

Indian Forest Service Exam (I F S 2010)  
2010.

Sl. No. 6994

DP-CHA-011

## AGRICULTURE

### Paper I

*Time Allowed : Three Hours*

*Maximum Marks : 200*

### INSTRUCTIONS

*Candidates should attempt questions 1 and 5 which are compulsory, and any THREE of the remaining questions selecting at least ONE question from each Section.*

*The number of marks carried by each question is indicated at the end of the question.*

*Answers must be written in ENGLISH.*

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(Contd.)

## Section 'A'

1. Answer any *four* of the following : 4×10=40
  - (a) Resource management for Sustainable Agriculture
  - (b) Diversification and Intensification in Agriculture
  - (c) Traditional Agro-Forestry systems existing in India
  - (d) Problems of herbicide resistance in crops
  - (e) Bio-inoculants in relation to soil health
  
2. Describe in detail — planting pattern; nutrient management, weed management, water management and productivity for
  - (a) Direct seeded rice
  - (b) Chickpea
  - (c) Lucerne and
  - (d) Sunflower 4×10=40
  
3. Explain the following : 4×10=40
  - (a) Classical biological control vs Bio-herbicides
  - (b) Soil solarization as a tool for weed control
  - (c) Significance of C : N Ratio
  - (d) Phosphorus fixation in relation to soil pH

4. Discuss the following in brief :  $4 \times 10 = 40$

- (a) Integrated Nutrient Management (INM)
- (b) Factors affecting nitrogen losses
- (c) Resource Conservation Technologies in modern agriculture
- (d) Significance of Sulphur and Zinc nutrition in intensive agriculture.

**Section 'B'**

5. Answer any *four* of the following :  $4 \times 10 = 40$

- (a) Management of Waste Lands for agricultural production
- (b) Role of Krishi Vignan Kendras in transfer of technology
- (c) Meaning and classification of agricultural marketing functions.
- (d) Role of farm women in agriculture
- (e) Self Help Groups (SHGs)

6. Describe the following in brief :  $4 \times 10 = 40$

- (a) In-situ rain water management
- (b) Crop management in saline soils
- (c) Alternate land use systems
- (d) Different types of costs (TVC, TFC, TC, AVC, AFC, ATC, MC)

7. Answer the following :

- (a) Problems in dry land agriculture; soil and crop management strategies for stabilizing yields  
10+10=20
- (b) Landless agricultural labour — Problems and government measures 10
- (c) Short term and long term effects of agricultural mechanization 10

8. Describe briefly the following.: 4×10=40

- (a) Techniques of recharging ground water
- (b) Law of diminishing returns
- (c) Effective irrigation scheduling for (i) rice and (ii) maize
- (d) Impact of climate change on agriculture