

**SJ-124**

September-2020

B.Sc., Sem.-VI

**CC-308 : Biochemistry**

Time : 2 Hours]

[Max. Marks : 50

**SECTION – I**Answer any **three** from the following :

1. Define Sterilization. Explain the mode of action, uses & limitations of the following as sterilizing agents : (i) Chlorine (ii) Hot Air oven 14
2. (a) Write a note on different nutritional categories of bacteria with examples. 7  
(b) Discuss the different types of Special Media used to culture bacteria. 7
3. Define Generation Time. Explain growth curve of bacteria in detail. 14
4. (a) Discuss the role of oxygen and water on bacterial growth giving examples. 7  
(b) Write a note on: Preservation of bacterial cultures. 7
5. Discuss in detail the transmission, pathogenesis, symptoms, diagnostic tests & prevention of AIDS. 14
6. (a) Write a note on : Drug Resistance. 7  
(b) Discuss mode of action, uses, resistance & limitations of Chloramphenicol. 7
7. Discuss the industrial production of : (1) Beer (2) Biotransformation of Steroids 14
8. (a) Explain the design and parts of a Bioreactor with a labelled diagram 7  
(b) Write a brief note on types of fermentation process. 7

**SECTION – II**

9. Answer any **eight** from the following : 8
- (1) What is the difference between Antiseptic and Disinfectant ? (1)
  - (2) What is full form of HEPA ? (1)
  - (3) Define undefined media. (1)
  - (4) What is Oligodynamic action ? (1)
  - (5) What is Diauxic growth ? (1)
  - (6) Define Haloduric bacteria. (1)
  - (7) Name any two methods used for cultivation of anaerobic bacteria. (1)
  - (8) Give one example of a Thermophilic bacterium. (1)
  - (9) What is the difference between an Antibiotic & a Drug ? (1)
  - (10) Name the vaccine used against Tuberculosis. (1)
  - (11) List any one drug used in the treatment of Typhoid. (1)
  - (12) Give two additional or other uses of Antibiotics. (1)
  - (13) Define Fermentation. (1)
  - (14) Give any two advantages of Packed Bed Reactor. (1)
  - (15) List any two important requirements for a microbial based industry. (1)
  - (16) Name the organisms used in Vinegar production. (1)
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