

Dr. B. Lal Institute of Biotechnology

An exclusive Biotechnology Institute

BEST-2019, M.Sc.

Biotechnology Entrance Cum Scholarship Test

The admission to Post Graduate program M.Sc. Biotechnology and M.Sc. Microbiology for session 2019-20 in Dr. B. Lal Institute of Biotechnology will be on the basis of the entrance examination **Biotechnology Entrance Cum Scholarship Test (BEST)**. Biotechnology Entrance Cum Scholarship Test (BEST) is an examination that particularly tests the comprehensive understanding of various science subjects and aptitude of students. The college aims to ensure minimum standards for the entrants in the field of biotechnology.

Date of examination: 09th June 2019

Timings: 11:00AM - 01:00PM

ELIGIBILITY CRITERIA

M.Sc. Biotechnology:

- i. B.Sc. Degree (Pass course or Hons.) under the 10+2+3 scheme with Agriculture/Botany/ Biotechnology/ Chemistry/ Microbiology/ Pharmacy/ Zoology as one of the subjects. Minimum of 55% of aggregate marks in Rajasthan, 60% marks for candidates from any Universities outside the State of Rajasthan.
- ii. As per the University of Rajasthan norms, if seats remain vacant in the college, the female candidate is given reduction of 5% in minimum percentage for admission.
- iii. Both Indian and Foreign nationals are eligible for BEST test.

M.Sc. Microbiology:

- i. B.Sc. Degree (Pass course or Hons.) under the 10+2+3 scheme with Microbiology/ Biotechnology/ Zoology/ Botany/ Chemistry/ Pharmacy/ Genetics/ Life Sciences/ Biochemistry/ Integrated Microbiology/ Integrated Biotechnology as one of the subjects. (Minimum of 55% of aggregate marks for students in Rajasthan, 60% marks for candidates from any Universities outside the State of Rajasthan.

- ii. As per the University of Rajasthan norms, if seats remain vacant in the college, the female candidate is given reduction till 5% in minimum percentage for admission.
- iii. Both Indian and Foreign nationals are eligible for BEST test.

ADMISSION CRITERIA

Admission to post graduate programmes of study in Dr. B. Lal Institute of Biotechnology shall be submitted online/ offline as per notification of admission by the Institute.

- Admission of a student to a course shall be subject to the conditions prescribed by the relevant University Ordinance/Rules as applicable to the course in which the admission is sought.
- Admission to post graduate programme in the Institute shall be based on objective type test (70% weightage) and academic record of qualifying examination (30% weightage).
- Acceptance of application form does not guarantee admission.
- Seats will be reserved for S.C., S.T., OBC (except creamy layer), SBC, Kashmiri Migrants and Differently abled applicants as per Government of Rajasthan policy/ as per directions of Hon'ble High Court of Rajasthan.
- Admissions will be made on the basis of merit (BEST score + Academic Score + Concession/ Weightage Marks (if applicable)) subject to the availability of seats in each category and fulfillment of conditions laid down by the University for the purpose from time to time.
- All admission will be provisional till the applicant completes all the formalities required.
- Payment of fee: No student shall be treated as admitted to the course until he/she has deposited the necessary fee (admission, tuition and others). All fees will be charged for 12 months irrespective of the date of admission. Fees once paid shall not be refunded except the caution money.
- Scholarships are available on merit basis of the examination conducted.
 - ✓ Students scoring from 75% - 80% will get 10% scholarship.
 - ✓ Students scoring from 80.1% - 90% will get 15% scholarship.
 - ✓ Students scoring from 90.1% - 95% will get 25% scholarship.
 - ✓ Students scoring 95.1 % above will get 50% scholarship.

For details refer University of Rajasthan Prospectus.

IMPORTANT INFORMATION

Students can register for the exam by filling a Registration form which is available on the website or collect from Admission office. The Application fee is Rs. 500/-

IMPORTANT DATES:

S.No.	Title	Date
1	Last Date of Application	06 th June 2019
2	Date of Examination	09 th June 2019
3	Date of Result	15 th June 2019

SYLLABUS:

- i. The test is of 2 hours duration and the test booklet will contain 100 questions carrying 3 marks each. For each correct response, the candidate will get 3 marks. There will be negative marking and for each incorrect response, 1 mark will be deducted from the total score. The maximum marks are 300.
- ii. The examination will contain two sections: Section A and Section B. Section A will contain 20 questions from general aptitude. Section B will contain 80 questions from life science.

General Aptitude:

Verbal Ability: English Grammar, Sentence Completion, Verbal Analogies, Word Groups, Instructions, Critical Reasoning, Verbal Deduction, Comprehension.

Numerical Ability: Numerical Computation, Numerical Estimation, Numerical Reasoning, Data Interpretation.

Life Science:

Biochemistry and microbiology: Cell structure and function; protein synthesis; genetic code; DNA and RNA; carbohydrate, protein and lipid metabolism; clinical biochemistry; hormones and their functions. Enzymes: classification, nomenclature, kinetics, etc., Metabolism and regulation of: carbohydrates, proteins, fats and nucleic acids, metabolic disorders, Classification and taxonomy of microorganisms; Growth and physiology; Laboratory cultivation of microbes, Method of microbial enumeration; Microbial metabolism, photosynthesis, fermentation, aerobic & anaerobic respiration, Pathogenic microorganisms, Microbial genetics, Microbes in industry, Endotoxins, viruses (enveloped and non-enveloped).

Molecular biology & Recombinant DNA Technology: Properties of nucleic acids, chromosomes, DNA replication, damage and repair, gene manipulation, cloning vectors, gene libraries, screening of libraries, gene cloning, applications of Recombinant DNA Technology, PCR, RFLP, Western, Northern and Southern Blotting, microarray technology, DNA fingerprinting, recombinant DNA technology, prokaryotic and eukaryotic expression systems; vectors: plasmids, phages and cosmids. Gene mutation: types of mutation; UV and chemical mutagens; Selection of mutants, Ames test for mutagenesis; Bacterial, yeast, cyanobacteria, fungi genetic system: transformation, conjugation, transduction, recombination, transposon genome shuffling, electroporation, DNA repair and chromosomal aberrations, synthetic biology for production of biochemical and biotech products.

Immunology: Cells of the immune system, lymphoid tissues, complement, antibodies, hybridoma technology, applications of monoclonal antibodies, antigen recognition, processing and presentation, cell mediated immunity cytokines, hypersensitivity, vaccine and vaccine technology, autoimmunity, transplantation, immune responses to various infections, immunotechnology, B-cells and T-cells, antibody structure, function and diversity, T-cell receptor, antigen-antibody reaction, complement systems and cytokines, Hypersensitivity, MHC and HLA, Hybridoma, immunodeficiency disease.