, 263101 Fax: 01662-276240 e-mail: gju_tech@yahoo.com vc_gju@yahoo.co.in
Registrar	Prof. R.S. Jaglan	01662-276025, 263104
Director, HSB	Prof. S.C. Kundu	01662-263111
Dean Academic Affairs	Prof. M.S. Turan	01662-263163
Proctor	Prof. Karam Pal Narwal	01662-263563, 263329
Chief Warden	Prof. S.C. Kundu	01662-263182
Dean Students Welfare	Prof. Kuldip Singh Bansal	01662-263675, 263167
Dean of Colleges	Prof. Dharminder Kumar	01662-263588
Controller of Examinations	Sh. Harnam Singh	01662-263130

DEANS OF FACULTIES

Prof. R.K. Gupta	
Dean, Faculty of Physical Sciences	S

01662-263120

Prof. P.K. Jena Dean, Faculty of Media Studies 01662-263361

Prof. Milind Parle Dean, Faculty of Medical Sciences 01662-263324

Prof. (Mrs.) Usha Arora

Dean, Haryana School of Business 01662-263307

Prof. Dinesh Kumar

Dean, Faculty of Engineering & Technology 01662-263399

Prof. B.S. Khatkar

Dean, Faculty of Environmental and Bio Sciences & Technology 01662-263313

OTHER OFFICERS

University Librarian	Dr. S.S. Joshi(Officiating	1) 01662-263118, 263351
Director, Academic Staff College	Prof. B.K. Punia	01662-263572, 263573
Director, Placement	Sh. Anjan Kumar Baral	01662-263507, 263508
Director, I.P.R.	Prof. J.B. Dahiya	01662-263356
Director, I.Q.A.C.	Prof. Karam Pal Narwal	01662-263329
Director Distance Education	Prof. Yogesh Chaba	01662-263157
Director, Sports	Prof. Vinod Kumar	01662-263429, 263156

CHAIRPERSONS OF THE DEPARTMENTS

CHAIRPERSONS OF THE DEPARTMENTS							
Sr. No.	Name of Department	Chairperson	Tel. No.				
1.	Advertising Management & Public Relations	Dr. Umesh Arya	263187, 263354				
2.	Applied Physics	Prof. Devendra Mohan	263176, 263386				
3.	Applied Psychology	Prof. (Mrs.) Jyotsana	263168				
4.	Bio & Nano Technology	Dr. Namita Singh	263165				
5.	Biomedical Engineering	Sh. Ravish Garg	263180, 263501				
6.	Chemistry	Prof. R.K. Gupta	263152				
7.	Communication Management and Technology	Prof. P.K. Jena	263148				
8.	Computer Science & Engineering	Prof. Dharminder Kumar	263173				
9.	Electronics & Communication Engineering	Prof. Sandeep Kumar Arya	263171				
10.	Environmental Science & Engineering	Prof. Parveen Sharma	262153, 263342				
11.	Food Technology	Prof. (Mrs.) Aradhita Burman Ray	263150				
12.	Haryana School of	Prof. S.C. Kundu,	263111				
	Business	Director	263182				
13.	Mathematics	Prof. (Mrs.) Sunita Pannu	263167				
14.	Mechanical Engineering	Dr. Vishal Gulati	263184				
15.	Pharmaceutical Sciences	Prof. D.C. Bhatt	263580				
16.	Physiotherapy	Prof. S.K. Singh	263169				
17.	Printing Technology	Sh. Anjan Kumar Baral	263175				
18.	Guru Jambheshwar Institute of Religious Studies	Dr. Kishna Ram Bishnoi	263159				
	HOSTE	L ADMINISTRATION					
Chie	f Warden	Prof. S.C. Kundu	263182				
Dy. C	Chief Warden-Boys	Prof. Sandeep Singh	263368				
Dy. C	Chief Warden-Girls	Prof. (Mrs.) Sonika	263160, 263591				
Ward	dens Boys Hostel :						
1.	Boys' Hostel No. I	Dr. Suresh Kumar Bhaker	263189				
		Dr. Manoj Kumar					
2.	Boys' Hostel No. II	Dr. Vikas Verma	263186,263542				
3.	Boys' Hostel No. III	Dr. Sunil Sharma	263333				
		Dr. Vijender Pal Saini	263545,263546				
	ordinators:						
4.	Girls Hostel No.I (Kasturba Bhawan)	Mrs. Meenakshi Bhatia	263190				
5.	Girls Hostel No. II (Saraswati Bhawan)	Mrs. Suman Dahiya	263191				
6.	Girls Hostel No. III	Dr. (Mrs.) Neetu Ahlawat	263390				
7.	Girls Hostel No. IV	Prof. (Mrs.) Sonika	263591				
8.	Working Women Hostel	Mrs. Suman Dahiya	263394				
	dens Girls Hostels	Mrs. Cushata Malile	000400				
1.	Girls Hostel No. I (Kasturba Bhawan)	Mrs. Sucheta Malik	263190				
2. 3.	Girls Hostel No. II (Saraswati Bhawan) Girls Hostel No. III	Mrs. Ritu Yadav	263191				
3. 4.	Girls Hostel No. IV	Ms. Jyoti Mehta Mrs. Ritu Yadav	263391 263394				
4. 5.	Working Women Hostel	Mrs. Manjeet	263591				
	Working Women noster	ivira. iviarijoot	200091				



