

2023

5th Semester Examination

BOTANY (Honours)

Paper : C 11-T

[Reproductive Biology of Angiosperms]

[CBCS]

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**

Answer any *five* of the following questions :  $2 \times 5 = 10$

1. What does it mean by MGU?
2. Define geitonogamy with example.
3. What does it mean by polyads? Cite an example.
4. What is called cybrid?
5. What is stub pollination?
6. Define self-incompatibility.
7. What is caruncle? Mention one role of it.
8. What is microsporogenesis?

P.T.O.

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**Group - B**

Answer any *four* of the following questions :  $5 \times 4 = 20$

9. What is palynology? Discuss the importance of its study.  
2+3
10. Draw and describe briefly the various types of apertures found in pollen wall.
11. Discuss various mechanisms for seed dispersal by animals with suitable examples.
12. 'Flower is a modified shoot' — explain.
13. What do you mean by double-fertilization? Briefly describe the syngamy with example.  
2+3
14. Discuss the development of nuclear and cellular types of endosperm.

**Group - C**

Answer any *one* of the following questions :  $10 \times 1 = 10$

15. State the differences between GSI and SSL. Write down the developmental pattern of dicotyledonous embryo formation.  
4+6
  16. What is polyembryony? Write a brief account on classification of polyembryony and its causes. What are the applications of apomixis in plant breeding?  
2+5+3
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13. Discuss the principles of priority and its limitations. 3+2=5
14. Discuss in detail the principles of ICN. 5

**Group - C**

Answer any *one* of the following questions :

10×1=10

15. Schematically illustrate Bentham and Hooker's system of classification of plants. Mention the merits of Bentham and Hooker's system of classification. Define the terms Archichlamydeae and Metachlamydeae. 6+2+2=10
16. What is a flora? How does it differ from a monograph? Briefly discuss the contribution of Takhtajan in angiosperm classification. Differentiate between holotype and syntype. 2+3+3+2=10
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