

Sr.No.7060

Exam. Code: 210004

Subject Code: 4852

M.Sc. Botany - 4th Sem.

(2517)

Paper- BOTC-625: Plant Morphogenesis

Time allowed: 3 hrs.

Max. Marks: 50

SECTION -A

Note : Attempt all the parts.

Q. 1 . i) Define physiological correlations.

ii) How polarity is expressed in coenocytes?

iii) What is bilateral symmetry?

iv) Define physiological differentiation.

v) What is stock?

vi) Define chimeras.

vii) Mention the chemical morphogenetic factors in plants.

viii) What are amorphous structures?

1 X 8 = 8

SECTION -B

Note :- Attempt any seven questions.

Q.2. What do you know about genetic correlations that control plant growth and development?

Q. 3. Describe how polarity is expressed in plasmodia.

Q.4. Describe the radial symmetry by giving suitable examples.

Q.5. Explain the development of abnormal organs.

Q.6. Discuss the role of physical factors in plant growth.

Q. 7. Describe reproductive regeneration in plants.

Q. 8. Explain differentiation during ontogeny.

Q. 9. Discuss the stock and scion interrelationships in plants.

Q. 10. Differentiate between external and internal differentiation.

Q. 11. Discuss regeneration in higher plants.

7 X 3= 21

SECTION -C

Note :- Attempt any three questions.

Q. 12. Describe physiological manifestation of polarity.

Q. 13. Discuss the role of genetic and chemical morphogenetic factors in plants growth.

Q. 14. Describe differentiation in relation to environment and differentiation without growth.

Q. 15. Discuss the abnormal development of organs giving suitable examples.

Q. 16. a) How the development of symmetry takes place in plants?

b) Write a note on somatic mutations.

3 X 7 = 21

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