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**Biology Question Papers**  
**Class X**  
**Total Marks per Paper: 30**  
**Time per Paper: 1 Hour**

## **Question Paper 1**

### **Q1. Fill in the blanks (4 marks)**

- a. In asexual reproduction, the new organism is genetically \_\_\_\_\_ to the parent organism.
- b. The process of \_\_\_\_\_ in Amoeba involves the formation of a cyst during adverse conditions.
- c. The male reproductive system includes \_\_\_\_\_ which secrete their fluid into the ejaculatory ducts.
- d. The hormone \_\_\_\_\_ is responsible for the development of the endometrium in the menstrual cycle.

### **Q2. Match the following (4 marks)**

Match the terms in Column A with their descriptions in Column B.

<b>Column A</b>	<b>Column B</b>
1. Binary fission	a. Reproduction using vegetative parts like roots or stems
2. Budding	b. Division of parent cell into two daughter cells
3. Vegetative propagation	c. Formation of a small outgrowth on the parent organism
4. Corpus luteum	d. Secretes progesterone after ovulation

### **Q3. Answer the following (6 marks)**

1. **Distinguish between (2 marks):** Asexual reproduction and Sexual reproduction.
2. **Give the name (4 marks):**
  - i. Two types of binary fission in protists.
  - ii. Two accessory whorls of a flower.
  - iii. Two glands in the male reproductive system (other than testes).
  - iv. Two hormones involved in the menstrual cycle.

### **Q4. Answer the following questions (Answer any three) (12 marks)**

- a. Explain the process of binary fission in Amoeba with a diagram.
- b. Describe the role of the placenta in human embryonic development.

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- c. What is multiple fission? Explain with reference to Amoeba.
  - d. Explain the process of budding in Hydra.
  - e. Describe the structure of a bisexual flower with its essential and accessory whorls.

#### **Q5. Diagram with explanation (4 marks)**

Draw a labelled diagram of the human male reproductive system and explain the role of testes in reproduction.

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## **Question Paper 2**

### **Q1. Fill in the blanks (4 marks)**

- a. \_\_\_\_\_ reproduction involves the fusion of male and female gametes.
- b. In yeast, asexual reproduction occurs by \_\_\_\_\_.
- c. The \_\_\_\_\_ hormone causes the follicle to burst, leading to ovulation.
- d. In plants, \_\_\_\_\_ develops into a fruit after fertilization.

### **Q2. Give the name (4 marks)**

Name the following:

- a. Two unicellular organisms that reproduce by binary fission.
- b. Two methods of asexual reproduction in multicellular organisms.
- c. Two essential whorls of a flower.
- d. Two sexually transmitted diseases mentioned in the chapter.

### **Q3. Answer the following (6 marks)**

1. **Distinguish between (2 marks):** Monozygotic twins and Dizygotic twins.
2. **Give the name (4 marks):**
  - i. Two types of fission in Amoeba.
  - ii. Two parts of the male reproductive system that secrete fluids into the urino-genital duct.
  - iii. Two floral whorls responsible for protection.
  - iv. Two hormones secreted by the ovary.

### **Q4. Answer the following questions (Answer any three) (12 marks)**

- a. Explain the process of regeneration in Planaria with an example.
- b. Describe the role of cilia in the human female reproductive system.
- c. What is vegetative propagation? Give examples of plants that use this method.
- d. Explain the concept of surrogacy as a modern reproductive technique.
- e. Describe the process of fertilization in humans and the formation of the zygote.

### **Q5. Diagram with explanation (4 marks)**

Draw a labelled diagram of a flower and explain the role of androecium and gynoecium in reproduction.

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## **Question Paper 3**

### **Q1. Fill in the blanks (4 marks)**

- a. The \_\_\_\_\_ in the male reproductive system contains numerous seminiferous tubules.
- b. Asexual reproduction by \_\_\_\_\_ occurs in Spirogyra when its filaments break into fragments.
- c. The \_\_\_\_\_ hormone stimulates the growth of follicles in the ovary.
- d. In sexual reproduction, the zygote is formed by the union of \_\_\_\_\_ gametes.

### **Q2. Write definitions (4 marks)**

Define the following terms:

- a. Asexual reproduction
- b. Sexual reproduction
- c. Menstrual cycle
- d. In Vitro Fertilization (IVF)

### **Q3. Answer the following (6 marks)**

1. **Distinguish between (2 marks):** Bisexual flower and Unisexual flower.
2. **Give the name (4 marks):**
  - i. Two organisms that reproduce by budding.
  - ii. Two parts of the female reproductive system.
  - iii. Two types of twins.
  - iv. Two methods of asexual reproduction in unicellular organisms.

### **Q4. Answer the following questions (Answer any three) (12 marks)**

- a. Explain the process of multiple fission in Amoeba with a diagram.
- b. Describe the role of the corpus luteum in the menstrual cycle.
- c. What is fragmentation? Explain with reference to Spirogyra.
- d. Explain the process of sperm formation in the human male reproductive system.
- e. Describe the structure and function of the human female reproductive system.

### **Q5. Diagram with explanation (4 marks)**

Draw a labelled diagram of the menstrual cycle and explain the role of estrogen and progesterone.