

Chapter – 8 | Microbes in human welfare**QUIZ
PART-04**

1. Biogas is mainly composed of which gas?

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

Explanation : Biogas is a mixture of gases, mainly methane, produced due to microbial activity.

2. The microorganisms responsible for methane production are called:

- A. Lactobacillus
- B. Methanogens
- C. Cyanobacteria
- D. Yeast (B)

Explanation : Methanogens are microorganisms that produce methane during anaerobic digestion.

3. A common bacterium involved in biogas production is:

- A. Methanobacterium
- B. Rhizobium
- C. Penicillium
- D. Lactobacillus (A)

Explanation : Methanobacterium is a common methanogenic bacterium involved in methane production.

4. Methanogenic bacteria generally grow:

- A. In presence of oxygen
- B. Under anaerobic conditions
- C. In sunlight
- D. In acidic environments only (B)

Explanation : Methanogens grow anaerobically on cellulosic materials and produce methane along with CO_2 and H_2 .

5. Methanobacteria are commonly found in the:

- A. Leaves of plants
- B. Rumen of cattle
- C. Human blood
- D. Flower nectar (B)

Explanation : Methanobacteria are present in the rumen of cattle where they help break down cellulose.

6. During fermentation of wet dough, cheese making and beverage production, the main gas produced is:

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

Explanation : CO_2 is mainly produced during fermentation of wet dough, cheese making and beverage production.

7. The depth of a biogas plant tank is generally:

- A. 5–8 feet
- B. 10–15 feet
- C. 20–25 feet
- D. 30–35 feet (B)

Explanation : The biogas plant tank usually has a depth of about 10–15 feet.

8. The slurry remaining after biogas production is used as:

- A. Fuel
- B. Fertilizer
- C. Medicine
- D. Pesticide (B)

Explanation : The used slurry from the biogas plant is rich in nutrients and is used as fertilizer.

9. Biogas production technology in India was developed through the efforts of:

- A. IARI only
- B. KVIC only
- C. Both IARI and KVIC
- D. WHO (C)

Explanation : The technology for biogas production in India was developed due to the efforts of Indian Agricultural Research Institute (IARI) and Khadi and Village Industries Commission (KVIC).

10. Biogas plants are more common in rural areas because:

- A. Electricity is unavailable there
- B. Livestock farming provides cow dung
- C. Methanogens are absent in cities
- D. Plants require sunlight (B)

Explanation : Rural areas have more livestock, ensuring availability of cow dung, which is used for biogas production.