AGRONOMY

Time Allowed : 3 hours   Full Marks : 100

*The figures in the margin indicate
full marks for the questions.*

*Attempt 10 (ten) questions
taking 5 (five) questions from each section.*

SECTION A

1. Describe the role of Agronomist in making Mizoram self sufficient in food grain production.   **(10)**

2. Define growth. Enlist the factors influencing growth and development   **(5+5=10)**

3. What are the methods of weather forecasting? Describe the role of medium range weather forecasting to save the crop against frost damage.   **(5+5=10)**

4. Define environment. Enlist the factors influencing soil environment.   **(5+5=10)**

5. What is conservation tillage? How is it different from conventional tillage?   **(5+5=10)**

6. What do you understand by seed vigour? What are the important components of estimating seed vigour?

(5+5=10)

7. What is stand establishment? How does it help in improving growth and yield of crops? **(5+5=10)**

8. What is soil tilth? What are the implements being used in making good soil tilth? **(5+5=10)**

SECTION B

9. Give criteria of essentiality of an element in plant nutrition

(10)

10. What are the factors responsible for low fertilizer use efficiency? How can efficiency of fertilizer use be improved? **(5+5=10)**

11. Describe the steps to be taken in watershed management.

(10)

12. Explain the type and methods of water harvesting for crop production **(5+5=10)**

13. What do you mean by mulch cropping? Enlist various types of mulch being used in crop production **(5+5=10)**

14. Define sustainable agriculture. Describe bio-physical indicators of sustainability. **(5+5=10)**

15. What is agricultural drainage? Give methods and types of drainage for optimum crop growth. **(5+5=10)**

16. Differentiate the following: **(5×2=10)**

(a) Cropping system and cropping pattern

(b) Deficiency symptoms and toxicity symptoms

(c) Bulky organic manure and concentrated organic manure

(d) Rill erosion and gully erosion

(e) Modern agriculture and sustainable agriculture

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