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About the University



General

The Guru Jambheshwar University, Hisar, was established on October 20, 1995 by an Act of the Legislature of the State of Haryana. It was formally inaugurated on November 1, 1995. It is named after Guru Jambheshwar Ji Maharaj, a saint environmentalist of 15th century. Keeping in view the nature of courses offered at the University and the mandate for which it had been established the name of the University has been changed as Guru Jambheshwar University of Science & Technology. The University is situated at Hisar, a rapidly growing town situated at about 167 Km, from Delhi on Delhi-Rohtak - Hisar - Sirsa - Fazilka National Highway (NH-10) and at a distance of about 231 Km. from Chandigarh on NH-65. The University is situated over a sprawling area of about 372 acres. The campus is laid out with picturesque landscape, numerous buildings of various designs and wide road network. It presents a spectacle of harmony in architecture and natural beauty. Approximately 225 acres of land have been developed providing with all modern facilities such as road networks, water supply, street lighting, electricity supply and parks/lawns. The university has a cafeteria with the facility of a big dinning hall, kitchen, store and office on the ground floor. One big hall is also

on the first floor. The cafeteria provides refreshment, breakfast and lunch facilities. Facilities for special program like tea party etc. are also available here. Besides, there is a Shopping Centre which offers several facilities to the residents, such as saloon, laundry, post office, bookshop, bank with ATM facility, grocery shop, sweets shop, computer and photocopying facilities, etc.

The University is recognized by the University Grants Commission under Section 2(f) for recognition of degrees on 11.01.1996 and under section 12(B) of the UGC Act to be eligible for central assistance on 07.02.1997. The University has been accredited by National Assessment and Accreditation Council (NAAC), in 2002 as grade 'A' and has been re-accredited as grade 'A' with (CGPA 3.26), in 2009.

Jurisdiction

The jurisdiction of the University extends to the courses being run in the areas of science, technology, engineering, pharmacy, physiotherapy and management on the University Campus and all Technical Institutions (except B.Pharmacy institutions) in the districts Fatehabad, Hisar and Sirsa with effect from the academic session 2011-12.

Ch. Ranbir Singh Auditotium

Ch. Ranbir Singh Auditorium forms the main component of architectural composition of the Central core of University Campus. The main hall is large enough for housing an audience of over 1800 and additional facilities of three Seminar hall-on the ground floor, one with a capacity of 250 persons and other two with a capacity of 125 persons each. This building is intended for convocations, conferences, seminars, workshops, concerts, ballets, film show, plays and other stage performances etc. of national & international level.

