

AGRICULTURE

Note: Attempt five questions in all. All questions carry equal marks i.e 30, Q no. 1 is compulsory. Answer two questions from Part I and two questions from Part II. The parts of the same question must be answered together and must not be interposed between answers to other questions.

1. Write critical notes on any four of the following: (4x7.5=30)
- (a) Storage pests of wheat
 - (b) Bio fertilizers
 - (c) Integrate pest management
 - (d) Lab to land programme
 - (e) Dormancy
 - (f) Male Sterility

PART I

- 2.(a) Describe the concept of multiple cropping and its role in food production. (10)
- (b) What can be the impact of WTO on Indian agriculture? (10)
- (c) Name important weeds of wheat and rice crops along with their control measures. (10)
- 3.(a) What are the problems of dry land agriculture? (10)
- (b) Explain different approaches to reduce run of losses of irrigation water. (10)
- (c) Discuss different strategies to minimize adverse effects of water logging on crop production.(10)
4. (a) Briefly explain different types of soils in India. (10)
- (b) Describe the approaches for the reclamation of alkali soils (10)
- (c) Discuss the impact of advances in information technology in agriculture. (10)

PART II

5. (a) Describe the ultrastructure of a eukaryotic chromosome. (10)
- (b) Discuss the role of transgenic crops in India agriculture. (10)
- (c) How induced polyploidy can be utilized in crop improvement. (10)
6. (a) Explain different classes of speed. (10)
- (b) Discuss the role of plant growth regulators in tissue culture. (10)

- (c) Explain different approaches for the control of storage pests of gram and wheat. (10)
7. (a) Discuss the problems of vegetable growers in India (10)
- (b) What are the problems in post-harvest handling and marketing (10)
- (c) Discuss the role of fruits in human nutrition. (10)

