

ADMISSION TO PhD PROGRAMME: (2ND SEMESTER SESSION 2012-13)

1 ELIGIBILITY

- 1.1 A candidate seeking admission to the degree of Doctor of Philosophy must have obtained ME/MTech/MPhil/MCA/MSc/MA/MBA/CA or equivalent with minimum CGPA of 6.00 on a 10 point scale or 55% marks in aggregate where marks are awarded or NET (UGC/CSIR) qualified.
- 1.2 Candidates with BE/BTech degree or equivalent with excellent academic record (minimum CGPA of 9.00 on 10 point scale or 80% marks in aggregate) may be considered for admission.

Relaxation in CGPA to 7.00 on a 10-point scale or in marks to 65% for the minimum eligibility conditions may be permitted for candidates with a BE / BTech degree or equivalent who have a minimum of 3 years of professional and/or research experience in the area in which the admission is sought. However, candidates admitted with BE/BTech or equivalent qualification will be admitted for PhD after successful completion of eight Masters level courses as suggested by the PhD Admission Committee of concerned Department/School, within a period of two years from the date of admission. A minimum CGPA of 6.00 on a 10-point scale should be earned in the courses prescribed by the concerned Department/School.

- 1.3 Part-time studies leading to PhD degree are permitted for professionally employed personnel. Part-time studies leading to PhD shall also be permitted to persons working in Institutions with which a Memorandum of Understanding has been signed for research purposes. Such a candidate must be in employment at the time of admission and be engaged in professional work in the area to which admission is sought.
- 1.4 Admission of a PhD candidate in a department/ school other than his/her basic background: Suitability of a candidate is the purview of admission committee, if a candidate qualifies the test and interview then he/she should be allowed to pursue PhD Program. However, the admission committee may recommend additional courses for the candidate to clear.
- 1.5 Candidates shall be admitted on the basis of merit of Entrance Test and Interview to be conducted by the University. The candidates who secure minimum of 20% marks in the written exam shall only be called for Interview. During interview, a candidate is required to

indicate area of research.

Relaxation for appearing in the Entrance Test may be given by the University to those candidates who have qualified UGC/CSIR (JRF).

Note:

- (i) Part-time candidates are required to submit the "No Objection Certificate" from their parent organization/department/employer stating that the candidate is permitted to pursue studies on a part-time basis and that the candidate's official duties permit her/him to devote sufficient time for course work and research.
- **1.6** Applications for admission will be considered by the Admission Committee of the concerned Department/School.
- 1.7 The number of PhD admissions to be made by each Department/School shall be notified at the start of admission process. All efforts shall be made to maintain 25% SC/ST and 3% physically handicapped category students.
- 1.8 The supervisor(s) shall be allocated to every admitted candidate at the time of interview._The Admission committee will recommend course work to be allocated to each selected candidate.

- **2 Registration:** It is mandatory for all the PhD students to register in the concerned Department/School at the start of each semester.
- 2.1 Every admitted candidate shall have to do course work for a minimum of one semester. The course work shall include at least three courses, namely, a course on research methodology (may include quantitative methods and computer Applications) or a course proposed by the Admission Committee (for those who have studied a similar course on Research Methodology at PG level), a professional course (if not offered by any Department/ School, its syllabus to be proposed by the allocated supervisor and approved by DoAA) and a seminar (Relevant in the area of research). Minimum credits for the course work shall be 11 including a seminar of 4 credits. The process of registration in the course work, examination, evaluation and grading shall be same as followed for UG/PG programmes.

Only those candidates who successfully complete the course work within one year of admission and with a minimum CGPA of 6.00 on 10.00 point scale shall be registered in the PhD programme.

Every candidate will be required to submit research proposal, duly recommended by the Supervisor(s), after successful completion of the course work (December 31 shall be taken as date of completion of course work for odd semester and June 30 shall be taken as date of completion for even semester). The minimum time period to submit the research proposal shall be **one semester** from the date of admission **and maximum time allowed to submit the research proposal shall be one year from the date of admission.** Research proposal will be submitted to the concerned Head of the Department/School. In case of non-submission of proposal within one year, DoRSP on the recommendations of the Supervisor and Head of the Department/School may grant an extension for a maximum period of six months.

If the candidate fails to submit the proposal even during the extended period her/his admission will be cancelled. In case the proposal is rejected by the URB, she may resubmit it within next six months starting the date of meeting of URB failing which her/his admission will be cancelled.

3 GENERAL INSTRUCTIONS

The application form along with attested copies of certificates must be submitted to the Registrar on or before **December 10, 2012** for the even semester. Application forms received after the prescribed date will not be entertained under any circumstances. No correspondence/enquiry from such candidates shall be entertained.

