

Seat No. : _____

MN-143

March-2019

B.Sc., Sem.-VI

**CC-308 : Biochemistry
(Advance Microbiology)**

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Write a note on types of media for microbial growth. **14**
- OR**
- (i) Explain sterilization by moist heat. **7**
- (ii) Write a note on mode of action, uses and limitation of mercury as disinfectant **7**
- (B) Explain the following term : (Any **four**) **4**
- (a) Define Pasteurization.
- (b) Define chemolithotroph. Give example.
- (c) Give use of B-propiolactone and ethylene oxide.
- (d) What is the effect of UV rays on microorganism ?
- (e) Define Sterilization.
- (f) What is tyndilization.
2. (A) Explain different techniques of preservation of pure culture. **14**
- OR**
- (i) Describe the methods to measurement of bacterial growth. **7**
- (ii) Explain calculation of generation time and diauxic growth. **7**
- (B) Write the answer in brief : (any **four**) **4**
- (a) Define thermophiles. Give an example.
- (b) Draw neat labelled figure of Growth curve of bacteria.
- (c) Define Barophilies . Give one example.
- (d) What are anaerobes ? List different methods to cultivate anaerobes.
- (e) Define growth of Microorganism.
- (f) What are acidophiles ?

3. (A) Write a short note on Tuberculosis. 14
- OR**
- (i) Explain the mode of action, use and limitation of Penicillin. 7
- (ii) Write a brief note on general properties of antimicrobial agent. 7
- (B) Answer in brief : (any **three**) 3
- (a) Give two non-medical uses of antibiotics.
- (b) Name the diagnosis test of Typhoid and AIDs.
- (c) Define chemotherapeutic index.
- (d) Give morphology of S typhi.
- (e) Give full of AIDS.
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4. (A) Write a short note on Bioreactor design parts and functions. 14
- OR**
- (i) Explain industrial production of Vinegar. 7
- (ii) Explain any two types of reactors. 7
- (B) Answer the following : (any **three**) 3
- (a) Define continuous batch culture.
- (b) Name the microorganisms used for production of Beer.
- (c) Define Fermentation process.
- (d) Name the microorganism used for production of penicillin.
- (e) What is batch and continuous fermentation process ?
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