

Indian Forest Service Exam (1 Feb 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.

(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 4×10=40
 - (a) Direct seeded rice
 - (b) Chickpea
 - (c) Lucerne and
 - (d) Sunflower

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