

CSM : 14

AGRICULTURE

PAPER - II

Time Allowed : 3 hours

Full Marks : 100

Marks for each question is indicated against it.

Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.

PART A

1. What is seed certification? Give a critical account of procedures of seed certification and how the genetic purity of seed is maintained. **(6+7+7=20)**
2. Describe different types of mutations. Discuss the role of mutation in crop improvement with suitable examples. **(8+12=20)**
3. Differentiate clearly any four of the following: **(4×5=20)**
 - (a) Autopolyploidy and Allopolyploidy
 - (b) Photosynthesis and Photorespiration
 - (c) Guttation and Exudation
 - (d) Photoperiodism and Thermoperiodism
 - (e) Absorption and Adsorption
4. What is the role of Hybridization in improvement of crop plants? Explain the technique followed for incorporating disease resistance. **(5+15=20)**

PART B

5. Mention major dietary deficiencies in India. Why is it more pronounced in young children? Suggest remedial measures. **(7+13=20)**
6. Write short notes on any four **(4×5=20)**
- (a) National Food Security Mission
 - (b) Food processing
 - (c) Protected cultivation of horticultural crops
 - (d) Plant quarantine measures
 - (e) Pheromones
7. (a) Discuss the causes of citrus decline and their management **(10)**
(b) Discuss briefly the prevention and curative measures for control of stored grain pests. **(10)**
8. Analyse the main causes of low productivity of fruit and vegetables in North East region. Discuss measures to minimize post harvest losses of fruits and vegetables. **(10+10=20)**

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