

BSR/3/15

0034 AGRICULTURE

2016

FIRST PAPER

Full Marks : 200

Time : 3 hours

The figures in the margin indicate full marks
for the questions

PART—A

Answer any **eight** questions

1. What are the different types of multiple cropping system? Discuss the factors to be considered for different management of soil fertility. 4+16=20
2. What are the major problems of watershed? Suggest suitable management practices to overcome those problems. 10+10=20
3. Write down the effect of organic manures. Discuss the advantages and disadvantages of green manuring. 6+7+7=20
4. What do you mean by weathering of rocks? Briefly discuss the mechanical and chemical processes of soil formation. 2+9+9=20

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(Turn Over)

5. Write about the factors to be considered in preparation of farm plan. What are the guiding principles to be followed in farm planning? According to you, what characteristics depict a good farm plan?
10+5+5=20
6. Enumerate the various roles of agroforestry. Discuss the role of agroforestry on soil improvement, production maximization and increase farm income.
10+10=20
7. Give the life span classification of weeds. Write about the survival mechanism of weeds. Discuss critically the various methods of weed control.
5+5+10=20
8. State the concepts of farm management. Elaborate the scope, improvement and characteristic of farm management. Discuss the types of farm budgeting and differentiate between them.
5+5+10=20
9. Define the term ecology. State the physical and social factors that affect the production of crops. Discuss critically the effect of climatic factors on growth and development of crops.
2+6+12=20

10. Discuss critically the role of agricultural extension in transfer of technology to farmers. Differentiate between the method demonstration and result demonstration. Write in brief the historical perspectives of LAB and LAND programme and its impact on agriculture. 5+6+9=20
11. Write in brief about the various mechanism of herbicide absorption. 20
12. Differentiate between the water requirement and irrigation requirement of crops. State the principles of water management in intensive agriculture. Discuss critically about the scheduling of irrigation in autumn rice (transplanted) and sugarcane crops. 3+5+12=20

PART—B

Answer *any five* questions

13. Discuss the impact of global warming in agriculture. 8
14. Briefly discuss the desirable characteristics of leguminous green manuring crops. 8
15. Write about the allelopathic effect of weeds on crops. 8

16. Discuss the effect of greenhouse gases on global warming and climate change. 8
17. Write about the mechanism of plant adaptation to drought. 8
18. Discuss about minimum tillage and zero tillage. 8
19. Write about the farm mechanization and its impact on rural employment. 8
20. Discuss critically about various methods for erosion and run off management of soil. 8
