

100018

AGRICULTURE

Paper-II

Time: 3 Hours

Full Marks: 100

Instructions : (1) Answer any five questions.

(2) The figures in the right-hand margin indicate full marks for the questions.

1. Write short notes on the following : $5 \times 4 = 20$
 - (a) Sustainable agriculture
 - (b) Crop diversification
 - (c) Multiple cropping
 - (d) Organic farming
2. (a) What is the difference between weather and climate ? Describe the different types of weather forecasting and its benefit to farming community. $2 + 8 = 10$
(b) What is scheduling of irrigation ? Describe the different methods of scheduling irrigation in brief. $2 + 8 = 10$
3. (a) What is soil structure? How are soil structures described based on shape ? Describe briefly. $1 + 9 = 10$
(b) What do you mean by essential plant nutrients ? How are they classified based on amount required and function in plant? Explain with examples. $3 + 3 + 4 = 10$
4. (a) What is weed ? Describe the different methods of weed control in crop field. $2 + 8 = 10$
(b) Describe the package of practices of maize with reference to variety, sowing time, spacing, nutrient management, method of sowing and irrigation management. 10
5. (a) What is heterosis ? Mention some manifestations of heterosis. How is heterosis exploited commercially? $2 + 4 + 4 = 10$
(b) Describe the role of national and state seed agencies in production, processing and marketing of improved seeds. 10
6. (a) Write the causal organisms, most distinguishing symptoms and management practices of the following diseases : $5 \times 2 = 10$
 - (i) Late blight of potato
 - (ii) Stem bleeding of coconut

- (b) Write the nature of damage and management practices of the following pests : $5 \times 2 = 10$
- (i) Stem borer of rice
 - (ii) Citrus trunk borer
7. (a) Describe the package of practices of banana with reference to cultivars, soil type, selection of planting materials, planting time, planting method, interculture operations, nutrient management and irrigation management. 10
- (b) Write short notes on the following : $5 \times 2 = 10$
- (i) Absorption of water by plant
 - (ii) Photoperiodism
8. (a) What is farm management ? Describe the different types of farm and systems of farming. $2 + 8 = 10$
- (b) What is Agricultural Extension ? Describe the role of Agricultural Extension in increasing the productivity of agriculture. $2 + 8 = 10$
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