

BIO - BOTANY

PART - A

I. Choose the correct answer.

3 X 1 = 3

1. Cleavage polyembryony seen in
 a) Bryophytes b) Orchids c) Pteridophytes d) Algae
2. Match :

1) Epiphyllous buds	-	a) Hydrilla
2) Helobial endosperm	-	b) Pollination by bats
3) Cheiropterophily	-	c) Primulaceae
4) Hemianatropous	-	d) Bryophyllum
3. Test cross involves
 - a) crossing between two genotypes with recessive trait
 - b) crossing between two F1 hybrids
 - c) crossing the F1 hybrids with a double recessive genotype
 - d) crossing between two genotypes with dominant trait

PART - B

II. Answer any two.

2 X 2 = 4

4. What is called Pollen kit?
5. What is microsporogenesis?
6. Polygenic inheritance - Explain.
7. What is meant by true breeding?

PART - C

III. Answer any 2. Q.No. 9 is compulsory.

2 X 3 = 6

8. Draw and label the diagram of a Mature Embryo sac.
9. 'Endothecium is associated with dehiscence of Anther' justify the statement.
10. Write a note on back cross.

PART - D

IV. Answer in detail.

1 X 5 = 5

11. a) Describe the L.S. structure of an ovule with diagram.

(OR)

- b) Explain Dominant Epistasis with example.

BIO - ZOOLOGY

PART - I

Choose the correct answer.

2 X 1 = 2

- In Which mode of reproduction variations are seen?
 - Asexual
 - Parthenogenesis
 - Sexual
 - Both (a) and (b)
- In this method of assisted reproductive technology fertilization occurs in 75-85% of the eggs injected with the sperms
 - Invitro fertilization
 - surrogacy
 - Intra cytoplasmic sperm injection
 - Intra uterine transfer

PART - II

Answer any two.

2 X 2 = 4

- What is regeneration? Mention its types.
- Draw a neat labelled sketch of Human Ovum.
- How will you classify breeding animals based on their breeding time?
- Writs briefly about chorionic villus sampling.

PART - III

Any two questions only. Q.No. 10 is a compulsory one.

2 X 3 = 6

- Differentiate Arrhenotoky from Thelytoky.
- Write short notes on colostrum.
- What is acrosomal reaction?
- Amniocentesis - write a short note on it.

PART - IV

Answer any one of the following.

1 X 5 = 5

- a) Define parthenogenesis? Explain its types.

(OR)

b) Explain the different types of natural birth control methods.