# **Digestion in Grass-eating Animals**

# A. Choose the Correct Answer:

# 1. How does Amoeba obtain its food?

- A) By photosynthesis
- B) By engulfing food particles through pseudopodia
- C) By absorbing nutrients from water
- D) By hunting small insects

### 2. What is the process by which Amoeba engulfs food called?

- A) Respiration
- B) Egestion
- C) Phagocytosis
- D) Excretion

### 3. Which organelle in Amoeba helps in digesting food?

- A) Nucleus
- B) Contractile vacuole
- C) Food vacuole
- D) Mitochondria

# **B. Fill in the Blanks:**

- 1. Amoeba captures its food using temporary finger-like projections called
- 2. The process of digestion in Amoeba takes place inside the \_\_\_\_\_\_.
- 3. The undigested food in Amoeba is removed through the process of

# C. Case Study:

A biology student, Rohan, observed an Amoeba under a microscope and noted the following:

- The Amoeba extended its pseudopodia towards a food particle.
- The food particle was enclosed within a food vacuole.
- Enzymes were secreted inside the food vacuole, breaking down the food into simpler substances.
- The digested nutrients were absorbed into the cytoplasm, and the remaining waste was expelled.

#### **Case Study Questions:**

- 1. What function do the pseudopodia serve in the process of nutrition in Amoeba?
- 2. How does Amoeba digest the food it engulfs?
- 3. What happens to the undigested food in Amoeba?
- 4. How is the process of nutrition in Amoeba different from that in humans?

# **D. Short Answer Questions:**

- 1. What is holozoic nutrition?
- 2. Why does Amoeba require pseudopodia for feeding?
- 3. Explain how Amoeba removes waste from its body.

# E. Long Answer Questions:

- 1. Describe the step-by-step process of nutrition in Amoeba, from ingestion to egestion.
- 2. Compare the nutrition process in Amoeba with that of a human digestive system.
- 3. Explain why digestion in Amoeba is intracellular, whereas in humans, it is extracellular.