

**BIRLA INSTITUTE OF TECHNOLOGY**  
(Deemed University u/s 3 of UGC Act 1956)  
**MESRA, RANCHI - 835215 (INDIA)**



**PH.D. ADMISSION NOTIFICATION  
(FULL-TIME / PART-TIME)  
FOR THE SESSION MONSOON 2018**

## IMPORTANT DATES

Filling of online form commences from	15 March 2018
Last date to Apply Online	17 April 2018
Last date of receiving of completed filled-in Application Forms at BIT, Mesra	23 April 2018
Display of list of eligible candidates to be called of Written Test and Interview	30 April 2018
<b>DATE OF ENTRANCE TEST</b>	<b>16 May 2018</b>
Interview of the selected candidates	17 May 2018
Declaration of 1 <sup>st</sup> Provisional Selection List on the Institute website / Notice Boards	18 May 2018
Admission from 19 May 2018 to 4 June 2018	
Classes will commence from 1 <sup>st</sup> /2 <sup>nd</sup> week of July 2018 [Exact date will be notified at later stage]	

## CONTACT DETAILS:

Dean, Admissions & Academic Coordination,  
Birla Institute of Technology,  
Mesra, Ranchi - 835 215  
Phone: PBX: 0651-2275444 / 896,  
Extn. 4469, and 0651-2275868 (Direct)

Fax: 0651- 2276007, 2275401

E-mail: [admissions@bitmesra.ac.in](mailto:admissions@bitmesra.ac.in), [deanadmissions@bitmesra.ac.in](mailto:deanadmissions@bitmesra.ac.in)

For any queries, candidates may see Ph.D. Regulations available on the Institute website (downloadable as pdf document). For any further queries, candidates may contact the Dean, Academic Programme through e-mail at [deanap@bitmesra.ac.in](mailto:deanap@bitmesra.ac.in).

For any queries about the research areas and syllabi of the Tests, candidates may please contact the concerned Head of the Department by telephone or e-mail. (Please see Directory on the Institute website for contact details).

Candidates must visit our website <http://www.bitmesra.ac.in> regularly for updates and/or for any other matters related to the admission procedures.

## HOW TO APPLY:

1. To start online application, click on the link, create 'username' and 'password' by clicking on "New users register here" when prompted. Do not share the username and password with any body else.
2. To apply for the Ph.D. programme (Session Monsoon 2018), eligible candidates must complete and submit the application online [link available on Institute website [www.bitmesra.ac.in](http://www.bitmesra.ac.in)]. Pay application fee through **State Bank Collect** (any nationalized bank) of Rs.2,500/- (General candidates) and Rs.1,500/- (for SC/ST candidates). **Fee once remitted shall not be refunded under any circumstances.**
3. Send a printout of the completed application form along with required enclosures (see List of Enclosures) in a A4 size envelope by Speedpost / reliable courier (means by which sender may track its movement on internet) to the office of **Dean, Admissions & Academic Coordination, Birla Institute of Technology, Mesra, Ranchi - 835215, to reach positively by the due date.**
4. Write "Application for Ph.D. Admission (Session Monsoon 2018)" on top of the envelope.
5. Applications reaching us after the due date are liable to be rejected / may not be processed.
6. Please do not print a blank form and fill it by hand as this will not be accepted.

## IMPORTANT INSTRUCTIONS:

- Candidates should proceed to fill the Online Application Form only after they satisfy themselves that they fulfill all the eligibility criteria.
- You may use one application form to apply for Ph.D. in ONLY one Department.
- Please use separate application forms to apply for two or more Departments. Each application form must be complete in all respects and sent in a separate envelope along with all required enclosures as above.
- Candidates may apply for the Ph.D. programme in a maximum of three Departments.
- The Department-wise list of eligible candidates with registration number will be displayed on the Institute website before 7-10 days of Entrance Test.
- Candidates whose names appear in the lists may note their Registration Numbers and should come to attend the Entrance Test and Interview. They are advised to carry a photocopy of their completed application form at the time of Test and Interviews. No individual intimation will be sent to candidates.
- **No Admit Card will be issued to candidates.**
- Candidates whose names do not appear in the lists of eligible candidates, may contact the Admissions Office at Mesra by telephone or fax.
- Candidates must carry valid Photo identification at the time of Written Test. (Driving license, Passport, PAN Card, Voter ID, Aadhaar Card, Employee Identification Card are acceptable)

