

**SOURASHTRA COLLEGE, MADURAI - 625004**

(An Autonomous Institution Re-accredited with 'B+' grade by NAAC)

B.Sc. MICROBIOLOGY - SYLLABUS

(Under CBCS based on OBE) (with effect from 2021 - 2022)

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**B.Sc. MICROBIOLOGY - COURSE STRUCTURE
SEMESTER - I**

S. No.	Sub. Code	Subject Title	Hrs./ Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UACT11	Part - I: Tamil - கவிதைப்படி சிறுகதைப்படி	6	3	25	75	100	3
	21UACH11	Hindi - Hindi - I						
	21UACS11	Sanskrit - Sanskrit - I						
2.	21UACE11	Part - II: English - I - English For Enrichment - I	6	3	25	75	100	3
3.	21UMBC11	Part - III : Core: General Microbiology	5	3	25	75	100	4
4.	21UMBA11	Part - III: Allied: Allied Chemistry for Life Sciences I	4	3	25	75	100	4
5.		Part - III: Core: Core Practical I*	3	-	-	-	-	-
6.		Part - III: Allied: Titrimetric Analysis*	2	-	-	-	-	-
7.	21UMBS11	Part - III: SBS: Microbial Techniques	2	3	25	75	100	2
8.	21UACVE1	Part - IV: Value Education	2	3	25	75	100	2
TOTAL			30				600	18

*Practical Examinations at the end of the II Semester

SEMESTER - II

S. No.	Sub. Code	Subject Title	Hrs./ Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UACT21	Part - I: Tamil - செய்யுள்படி புனைபடி	6	3	25	75	100	3
	21UACH21	Hindi - Hindi - II						
	21UACS21	Sanskrit - Sanskrit - II						
2.	21UACE21	Part - II: English - English For Enrichment - II	6	3	25	75	100	3
3.	21UMBC21	Part - III: Core: Microbial Physiology & Taxonomy	5	3	25	75	100	4
4.	21UMBA21	Part - III: Allied: Allied Chemistry for Life Sciences II	4	3	25	75	100	4
5.	21UMBCP1	Part - III : Core: Core Practical I	3	3	40	60	100	2
6.	21UMBAP1	Part - III : Allied: Titrimetric Analysis	2	3	40	60	100	2
7.	21UMBS21	Part - III: SBS: Diagnostic Microbiology and Haematology	2	3	25	75	100	2
8.	21UACES1	Part - IV: Environmental Studies	2	3	25	75	100	2
TOTAL			30				800	22

Passed in the BOS Meeting held on 04/03/2023

Signature of the Chairman



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SEMESTER – III

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S. No.	Subject Code	Subject Title	Hrs. / Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UACT31	Part – I: Tamil – தமிழியல் - தமிழியல்	6	3	25	75	100	3
	21UACH31	Hindi – Hindi – III						
	21UACS31	Sanskrit – Sanskrit – III						
2.	21UACE31	Part – II: English – English For Enrichment – III	6	3	25	75	100	3
3.	21UMBC31	Part – III: Core – 3: Molecular Microbiology	5	3	25	75	100	5
4.	21UMBCP2	Part – III: Core – 4: Practical – II: Core Practical – II*	3	-	-	-	-	-
5.	21UMBA31	Part – III: Allied – 3 T: Cell Biology	4	3	25	75	100	4
6.	21UMBAP2	Part – III: Allied – 3 Practical: Allied Biology Practical *	2	-	-	-	-	-
7.	21UMBS31	Part – III: SBS – 3: Mushroom Technology	2	3	25	75	100	2
8.	21UMBN31	Part – IV: NME-1: Food and Dairy Technology	2	3	25	75	100	2
TOTAL			30				600	19

*Practical examinations at the end of the IV semester

SEMESTER – IV

S. No.	Subject Code	Subject Title	Hrs. / Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UACT41	Part – I: Tamil – தமிழ் இலக்கியம் - தமிழ் இலக்கியம்	6	3	25	75	100	3
	21UACH41	Hindi – Hindi – IV						
	21UACS41	Sanskrit – Sanskrit – IV						
2.	21UACE41	Part – II: English – English For Enrichment – IV	6	3	25	75	100	3
3.	21UMBC41	Part – III: Core – 5 : Microbial Genetics	5	3	25	75	100	5
4.	21UMBCP2	Part – III: Core – 4: Practical – II: Core Practical – II	3	3	40	60	100	2
5.	21UMBA41	Part – III: Allied – 4 T : Biodiversity and Biostatistics	4	3	25	75	100	4
6.	21UMBAP2	Part – III: Allied – 4 Practical: Allied Biology Practical	2	3	40	60	100	2
7.	21UMBS41	Part – IV: SBS – 4 : Cosmetic Microbiology	2	3	25	75	100	2
8.	21UMBN41	Part – IV: NME – 2: Microbes in Human Health	2	3	25	75	100	2
9.		Part – V: Extension Activities	-	-	-	-	100	1
TOTAL			30				900	24

Passed in the BOS Meeting held on 04/03/2023

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SEMESTER - V

S. No.	Subject Code	Subject Title	Hrs./ Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UMBC51	Part - III: Core - 6: Clinical Microbiology	5	3	25	75	100	5
2.	21UMBC52	Part - III: Core - 7: Agricultural and Environmental Microbiology	4	3	25	75	100	4
3.	21UMBC53	Part - III: Core - 8: Immunology	5	3	25	75	100	4
4.	21UMBC54	Part - III: Core - 9: Food and Industrial Microbiology	4	3	25	75	100	4
5.	21UMBCP3	Part - III: Core - 10 Practical - III: Core Practical - III	5	3	40	60	100	4
6.	Part - III: Elective - 1:		5	3	25	75	100	5
	21UMBE51	Computer Applications in Biology						
	21UMBE52	Bioremediation						
	21UMBE53	Fermentation and Bioprocess Technology						
7.	21UMBS51	Part - IV: SBS - 5: Biocontrol	2	3	25	75	100	2
8.	21USSY51	Soft Skills (Self-Study)	-	-	-	-	100	-
		TOTAL	30				800	28

*One elective course to be chosen from THREE courses

5 + 3 + 2 = 10

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SEMESTER – VI

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S. No.	Subject Code	Subject Title	Hrs./ Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	21UMBC61	Part – III: Core – 11: Virology	5	3	25	75	100	5
2.	21UMBC62	Part – III: Core – 12: Biochemistry and Enzymology	4	3	25	75	100	4
3.	21UMBC63	Part – III: Core – 13: rDNA Technology	4	3	25	75	100	4
4.	21UMBCP4	Part – III: Core – 14: Practical – IV: Core Practical – IV	5	3	40	60	100	4
		Part – III: Elective – 2:						
5.	21UMBE61	Bioinformatics	5	3	25	75	100	5
	21UMBE62	Biotechnology						
	21UMBE63	IPR, Bioethics and Biosafety						
		Part – III: Elective – 3:						
6.	21UMBE64	Analytical Microbiology	5	3	25	75	100	5
	21UMBE65	Mycology						
	21UMBE66	Parasitology						
7.	21UMBS61	Part – IV: SBS – 6: Pharmaceutical Microbiology	2	3	25	75	100	2
8.	21UGKY61	General Knowledge (Self-Study)	–	–	–	–	100	–
TOTAL			30				800	29

*One elective course to be chosen from THREE courses