



Q-2 Do as directed (4+4=08)

A. Fill in the blanks (4)

1. Stomach usually contains low count of bacteria when gastric juices are secreted due to -----(high pH / Low pH)
2. ----- prevent vortex formation during fermentation (Baffles/ spargers)
3. Antimicrobial agent having killing as well as cleaning effect is ----- (Phenol/crystal violet)
4. Hot air oven works on ----- (moist heat, dry heat)

B. Mention true or false

1. Evaporation of droplets results into Droplet nuclei formation
2. *Escherichia coli* produce streptokinase.
3. Pasteurization process is used to reduce number of the microbial population of milk.
4. Antibiotics are the antimicrobial agents produced by one kind of microbes and inhibitory to other kind of microbes.

Q-3 Attempt any ten (10) questions in short.

(20)

1. Enlist microbial flora of skin
2. Give two examples of exo toxins.
3. What are antiphagocytic factors?
4. Enlist airborne viral infections.
5. Differentiate between droplet and droplet nuclei.
6. Enlist characteristics of industrially important microorganisms
7. What is bactericide? Give example.
8. How X-rays affect microbial population?
9. When filtration can be effective for control of microbes?.
10. Enlist characteristics of ideal antimicrobial agent.
11. Write mode of action of alcohols.
12. List materials used for preparation of bacteriological filters..

Q-4 Attempt any four in detail (4x8=32)

(32)

1. Explain: Germ free animals and their importance.
2. Explain Normal flora of mouth.
3. Write note on : control of airborne microorganisms.
4. Draw a complete Fermentor and list functions of its four important parts.
5. Explain: High temperature as microbicidal agent.
6. Write a note on: osmotic pressure for microbial control..
7. Explain: Gaseous antimicrobial agents.
8. Write a note on Practical applications and mode of action of: heavy metals, chlorine and chlorine compounds.