



$\frac{P_6}{1}$

II

Regd.
No.



BOTANY - PAPER - I 4060077

Max. Marks : 60

- (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 Serial 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 Serial 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 Serial 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

10x2=20

1. Which is the largest botanical garden in the world ? Name a few well known botanical gardens in India.
2. Who is popularly known as father of Botany ? What was the book written by him ?
3. What is the nature of cell-walls in diatoms ? 
4. What is the morphology of cup like structure in Cyathium ? In which family it is found ?
5. Define venation. How do dicots differ from monocots with respect to venation ?
6. What is geocarpy ? Name the plant which exhibits this phenomenon.
7. What is middle lamella made of ? What is its functional significance ? 
8. Given that the average duplication time of E.coli is 20 minutes. How much time will two E.coli cells take to become 32 cells ?

[1 of 2]

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$2 - 2 = 20$
 $2 - 4 = 40$
 $4 - 8 = 60$
 $8 - 16 = 80$
 $16 - 32 = 100$



9. Starch, Cellulose, Glycogen, Chitin are polysaccharides found among the following. Choose the one appropriate and write against each.

- (a) Cotton fibre _____
 (b) Exoskeleton of cockroach _____
 (c) Liver _____
 (d) Peeled potato _____



10. Define population and community.

SECTION - B

Note : Answer any six questions.

6x4=24

11. What are the characteristic features of Euglenoids ?
 12. Differentiate between red algae and brown algae.
 13. Distinguish between asexual and sexual reproduction. Why is vegetative reproduction also considered as a type of asexual reproduction ?
 14. Write a brief note on semi technical description of a typical flowering plant.
 15. Differentiate between Rough Endoplasmic Reticulum (RER) and Smooth Endoplasmic Reticulum (SER).
 16. Though redundantly described as a resting phase, interphase does not really involve rest. Comment.
 17. State the location and function of different types of meristems.
 18. Enumerate the morphological adaptations of hydrophytes.



SECTION - C

Note : Answer any two questions.

2x8=16

19. Define root modification. Explain how root is modified to perform different functions.
 20. Describe the process of Fertilization in angiosperms.
 21. Describe the T.S. of monocot stem.

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