Total No. of Printed Pages - 2

Regd. No.

Part -III

BOTANY, Paper - I

(English Version)

Time : 3 Hours

Max. Marks : 6

SECTION – A

10×2=

Note :-

(i) Answer **ALL** questions.
(ii) Each question carries **TWO** marks.
(iii) All are very short answer type questions.

1. Give the scientific name of Mango. Identify the generic name and specific epithet.
2. How are Viroids different from Viruses?
3. Who discovered cell and what was the book written by him?
4. What is meant by pulvinus leaf base? In members of which angiospermic family do you find them?
5. What is the morphology of cup like structure in Cyathium? In which family it is found?
6. Name the type of pollination mechanism found in members of Fabaceae.
7. What is the feature of a metacentric chromosome?
8. Give one example for each of amino acids, sugars, nucleotides and fatty acids.
9. An anther has 1200 pollen grains. How many pollen mother cells must have been there to produce them?
10. Define Heliophytes and Sciophytes. Name a plant from your locality that is either Heliophytes or Sciophytes.

SECTION – B

Note :- 6×4=24

(i) Answer **ANY SIX** questions.
(ii) Each question carries **FOUR** marks.
(iii) All are short answer type questions.
(iv) Draw labelled diagrams, wherever necessary.

11. Give a brief account of Dinoflagellates.
12. How would you distinguish monocots from dicots?
13. Distinguish between asexual and sexual reproduction. Why vegetative reproduction is also considered as a type of asexual reproduction?
14. Describe the essential floral parts of plants belonging to Liliaceae.
15. Differentiate between Rough Endoplasmic Reticulum (RER) and Smooth Endoplasmic Reticulum (SER).
16. Explain Prophase-I of meiosis.
17. State the location and function of different types of meristems.
18. Enumerate the morphological adaptations of xerophytes.

SECTION – C

Note :- 2×8=16

(i) Answer **ANY TWO** questions.
(ii) Each question carries **EIGHT** marks.
(iii) All are long answer type questions.
(iv) Draw labelled diagrams, wherever necessary.

19. Explain, how stem is modified variously to perform different functions?
20. With a neat labelled diagram, describe the parts of a mature angiosperm embryo sac. Mention the role of synergids.
21. Describe the internal structure of a monocot root.
