
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.

Column A	Column 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.

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.

Question Paper 3

Q1. Fill in the blanks (4 marks)

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

Q2. Write definitions (4 marks)

Define the following terms:

- Asexual reproduction
- Sexual reproduction
- Menstrual cycle
- In Vitro Fertilization (IVF)

Q3. Answer the following (6 marks)

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

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

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