

CSM – 6/16
Agriculture
Paper – I

Time : 3 hours

Full Marks : 300

The figures in the right-hand margin indicate marks.

*Candidates should attempt Q. No. 1 from Section – A and Q. No. 5 from Section – B which are compulsory and any **three** of the remaining questions, selecting at least **one** from each Section.*

SECTION – A

1. Answer any **three** of the following in about **200** words each : 20×3 = 60
 - (a) Give a brief account on various cropping pattern. How does it influence the crop production.
 - (b) Narrate the processes on how the industrial effluents pollute water and soil.

- (c) Briefly enumerate the importance on principles and practices followed in organic farming.
 - (d) Narrate the package of practices adopted in fibre crops with examples and the strategies for improvement.
2. How would you increase the water use efficiency of crops ? Briefly describe the methods of reducing the run-off losses of irrigation water and explain the significance of micro irrigation. Narrate the qualities of irrigation water and how the drainage of water logged soils can be done.

60

3. Explain, with examples, on various groups of herbicides used in chemical weed control. What do you mean by crop weed association and explain the significance of weed control efficiency. What is meant by biological weed control and how does it differ from cultural weed management.
4. What do you mean by agro forestry and how does it differ from social forestry ? Define and list

60

out the essential micronutrients and narrate how the soil fertility is evaluated for fertilizer usage. Draw a sketch on how the fixation of phosphorous occur in soils and how its efficiency can be improved. 60

SECTION – B

5. Write short notes on any **three** of the following in **200** words each : $20 \times 3 = 60$
- (a) How the climatic factors regulate the crop productivity ? Explain with suitable examples.
 - (b) Define how ecology regulates biodiversity. What are its sources and how it can be managed ?
 - (c) Narrate how the environmental pollution becomes hazardous to crops.
 - (d) Narrate how effectively farm planning and budgeting can be done.
6. Discuss how the co-operative play a role in determining the economy of agriculture. Narrate how the Intellectual Property Rights can be

related to agriculture. How would you justify that farming system benefit the economy in agriculture and discuss the factors which control the process ? 60

7. Narrate the evaluation of agricultural extension programme and mention their role and importance in rural development. How would you organize a training programme for extension workers and how it can be made useful to farming community ? Distinguish between small and marginal farmers and explain how does it regulate agricultural production and rural employment. 60

8. Define institution-village link programme. How does it help the farming community. Give a brief account on how General Agreement on Trade and Tariff affect the economy of Indian farming community. Give a brief account how the marketing and pricing of agricultural inputs and outputs are decided and their impact on farmers. 60