Hostels

There are eight hostels (Three for boys, four for girls and one for working women) in the University, which can accommodate about 2150 residents. All the hostels are fully equipped with modern amenities like electric geysers, music systems, telephone facilities, water coolers fitted with water purifiers, insect killers and adequate playgrounds and other recreational facilities like chess boards, carom boards. All the girls hostels come under a common boundary wall. Three CCTV cameras have been installed for security purpose. Each hostel has a common room where newspapers and latest magazines are available to the students. Further, all hostels have internet and Wi-Fi facilities. The girl

hostel complex also has a dedicated ATM facility. Cyber cafe, stationery shop, laundry shop and Photostat shop. The lawns around the hostels are developed aesthetically to provide refreshing view while entering or leaving hostel accommodation is provided strictly on merit. The hostel residents will be governed by the terms and conditions as contained in the university hostel regulations. Keeping in view of the increasing strength of students one more hostel for boys is under construction. The prospective hostlers are also required to undergo a medical examination. Ambulance facility has been provided round the clock.

Credit Based System of Examinations

For the purpose of evaluation of students performance in the examinations, the University has switched over to credit based system of examinations for all courses w.e.f. 2006-07. The prominent features of the credit based system are the process of continuous evaluation of a student's performance and flexibility to allow the students to progress at an optimum pace suited to individuals ability and convenience, subject to fulfilling minimum requirements for continuation.

University Computer & Informatics Centre

The University Computer & Informatics Centre (UCIC) was established in 1998 to meet the



computing requirements of all the students, research scholars, faculty and staff of the University. It has more than 135 computers including latest configuration servers and other peripherals. It caters to the needs of students, research scholars and faculty in the field of research, computing and software development. All the computers are connected with Internet facility. Online journals facility is also availabe under INFLIBNET, a UGC programme. All online journals of publishers like IEEE, Emerald, ACS, AIP, APS, EPW, IOP, OUP, RSC, ISID, JCCC, JSTOR, Anuual Reviews, Cambridge University Press, Project Muse, Springer Link, Taylor & Francis, Web of Sciences and Wiley Blackwell are provided through University network. From its very inception, the UCIC has effectively performed the pioneering task of building up data processing capabilities of many branches of the university and played a vital role in imparting intensive training to the staff of the university. In addition, there is a full fledged language lab also. The language lab has Tense Buster, Study Skills Success and Sky Pronunciation Suite software to learn the English language. The website of the university has been indigenously designed and is being maintained by the UCIC. The

site is continuously updated to cover all day-to-day activities. The URL (address) of the University website is http://www.gjust.ac.in. The UCIC has also designed and maintain a separate website of Directorate of Distance Education http://www.ddegjust.ac.in. The timing of the UCIC are 9.00 a.m. to 7.00 p.m. except for vacations period. During vacations, UCIC follows the timings 9:00 am to 5:00 pm.

Training & Placement

The Training & Placement Cell takes care of training and campus placements for the students. The Cell is equipped with appropriate infrastructure to execute the placement process. Arrangements for Pre-Placement talks, written tests, group discussions, interviews etc. are handled by the staff at the office in coordination with the respective departments. The placement activities are handled by the Placement Cell which includes final year students from different departments under the guidance of Director, Training and Placement. Training and Placement Cell keeps liaison with the potential industries and provides necessary guidance to the students. The Cell facilitates arranging on-campus placements of students in



students to participate in off-campus drives organized at various institutions/industries.

University Library

The University Library is centrally located in a circular designed three storied large building. The Library has two Reading Halls with seating capacity of 250. The Library run in two shifts from 9.00 a.m. to 7.00 p.m. and remains open on Saturdays and Sundays also. The timing of Night Reading Hall is 8.00 A.M. to 12.00 midnight. During examination days it remains open round the clock.

The University Library has a collection of 93145 books and 5173 bound volumes of journals. The library has processed the subscription of 180 Indian journals, 58 magazines and 19 Newspapers for the year 2014

The library has the access 7129 e- journals of 17 publishers through UGC-INFONET Consortium. The University Library has subscribed Emerald Management, an online database of 175 electronic journals and APSS+POP of IEEE for the period January to December 2014. The library also

various industries, makes arrangements for subscribed J-Gate Plus and Prowess database for the period January to December 2014 and has the perpetual access of SPSS.

