



POST GRADUATE DEPARTMENT OF BIOTECHNOLOGY

TILKA MANJHI BHAGALPUR UNIVERWSITY, BHAGALPUR - 812 007

Prospectus - 2020



INFORMATION BROCHURE AND APPLICATION FORM FOR BIOTECHNOLOGY ENTRANCE TEST (BTET) - 2020

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Prof. P. K. Roy
Course Co-ordinator

Information brochure and application form available on payment of Rs. 860/- (in person) Rs. 910/- (by mail)
in the form of Bank draft only in favour of "TMBU P.G. Biotech A/C" payable at Bhagalpur

T. M. BHAGALPUR UNIVERSITY, BHAGALPUR

Named after Tilka Manjhi - a great martyr of India's freedom movement, T.M. Bhagalpur University was established in 1960. It has three types of teaching units: 34 University Departments, 12 Constituent College and a good number of Affiliated College etc. With a sprawling campus, it has a massive administrative building, a Computer Centre, Bioinformatics Centre, Press, Health Centre, Central Library, Hostels for boys and girls, Guest house, Stadium, Multipurpose hall and other allied institutions. Tilka Manjhi Bhagalpur University, Bhagalpur, imparts teaching and research of international standard, conducts examinations and awards, degree & diplomas in faculties like Humanities, Social Sciences, Commerce & Management, Science, Law, Education, Medicine, Engineering and Technology with a commitment to train young people for challenging and rewarding opportunities throughout the world. Bhagalpur, also known as silk city, has a long history of learning and culture like Vikramshila University, one of the oldest Universities of the world.

The then Centre for Biotechnology (CBT) was initially established in this University in 2001 as an approved unit of University Grants Commission (U.G.C. IX Plan period) to offer high quality education, training and research in Biotechnology at the Master's level. CBT launched its first four - semester M.Sc. program in Biotechnology from 18th September 2001 for the Session 2001-03. Thereafter, CBT was renamed as Post Graduate Department of Biotechnology (PGDBT) in February, 2002 and is presently running in the independent Building with large campus in the premises of TNB College, Bhagalpur. Though the PGDBT is in its beginning stage, however within a short tenure it has gain appreciation from DBT, NAAC, and UGC. The Department of Biotechnology, New Delhi has also agreed in principle to provide all sorts of assistance to run this course in the University like other institutes of the country and also sanctioned grant for the development of infrastructure including sophisticated instruments like Gel-doc, Thermocycler, DNA sequencer, UV Spectro - photometer, Fermenter etc. On the basis of existing infrastructure and quality of teaching imparted, this department has established a reputation in India particularly in Eastern region.

FACULTY

Faculty consists of some qualified permanent teachers from Botany, Zoology and related Department of the University and some faculties appointed on contractual basis in the Department of Biotechnology as core faculty as well as some qualified guest faculty members as Resource Personnel from various departments/faculties including medicine and engineering within and outside the university.

PLACEMENT OF ALUMINA

Fifteen batches of students have already passed out from the institution, about half a dozen of alumini are carrying quality research in the reputed institutions abroad (Germany, England, Netherland, Newzealand etc.), some are placed as faculty member in Indian Universities and some as scientists in R&D group of Industries and pharmaceuticals.

FACILITIES

Research facilities on Microbiology, Biochemistry, Molecular Biology, Tissue Culture and Plant Sciences are provided by the department. Presently about two dozen of students are enrolled in the department for pursuing their Ph.D. oriented research works, half of them are getting Fellowship from DBT, UGC, ICMR etc. Library is rich with recent and advanced books. Laboratories are well equipped with modern apparatus and students are exposed before weekly seminars and interactive session on current topics. In 4th semester students are encouraged to take project training program in different research laboratories of National repute.

ELIGIBILITY

Minimum academic qualification for admission is to be a Science Graduate in Biotechnology / Life Sciences / Microbiology / Biochemistry / Molecular Biology or one of the subject of Biological Sciences at Graduate Level.