## MINIMUM ELIGIBILITY CRITERIA:

Candidates with following qualification shall be eligible for admission to the Ph. D. Programme of the Institute:

- (a) Candidates possessing M.Tech. / M.E. / M.Sc. (Engg.) / M.Arch / M.Pharm / M.Sc. / MCA / MBA or equivalent Degree in relevant branch from a recognized University / Institute with minimum 60% marks or 6.0 CGPA on a ten point scale in the qualifying examination are eligible to apply for admission in the departments as per their Specialization.
- (b) Candidates possessing B.Tech. / B.E./ B.Sc. (Engg.)/ B.Pharm / B.Arch or equivalent Degree in relevant branch from a recognized University/ Institute with minimum 70% or 7.0 CGPA on a ten point scale in the qualifying examination and a valid GATE score with a minimum of 80 percentile are eligible to apply for admission in the departments as per their Specialization.
- (c) Candidates possessing B.Tech. / B.E./ B.Sc. (Engg.)/ B.Pharm / B.Arch or equivalent Degree in relevant branch from a recognized University/ Institute with minimum 70% or 7.0 CGPA on a ten point scale in the qualifying examination and employed in R&D organisations and having ten years' experience with good research credentials are eligible to apply for admission in the departments as per their Specialization.

### RELAXATION FOR SC/ ST CANDIDATES

Eligibility criteria will be relaxed by 5% marks for SC / ST candidates.

**Note:** In case of the candidates with other grade point scale, the decision of the equivalence committee of the institute shall be final.

## FELLOWSHIP AVAILABLE:

A limited number of Institute Research Fellowship (IRF) with a fellowship amount of Rs. 25,000/- per month for first two years and Rs. 28,000/- per month for next two years is available. These IRFs shall be distributed based on the performance in the admission test, academic carrier and interview. Ph.D. admission test is mandatory for candidate aspiring for the IRF.

## DEPARTMENTS OFFERING THE PHD. PROGRAMMES:

1. Architecture
2. Bio-Engineering
3. Chemical Engineering
4. Chemistry
5. Civil & Environmental Engineering
6. Computer Science & Engineering
7. Electrical & Electronics Engineering
8. Electronics & Communication Engineering
9. Management
10. Mathematics
11. Mechanical Engineering
12. Pharmaceutical Science & Technology
13. Physics
14. Production Engineering
15. Remote Sensing
16. Space Engineering & Rocketry.

## SELECTION PROCEDURES:

Selection to the Ph.D. programmes would be based on performance in a Written Test, Previous academic record and an Interview. Only such candidates, who obtain the minimum required marks in Aptitude Test, Subject Specific Test and the indicated total percentage of marks, will be considered for final preparation of result as given below:

Category of applicant	Aptitude Test (100)	Subject Test (100)	Academic Record (60)	Interview (40)	Total (300)
General	30%	30%	-	-	50%
SC / ST	25%	25%	-	-	45%

**Note: Up to 20% of the selected candidates for admission of the respective Department may be allotted to Part-Time candidates depending upon their position in the merit list.**

## DATE, TIME & VENUE OF THE ENTRANCE TEST & INTERVIEW:

**The Ph.D. Entrance Test will be held on 16<sup>th</sup> May 2018 from 9:00 am to 6:00 pm at the Institute Main Building in the Institute's Campus at Mesra, Ranchi- 835215.**

The Ph.D. Entrance Test on **16<sup>th</sup> May 2018** would consist of 2 parts

- a) General Aptitude Test common to all applicants, from 9:00 am to 10:30 am and
- b) Subject Specific Tests to examine basic fundamental knowledge in the subject, from
  - 11:00 am to 1:00 pm for candidates applied for only one Department
  - 11:00 am to 1:00 pm & 1:30 pm to 3:30 pm for candidates applied for two Departments
  - 11:00 am to 1:00 pm & 1:30 pm to 3:30 pm & 4:00 pm to 6:00 pm for candidates applied for three Departments

**The syllabi of the Subject Specific Tests for each Department can be seen on the Department web pages on the Institute website.**

## EXEMPTION FROM THE ENTRANCE TEST:

The following category of candidates may be exempted from taking Entrance Test for the Ph.D. Programme (Session Monsoon 2018):

Candidates who have qualified in

- (i) UGC-JRF
- (ii) CSIR-NET/NBHM/DBT-JRF
- (iii) GATE / GPAT score with 80 percentile (subject to have valid GATE /GPAT score)
- (iv) Any other national level test for pursuing Ph.D.

