

V12Bio

Common First Mid Term Test - 2024

## Standard 12

## BIOLOGY

## Part - A (Bio-Botany)

## Section - A

Time: 1.30 Hours

Marks: 50

Marks: 25

**I. Choose and write the correct answer with option code:**

5 x 1 = 5

- 1) Transmitting tissue is found in .....
  - a) Micropylar region of Ovule
  - b) Pollen tube wall
  - c) Styler region of gynoecium
  - d) Integument
- 2) Find out the correct pair
  - a) Duplicate genes - 15 : 1
  - b) Supplementary genes - 9 : 7
  - c) Inhibitor genes - 9 : 3 : 4
  - d) complementary genes - 13 : 3
- 3) An allohexaploidy contains:
  - a) six different genomes
  - b) six copies of three different genomes
  - c) Two copies of three different genomes
  - d) Six copies of one genomes
- 4) What is the phenotype of wheat kernal colour for the geno type:  $R_1 R_2 r_1 r_2$ 
  - a) Dark red
  - b) Medium dark red
  - c) Medium red
  - d) light red
- 5) Circinotropous Ovule is found in the family
  - a) Primulaceae
  - b) Alismataceae
  - c) Cactaceae
  - d) Leguminosae

## Section - B

**II. Answer any three questions:**

3 x 2 = 6

- 6) What are multiple Alleles?
- 7) Draw diagram of Hemianatropous Ovule with an example
- 8) Give the names of the scientists who rediscovered Medelism
- 9) What is Stomium?
- 10) Differentiate continous variation with discontinuous variation. (Any three points)

## Section - C

**III. Answer any three questions:**

3 x 3 = 9

- 11) What are the reason for Mendel's Success in his breeding experiment?
- 12) Write the gene mapping uses
- 13) What is endothelium?
- 14) How to do test for homozygosity of a trait in plants?
- 15) List out the any three functions of Tapetum.

## Section - D

**IV. Answer the following questions:**

1 x 5 = 5

- 16) Explain Incomplete Dominance with an example

(5)

What is endosperm? Explain the types.

## Section - A

## I. Answer all the questions:

5×1=5

- 1) The most important hormone in initiating and maintaining lactation after birth is
  - a) Oestrogen
  - b) FSH
  - c) Prolactin
  - d) Oxytocin
- 2) A contraceptive pill prevents ovulation by
  - a) Blocking Fallopian tube
  - b) Inhibiting release of FSH and LH
  - c) Stimulating release of FSH and LH
  - d) causing immediate degeneration of released ovum
- 3) In which mode of reproduction variations are seen
  - a) Asexual
  - b) Parthenogenesis
  - c) Sexual
  - d) Both A and B
- 4) The Androgen binding protein is produced by
  - a) Leydig cells
  - b) Hypothalamus
  - c) Sertolicells
  - d) Pituitary gland
- 5) Match Column I with Column II and select the correct option from the codes given below

## Column I

- A. Copper releasing IUD  
 B. Hormone releasing IUD  
 C. Non medicated IUD  
 D. Minipills  
 a) A(iv) B(ii) C(i) D(iii)  
 c) A(i) B(iv) C(ii) D(iii)

## Column II

- i) LNG  
 ii) Lippes loop IUD  
 iii) Saheli  
 iv) Multiload - 375  
 b) A(iv) B(i) C(iii) D(ii)  
 d) A(iv) B(i) C(ii) D(iii)

## Section - B

## II. Answer any three of the following questions:

3×2=6

- 6) Write about the outer layer of embryonic membrane?
- 7) What is Prostatitis?
- 8) What is Apolysis? Write about that significance?
- 9) Write any two studies that diagnose cervical cancer.
- 10) Write about a sexual reproductive system in Aurelia

## Section - C

## III. Answer any three of the following questions:

3×3=9

- 11) How is Polyspermy avoided in human?
- 12) Write about Exogenous budding with example?
- 13) What is chorionic villus sampling?
- 14) Amniocentesis, the foetal sex determination test, is banned in our country. Is it necessary? Comment
- 15) Write the significance of Ferguson reflex?

## Section - D

## V. Answer the following questions:

1×5=5

- 16) a) Write the sexually transmitted diseases caused by bacteria and their symptoms

(OR)

- b) Name the gamete cell that fertilizes the ovum in human and draw and explain its structure? And draw the diagram of spermatogenesis?

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