

Standard 12**BIOLOGY**

Marks: 35

BIO - BOTANY

Marks: 18

SECTION - I**I. Choose the best answer:****3×1=3**

- 1) First cell of male gametophyte is
 - a) Microspore
 - b) Megaspore
 - c) Nucleus
 - d) Primary endosperm nucleus
- 2) Transmitting tissue is found in
 - a) Micropylar region of ovule
 - b) Pollen tube wall
 - c) Stylar region of gynoecium
 - d) Integument
- 3) Which one of the pollination is adopted for majority of angiosperms?
 - a) Ornithophily
 - b) Entomophily
 - c) Hydrophily
 - d) Anemophily

SECTION - II**II. Answer any three of the following:****2×2=4****Question No. 4 compulsory question.**

- 4) What are clones?
- 5) Draw the structure of embryo sac and label it.
- 6) Give the names of the scientists who rediscovered Mendelism.

SECTION - III**III. Answer any three of the following:****2×3=6****Question No. 7 compulsory question.**

- 7) Draw the structure of monocot seed and label it.
- 8) Enumerate the characteristic features of entomophilous flowers.
- 9) What is meant by cytoplasmic inheritance?

SECTION - IV**IV. Answer the following question:****1×5=5**

- 10) What is endosperm? Explain the types.

(OR)

Explain the experiment done by Carl Correns with example.

SECTION - I

Answer all the questions:

3×1=3

- 1) Paedogenetic parthenogenesis occurs in
 - a) Aphis
 - b) Honey bees
 - c) Solenobia
 - d) Gall Fly
- 2) Four children of a couple have blood groups A, B, AB, O what could be the genotype of the parents.
 - a) $I^A I^A \times I^B I^B$
 - b) $I^A I^O \times I^A I^B$
 - c) $I^A I^O \times I^B I^O$
 - d) $I^O I^O \times I^A I^B$
- 3) Match the following:

i) Gonorrhoea	-	A) 10-90 days
ii) Syphilis	-	B) 1-8 months
iii) Genital warts	-	C) 30-80 days
iv) Hepatitis	-	D) 2-5 days

 - a) (i) A (ii) B (iii) D (iv) C
 - b) (i) B (ii) C (iii) D (iv) A
 - c) (i) C (ii) D (iii) A (iv) B
 - d) (i) D (ii) A (iii) B (iv) C

SECTION - II

Answer any two of the following questions:

2×2=4

- 4) What is Inhibin? State its functions.
- 5) What is Mayer-Rokitansky syndrome.
- 6) Why honey bees parthenogenetic reproduction is referred as incomplete parthenogenesis?

SECTION - III

Answer any two of the following questions:

2×3=6

Question No. 9 is compulsory.

- 7) Write the symptoms of pataus syndrome.
- 8) Distinguish between heterochromatin and Euchromatin.
- 9) Write three causes of infertility in human beings.

SECTION - IV

Answer any one of the following questions:

1×5=5

- 10) Explain the process of spermatogenesis in Human beings with a schematic representation.

(OR)

What is Colour Blindness?

How X linked gene inherited in the marriage between hemizygous recessive male and normal visioned woman?
