

T **FIRST MID TERM TEST - JULY 2019**

Thiruvarehveli
Distric. **STANDARD - XII**

BIOLOGY

TIME: 1.30 hrs

MARKS:36

BIO - BOTANY

MARKS:18

Part - A

- I. **Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer**
Choose the best answer. Answer all the questions **3 x 1 = 3**

1. Identify the correctly matched pair
- | | | |
|-----------------|---|--------------------------------------------|
| a) Sporopollnin | - | Exine of Pollen grain |
| b) Tapetum | - | Nutritive tissue for developing microspore |
| c) Nucellus | - | Nutritive tissue for developing embryo |
| d) Obturator | - | Directs the pollen tube into micropyle |
2. Which one of the following is an example of Polygenic inheritance?
- | | |
|-------------------------------------|---------------------------------|
| a) Flower colour in Mirabilisjalapa | b) Production of male honey bee |
| c) Pod shape in garden Pea | d) Skin Colour in Humans |
3. Match List I with List II

List I

List II

- | | |
|-------------------------------------------------|-----------------------|
| A. A pair of chromosomes extra with diploid | - i) Monosomy |
| B. One Chromosome extra to the diploid | - ii) Tetrasomy |
| C. One Chromosomes loses from diploid | - iii) Trisomy |
| D. Two individual chromosomes lose from diploid | - iv) Double Monosomy |
- | | |
|-----------------------------------|-----------------------------------|
| a) A - i, B - iii, C - ii, D - iv | b) A - ii, B - iii, C - iv, D - i |
| c) A - ii, B - iii, C - i, D - iv | d) A - iii, B - ii, C - i, D - iv |

Section - II

- II. **Answer any Two of the following not exceeding 30 words.** **2 x 2 = 4**
4. A detached leaf of Bryophyllum produces new plants? How?
5. What is Pleiotropy?
6. What is SharbatiSonora?

Section - III

- III. **Answer any Two of the following not exceeding 45 words.** **2 x 3 = 6**
7. List the difference between Linkage and Crossing over
8. Draw a flow chart to show different types of gene interactions.
9. Differentiate dichogamy and herkogamy

Section - IV

- IV. **Answer all the following not exceeding 75 words.** **1 x 5 = 5**
10. With a suitable diagram explain the structure of an Ovule
What is Incomplete Dominance? Explain with example. **(Or)**

2 XII - BIOLOGY
BIO - ZOOLOGY **MARKS:18**
Part - A

I. Choose the correct answer:- 3 x 1 = 3

1. In some metazoan animals a special type of transverse fission called _____
 - a) Strobilation
 - b) Budding
 - c) Fragmentation
 - d) Gemmules
2. Acrosome is small cap like pointed structure formed from _____
 - a) mitochondria
 - b) Golgibodies
 - c) cytoplasm
 - d) Nucleus
3. Find out the incorrect statement in relation to contraception
 - a) Inhibition of Spermatogenesis
 - b) Inhibition of Ovulation
 - c) Changes in cervical mucus impairing its ability to allow passage and transport of sperms
 - d) Alteration of Uterine Endometrium to make it Unsuitable for implantation

II. Answer any Two:- 2 x 2 = 4

4. Explain male heterogamety?
5. Expand the following
 - a. ZIFT
 - b. ICSI
6. What is inhibin? state its function?

III. Answer any Two:- 2 x 3 = 6

7. Give a Schematic representation of Spermatogenesis
8. Write a note on syphilis?
9. Application of karyotyping?

IV. Answer any One of the following. 1 x 5 = 5

10. Explain the barrier methods of Contraception?

(Or)

Explain the Criss - cross pattern of inheritance in marriage between normal visioned man and colour blind woman.

Sivakumar. M. Sri Ram Matric. HSS, Vallu
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