

## Holidays' Homework, 2024-25

### Science (Biology)

#### Class XII

#### Assignment-A

#### Section- A

- Write the following in Biology notebook-

Briefly describe-

1. Endosperm
2. MTP
3. Point Mutation
4. Gene and allele
5. Colostrum
6. Oogenesis
7. Geitonogamy
8. Emasculation
9. Leydig cells
10. Law of dominance

#### Section-B

11. Differentiate between

- |                             |                             |
|-----------------------------|-----------------------------|
| (a) hypocotyl and epicotyls | (b) Coleoptile & coleorhiza |
| (c) Perisperm & pericarp    | (d) Integument and testa    |

12. Amniocentesis and its significance.

13. Write the functions of testis, ovary and seminal plasm.

14. Define & design a test cross.

15. Explain the term with example-

- |                  |                           |
|------------------|---------------------------|
| (a) Co-dominance | (b) Incomplete dominance. |
|------------------|---------------------------|

#### Section-c

16. Differentiate between autogamy and xenogamy.

17 How is oogenesis different from spermatogenesis? Justify.

18. Explain different phases of menstrual cycle.

19. Explain process of double fertilisation with diagram.

20. Explain different types of IUDs. Why is hormone releasing IUDs considered as good contraceptive to space children?

### **Assignment-B**

Make a project anyone of the given topics.

- i. Pollination and it's types.
- ii. Embryogenesis.
- iii. Fertilization and post-fertilization events.
- iv. Human Reproductive systems.
- v. Fertilization and Implantation in humans.
- vi. Foetus development.
- vii. MTP
- viii. Mendelian disorders etc.

### **Assignment- C.**

Write these experiments with well-labelled diagrams in your practical notebook –

1. To study t.s. of mammalian testis and ovary using permanent slide.
2. To study controlled pollination, emasculation, tagging and bagging.
3. Prepare a temporary mount to observe pollen germination.

Make a model on anyone of the following topics-

- Young anther and l.s. of pistil.
- Male reproductive system
- Female reproductive system
- Human sperm and ovary
- Spermatogenesis and oogenesis
- menstrual cycle

**Note: Also learn all of the above questions.**