# 0127



Total No. of Questions-21

Total No. of Printed Pages—2

Regd. No. [ ] 9 6 0 1 3 5 6 7 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**

 $10 \times 2 = 20$ 

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

\*\*Rhown Botanical Gardens in India.

Who proposed five kingdom classification? How many kingdoms of this classification contain eukaryotes?

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Which group of plants is called vascular cryptogams? Name the branch of Botany which deals with them.

Name any two plants having single seeded dry fruits.

Differentiate actinomorphic flower from zygomorphic flower.

6. What is Natural system of plant classification? Name the scientists who followed it.

An anther has 200 pollen mother cells. How many pollen grains are produced maximum from them?

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 ?

Hydrophytes show reduced Xylem. Why ?

### SECTION B

 $6 \times 4 = 24$ 

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

11. Differentiate between red algae and brown algae.

Give a brief account of Dinoflagellates.

. Write briefly about the different types of ovules.

Describe the essential organs of Solanaceae.

Describe the structure of nucleus.

Explain prophase-I of meiosis.

State the location and function of different types of meristems.

What are hydrophytes? Briefly discuss the different kinds of hydrophytes with the examples.

#### **SECTION C**

 $2 \times 8 = 16$ 

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

Explain different types of racemose inflorescences.

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.

16.

19.