

B.Sc. Sem.-6 Examination

CC - 308

Bio-Chemistry

July 2021

Time : 2-00 Hours]

[Max. Marks : 50

Instructions: All questions in section - I carry equal marks.

Attempt any **THREE** questions in section - 1

Questions in section - II is compulsory

Total Marks: 50

Section - I

Q1. (A)	Define Sterilization. Explain the mode of action, uses & limitations of the following as sterilizing agents:	(14)
	i)Radiations	
	ii)Autoclave	
Q2.(A)	Discuss any five types of media with examples in detail.	(7)
(B)	Write any four important properties of an ideal disinfectant and discuss Chlorine as a chemical disinfectant	(7)
Q3. (A)	Define Generation Time. Explain Bacterial growth curve in detail.	(14)
Q4. (A)	Classify the bacteria based on their oxygen requirements, giving examples.	(7)
(B)	Discuss cultivation of Anaerobic bacteria	(7)
Q5. (A)	Discuss in detail the transmission, pathogenesis, symptoms, diagnostic tests & prevention of AIDS.	(14)
Q6. (A)	Write a note on Source, mode of action, uses and limitations of: Tetracycline & Sulpha drugs	(14)
Q7. (A)	Discuss the industrial production of: 1. Penicillin 2. Lysine	(14)
Q8. (A)	Explain the design of a Bioreactor with a labeled diagram	(7)
(B)	Write a brief note on types of fermentation process.	(7)
SECTION - II		
Q9.	Attempt any Eight Questions	(16)
1.	What are photolithotrophs? Give one example.	
2.	What is the time and temperature used for Pasteurisation	
3.	What is culture media?	
4.	How do we sterilize Vaccines	
5.	Define TDT	
6.	What is Diauxic growth?	
7.	Define Barophile. Give an example.	
8.	Give the full form of IMViC	
9.	Name the vaccine used against Tuberculosis.	
10.	Define chemotherapeutic Index	
11.	Give any one factor which leads to drug resistance	

P. T. O.

M105-2

12.	Name the diagnostic test for Typhoid.	
13.	What is the solvent used in Biotransformation of steroids	
14.	Name the two methods used in Vinegar production	
15.	Name the organism used in Penicillin production	
16.	What are HOPS?	