

Please check whether you have got the right question paper.

- N.B:**
1. **All** questions are **compulsory**
  2. **Figures** to the **right** indicate **full marks**.
  3. **Draw neat and labeled diagrams wherever necessary.**

- Q.1** Describe the various stages associated with germination of seeds. **12**
- OR**
- Q.1** Describe the role of various hormones in regulating seed dormancy.
- Q.2** Describe the role of heat shock proteins (HSP's) in increased thermotolerance as observed in some plants. **12**
- OR**
- Q.2** Explain the different pathogen attack strategies induced in plants.
- Q.3** Give an account of biotic factors in an ecosystem. **12**
- OR**
- Q.3** Write short notes on:
- a) Population Growth Curve
  - b) Ecological niche
- Q.4** Discuss interspecific competition and role of herbivory. **12**
- OR**
- Q.4** Discuss the littoral ecosystem.
- Q.5** Write short notes on **any three** of the following: **12**
- a. Role of H<sup>+</sup> pumps in salinity stress
  - b. Proteinase Inhibitors role in plant defense
  - c. Temperature as a factor in controlling seed dormancy
  - d. Conservation of Genetic resources
  - e. Pollination and symbiosis
  - f. Depletion of forest resources