

2025

M.Sc. 3rd Semester Examination

BOTANY

Paper : BOT - 305

(Plant Physiology)

(New Syllabus)

Full Marks : 25

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 *two* questions : $2 \times 2 = 4$

1. What is monocarpic senescence?
2. What is double dormancy?
3. Mention the difference between channel and carrier proteins.
4. Name two synthetic PGR and mention their vital roles.

Group - B

Write short notes on any *two* from the following :

$4 \times 2 = 8$

5. Photorespiratory pathway
6. Polar transport of IAA

P.T.O.

(2)

7. Regulatory pathway of flower senescence
8. Types and functions of ion transporters

Group - C

Answer any *one* question : $8 \times 1 = 8$

9. What is the basic difference between dormancy and quiescence? Briefly discuss about the causes of endogenous and exogenous dormancy. Mention two possible methods of breaking seed dormancy. $2+4+2$
10. Describe the pathway of Glyoxylate cycle. Write a note on Cryptochromes. $5+3$

Internal Assessment : 5 marks
