

**0127****A**

Total No. of Questions—21

Total No. of Printed Pages—2

Regd. No.

1 9 6 0 1 3 5 6 2 7

Part III

**BOTANY, Paper - I**

(English Version)

**Time : 3 Hours]****[Max. Marks : 60****Note :—** Read the following instructions carefully :

- (i) Answer all the questions of Section A. Answer ANY SIX questions out of eight in Section B and Answer ANY TWO questions out of three in Section C.
- (ii) In Section A, questions from Sl. Nos. 1 to 10 are of 'very short answer type'. Each question carries TWO marks. Every answer may be limited to 5 lines. Answer all the questions at one place in the same order.
- (iii) In Section B, questions from Sl. Nos. 11 to 18 are of 'short answer type'. Each question carries FOUR marks. Every answer may be limited to 20 lines.
- (iv) In Section C, questions from Sl. Nos. 19 to 21 are of 'long answer type'. Each question carries EIGHT marks. Every answer may be limited to 60 lines.
- (v) Draw labelled diagrams, wherever necessary for questions in Sections B and C.

**SECTION A**

10×2=20

**Note :—** Answer ALL the questions. Each answer may be limited to 5 lines.

1. Which is the largest Botanical Garden in the world ? Name a few well known Botanical Gardens in India.
2. Who proposed five kingdom classification ? How many kingdoms of this classification contain eukaryotes ?

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3. Which group of plants is called vascular cryptogams ? Name the branch of Botany which deals with them.
4. Name any *two* plants having single seeded dry fruits.
5. Differentiate actinomorphic flower from zygomorphic flower.
6. What is Natural system of plant classification ? Name the scientists who followed it.
7. An anther has 200 pollen mother cells. How many pollen grains are produced maximum from them ?
8. What is the function of polysome ?
9. Glycine and Alanine are different with respect to one substituent on  $\alpha$  (Alpha) carbon. What are those substituent groups ?
10. Hydrophytes show reduced Xylem. Why ?

**SECTION B**

6×4=24

**Note** :—Answer **ANY SIX** questions. Each answer may be limited to **20** lines.

11. Differentiate between red algae and brown algae.
12. Give a brief account of Dinoflagellates.
13. Write briefly about the different types of ovules.
14. Describe the essential organs of Solanaceae.
15. Describe the structure of nucleus.
16. Explain prophase-I of meiosis.
17. State the location and function of different types of meristems.
18. What are hydrophytes ? Briefly discuss the different kinds of hydrophytes with the examples.

**SECTION C**

2×8=16

**Note** :—Answer **ANY TWO** questions. Each answer may be limited to **60** lines.

19. Explain different types of racemose inflorescences.
20. With neat labelled diagram, describe the parts of mature embryo sac. Mention the role of synergids.
21. What are complex tissues ? Describe various types of complex tissues.