# 127(N)



Total No. of Questions : 21 Regd.
Total No. of Printed Pages : 2 No.

# 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. Each 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 Section-B and C.

## **SECTION - A**

 $10 \times 2 = 20$ 

Note: Answer all the questions. Each answer may be limited to 5 lines.

- 1. Who discovered the Cell and what was the book written by him?
- 2. Which is the largest botanical garden in the World? Name a few well known botanical gardens in India.
- 3. What do the terms Phycobiont and Mycobiont signify?
- 4. Which organ is modified to trap insects in insectivorus plants? Give two examples.

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- 5. What are Aggregate fruits? Give one example.
- 6. What is Omega Taxonomy?
- 7. What is the feature of a Meta-centric chromosome?
- Give an example for each of Amino acids, Sugars, Nucleotides and Fatty acids.
- 9. Which of the four chromatids of a bivalent of prophase-I of Meiosis can involve in Cross-over?
- 10. Define Population and Community.

### SECTION - B

 $6 \times 4 = 24$ 

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

- 11. Explain Binomial Nomenclature.
- 12. Explain the scope of Botany taking plant physiology as example.
- 13. Justify the statement "Vegetative reproduction is also a type of Asexual reproduction".
- 14. Give economic importance of plants belonging to Fabaceae.
- 15. Though, redundantly described as a Resting Phase, Inter Phase does not really involve rest. Comment.
- Differentiate between Rough Endoplasmic Reticulum (R.E.R.) and Smooth Endoplasmic Reticulum (S.E.R.).
- 17. What is the difference between Lenticels and Stomata?
- 18. Give in detail the anatomical adaptations shown by Xerophytes.

#### SECTION - C

 $2 \times 8 = 16$ 

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

- 19. Define Root. Mention the types of root systems. Explain how root is modified to perform different function.
- 20. Describe the process of Fertilization in Angiosperms.
- 21. Describe the internal structure of a Dicot root.

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