Appearing Candidates in the respective qualifying examination prescribed above as eligibility for admission shall also be considered for appearing in the entrance examination at their own risk and on the clear stipulation that in the event of their selection, they will be entitled to take admission only after production of qualifying degree before the deadline failing which their claim will be forfeited.

RESERVATION

Admission under reservation category will be made as per rules and regulations of the University.

SELECTION PROCESS

Admission to Four-Semester Post Graduate Program (M.Sc.) in Biotechnology is made through an All India Entrance Test (BTET) be conducted by the Department every year.



ENTRANCE EXAMINATION

Duration: 2 hours for 100 questions of 200 marks.. Type of questions : Multiple - choice/ Reasoning / Short answer type on Cell / Molecular Biology, Genetics, Biochemistry, Microbiology, Plant/Animal Biotechnology of graduation standard including Elementary / Basic knowledge of Mathematics, Computer Science, Biophysics and Bioinformatics.

SAMPLE QUESTIONS

- Hybridoma technique was first discovered by**
a) Kohler and Milstein b) Robert Koch
c) 'D' Herelle d) Landsteiner
- DNA Polymerase enzyme involved in base excision repair is:**
a) Pol- α b) Pol- β c) Pol- γ d) Pol- δ
- The yeast Extract in the industrial fermentation :**
a) Acts as Vitamin and micronutrient source.
b) Acts as Nitrogen Source.
c) Acts as Carbon Source.
d) Acts as Carbon and Vitamin Source.
- Tool which is used for the identification of motifs :**
a) BLAST b) COPIA
c) PROSPECT d) PATTERN hunter
- The sum of all two digit odd natural numbers is:**
a) 24752 b) 2530 c) 4905 d) 5049

PREVIOUS YEARS QUESTION PAPERS

For the reference of intending candidates, a set of question papers of the last four years is available in the department on payment of rupees 1000/- in the form of (1) Bank draft drawn in favour of "TMBU. P.G. Biotech. A/C" payable at Bhagalpur and (2) a self addressed unstamped envelope of not less than 28X20 cm. mentioning clearly" Request for M.Sc. Biotechnology previous year's question papers. The set of previous year's question papers will remain available in the department on all working days of June-July months of the year.

ADMISSION PROCEDURE

A. Candidates out of state quota desirous for admission in M.Sc. Biotechnology course are required to apply only on the prescribed Application Form obtainable on payment of a demand draft of Rs. 860/- (in person) or Rs. 910/- (by mail) drawn in favour of "**TMBU. P.G. Biotech. A/C**" payable at Bhagalpur. Admission will be made on the basis of an Entrance Test to be conducted by the Department in the month of March, 2021

B. Application form duly completed alongwith three copies of recent photographs (coloured) should reach the Head/Course Co-ordinator, P.G. Department of Biotechnology, T.M. Bhagalpur University, Bhagalpur- 812007 on or before the last date of submission.

No enclosures are required to be submitted alongwith the application form. Candidates belonging to SC/ ST/ OBC/ EWS categories are required to submit attested copy of the original caste certificate (with the application form) issued from an authorized officer not below the rank of the District Magistrate.

Candidates belonging to Physically handicapped category are required to submit attested copy of the certificate (with the application form) issued by the Government hospital (s) indicating the nature and degree of disability and the extent to which the disability hampers the candidate in pursuing his/her studies.

All certificates / mark-sheets and other related documents are required to be submitted (in original) by the selected candidates at the time of the interview alongwith photocopy of each document in duplicate.

C. Admit Card will be issued only to those candidates who have submitted the application form complete in all respects on or before the last date for submission of completed application forms. University will in no way be responsible for any postal delay resulting in untimely delivery of Admit Cards.

Admit card will be mailed to the candidates approximately seven days before the commencement of the Entrance Test by Registered Post / E-mail. In case, Admit card is not received in time, the candidate is advised to obtain his/her duplicate Admit card one day before the date of Entrance Test after producing two recent photographs and proof that he/she has applied for.

