

Total No. of Questions : 21

Total No. of Printed Pages : 2

Reg. 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** 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 **Section – B** and **Section – C**.

SECTION – A

(10×2=20)

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

1. What does ICBN stands for ?
2. How Viroids are different from Viruses ?
3. Why is Mendel considered as Father of Genetics ?
4. What is the morphology of cup like structure in Cyathium ? In which family it is found ?
5. Differentiate between Apocarpous and Syncarpous ovary.
6. What is Omega Taxonomy ?
7. Mention a single membrane bound organelle which is rich in hydrolytic enzymes.

8. Give an 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 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 Dinoflagellates.
12. Differentiate between Red algae and Brown algae.
13. List out three strategies that a bisexual chasmogamous flower can evolve to prevent self pollination (autogamy).
14. Describe about essential floral parts of plants belonging to Family : Liliaceae.
15. Differentiate between Rough Endoplasmic Reticulum (RER) and Smooth Endoplasmic Reticulum (SER).
16. Nucleic acids exhibits secondary structure – Justify with examples.
17. Though redundantly described as a resting phase. Interphase does not really involve rest – Comment.
18. List out anatomical adaptation of Hydrophytes.

SECTION – C

(2×8=16)

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

19. Define Root. Explain how root is modified to perform different functions.
 20. Describe the process of fertilisation in angiosperms.
 21. Explain the T.S. of Dicot stem.
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