

Code -01
AGRICULTURE
Time: 3hrs
Maximum Marks: 150

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 1/2=30)

- (a) Storage pests of wheat
- (b) Biofertilizers
- (c) Integrate pest management
- (d) Lab to land programme
- (e) Dormancy
- (f) Male sterility

PART 1

- 2.(a) Describe the concept of multiple cropping and its role in food production. (10)
- (b) What can be the impact of W T O 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)