**Note:**

- The candidates who have been granted exemption from taking the Entrance Test will have to follow the rest of the admission process as per the schedule and fulfill all other requirements as per the Ph.D. Regulations.
- Candidates will not be entitled to get any kind of financial assistance from the Institute.

## Date of Interviews:

The interview process of the selected candidates will be conducted on 17<sup>th</sup> May 2018 from 10:00 am onwards in the concerned Departments.

Provisional selection lists, along with procedures for admissions, will be notified by 5:00 pm on or before 18<sup>th</sup> May 2018, on the Institute website and Notice Boards of the Institute only. **No separate intimations will be sent to candidates.** Provisionally selected candidates will be required to take admission by the date given, failing which vacant seats may be allotted to waitlisted candidates. The list of waitlisted candidates will also be announced on our website and Institute Notice Boards only. **No separate intimations will be sent to candidates.**

Candidates provisionally admitted to the Ph.D. programme will be required to fill an “Enrollment Form” with details of their proposed field of research, research topic, and name of their guide, within 7 to 10 days after their admission, and submit the same to the Dean (Academic Programme), through the Head of the concerned Department. [The Enrollment Form will be available on the Institute website and at office of the Dean, Admissions & Academic Coordination].

## LIST OF ENCLOSURES REQUIRED TO BE SENT ALONG WITH THE APPLICATION FORM:

Candidates must enclose photocopies of the following documents with the duly completed Application Form:

1. Pass certificate and marksheet of Class 10
2. Marksheet of Class 12 / Intermediate or equivalent
3. Certificate and marksheets of Graduation
4. Certificate and marksheets of Post-Graduation
5. College Leaving Certificate
6. Migration Certificate
7. Candidates with qualifications acquired through correspondence or distance-learning programmes are eligible only if (a) they acquired such qualifications as working professionals / while in employment, (b) the programmes are recognized by the DEC-UGC-AICTE or MHRD, (c) they have passed the qualifying examination at the time of applying, with minimum requisite marks as given in eligibility criteria. They must enclose photocopies of (i) work experience certificate (ii) pass certificate and marksheets of qualifying examination with their application.
8. UGC-JRF / CSIR-NET / NBHM / DBT-JRF / GATE/GPAT / Any other national level test for pursuing Ph.D. admit card and Score card (if applicable)
9. Caste certificate / special category certificate (if applicable) in proper format (see below)
10. Payment receipt towards application fee of Rs.2,500/- (General) and Rs.1,500/- (SC/ST) candidates (non-refundable)
11. NOC, Experience Certificate and Facilities available to carry out the research work at their place of working (if applicable) for candidates employed in R&D organizations.
12. One recent colour photograph - [same as uploaded on the form] and attached by clip
13. Photo identification: (Driving license, Passport, PAN Card, Voter ID, Aadhaar Card, Employee Identification Card are acceptable)

Write your Name, your telephone number and “Ph.D. Monsoon 2018” on the back of each of these documents and certificates. All such papers must be stapled or stitched to the form.

- **All candidates belonging to the SC and ST categories must note and obtain caste certificates which should be in proper format, and should be signed by appropriate authority of rank not less than SDO. (Note: Final reservation proportion will depend on notification, if any, issued by competent authority and as accepted by the Institute).**
- Candidates belonging to Persons with Disability [PwD] category must send photocopy of relevant certificate(s) in proper format **signed by appropriate authority.**
- **Do not enclose any original certificates with your application at this stage.**

- The Admissions Office / concerned Departments may not undertake detailed scrutiny of applications before Test / Interviews, and all shortlisted applicants called for Test / Interviews, except those whose applications are summarily rejected, are allowed to appear at the Test / Interviews on purely provisional basis, subject to their eligibility being verified at the time of interviews. Merely being allowed to appear at the Test / Interviews will not be considered as a ground for being eligible for admission to the Ph.D. programme. Further, mere submission of application form does not entitle a candidate to appear for the Test / Interviews.

