# **UDAAN 2025**

# **BIOLOGY**

# **How do Organisms Reproduce?**

- **Q1** Which microbe causes kala-azar and how does it reproduces?
  - (A) Plasmodium-Budding
  - (B) Yeast-Reduction division
  - (C) Leishmania Binary fission
  - (D) Leishmania- Multiple fission
- **Q2** Which of the following organism is also called malarial parasite?
  - (A) Amoeba
  - (B) Leishmania
  - (C) Plasmodium
  - (D) Paramecium
- **Q3** Which of the following statement is true about fission?
  - (A) During fission the parent cell divides or splits into two or more cells
  - (B) Amoeba reproduces by irregular binary fission
  - (C) Leishmania reproduces by longitudinal binary fission
  - (D) All of the above
- **Q4** In Spirogyra, asexual reproduction takes place by
  - (A) Breaking up of filaments into smaller bits
  - (B) Division of a cell into two cells
  - (C) Division of a cell into many cells
  - (D) Formation of young cells from older cells
- **Q5** Which organisms reproduces by budding?

- (A) Yeast
- (B) Hydra
- (C) Spirogyra
- (D) Both (A) and (B)
- **Q6** Amoeba shows
  - (A) Longitudinal binary fission
  - (B) Transverse binary fission
  - (C) Irregular binary fission
  - (D) None of these
- **Q7** The ability of a cell to divide into several cells during reproduction in Plasmodium is called
  - (A) Budding
  - (B) Reduction division
  - (C) Binary fission
  - (D) Multiple fission
- **Q8** Which of the following statement is incorrect about hydra?
  - (A) Hydra is a small sized aquatic plant which range upto 1-2cm
  - (B) Hydra reproduces by budding
  - (C) In Hydra, a bud develops as an outgrowth due to repeated cell division at one specific site
  - (D) Hydra has tentacles for locomotion and capturing of food
- **Q9** Characters that are transmitted from parents to offspring during reproduction show
  - (A) Only similarities with parents



- (B) Only variations with parents
- (C) Both similarities and variations with parents
- (D) Neither similarities nor variations

**Q10** Gametes are formed during

- (A) Budding
- (B) Vegetative propagation
- (C) Binary fission
- (D) Sexual reproduction



| <b>Answer</b> | Key |
|---------------|-----|
|---------------|-----|

| Q1 | (C) | Q6  | (C) |
|----|-----|-----|-----|
| Q2 | (C) | Q7  | (D) |
| Q3 | (D) | Q8  | (A) |
| Q4 | (A) | Q9  | (C) |
| Q5 | (D) | Q10 | (D) |



# **Hints & Solutions**

Note: scan the QR code to watch video solution

### Q1 Text Solution:

Leishmania is the microbe that causes kalaazar, and it reproduces through binary fission.

## **Video Solution:**



#### Q2 Text Solution:

Plasmodium is the organism that causes malaria and is commonly referred to as the malarial parasite.

# **Video Solution:**



## Q3 Text Solution:

- Statement (A) is true because fission involves the parent cell dividing or splitting into two or more cells.
- Statement (B) is true because Amoeba reproduces by irregular binary fission.
- Statement (C) is true because Leishmania reproduces by longitudinal binary fission.

Therefore, the correct answer is (D) All of the above.

### **Video Solution:**



#### Q4 Text Solution:

In Spirogyra, asexual reproduction primarily occurs through fragmentation or breaking up of filaments into smaller bits, which then grow into new individuals.

#### **Video Solution:**



## Q5 Text Solution:

Both Yeast (A) and Hydra (B) reproduce by budding.

#### **Video Solution:**



#### Q6 Text Solution:

Amoeba reproduces by irregular binary fission, where the cell divides into two unequal parts.

## **Video Solution:**



## Q7 Text Solution:

Plasmodium reproduces by multiple fission, where a single cell divides into multiple daughter cells simultaneously.

#### **Video Solution:**



# **Q8** Text Solution:

Hydra is not a plant; it is an aquatic organism belonging to the phylum Cnidaria. It is an animal that ranges in size up to 1-2 cm.

# **Video Solution:**



# Q9 Text Solution:

Sexual reproduction shows variations as well as similarities.

# **Video Solution:**



# Q10 Text Solution:

Gametogenesis is the crucial step of sexual reproduction.

# **Video Solution:**



