

<b>CSM – 6/17</b>
<b>Agriculture</b>
<b>Paper – I</b>

*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 and their importance in crop production.
- (b) How does the industrial effluents cause water and soil pollution ?

- (c) Discuss the principles and practices followed in organic farming.
- (d) Narrate the package of practices adopted in sugarcane 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 drip and sprinkler irrigation. Narrate the qualities of irrigation water. 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. How the weeds are disseminated and give a relationship about the crop-weed association ? What is meant by biological weed control and how does it differ from cultural weed management ? 60
4. What do you mean by agroforestry and how does it help in agriculture ? Define and list out the essential nutrients and narrate how the soil fertility

is evaluated for fertilizer usage. Draw a sketch on how the fixation of nitrogen, phosphorus and potassium occur in soils. How their efficiency can be improved ? 60

### SECTION – B

5. Write short notes on any three of the following in 200 words each : 20×3 = 60

- (a) How the climatic factors regulate the crop growth ? Explain with suitable examples.
- (b) Define Biodiversity. What are its sources and how it can be managed ?
- (c) Narrate how the environmental pollution becomes hazardous to crops and animals.
- (d) Importance of farm planning and budgeting.

6. Discuss how the co-operative plays a role in determining the economy of agriculture. Narrate how the Intellectual Property Rights is related to agriculture and its importance. How would you justify that farming system benefit the economy in agriculture ? Discuss the factors which control the process. 60

7. How would you evaluate agricultural extension programme ? Mention their role and importance in rural development. How would you organize a training programme for extension workers and how it will be beneficial to farming community ? Differentiate among the small, marginal and big farmers and explain how does it regulate agricultural production and rural employment.

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8. What do you mean by institution-village link programme and how would you justify it will help the farming community ? Give a brief account on how World Trade Organisation and 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.

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