



11629

B.Sc. VI Semester Degree Examination, May/June 2016
Paper – 6.2 : BOTANY
Plant Physiology and Biotechnology

Time : 3 Hours

Max. Marks : 80

- Instructions :** 1) *Part – I is compulsory.*
2) Answer **any eight** questions in Part – II.
3) **Labelled** diagram will enhance the **value** of answer.

PART – I

I. Answer the following :

(8×2=16)

- 1) What is Bolting ?
- 2) What are Plasmids ? Give functions.
- 3) What is totipotency ?
- 4) Define DPD.
- 5) What is meant by De-plasmolysis ?
- 6) What is RUBISCO ? Mention the function.
- 7) Differentiate between Wall pressure and Jurgor pressure.
- 8) What is Crescograph ? Mention the uses.

PART – II

II. Answer **any eight** of the following :

(8×8=64)

- 9) Explain Glycolysis with the diagrammatic representation.
- 10) Explain the Physiological role of cytokinins and ABA.
- 11) Explain the characters of Enzymes.
- 12) What is Photoperiodism. Explain SDP and LDP.
- 13) What are transgenic plants ? Explain the steps involved in the production of Golden rice.
- 14) Explain the theories of opening and closing of stomata.
- 15) Explain Munch mass flow hypothesis with diagram.

11629



- 16) Explain transpiration pull theory of Ascent of sap.
- 17) What is Photosynthesis ? Explain the factors affecting rate of photosynthesis.
- 18) What are tropic movements ? Explain scismonastic movement with example.
- 19) Explain the scope of Genetic Engineering technology.
- 20) Answer **any 2** of the following :
 - a) K^+ ion transport concept
 - b) R.Q. and its types
 - c) Vernalization
 - d) Role of Ethylene.