D. Result will be declared within a week from the date of BTET and short listed candidates will have to appear before interview Board on prescribed date at the P.G. Department of Biotechnology, T. M. Bhagalpur University, Bhagalpur-812007. They will have to produce all the original certificates and documents alongwith Admit Card of BTET - 2020 (see the information Bulletin).

E. Candidates desirous of taking admission on NRI quota will have also to appear at an Interview Board alongwith original certificates and documents as stated in the Information. In case the certificates/mark sheets are in a language other than English, the English version of such

documents, duly attested, should be submitted at the time of the interview.

- F. Result of interview will be announced on Departmental notice board and the candidates finally selected are required to take their admission by paying course fee and other charges as mentioned in "Fee Structure and mode of payment" before the last date of admission failing which they will forfeit their claims and such vacant seats will be filled up by candidates in waiting list.
- G. P.G. Dept. of Biotechnology, T.M. Bhagalpur University, Bhagalpur will not be responsible for any damage or loss caused due to any inadvertent omission and/or commission.
- H. All correspondences should be made in the name of the Head/Course Co-ordinator, P.G. Dept. of Biotechnology, T.M. Bhagalpur University, Bhagalpur-812007.

For any enquiry please contact

Tel. No.: 0641-2500073 (0)

Mob.: 9931188763, 9431874469

E-mail : pgbiotectmbu@yahoo.co.in

HOSTEL FACILITIES

The outstation candidates (both-boys & girls) admitted to this programme of study will be considered for hostel accommodation for which separate fee will be charged as per rules of the University. Students may please note that admission in the University would not ensure automatic allotment of hostel accommodation and that the same will be offered subject to its availability.

Course Design & Evaluation System

M.Sc. Biotechnology is a full two years course consisting four semesters based on CBCS pattern.

Semester - I : **Core theory - Three Papers** (1. Cell & Mol., Biology and Genetics 2. Microbiology 3. Bio-molecules and enzymology).

Core Practical (based on paper -1, 2 & 3)

AECC1

Semester - II : **Core theory four papers** (1. Bio-fertilizers & mushroom technology 2. Bio-physics and instrumentation 3. Biology of Immune System 4. Bio-process Technology)

Core Practical (based on paper -1, 2, 3 & 4)

AEC/SEC Course - I

Semester - III : **Core theory four papers** (1. Bio-statistics & Bio-informatics 2. Recombinant DNA Technology 3. Plant & Animal Biotechnology)

Core Practical (based on paper -1, 2 & 3)

AECC2

Semester - IV : **Subject Elective Theory-1** (Microbial Biotechnology or Advance Plant and Agriculture Biotechnology)

Practical - I

Instead of these two SET, **one project work** may be opted for 200 marks.

DSE - 1 : Selected from other department.

Each core theory & practical paper will be of 100 marks consisting of 30 CIA and 70 ESE. AECC - 1, 2, AEC/SEC/DSE will be qualifying paper consisting of 50 CIA and 50 ESE. The result will be given on the basis of 14 core papers and 02 subject elective papers.

FEE STRUCTURE & MODE OF PAYMENT

Course Fee	Semester I	Semester II	Semester III	Semester IV
Admission Fee	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-
Tuition Fee	Rs. 9000/-	Rs. 9000/-	Rs. 9000/-	Rs. 9000/-
Library Fee	Rs. 1500/-	Rs. 1500/-	Rs. 1500/-	Rs. 1500/-
Development Fee	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-
Total	Rs. 12500/-	Rs. 12500/-	Rs. 12500/-	Rs. 12500/-
Security Deposit	Rs. 3000/-			
Examination Fee	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-	Rs. 1000/-
Grand Total	Rs. 16,500/-	Rs. 13,500/-	Rs. 13,500/-	Rs. 13,500/-

Fee and other admissible charges semester-wise will be collected at the beginning of each semester in the form of Account Payee Demand Draft drawn in favour of "TMBU P.G. Biotech A/c" payable at Bhagalpur. The University reserves the right to make any change in fee structure even in mid way of the session.