Criteria 1: Curricular Aspects

Programs offered by the Department:

- **M. Sc.:** 4 semesters* 80 Credits 37 Seats
- **P.hD.:** 3-6 years 16 Credits + Thesis Research As per guidelines

**4th semester comprises of a Project Work*

Admission Process:

The admission to M. Sc. program happens through all India entrance examinations. The students have to register to appear for the entrance examination. The eligibility for M. Sc. is an undergraduate degree in life sciences.

Admission in Ph. D. programm happens through all Indian entrance examinations. The students have to register for the entrance examination. The eligibility for Ph. D. is post graduate degree in any allied or relevant subject respectively. In case of Ph. D. admission written test is followed by an interview. The candidates that have cleared national-levell fellowship examinations such as UGC-NET (JRF), DBT-JRF, etc. can appear for the interview without writing the entrance exams. However, they have to register for Ph. D. admission.

The university uploads the admission and entrance examination details every year on the university website.

Current Curriculum for M. Sc.:

1) Name of the Program: M. Sc. Biotechnology

2) Duration of the Program:

a) Minimum duration: 2 years

b) Maximum duration: 4 years

3) Structure of the Program:

a) Number of core courses: 16 (60 credits)

b) Minimum number of Elective courses to be opted by the student: 5 (18 credits)

(Note: 4 elective course of 4 credits each and one elective of 2 credits)

c) Minimum number of Open elective courses to be opted by the student: 1 (2 credits)

Scheme of Examination:

a) Mid Semester Examination: 20 marks

b) Internal Assessment: 20 marks

[15 marks: Assignment/presentation/group discussion; 05 marks: Attendance]

i) 75% and below: 00 marks

ii) >75% and up to80%: 01 marks

iii) >80% and up to 85%: 02 marks

iv) >85% and up to 90%: 03 marks

v) >90% and up to 95%: 04 marks

vi) >95%: 05 marks

c) End Semester Examination*: 60 marks

* To appear in the End Semester Examination the student must appear in the I Mid Semester Examination and Internal Assessment.

End semester Examination for Practical course (60 Marks)

a) Assessment of performance in the experiment: 50 marks

b) Viva-voce of the experiment: 10 marks

1. M.Sc. Program Structure and Scheme

Semester	**Paper Code**	**Title of the Paper**	**Credit**			
			L	**T**	**P**	**C**
I	**BIT CC 121**	Cell Biology	**4**	**0**	**0**	**4**

	BIT CC 122	Biochemistry	**4**	**0**	**0**	**4**
	BIT CC 123	Microbiology	**4**	**0**	**0**	**4**
	BIT CC 124	Lab Course 1	**0**	**0**	**2**	**2**
	BITCC 125	Lab Course 2	**0**	**0**	**2**	**2**
	BIT OE 126	Scientific Writing and Presentation	**0**	**0**	**2**	**2**
	BIT SE 127	Bioentrepreneurship	**0**	**0**	**4**	**4**
	BIT CC 221	Molecular Biology	**4**	**0**	**0**	**4**
	BIT CC 222	Bioinstrumentation & Bioinformatics	**4**	**0**	**0**	**4**
	BIT CC 223	Immunology	**4**	**0**	**0**	**4**
II	**BIT CC 224**	Lab Course 3	**0**	**0**	**2**	**2**
	BIT CC 225	Lab Course 4	**0**	**0**	**2**	**2**
	BIT SE 226	Critical analysis of classical research papers	**0**	**0**	**4**	**4**
	BIT SE 227	Basic virology	**4**	**0**	**0**	**4**
	BIT CC 321	Animal Biotechnology	**4**	**0**	**0**	**4**
	BIT CC 322	Plant Biotechnology & Genetic Engineering	**4**	**0**	**0**	**4**
	BIT CC 323	Bioprocess Engineering and Technology	**4**	**0**	**0**	**4**
III	**BIT CC 324**	Lab Course 5	**0**	**0**	**2**	**2**
	BIT CC 325	Lab Course 6	**0**	**0**	**2**	**2**
	BIT SE 326	Lab based Project Work	**0**	**0**	**4**	**4**
	BIT SE 327	Biostatistics	**3**	**0**	**1**	**4**

12 Credits

IV		
	BIT CC 421	Semester Long Dissertation/Project Work/Practical Training/Field Work, and Technical Writing.

BIT: Biotechnology **CC**: Core Course **OE**: Open Elective
SE: Self Elective **L**: Lecture **T**: Tutorial
P: Practical **C**: Credits

Current Curriculum for Ph. D.:

Ph. D. Course Work: Minimum of 16 credits should be completed as follows in one semester

Paper	**Code**	**Title**	**Credits**
Paper I	Core course SBS CC 141	Research Methodology	4

Paper II	Core Course	BIT CC 502	Research and Publication Ethics (RPE)	2
	Elective Course One			
		(1) BIT SE 503	Biotechnology Techniques and Applications	
Paper III				2
			Cell and Molecular Biology	
		(2) BIT SE 504		
		BIT CC 505	Review of Published Research	8
			Total	16

M. **Sc. Figures**

Year	**No. of Seats**	**No. of Admission**	**Passed**	**Pass %**
2014-15	20	20	14/14	100
2015-16	28	28	10/15	66.66
2016-17	28	25	18/22	81.81
2017-18	30	30	17/22	77.27
2018-19	30	21	20/27	74.07
2019-20	35	26	10/10	100
2020-21	37	16	18/	90

Ph. D. figures

Year	**No. of seats**	**No. of Admission**	**PhD awarded**
2014-15	01	01	-
2015-16	05	04	-
2016-17	04	01	-
2017-18	01	01	01
2018-19	01	02	01
2019-20	01	01	01
2020-21	00	00	-

Programm curriculum and syllabus design

Before 2016, the Department of Post Graduate Council (DPGC) which consists of members from and outside the department designed the curriculum and syllabus of M. Sc. and Ph. D. courses offered by the department. The syllabus gets updated regular by the DPGC upon the recommendation of the course coordinators. Since 2016, the Board of Studies (BOS) has been constituted for every department which includes members of the department and external members from other departments and other universities/institutes. The BOS approves any revisions or additions or changes to the syllabus that are recommended by the course coordinators.