

FIRST MID TERM TEST - 2024

Standard - XII

Time : 1.30 hrs

BIOLOGY

Marks: 50

Bio-Botany

Marks: 25

Part - A

I. i) Answer all the questions.

ii) Choose the correct answer and write the option code: $5 \times 1 = 5$

- 1) Size of pollen grain in *Myosotis*
 - a) 10 micrometer
 - b) 20 micrometer
 - c) 200 micrometer
 - d) 2000 micrometer
- 2) Select the mismatch pair
 - a) Trap mechanism - *Aristolochia*
 - b) Pit fall mechanism - *Arum*
 - c) Clip (or) translator mechanism - *Asclepiadaceae*
 - d) Piston mechanism - *Vallisneria*
- 3) The curvature of the ovule leads to horse-shoe shaped nucellus present in _____.
 - a) Circinotropous
 - b) Amphitropous
 - c) Campylotropous
 - d) Orthotropous
- 4) Fruit colour in squash is an example of
 - a) Recessive epistasis
 - b) Dominant epistasis
 - c) Complementary genes
 - d) Inhibitory genes
- 5) The first systematic researcher in the field of genetics _____
 - a) Hugo de vries
 - b) Erich von Tschermak
 - c) Carl Correns
 - d) Gregor Johann Mendel

Part - B

II. Answer any three questions:-

$3 \times 2 = 6$

- 6) What is Mellitophilly?
- 7) A detached leaf of *Bryophyllum* produces new plants. How?
- 8) "*Eichhornia Crassips*" is called as Terror of Bengal. Why?
- 9) Give the names of the scientists who rediscovered mendelism.
- 10) What is backcross?

Part - C

III. Write any three questions. Q.No. 14 is compulsory:

$3 \times 3 = 9$

- 11) Write the functions of tapetum.
- 12) Draw and label the parts of Mature Anther.
- 13) The endosperm of angiosperm is different from gymnosperm. Do you agree justify your answer.
- 14) What is the reason for similarities differences of appearance and skipping of generations?
- 15) Name the seven contrasting traits of mendel.

Part - D

IV. Answer in detail:-

$1 \times 5 = 5$

- 16) With a suitable diagram explain the structure of an ovule. [or]
Bring out the inheritance of chloroplast gene with an examples.

(2)

Bio-Zoology

XII BIOLOGY

Marks: 25

Part - A

I. Choose the correct answer and write the option code: $5 \times 1 = 5$

- 1) In which type of Parthenogenesis only males are produced?
 - a) Arrhenotoky
 - b) Thelytoky
 - c) Amphitoky
 - d) Both a and b
- 2) The site of embryo implantation is the
 - a) Uterus
 - b) Perit neal cavity
 - c) Vagina
 - d) Fallopian tube
- 3) The enzyme present in Aerosome is
 - a) Maltase
 - b) Hyaluronidase
 - c) Lactase
 - d) Hyaluronic acid
- 4) Read the given statement and select the correct option
 Statement 1: Vasectomy is the surgical procedure for male sterilization.
 Statement 2: In Vasectomy a small portion of fallopian tubes are cut and tied up.
 - a) Both statements 1 and 2 are correct
 - b) Statement 1 is correct 2 is wrong
 - c) Both statements 1 and 2 are wrong
 - d) statement 1 is wrong and 2 is correct
- 5) ABO blood group in man is controlled by
 - a) Multiple alleles
 - b) Lethal genes
 - c) Sex linked genes
 - d) Y-linked genes

Part - B

II. Answer any three questions:-

 $3 \times 2 = 6$

- 6) What is Apolysis?
- 7) What is Ectopic pregnancy?
- 8) Amniocentesis, the foetal sex determination test, is banned in our country, Is it necessary? Comment.
- 9) How Erythroblastosis foetalis can be prevented?
- 10) What is Tubectomy?

Part - C

III. Answer any three questions. (Q. No.13 is compulsory) $3 \times 3 = 9$

- 11) What is Parthenogenesis? Give two examples.
- 12) Give a schematic representation of Spermatogenesis.
- 13) How is polyspermy avoided in humans?
- 14) Differentiate foeticide and infanticide.
- 15) Write any three applications of Karyotyping.

Part - D

IV. Answer any one question in detail:

 $1 \times 5 = 5$

- 16) Explain the various phases of the Menstrual cycle. [or]
 Write about any two sexually transmitted (STD) BACTERIAL DISEASE.
