

**CSM : 15**

**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. Write short notes on any four of the following: **(4×5=20)**
  - (a) Laws of Heredity
  - (b) Significance of linkage and cross over in recombination breeding
  - (c) Classes of improved seed
  - (d) Genetically modified food
  - (e) Apomixis
  
2. Write short notes on any four of the following: **(4×5=20)**
  - (a) Heritability
  - (b) Self incompatibility
  - (c) Chromosomal aberrations
  - (d) Sex linked characters
  - (e) Cytoplasmic inheritance
  
3. Write short notes on the following: **(4×5=20)**
  - (a) PPVFRA
  - (b) DNA fingerprinting
  - (c) Cartagena protocol on Biosafety
  - (d) Certified seed and truthful labelled seed
  
4. Discuss the difference between C3, C4 and CAM mechanism of photosynthesis with examples. **(20)**

**PART B**

5. (a) What do you understand by protected cultivation and high-tech horticulture? Discuss various approaches for the same. **(10)**
- (b) Discuss the role of fruits and vegetables in human nutrition. **(10)**
6. What are the broad principles of disease and pest control? Describe integrated pest and disease management. **(20)**
7. Write short notes on the following: **(4×5=20)**
- (a) Targeted Public Distribution System in Mizoram
  - (b) National Food Security Mission (NFSM)
  - (c) Status of food processing industries in Mizoram
  - (d) Bamboo Flowering and Famine Combat Schemes (BAFFACOS)
8. Write short notes on the following: **(4×5=20)**
- (a) BPL population
  - (b) National dietary guidelines
  - (c) Protein energy malnutrition
  - (d) Food processing constraints

\* \* \* \* \*