| Roll No. |       |       |   |  |      |   | Total No. of Pages: 02 |
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Total No. of Questions: 09

B.Sc.(Agriculture) (2014 & Onwards) (Sem. – 3)

# **PLANT PHYSIOLOGY**

M Code: 72552 Subject Code: BSAG-302 Paper ID: [72552]

Time: 3 Hrs. Max. Marks: 60

#### **INSTRUCTIONS TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

#### **SECTION A**

- 1. Write short notes on:
  - a) Physiological maturity
  - b) Epigeal germination
  - c) Non-climacteric fruits
  - d) Harvest index
  - e) Hydroponics
  - f) Abscission
  - g) Lag phase
  - h) Senescence
  - i) Plant growth regulators
  - j) Water use efficiency

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### **SECTION B**

- 2. Describe non-cyclic electron transport in photosynthesis.
- 3. Discuss occurrence, biosynthesis and commercial applications of gibberellins in plants.
- 4. Discuss various methods of breaking seed dormancy.
- 5. Write short note on vernalization.
- 6. Why is it more appropriate to call a short day plant a long night plant.

## **SECTION C**

- 7. Explain the physiological roles of any three micronutrients and also discuss how their deficiency affects the plant growth?
- 8. Discuss commercial applications of plant growth regulators in agriculture and horticulture.
- 9. Discuss in details Munch's mass flow hypothesis for translocation of assimilates. What are the major objections against this hypothesis?

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