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B.Sc./5th Sem/BOT/25(NEP)

2025

5th Semester Examination (CCFUP : NEP)

BOTANY

Paper : MJ 10-T (Single Core Major)

[Palynology & Plant Reproductive Biology]

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* questions : $2 \times 5 = 10$

1. What is palynology? Who is considered as the father of palynology? 1+1
2. What are palynomorphs? 2
3. What is meant by double fertilization? 2
4. Define exine and intine. 1+1
5. What are monosulcate and tricolpate grains? 1+1
6. What are meant by GSI and SSI? 1+1
7. What is tapetum. Mention its function. 1+1
8. What are aril and caruncle? 1+1

P.T.O.



Group - B

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

9. What is pollination? Differentiate between geitonogamy and xenogamy. What is dichogamy? $1+3+1$
10. Discuss the process of double fertilization in flowering plant. 5
11. Differentiate between dicot and monocot embryo. What is apomixis? $3+2$
12. Write a short note on pollinating agents. 5
13. Classify the pollen grains on the basis of apertures. 5
14. Flower is a modified shoot. Justify the statement. 5

Group - C

Answer any *one* question : $10 \times 1 = 10$

15. What is Self-Incompatibility? Mention its types and importance. State the various adaptive features of cross pollinating flowers. $1+5+4$
 16. Describe the NPC system of classification of spores/pollen grains. What are pollinia? $8+2$
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