

Total No. of Questions— 21

Total No. of Printed Pages— 2

Regd. No.

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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 Sr. 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 Sr. 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 Sr. 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. What does ICBN stand for ?
2. What do the terms 'algal bloom' and 'red tides' signify ?
3. Which group of plants is called vascular cryptogams ? Name the branch of Botany which deals with them ?
4. What is meant by Parthenocarpic fruit ? How is it useful ?
5. What is meant by Epipetalous condition ? Give an example.

6. What is Geocarpy ? Name the plant which exhibits this phenomenon.
7. What is the function of a Polysome ?
8. Give *one* example for each of amino acids, sugars, nucleotides and fatty acids.
9. Which of the phases of cell cycle is of longest duration ?
10. Define Population and Community.

SECTION B

6×4=24

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

11. Give a brief account of Dianoflagellates.
12. Differentiate between Red alage and Brown algae.
13. Distinguish between asexual and sexual reproduction. Why is vegetative reproduction also considered as a type of asexual reproduction ?
14. Give economic importance of plants belonging to Fabaceae.
15. What are nucleosomes ? What are they made of ?
16. Though redundantly described as a resting phase, interphase does not really involve rest. Comment.
17. What is the difference between Lenticels and Stomata ?
18. Enumerate the morphological adaptations of hydrophytes.

SECTION C

2×8=16

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

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 Dicot Root.