

B.Sc., Biotechnology (Students admitted from 2018-2019 onwards)

SCHEME OF EXAMINATION

Subject code	Subject	Hours of instruction	Exam duration	Maximum marks			Credit points
				CA	CE	Total	
First semester							
Part I							
18UTALA101/ 18UHILA101/ 18UFRLA101	Tamil I/Hindi I/ French I	5	3	25	75	100	3
Part II							
18UENLA101	Foundation English I	5	3	25	75	100	3
Part III							
18UBTM101	Core I: Concepts of Cell Biology	6	3	25	75	100	5
18UBTMP101	Core Practical - I	4	3	40	60	100	2
18UCSBTA101	Allied I: Computer fundamentals and office automation	5	3	25	75	100	2
18UCSBTAP101	Allied Practical I: Office automation techniques	3	3	40	60	100	2
Part IV							
18UVE101	Value Education I: Yoga	2	3	25	75	100	2
	Total	30				700	19
Second semester							
Part I							
18UTALA201/ 18UHILA201/ 18UFRLA201	Tamil II/Hindi II/ French II	5	3	25	75	100	3

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Part II							
18UENLA201	Foundation English II	5	3	25	75	100	3
Part III							
18UBTM201	Core II : Principles of Genetics	6	3	25	75	100	5
18UBTMP201	Core Practical - II	5	6	40	60	100	2
18UCHBTA201	Allied II: Chemistry	4	3	25	75	100	2
18UCHBTAP201	Allied Practical II: Chemistry	3	3	40	60	100	2
Part IV							
18UVE201	Value Education II: Environmental Studies	2	3	25	75	100	2
	Total	30				700	19
Third Semester							
Part I							
18UTALA301/ 18UHILA301/ 18UFRLA301	Tamil III/Hindi III/ French III	5	3	25	75	100	3
Part II							
18UENLA301	Foundation English III	5	3	25	75	100	3
Part III							
18UBTM301	Core III: Microbiology	5	3	25	75	100	5
18UBTMP301	Core Practical - III	3	6	40	60	100	2
18UBCBTA301	Allied III: Biochemistry (Biomolecules)	3	3	25	75	100	2
18UBCBTAP301	Allied Practical III: Biochemistry (Biomolecules)	3	3	40	60	100	2
Part IV							
18UBTSB301	SBC I: Calculations for Biologist (100% Internal Evaluation)	2	3	100	-	100	2
	NMEC -I	2	3	25	75	100	2

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Non Credit							
18ULS301	Career competency Skills I	1	-	-	-	-	-
	Add on course	1					
	Total	30				800	21
Fourth Semester							
Part I							
18UTALA401/ 18UHILA401/ 18UFRLA401	Tamil IV/ Hindi IV/ French IV	5	3	25	75	100	3
Part II							
18UENLA401	Foundation English IV	5	3	25	75	100	3
Part III							
18UBTM401	Core IV: Biophysics and Bioinstrumentation	5	3	25	75	100	5
18UBTMP401	Core Practical - IV	3	6	40	60	100	3
18UMABTA401	Allied IV: Biostatistics	4	3	25	75	100	2
18UMABTAP401	Allied Practical IV: Statistics (Using MS-Excel)	2	3	40	60	100	2
Part IV							
18UBTSB401	SBC II: Biosafety and Bioethics (100% Internal Evaluation)	2	3	100	-	100	2
	NMEC -II	2	3	25	75	100	2
Non Credit							
18ULS401	Career competency Skills II	1	-	-	-	-	-
	Add on course	1					
	Total	30				800	22
Fifth Semester							
Part III							
18UBTM501	Core V: Molecular Biology	5	3	25	75	100	5
18UBTM502	Core VI: Immunology	5	3	25	75	100	5
18UBTM503	Core VII: Industrial Biotechnology	5	3	25	75	100	5

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18UBTM504	Core VIII: Plant tissue culture	5	3	25	75	100	5
	Elective I	4	3	25	75	100	4
18UBTMP501	Core Practical -V	3	6	40	60	100	3
Part IV							
18UBTSB501	SBC III: IPR for Life science (100% Internal Evaluation)	2	3	100	-	100	2
18ULS501	Career competency skills III	1	-	-	-	-	-
Part V							
18UBTE501	Extension Activity	-	-	-	-	-	2
	Total	30				700	31
Sixth Semester							
Part III							
18UBTM601	Core IX: Recombinant DNA Technology	5	3	25	75	100	5
18UBTM602	Core X : Environmental Biotechnology	5	3	25	75	100	5
18UBTM603	Core XI: Basics of Animal Cell culture	5	3	25	75	100	5
	Elective II	4	3	25	75	100	4
18UBTMP601	Core Practical-VI	3	6	40	60	100	3
18UBTPR601	Internship	5	-	40	60	100	4
Part IV							
18UBTSB601	SBC IV: Basics of Research	2	3	25	75	100	2
18ULS601	Career competency Skills IV	1	-	-	-	-	-
	Total	30				700	28
Grand Total						4400	140

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ELECTIVE COURSES

The Department offers the following subjects during V and VI semesters as Elective Courses. The students can opt any one subject as their Elective course in the respective semester.

S.No	Semester	Elective	Subject code	Subject
1.	V	Elective I	18UBTEL501	Nanobiotechnology
			18UBTEL502	Bioinformatics
2.	VI	Elective II	18UBTEL601	Medical Biotechnology
			18UBTEL602	Food Biotechnology

Advanced Learners courses: (Career Oriented Courses)

The Department offers the following subjects during V semester as ALC. The students can opt any one subject in the respective semester.

S.No	Semester	Course	Subject code	Subject
1.	V	ALC	18UBTAL501	Genes and Humans
			18UBTAL502	Omics- Science

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TOTAL CREDIT DISTRIBUTION

S.No	Component	Total Number of Subjects	Total marks	Credits
1.	PART I: Language	4	400	12
2.	PART II: Foundation English	4	400	12
3.	PART III :Major	17 (11t+6p)	1700	70
4.	PART III :Major (Elective)	2	200	8
5.	PART III : Allied	8 (4t+4p)	800	16
6.	PART III :Major (Internship)	1	100	4
7.	PART-IV: Value Education	2	200	4
8.	PART-IV: SBC	4	400	8
9.	PART-IV: NMEC	2	200	4
10.	PART-V: Extension Activity	1	-	2
	TOTAL	45	4400	140

FOR COURSE COMPLETION

Student shall complete:

- Language papers (Tamil/Hindi/French and English) in I, II, III and IV semesters.
- Value Education Yoga and Environmental Studies in I and II Semester
- Non Major Elective Course in III and IV semesters.
- Skill Based Course in III, IV, V and VI semesters.
- Extension activity in V semester.
- Project work in the VI semester.

Add-on Course: (Career Oriented Courses)

Keeping tempo with the demand for career-oriented courses at the undergraduate level, apart from the regular courses, various add-on courses are in the pipeline to be introduced. Candidates pursuing Under Graduation are eligible to take up one of the Add-on courses simultaneously with their regular course of study. At the end of three years, the students will be provided with a Certificate in an Add-on course. It is an opportunity to students to add Credentials to their regular Degrees without affecting their regular study. All these programmes are to be conducted during the evenings between 4.00 pm and 5.30 pm.