

M.Sc. Sem.-1 Examination

404

MLT (Microbiology-I)

January-2024

Time : 2-30 Hours]

[Max. Marks : 70

Q-I	1	Write a detailed note on the Bacterial growth curve.	(14)
	2	Draw the flow chart of the Chemical Sterilization process.	
	OR		
	1	Write a brief note on the principle and working procedure of the Autoclave.	
	2	Enlist the methods of Isolation of bacteria and write a brief note on any one method in detail.	
Q-II	1	Define staining and describe Gram staining.	(14)
	2	Describe the serial dilution process in detail.	
	OR		
	1	Write the differences between Gram-positive and Gram-negative bacteria.	
	2	Write a detailed note on Antibiotic susceptible testing.	
Q-III	1	What is PCR? Describe the principle and working procedure of PCR.	(14)
	2	Give a short note on Quantitative PCR.	
	OR		
	1	Write a detailed note on RT-PCR.	
	2	Write a detailed note on DNA sequencing.	
Q-IV	1	Explain ELISA in detail and also write applications in the diagnostics laboratory.	(14)
	2	Describe a Fungal mounting.	
	OR		
	1	Write a note on Fungi and	
	2	What are protozoa? Describe in detail with an example.	
Q-V	Answer any SEVEN out of TWELVE.		(14)
	1	Classify the bacteria according to their shapes.	02
	2	What is Disinfection? Give any two examples of disinfectant.	02
	3	Give two examples of Gram-negative bacteria.	02
	4	Write the importance of Antibiotic susceptible testing in Pharmaceutical Industries.	02
	5	What is MIC?	02
	6	What is Tyndallization? How does it work?	02
	7	What is Taq polymerase?	02
	8	What is DNA amplification?	02
	9	Write the difference between RT-PCR and PCR.	02
	10	What are Dermatophytes?	02
	11	Write the species name of Plasmodium that are responsible for malaria.	02
	12	Write the name of ant two pharmaceutical important fungi.	02