## RESIDENTIAL REQUIREMENTS:

The residential requirement of the external Ph.D. candidate shall be a minimum period of one semester at the Institute at Mesra / Extension Centres.

## FEE STRUCTURE:

S.No.	Description	Fee (INR) Main Campus / Off Campuses	Fee (USD) Offshore Campuses	Remarks
1.	Admission Fee	5000.00	500.00	Payable at the time of admission
2.	Infrastructure Fee (One time non-refundable)	20000.00	2000.00	Payable at the time of admission
3.	Caution Money (Refundable)	10000.00	1000.00	Payable at the time of admission
4.	Registration Fee for Pre-Ph.D. Qualifying Examinations	2000.00 (per course)	200.00 (per course)	Payable at the time of registration for the Pre-Ph.D. Qualifying Examination
5.	<b>Semester Fee:</b> Full-time Research Scholar	20000.00	3000.00	Payable in each semester at the time of admission and registration
	Part-time Research Scholar (Employees of BIT)	20000.00		
	Sponsored / Part-time Research Scholar (External)	40000.00		
6.	Thesis Submission Fee	20000.00	2000.00	Payable at the time of submission of thesis

### Refund rules for the Ph.D. programme

- If a student withdraws / leaves the Institute for any reason in the mid-session without completing the entire programme, all fees paid including the caution money will be forfeited by the Institute.
- If a student with fellowship (Institute / QIP / Project / External) withdraws / leaves the Institute in the mid-session without completing the programme, the entire amount paid to him / her towards fellowship need to be returned by the student before leaving the Institute.

# NUMBER OF SEATS AVAILABLE

## BIT Mesra (Main Campus)

Sl No.	Department	No. of vacancies
1.	Architecture	5
2.	Bio-Engineering	23
3.	Chemical Engineering	22
4.	Chemistry	26
5.	Civil & Environmental Engineering	17
6.	Computer Science & Engineering	39
7.	Electrical & Electronics Engineering	8
8.	Electronics & Communication Engineering	27
9.	Management	Nil
10.	Mathematics	17
11.	Mechanical Engineering	16
12.	Pharmaceutical Science & Technology	104
13.	Physics	21
14.	Production Engineering	11
15.	Remote Sensing	12
16.	Space Engineering & Rocketry	9

## BIT Extension Centres

Sl No.	Campus	Department	No. of vacancies
1	BIT Deoghar Campus	Chemistry	4
		ECE	2
		Mathematics	6
		Mechanical Engineering	1
		Physics	3
		Production Engineering	5
2	BIT Noida Campus	Computer Science & Engg.	3
		Mathematics	6
		Management	7
3	BIT Patna Campus	Chemistry	2
		Civil Engineering	4
		Computer Science & Engg.	4
		ECE	4
		Management	5
		Mechanical Engineering	5
		Mathematics	3
		Physics	3

**Note: Up to 20% of the selected candidates for admission of the respective Department may be allotted to Part-Time candidates depending upon their position in the merit list.**





# SYLLEBUS FOR APTITUDE TEST

The General Aptitude Test for admission to the Ph.D. programme (Session Monsoon 2018) shall comprise of 50 questions to be answered in 90 minutes. The test will be conducted at Mesra (Main Campus) only, as per date and timings mentioned in the Ph.D. Admission Notification.

Questions will be of subjective and objective type. **There will be no negative marking.** For each correct answer a candidate will earn 2 marks. If a question has not been attempted no credit will be given. The questions will be distributed into various areas as follows and the detailed syllabus is given below:

Section	Subject	No. of Questions
A	Analytical Ability and Logical Reasoning	25
B	Test of English Language	25
<b>Total</b>		<b>50</b>

## Section A: Analytical Ability and Logical Reasoning: (25 questions - objective type)

This section will test the logical reasoning and visio-spatial reasoning abilities of the candidate.

## Section B: Test of English Language: (25 questions - Subjective and objective type)

This section will test the competence of the English language.