> The Library has an Internet Lab for SC/ST Students and one Research Database Lab for this Research Scholars and Faculty Members which are equipped with state of the Art facilities.

> The university library recorded 47422 visitors upto 30.9.2014. During this period total issue for home lending were 86689 books (Average issues 304 books per day) and total 135410 books were consulted by the members of the Library.

University Sports Department

The University Sports Department was established in the year 1996. The entire sports complex is spread in an area of 40 Acres. The Sports Complex has one Multipurpose Hall for Indoor games i.e. Badminton, Carom board, Chess, Yoga etc. Two Gymnasium Hall (Men & Women) 13 Station for Man and 6 Station for Women gym and weight-lifting facility and one Hall for Table Tenis.

The Outdoor facility include Three half cemented Cricket pitch, one ground each for Football, Hand



ball, Cricket with grassy Turf and Athletic Track of 400 meter with fencing and pavilion. In addition, two cemented Basket ball courts with lights, two Volleyball courts with fencing and lights, two synthetic Lawn Tennis Courts with lights and fencing and one cemented tennis court with practice wall are also available. The Sports department has dedicated Coach(s) for Basketball, Volleyball, Kabaddi and Athletics. Timings for Sports activities are Morning 6.00 am to 9.00 am and Evening 4.30 pm to 8.30 pm for University students and Staff Members. The Sports Equipments/ kits are issued to the students as well as to the University Employees during the tournaments. Fifteen Technical Colleges have been affiliated to the university recently. The Inter College Tournaments are conducted in various games annually i.e. Football, Cricket, Badminton, Table Tennis, Basketball, Volleyball and Annual Athletic Meet. Sports facilities for indoor games have also been created in the Boys and Girls Hostels.

University Health Centre

The University Health Centre caters to the medical needs of University Staff and students. It is spacious enough to accommodate 3 doctors' cabins, a dental clinic, a dispensing room, a laboratory, a medicine store, a minor O.T. and an observation room with 3 beds facility. The staff includes three doctors one S.M.O.(female), one male M.O., and one Dental surgeon. Paramedical Staff has 3 staff Nurses, one Pharmacist, one Lab Technician, two Lab Attendant, One clerk and One Peon. The University Health Centre provides facilities like:-

- Medical Aid for all common ailments with routine blood tests like haemogram, blood sugar, Lipid Profile, S. bilirubin, S. Creatinine, Urine Test, Sputum & Stool examination and ECG.
- First Aid to all accident cases.
- Preliminary care to all major diseases.
- ◆ 24 hours Ambulance Service for transporting the

Referred patients.

 Free Medicines to all the employees, their wards and students with handsome budget.

For referral three multi-specialty hospitals are on University panel i.e. N.C. Jindal Institute of Medical Care & Research, Hisar, Civil Hospital, Hisar, Sarvodya Hospital, Hisar. Besides this, nine different specialist doctors like Orthopaedician, Physicians, Surgeon, Pediatrician, Ophthalmologist, Gynecologist, Urologist, Burnt Plastic Surgeon and ENT are also there on University panel for providing indoor treatment and reimbursement to the University employees.

Facilities for SC/ST and BC Students

SC/ST Cell has been set up in the University to ensure proper implementation of various schemes of the UGC, the Government of India and the State Govt. concerning scholarships, stipends etc. for welfare of reserved categories. The guidelines, for various types of scholarship stipends as revised from time to time by the Central and State Govts., are notified to all departments which are got displayed on the Notice Boards of the concerned departments. This Cell ensures that these guidelines are strictly adhered to. The reservation to SC, BC and other categories will be admissible as per reservation policy of the State Govt. The scholarships are granted to the SC and BC candidates under the Schemes of Govt. of India/State Govt.

