

## Certificate Course in Bioinformatics

Ordinance & Regulations for six months **Certificate Course in Bioinformatics** under self-financing scheme has been approved by University vide **Letter No.: CCDC/5464-74/19 Dated 24-04-2019.**

### 1.) Admission

- 1.1 Candidate seeking admission to Certificate Course in Bioinformatics must have acquired the graduation degree in Science, Medicine, Engineering, Agriculture, Pharmacy, Biochemistry or Biotechnology from a University as is established by law or an equivalent degree thereto as is recognized by T.M. Bhagalpur University, with at least 45% marks at the graduation level.
- 1.2 Admission to Certificate Course in Bioinformatics shall be done on the basis of the marks obtained by the candidate in the aptitude test to be conducted on behalf of the University at the beginning of each academic session. The test paper shall consist of 100 objective type questions of multiple choices each question carrying one mark to be set from areas of basic science, computer Knowledge, environmental science and general studies.
- 1.3 The date and time of the test shall be announced each year by the University through newspaper/ website etc.
- 1.4 Candidates appearing for the test shall have to pay 500/- each as cost of the application form and other expenses to be incurred by the University in connection with the conduct of the aforesaid Aptitude test.

### 2.) Number of Seats:

Number of seats in Certificate Course in Bioinformatics shall be a maximum of 35 only.

### 3.) Duration:

Duration of the Course shall be of six months (one semester). The course shall start in January and July of every year.

### 4.) Reservation:

Reservation of seats for SC/ST/OBC etc. in admission shall be done as per reservation rules of the state government of Bihar.

### 5.) Examination:

- 1.1 Students offering Bioinformatics certificate course shall be continuously assessed, examined and evaluated to judge their performance based on mid-term semester tests, and one examination at the end of semester. Division of Marks between mid-term tests and semester end examination shall be in a ratio 20:80 respectively. Mid-term test shall have 10 marks. The modalities of the midterm shall be decided by the examination board of the university.

1.2 Each Paper (both theory and practical) to be answered at the semester-end examination shall have 80 marks. Theory papers shall have written examination of 80 marks, while examination in practical paper shall be, shall be primarily, laboratory based.

1.3 Semester-end examinations, both theory and practical and mid-term tests shall be conducted by the University. Practical examination shall be conducted jointly by two external examiners to be appointed by the University.

1.4 A student shall have to pass separately in each paper (both theory and practical) of semester.

6.) Pass Marks and Award of Divisions:

1.1 In order to pass a semester examination, a student shall have to secure at least 45% marks in each paper to be calculated by taking together the marks obtained by him/her both in semester-end examination and mid-term tests.

1.2 Student, Passing the semester end examination, shall be awarded divisions, taking the aggregate of marks secured in the semester end examination, as follows:-

- |  |   |                                 |
|--|---|---------------------------------|
| (i) 75% and above                        | - | First Division with Distinction |
| (ii) Less than 75% but not less than 60% | - | First Division                  |
| (iii) 45% or more but less than 60 %     | - | Second Division                 |
| (iv) Less than 45%                       | - | Failed                          |

7.) Attendance:

A candidate appearing as a regular student for a semester examination shall be required to attend at least 75% of the classes in each theory and practical paper separately. However, a shortfall in attendance upto 15% can be condoned as per rules of the university.

8.) Improvement Examination:

If a candidate has cleared a semester examination in full, he/she will not be allowed to re-appear in one or more papers of that semester to improve his/her marks.

9.) Syllabus and Course Structure:

1.1 Syllabus and Course structure shall be as follows:

Paper Code	Paper Title	Internal Assessment	Semester Examination	Total
Semester-I				
BIN101	Bioinformatics- I	20	80	100
BIN102	IT Tools and Application	20	80	100
BIN103	Elements of protein Sequence, Structure and modelling	20	80	100
BIN104	Basic Mathematics, Probability and Statistics	20	80	100

BIN105	Computer Programming in C (Theory)	20	80	100
BIN106	Computing Lab-I (Practical): C and Software packages.	20	80	100
	Grand Total	120	480	600

1.2 Successful candidates shall be provided with the Certificate Course in Bioinformatics under the faculty of Science, T.M. Bhagalpur University, Bhagalpur.

#### 10.) Fee Structure

1.1 Fee structure for the course shall be as follows:-

(a) Admission Fee	100/- (one time)
(b) Registration Fee	200/- (one time)
(c) Tuition Fee	3000/- (one time)
(d) Laboratory & Software Fee	2000/- (one time)
(e) Library Fee	1000/- (one time)
(f) Development Fee	1000/- (one time)
(g) Examination Fee	1000/- (one time)

1.2 Fee shall be paid at the time of admission it would be 8,300/- or in any other manner as shall be determined by the University.

1.3 University may revise the fee structure from time to time after obtaining approval of the Chancellor/ Vice Chancellor.