PRACTICE QUESTIONS – 2019-20

CLASS – XII - BIOLOGY

Unit - 1 and 2

2 Marks Questions.

1. Differentiate between oestrous cycle and menstrual cycle.

2. What are (a) continuous breeders and (b) seasonal breeders?

3. How do homogametes differ from heterogametes?

4. Differentiate between testa and integument.

5. What is apomixes and what is its importance?

6. Differentiate between syncarpous and apocarpous pistils with an example for each.

7. What is parturition? Which hormones are involved in induction of parturition?

8. Enumerate the functions of placenta.

9. Bring out the differences between multiple genes and multiple alleles.

10. Mention four reasons why Drosophila was chosen by Morgan for his experiments in Genetics.

11. Explain the pattern of inheritance of Thalassemia in humans. Explain its different types.

3 Marks Questions.

12. Differentiate between external fertilization and internal fertilization with an example for each.

13. Differentiate between oviparous and viviparous animals with an example of each.

14. Draw a diagram of a male gametophyte of an angiosperm. Label any four parts. Why is sporopollenin considered the most resistant organic material?

15. a) Mention any four strategies adopted by flowering plants to prevent self-pollination.
b) Why geitonogamy also referred to as genetical autogamy?

16. State the significance of pollination. List any four difference between wind pollinated and animal pollinated flowers.

17. Describe the three different practices under natural methods of birth control.

18. Explain the law of Dominance using a monohybrid cross.

19. Define and design a test cross.

20. How is sex determined in human beings?

21. With the help of an example, differentiate between incomplete dominance and codominance.

22. Represent only diagrammatically the process of transcription in eukaryotes.

23. Write short notes of RNA polymerases of eukaryotic cells.

24. Draw a longitudinal sectional view of a typical anatropous ovule to show the site where double fertilization takes place. Label any four major parts of the ovule.

5 Marks Questions.

1. Name the three events in the sexual reproduction of an angiosperm and mention what major events occur in each of them.

2. a) Name two animals showing external fertilization. Why are more gametes produced by such animals?
b) Name two animals showing internal fertilization. What are the characteristics of the gametes produced by such animals?

3. **a)** Draw a labelled schematic diagram of the transverse section of a mature another of an angiospermic plant.
b) Characteristic features of an insect pollinated flower.

4. Explain with the help of a diagram, the development of a mature embryo sac from a megaspore mother cell in an angiosperm.

5. How does a pollen mother cell develop into a mature pollen grain? Illustrate the stages with labelled diagrams.

6. a) Differentiate between: Autogamy, geotonogamy and exnogamy.

b) Explain the events that occur during pollen pistil interaction.

7. With a neat, labelled diagram, describe the parts of a typical angiosperm ovule.

8. What is spermatogenesis? Briefly describe the process of spermatogenesis.

9. What is oogenesis? Give a brief account of oogenesis.

10. What is menstrual cycle? Which hormones regulate menstrual cycle?

11. Suggest some methods to assist infertile couples to have children.

12. Differentiate between the following:

a) Polygenic inheritance and Pleiotropy

b) Dominance, Codominance and Incomplete dominance.

13. Describe the mechanism of pattern of inheritance of ABO blood groups in humans.

14. State and explain with the help of a cross, the law of segregation as proposed by Mendel.