

# WORKSHEET 2

## CHAPTER 8 – BACTERIA AND FUNGI – THEIR ECONOMIC IMPORTANCE

### A. Name the following.

1. A free living nitrogen-fixing bacteria.
2. A food poisoning disease caused by bacteria.
3. A poisonous mushroom.
4. A fungal disease of plants.
5. Bacteria used in vinegar production.

### B. Match the items in Column A with those in Column B and write down the matching pairs.

#### Column A

1. Spherical-shaped bacteria
2. Rod-shaped bacteria
3. Spherical bacteria in pair
4. Spiral-shaped bacteria
5. Comma-shaped bacteria

#### Column B

- a. *Vibrio cholerae*
- b. *Diplococcus*
- c. *Staphylococcus*
- d. *Leptospira*
- e. *Bacillus anthracis*

### C. State whether the following statements are True or False.

1. Bacteria move with the help of whip-like flagella.
2. BCG is a vaccination for typhoid.
3. Diphtheria is a bacterial disease.
4. Bacteria form endospores to protect themselves from anaerobic condition.
5. Athlete's foot is a viral disease.

### D. Fill in the blanks.

1. Penicillin is obtained from \_\_\_\_\_
2. \_\_\_\_\_ is a food preservative added to tinned food and squashes to prevent their spoilage.
3. The finger-like hyphae of *Rhizopus* which penetrate the substratum is known as \_\_\_\_\_
4. Bacteria reproduce asexually by \_\_\_\_\_
5. Conversion of nitrate and nitrite salts to elemental nitrogen is known as \_\_\_\_\_

### E. Study the figure given below and answer the following questions.

1. Identify the given organism and name the group to which it belongs.

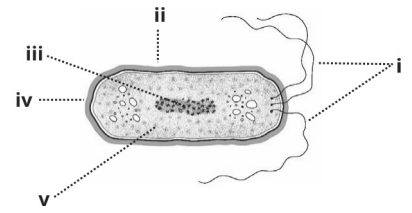
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Class: ..... IX .....

Date: .....

2. Label parts **i-v**.
3. Write the function of parts **i**, **ii** and **iv**.
4. Name a cell organelle present in this organism and state its role.
5. How do these organisms reproduce? Also name the structure formed to overcome unfavourable condition.



# ANSWERS

## WORKSHEET 2

### A. Name the following.

1. *Azotobacter*
2. Botulinum
3. *Amanita* sp (fly agaric)
4. Late blight of potatoes
5. *Acetobacter* and *Bacillus acetic*

### B. Match the items in Column A with those in Column B and write down the matching pairs.

- |       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. c. | 2. e. | 3. b. | 4. d. | 5. a. |
|-------|-------|-------|-------|-------|

### C. State whether the following statements are True or False.

- |         |          |         |          |          |
|---------|----------|---------|----------|----------|
| 1. True | 2. False | 3. True | 4. False | 5. False |
|---------|----------|---------|----------|----------|

### D. Fill in the blanks.

- |                               |                    |
|-------------------------------|--------------------|
| 1. <i>Penicillium notatum</i> | 2. Sodium benzoate |
| 3. rhizoid                    | 4. binary fission  |
| 5. denitrification            |                    |

### E. Study the figure given below and answer the following questions.

1. Bacteria, Monera
2. i. Flagella                      ii. Cell wall                      iii. Nuclear material                      iv. Cell membrane  
v. Cytoplasm
3. Functions –
  - i. Flagella – Helps in movement of the cell.
  - ii. Cell wall – Protects the cell and gives it shape.
  - iv. Cell membrane – Regulates movement of substances into and out of the cell; contains enzymes important for cellular respiration.
4. Ribosomes – Help in protein synthesis.
5. Bacteria reproduce asexually by binary fission under favourable conditions. They form endospore under unfavourable condition.