Central Instrumentation Laboratory

The Central Instrumentation Laboratory (CIL) is established for the students, research scholars and teachers of the university who are actively engaged in R&D activities in the emerging areas of Science, Technology & Engineering. The CIL is presently having sophisticated instruments like Nuclear Magnetic Resonance (NMR) Spectormeter (400 MHz), High Performance Liquid Chromatograph (HPLC), Atomic Absorption Spectrophotometer (AAS), UV-VIS-NIR Spectrophotometer, Fourier Transform Infrared (FTIR) Spectrometer,

Differential Scanning Calorimeter (DSC) and Lyophilizer and the process of purchase of other sophisticated instruments is in progress. These instruments are generally used to pursue R&D activities by the students, research scholars and teachers of Department of Bio & Nano Technology, Food Technology, Pharmaceutical Sciences, Applied Physics, Environmental Science & Engineering, Chemistry, etc.

Research Programmes

Research scholarship and creative work differentiate universities from all other educational institutions. The ideas, discoveries and innovations emanating from universities profoundly affect the social cultural and economic well-being of our society. The University offers intensified research programmes leading to award of the degree of Doctor of Philosophy in all Departments offering post-graduate courses. The details are available in Information Brochure which can be had from Assistant Registrar (Registration) or university website www.gjust.ac.in.

Business Development Group

The University has constituted the Business Development Group (BDG). The BDG has been mandated to foster closer ties with the Corporate World, Industry Association, Government agencies, Multi lateral bodies and others for the purpose of soliciting consultancy assignments, collaborative research projects, establishment of study chair in the University and placement activities of the students.

Business Development Group (BDG) is the nodal agency to coordinate the consultancy activities in the university. The consultancy projects/ assignments received by the university are about Rs. 2.70 crore. The BDG has received projects from various Govt. agencies including Haryana Government, Haryana State Finance Commission, Public Health Department, Govt. of Haryana, Haryana State Pollution Control Board (HSPCB), Panipat Thermal Plant, Khedar Power Plant, Panipat Co-op. Sugar Mills Ltd., Panipat Escort Ltd., AMG Tractor Plant, Hisar-Jind Co-Op. Milk Producers Union Ltd., Milk Plant, Jind, JCB India Ltd., Ballabgarh. Various multinational and Indian



companies have also been sponsoring consultancy projects to the university.

Intellectual Property Rights & Technology Commercialization Cell (IPR & TCC)

The IPRs are a bundle of exclusive rights over creations of the mind both artistic and commercial. The former is covered by copyright laws, which protect creative works, such as books, movies, music, paintings, photographs, and software, and gives the copyright holder exclusive right to control reproduction or adaptation of such works for a certain period of time. The second category is collectively known as "industrial properties", as they are typically created and used for industrial or commercial purposes. A patent may be granted for a new, useful, and non-obvious invention and gives the patent holder a right to prevent others from practicing the invention without a license from the inventor for a certain period of time. A trademark is a distinctive sign which is used to prevent confusion among products in the marketplace. An industrial design right protects the form of appearance, style or design of an industrial object from infringement. A trade secret is an item of non-public information concerning the commercial practices or proprietary knowledge of a business. All this calls for comprehensive understanding and detailed

deliberations on various issues and intricacies involved and hence a separate cell was required to address the underlying objectives. Therefore the University has established a separate Cell for the purpose of Documentation and Commercialization of Research. The Cell is named as "Intellectual Property Rights & Technology Commercialization Cell". The very purpose of creating this Cell is to ensure the 'Commercial Use' of University's Inhouse Research and Technology-Outcomes to outside world. The Cell is expected to transfer University's intellectual property rights to needy organizations to promote active commercialization of University's inventions through a well-designed policy of the University in this connection.

Academic Staff College

The UGC- Academic Staff College of the university has been established during the 11th Plan (2009) in accordance with the National Policy of Education (NPE-1986) with a vision 'To Facilitate Human Devolvement and Professional Excellence in Academics' and a mission 'To equip and enrich the participants with requisite professional and personal skills to make them grow as excellent human beings for their best possible contribution in personal, professional and societal domain'.

The objectives of ASC are to enhance the

