



DAV PUBLIC SCHOOL, SAMASTIPUR

1st Periodic Test: 2024-25

Class : XII

Biology

Time: 1 Hour.

Full Marks: 20

Answer the following questions:

Section - A. **1X5=5**

1. How many Pollen mother cells should undergo meiotic division to produce 48 pollen grains?
(A) 8. (B) 12 (C) 16 (D) 24
2. During human embryonic development, the heart in the embryo is formed after
(A) 15 days of pregnancy (B) 30 days of pregnancy
(C) 45 days of pregnancy (D) 60 days of pregnancy
3. The probability of all possible genotypes of offspring in a genetic cross can be obtained with the help of
(A) Test cross (B) Back cross (C) Punnett square (D) Linkage cross
4. Chorionic villi and uterine tissue become interdigitated with each other and jointly form
(A) trophoblast (B) inner cell mass (C) Placenta (D) implantation
5. Which of the following is hormone releasing IUD?
(A) LNG-20 (B) Multiload-375 (C) Lippes loop (D) Cu-7

Section - B **2X2 =4**

6. Mention the advantages of selecting pea plant for experiment by Mendel.
7. What is meant by emasculation? When and why does a plant breeder employ this technique?

Section -C **3X2=6**

8. Write the steps in the formation of an ovum from an oogonium in human.
9. Why is Pedigree analysis done in human? List two reasons why the Mendelian experiments cannot be carried out in human beings.

Section -D **5X1=5**

10. (i) Explain the formation of placenta after the implantation in a human female.
(ii) Draw a diagram showing human foetus within the uterus and label any four parts in it.

or

Describe the dihybrid cross upto F₂- generation as conducted by Gregor Mendel using pure lines of garden pea for characters; seed shape and seed colour.
