

SSR DEGREE AND PG COLLEGE (AUTONOMOUS)
B.Sc. Programme – Microbiology
Semester – III Internal 1 Question Bank
Paper: Applied Microbiology

SECTION – A: Multiple Choice Questions

1. Which microorganism is mainly responsible for curd formation?

A) *Lactobacillus* B) *Bacillus* C) *Escherichia coli* D) *Clostridium*

Ans: (A)

2. The probiotic yeast commonly used as a dietary supplement is

A) *Candida albicans* B) *Rhizopus stolonifer*
C) *Saccharomyces boulardii* D) *Penicillium chrysogenum*

Ans: (C)

3. Which food poisoning organism is commonly associated with improperly canned foods?

A) *Salmonella* B) *Staphylococcus aureus* C) *Bacillus cereus*
D) *Clostridium botulinum* **Ans: (D)**

4. Sauerkraut is prepared by fermentation of

A) Carrot B) Cabbage C) Radish D) Beetroot **Ans: (B)**

5. Which process converts atmospheric nitrogen into ammonia?

A) Nitrification B) Denitrification C) Nitrogen fixation D) Ammonification

Ans: (C)

6. The region surrounding plant roots influenced by microorganisms is called

A) Rhizosphere B) Phyllosphere C) Endosphere D) Lithosphere **Ans: (A)**

7. Heavy metal pollution can be reduced by

A) Pasteurization B) Sterilization C) Chlorination D) Bioremediation

Ans: (D)

8. Which biofertilizer forms nodules in leguminous plants?

A) *Azolla* B) *Rhizobium* C) *Spirulina* D) *Chlorella* **Ans: (B)**

9. Kefir is an example of a

A) Fermented dairy product B) Fermented vegetable C) Bakery product
D) Meat product **Ans: (A)**

10. Which microorganism is widely used in mushroom cultivation?

A) *Rhizobium* B) *Azotobacter* C) *Agaricus bisporus* D) *Spirulina* **Ans: (C)**

11. Which fermented dairy product contains a mixture of bacteria and yeast?
A) Cheese B) Kefir C) Butter D) Paneer **Ans: (B)**
12. The parameter indicating oxygen required by microorganisms to decompose organic matter is
A) COD B) pH C) Turbidity D) BOD **Ans: (D)**
13. Azolla is mainly associated with
A) Potassium fixation B) Nitrogen enrichment C) Sulphur oxidation
D) Iron reduction **Ans: (B)**
14. Mycorrhiza mainly helps plants in absorption of
A) Nitrogen B) Potassium C) Phosphorus D) Calcium **Ans: (C)**
15. Bulgarian milk is prepared using
A) Lactobacillus bulgaricus B) Vibrio cholerae C) Salmonella typhi
D) Clostridium tetani **Ans: (A)**
16. The microorganisms present on leaf surfaces constitute the
A) Phyllosphere B) Rhizosphere C) Mycorrhiza D) Endospore **Ans: (A)**
17. Idli fermentation mainly involves
A) Aspergillus B) Lactic acid bacteria and yeasts C) Vibrio
D) Pseudomonas **Ans: (B)**
18. Food spoilage caused by molds is characterized by
A) Increased nutrition B) Improved shelf-life C) Vitamin enrichment
D) Visible fungal growth **Ans: (D)**
19. Which treatment mainly depends on anaerobic microorganisms?
A) Slow sand filtration B) Chlorination C) Aeration
D) Anaerobic sewage treatment **Ans: (D)**
20. Trichoderma is mainly used as a
A) Biofertilizer B) Bioinsecticide C) Biofungicide D) Biostimulant **Ans: (C)**

SECTION – B: Fill in the Blanks

1. Fermented foods have improved **Shelf** life.
2. The biological oxygen demand of water is abbreviated as **BOD**.
3. Yogurt is produced mainly by **Lactic acid** fermentation.
4. Aerobic sewage treatment requires the presence of **Oxygen**.
5. Pickles are preserved by salt and **Fermentation**.
6. The process of removing pollutants using microorganisms is called **Bioremediation**.
7. Cheese ripening involves the action of **Microorganisms**.
8. Soil microorganisms play an important role in the **Carbon** cycle.
9. Food poisoning caused by microbial toxins is called food **Intoxication**.
10. Cyanobacteria used as biofertilizers are also called **Blue-green algae**.

11. Probiotics help maintain healthy intestinal **Microflora**.
12. *Pseudomonas* is widely used as a biological **Pesticide**.
13. Organic matter in sewage is decomposed by **Microorganisms**.
14. The process of converting sugars into acids by microbes is called **Fermentation**.
15. Mycorrhiza is an association between fungi and plant **Roots**.
16. Fresh mushrooms are rich in **Protein**.
17. Good quality drinking water should be free from pathogenic **Microorganisms**.
18. Undesirable changes in food due to microorganisms are called food **Spoilage**.
19. Sustainable agriculture encourages the use of **Biofertilizers** fertilizers.
20. Fermented vegetables have a longer **Shelf life** than fresh vegetables.

SECTION – C Descriptive Questions

1. Explain the microorganisms used in food fermentation and their significance.
2. Describe the fermentation of Sauerkraut, Pickles and Idly.
3. Discuss microbial spoilage of foods and food poisoning.
4. Explain the microbiology of water and sanitary quality of water.
5. Describe aerobic and anaerobic sewage treatment.