

AGRICULTURE (Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Write short notes on any three of the following in about 200 words each: **20×3=60**
- (a) Allelopathy
 - (b) Agroforestry
 - (c) Soil pollution
 - (d) N-use-efficiency vs. N-utilization-efficiency [?]
2. Differentiate between mixed cropping & inter-cropping. Give types of inter-cropping. Discuss the criteria for evaluation of the advantage of inter-cropping & suggest the best one. **60**
3. Elaborate the constraints of pulse production in India. Suggest suitable strategies to overcome these constraints. **60**
4. Define marginal & small farmers. Give a list of (a) Non-monetary inputs & (b) Low cost inputs technology useful for these farmers, Discuss in detail two each from a & b list. **60**

SECTION 'B'

5. Write short notes on any three of the following in about 200 words each: **20×3=60**
- (a) Contract farming
 - (b) Crop biotechnology
 - (c) Symbiosis
 - (d) Precision in agriculture
6. Define integrated weed management. Suggest integrated weed management for rice-wheat, and groundnut-pigeon pea, inter-cropping systems. **60**
7. Write in tabular form the recommended package of practices viz. sowing time, seed rate, spacing, irrigation and weed control schedule of sugarcane, potato, chick pea, soybean and transplanted rice for higher production. **60**
8. Discuss in brief any four of the following: **15×4=60**
- (a) Method of demonstration
 - (b) Farm mechanization

- (c) Farm planning and budgeting
- (d) Farmers and research linkages
- (e) Factors of production