

DEPARTMENT OF PRE-UNIVERSITY EDUCATION

MODEL QUESTION PAPER FOR FIRST TEST

SEPTEMBER - 2021

II PUC

SUB : BIOLOGY (36)

TIME : 1 HOUR 30 MINUTES

MAX . MARKS: 35

General instructions:

1. The question paper contains four parts A,B,C and D. Part-D consists of two parts, Section-1 and Section-II
2. All the parts are compulsory.
3. Draw diagrams wherever necessary, unlabelled diagrams or illustrations do not attract any marks.

PART – A

Answer the following questions in ONE word or ONE sentence each: 5 x 1 = 5

1. Name the reproductive cycle that occurs in non-primates.
2. Which is the oldest viable seed excavated from Arctic Tundra?
3. Define amniocentesis.
4. Which layer of the uterus exhibit strong contraction during child birth?
5. Mention the significance of test cross.

PART – B

Answer any THREE of the following questions in 3-5 sentences each, wherever applicable:

3 x 2 = 6

6. Differentiate between seasonal breeders and continuous breeders.
7. "External fertilization is disadvantageous over internal fertilization". Justify the statement.
8. What is polyembryony? Give an example.
9. Write one function each for FSH and LH in females.
10. Mention the possible genotypes of children whose parents are heterozygous for blood group 'A' and 'B' respectively.

PART – C

Answer any **THREE** of the following questions in **40-80** words each, wherever applicable:

3 x 3 = 9

11. Name the vegetative propagules in the following plants:
a) *Bryophyllum* b) *Agave* c) Water hyacinth
12. What are outbreeding devices? Mention any four outbreeding devices in plants.
13. Schematically represent oogenesis.
14. a) What is implantation?
b) Distinguish between menarche and menopause.
15. Suggest any three measures to check population growth rate.

PART- D (Section-I)

Answer any **TWO** of the following questions in **200-250** words each, wherever applicable:

5 x 2 = 10

16. Explain the structure of mature embryo sac in angiosperms with a neat labelled diagram.
17. a) Name the two techniques involved in the process of artificial hybridization in plants. 2
b) Enumerate the characteristics of insect pollinated flowers. 3
18. What is incomplete dominance? Explain with reference to flower colour in *Snapdragon*.

Section-II

Answer any **ONE** of the following questions in **200-250** words each, wherever applicable:

5 x 1 = 5

19. Draw a neat labelled diagram of sectional view of the human male reproductive system.
20. a) What is placenta? Mention any four hormones secreted by it. 3
b) Write a short note on foetal ejection reflex. 2