

Chapter – 8 | Microbes in Human Welfare

QUIZ-01

1. Curd formation from milk is carried out by:

- A. Saccharomyces cerevisiae
- B. Lactobacillus
- C. Penicillium notatum
- D. Methanobacterium (B)

Explanation : Lactobacillus and other lactic acid bacteria (LAB) convert milk into curd by producing lactic acid.

2. The large holes in Swiss cheese are due to the production of:

- A. Oxygen
- B. Nitrogen
- C. Carbon dioxide
- D. Methane (C)

Explanation : Propionibacterium sharmanii produces CO₂, which forms large holes in Swiss cheese.

3. Bread making uses:

- A. Lactobacillus
- B. Saccharomyces cerevisiae
- C. Aspergillus niger
- D. Rhizobium (B)

Explanation : Baker's yeast (Saccharomyces cerevisiae) ferments dough and helps in bread production.

4. The first antibiotic discovered was:

- A. Streptomycin
- B. Penicillin
- C. Cyclosporin A
- D. Statin (B)

Explanation : Penicillin was discovered by Alexander Fleming from the fungus Penicillium notatum.

5. The main gas present in biogas is:

- A. Oxygen
- B. Nitrogen
- C. Methane
- D. Hydrogen (C)

Explanation : Biogas contains predominantly methane along with CO₂ and hydrogen.

6. Methanogens are commonly found in:

- A. Human blood
- B. Rumen of cattle
- C. Plant leaves
- D. Marine water only (B)

Explanation : Methanogens live anaerobically in cattle rumen and help in cellulose breakdown.

7. Secondary sewage treatment mainly involves:

- A. Physical removal of large particles
- B. Growth of aerobic microbes forming flocs
- C. Addition of chemical disinfectants only
- D. Removal of dissolved salts (B)

Explanation : In secondary treatment, aerobic microbes form flocs and reduce the organic matter and BOD of sewage.

8. Bacillus thuringiensis (Bt) is used as:

- A. Biofertiliser
- B. Biocontrol agent
- C. Antibiotic producer
- D. Fermentation organism (B)

Explanation : Bt produces toxins that kill insect larvae and is used as a biological pest control agent.

9. Rhizobium helps plants by:

- A. Producing antibiotics
- B. Fixing atmospheric nitrogen
- C. Producing methane
- D. Causing plant diseases (B)

Explanation : Rhizobium forms root nodules in leguminous plants and fixes atmospheric nitrogen.

10. Cyclosporin A is produced by:

- A. Monascus purpureus
- B. Trichoderma polysporum
- C. Penicillium notatum
- D. Aspergillus niger (B)

Explanation : Cyclosporin A, an immunosuppressive drug used in organ transplantation, is produced by the fungus Trichoderma polysporum.