

KCP SIDDHARTHA ADARSH RESIDENTIAL PUBLIC SCHOOL

KANURU: : VIJAYAWADA

Unit Test - 2

Class : XII
Sub : Biology

Duration : 90 Min
Max. Marks : 30

General Instructions:

1. All questions are compulsory.
2. This question paper consists of four sections A, B, C and D. Section-A contains 5 questions of one mark each, Section B is of 3 questions of two marks each, Section-C is of 3 questions of three marks each and Section-D is of 2 questions of five marks each.
3. Wherever necessary, the diagrams drawn should be neat and properly labeled.

SECTION – A

5 x 1 = 5M

1. How do the pollen grains of Vallneria protect themselves?
2. What is monosporic development of female gametophyte?
3. An anther with malfunctioning tapetum often fails to produce viable male gametophytes. Give one reason.
4. What is the site of microsporogenesis?
5. The flower of brinjal is referred to as chasmogamous while that of beans is cleistogamous. How are they different from each other?

SECTION – B

3 x 2 = 6M

6. Differentiate between cross pollination and self pollination.
7. What is meant by emasculation? When and why does a plant breeder employ this technique?
8. What is geitonogamy? Give its one similarity to i) Autogamy and ii) Xenogamy

SECTION – C

3 x 3 = 9M

9. Draw a diagram of a male gametophyte of an angiosperm. Label any four parts. Why is sporopollenin considered the most resistant organic material?
10. Draw a labeled sketch of L.S. Pistil showing porogamous type of fertilization.
11. Mention any four strategies adopted by flowering plants to prevent sky pollination.

SECTION – D

2 x 5 = 10M

12. How does the megaspore mother cell develop into 7-celled, 8-nucleate embryo sac in an angiosperm? Draw a labeled diagram of a mature embryo sac.
13. a) Why is fertilization in an angiosperm referred to as double fertilization? Mention the ploidy of the cells involved.
b) Draw a neat labeled sketch of L.S. of an endospermous monocot seed.