Exam. Code : 210003
Subject Code : 3796

M.Sc. Botany 3rd Semester

BOT-C617 : PLANT MORPHOGENESIS

Time Allowed—3 Hours] [Maximum Marks—50

SECTION—A

Note :— Attempt **ALL** the parts.

1. (i) How polarity is expressed in internal structures ?
   (ii) What do you mean by genetic correlations ?
   (iii) What is dorsiventral symmetry ?
   (iv) Define differentiation without growth.
   (v) What do you mean by stock ?
   (vi) What are amorphous structures ?
   (vii) Name the genetic morphogenetic factors in plants.
   (viii) Define somatic mutations. 1×8=8

SECTION—B

Note :— Attempt any ***seven*** questions.

2. What do you know about physiological correlations ?
3. Explain expression of polarity in isolated cells.
4. Explain the development of abnormal organs.
5. Describe the bilateral symmetry by giving suitable examples.

6. Discuss the role of physical factors in plant growth.
7. Describe regeneration in higher plants.
8. Explain physiological differentiation.
9. What are developmental patterns of polarity ?
10. Differentiate between external and internal differentiation.
11. What are chimeras ? 3×7=21

SECTION—C

Note :— Attempt any ***three*** questions.

12. Describe stock and scion interrelationships in plants.
13. Discuss the role of physical morphogenetic factors in plants growth.
14. Describe the development of symmetry.
15. Explain the production of new types of organized structures in plants.
16. Discuss the differentiation during ontogeny of plants. 7×3=21