2023/TDC(CBCS)/ODD/SEM/
BOTHCC-501T/143

TDC (CBCS) Odd Semester Exam., 2023

BOTANY

(Honours)

(5th Semester)

Course No. : BOTHCC-501T

(Reproductive Biology of Angiosperms)

Full Marks : 50
Pass Marks : 20

Time : 3 hours

The figures in the margin indicate full marks for the questions

SECTION—A

Answer *ten* questions, selecting any *two* from each Unit : 2×10=20

UNIT—I

1. Briefly mention the research contributions of Amier.

2. Write a brief account on the history and development of reproductive biology.

3. Give a short account of the contributions of Nawaschin.

UNIT—II

4. Write a short note on microgametogenesis.

5. What do you mean by polyads?

6. Write a brief note on the structure of MGU (Male Germ Unit).

UNIT—III

7. Write a brief note on obturator.

8. Give a short account of aril and caruncle.

9. Write a short note on Circinotropous ovule.

UNIT—IV

10. Briefly explain interspecific and intraspecific incompatibility.

11. Write a note on stub pollination.

12. Write briefly on bud pollination.

UNIT—V

13. Write a note on embryo-endosperm relationship.

14. Briefly explain the types of endosperm.

15. Write a brief note on polyembryony.

SECTION—B

Answer *five* questions, selecting *one* from each Unit : 6×5=30

UNIT—I

16. Give an illustrated account of the major contributions of Strasburger and Maheshwari in the field of reproductive biology of angiosperms. 3+3=6

17. Give a detailed account of the scope of reproductive biology of angiosperms. 6

UNIT—II

18. Describe the flower as a modified determinate shoot with suitable diagrams. 6

19. Describe the process of microsporogenesis with suitable diagrams. 6

UNIT—III

20. Describe the various contrivances for self- and cross-pollination in angiosperms with suitable examples. 6

21. With suitable diagrams, describe in detail the polygonum type of embryo sac development. 6

UNIT—IV

22. What is *in vitro* pollination? Give a detailed account of parasexual hybridization. 2+4=6

23. Write a note on cybrids with necessary diagrams. Add a note on *in vitro* fertilization. 4+2=6

UNIT—V

24. Describe the structure and functions of suspensor. Add a note on apomixis. 4+2=6

25. Describe the structure and development of dicot embryo. 6

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