4 VACANCY STATEMENT IN PHD PROGRAMME FOR EVEN SEMESTER TO BE HELD ON DECEMBER 2012 GIVEN AS UNDER:

As on 26.10.2012

Departments	No. of Seats	Specialization
Biotechnology & Environmental Sciences		
	01	Microbiology
	02	Environmental technology and
		management
	01	Plant Biotechnology
	02	Plant Molecular Biology
	01	Food Technology
	01	Environmental Biotechnology
Chamical Engineering	01	Environmental Engineering
	01	
	01	Heat Transfer Nanofluids Heat-
		pipes. CFD Energy
	03	Polymer/Adsorption
	03	Reaction Engg. & Catalyses
		Adsorption
	01	Environment Engineering
	02	Membrane Separation
	01	Molecular Simulation
		(Thermodynamic properties of bulk
	00	& contined fluids)
	02	
	02	Concrete Structural Materials
	02	Structures Modeling Health
	02	Monitoring
	01	Contaminant Transport
	01	Structures, Retrofitting
	01	Structural Materials
	02	Ground Water Flow Modeling,
		Contaminant Transport, Slurry flow
		in a pipe
	01	Computer Applications/
	01	Environment Reliability, Reinferred Forth
	01	Reliability, Relificiced Earth Pivor Engineering, Pomoto Sonsing
	01	Applications
Computer Science & Engineering		
Electrical & Instrumentation Engineering		I
	01	Biomedical Engg.
	01	Medical Image Processing
Electronics & Communication Engineering		1
	01	Intergrated Opto-Electronics
	02	VLSI Circuits & Systems
	01	VLSI Soft computing
	01	Optical Communication System
	03	Coding
	02	Antenna Design
Mechanical Engineering		
	01	Vibrations
	01	Mechanisms
	01	CAD/CAM
	01	Thermal
	02	Design

Schools			
School of Physics & Materials Science			
	02	Soft Condensed Matter Physics	
	01	Condensed Matter Physics/	
		(Experimental)	
	04	Nuclear Physics (thoritical)	
	01	Particle Physics	
	01	Nanomedicine	
	01	Experimental Condensed Matter	
		Physics	
	02	Non Linear Optics	
	01	Solar Cells	
School of Behavioral Sciences & Business Studies			
	02	Industrial Management & Business	
		Environment	
	02	Cognitive & experimental	
		Psychology	
	03	Economics & Finance	
	02	Management & Finance	
School of Mathematics & Computer Applications			
	02	Algebra	
	01	Differential Equations	
	01	Functional Analysis	
School of Chemistry & Biochemistry			

5 IMPORTANT INSTRUCTIONS:

- The application form shall be filled Online at <u>www.thapar.edu</u>. After filling the form, attach Demand Draft of Rs 2500/- (in favour of Thapar University payable at Patiala) with the print out of the application form. The fee can also be paid online. The application form shall be available shortly on <u>www.thapar.edu</u>.
- The complete application must reach the admission cell on or before the last date.
- The complete form along with DD must be sent at following address:
 - Incharge Admission Cell Academic Section Thapar University Patiala-147004 Punjab (India)
- For any assistance, candidates can contact admission cell or call at 0175-2393324, 08288008121 or email at helpdesk@thapar.edu.

6 ADMIT CARD

Candidates shall be able to generate 'Admit Card' on www.thapar.edu provided their DD alongwith print out of application form reaches Thapar University in time. The login id and password created by candidate at the time of filling the application form shall be used to register for generation of Admit card. **Important instructions for candidates for Generation of admit card**: Once your documents are received and approved by the university, you will have to go to this same link and do the booking for your Online exam.

The booking of test centre can be done from **November 20, 2012 to December 15, 2012**, hence you can generate your Exam ADMIT CARD from **November 20, 2012 to December 15, 2012**.

After registering, the candidate shall take out two print outs of 'Admit Card", paste latest photograph on each and then come to the Entrance test centre. Along with admit cards, the candidate will also carry

any one of the identity proof (Original) with him/her like Passport/Voter I Card/ PAN Card/ Driving License/Aadhaar. One copy of the Admit card shall be retained by the Entrance Test centre. The candidate shall keep the other copy (duly acknowledged by the examiner at test centre) to be shown at the time of document checking

7 While registering for ONLINE entrance test on our website, the candidate shall choose entrance test centre of his/her choice from the available list and any one slot available in the test period given above i.e. (December 26-28, 2012). Once slot is chosen, it cannot be changed thereafter.

GENERAL INFORMATION REGARDING PhD ENTRANCE TEST

Duration of test: 90 minutes (75 Questions)

1/4th mark will be deducted for each wrong answer.

Syllabus for the Ph.D entrance examination

1. English & General Studies

Interpersonal skills including communication skills, anonyms/synonyms, sentence completion, active/passive voice, prepositions, direct/indirect speech, idioms & phrases. General issues on environmental ecology, biodiversity and climate change (not requiring subject specialization). Economic and social development – multilateral trade agreement, sustainable development, poverty, inclusion, demographics, social sector initiatives, etc. Indian polity and governance – constitution, political system, public policy, rights issues, etc. Indian and world geography – physical, social, economic geography of India and the world. History of India and Indian national movement. Nobel prize winners, inventions & discoveries, awards & recognitions

2. Quantitative Reasoning

Ratios and proportion, percentages, profit & loss, averages, partnership; time-speed-distance, work and time; number system, factors, multiples; pipes and cisterns, simple interest & compound interest, installment payments; clocks, calendar; in-equations, quadratic and linear equations, functions, logarithm geometry, mensuration and solid geometry, geometry (lines, angles, triangles, spheres, rectangles, cube, cone etc), co-ordinate geometry.

Set theory, measures of central tendency and dispersion, probability and theory random variables (single variable case only), probability distribution (binomial, poisson and normal), correlation & regression; permutation & combinations; maxima & minima progression; complex numbers; data Interpretation based on text, graphs (column graphs, bar graphs, line charts, Pie charts, graphs representing area) and tables.

3. Analytical Reasoning & Mental Ability

Critical reasoning, visual reasoning, assumption-premise-conclusion, assertion and reasons; statements and assumptions, identifying valid inferences, identifying strong arguments and weak arguments, statements and conclusions; cause and effect, identifying probably true, probably false, definitely true, definitely false kind of statement; linear arrangements, matrix arrangements, puzzles, family tree problem, symbol based problems; coding and decoding, sequencing, identifying next number in series, etc; tables. Basic numeracy (numbers and their relations, orders of magnitude, etc.)