MIZORAM PUBLIC SERVICE COMMISSION

General Competitive Examinations for Recruitment to the post of Junior Grade of Mizoram Forest Service i.e. Assistant Conservation of Forest (ACF) under Environment, Forest & Climate Change Department, Government of Mizoram, 2018

AGRONOMY

Time Allowed : 3 hours | Full Marks : 100

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

Answer any 10 (ten) questions taking 5 (five) questions from each section.

SECTION - A

1. What is Agronomy? Discuss the scope of Agronomy and its relation to other sciences. **(2+4+4=10)**

2. Write the differences between soil fertility and soil productivity; what are the major factors influencing micronutrients availability in soils. **(7+3=10)**

3. Explain how seeds are classified by the seed certifying agencies. **(10)**

4. What do you understand by optimum plant population? What are the factors influencing optimum plant population? **(2+8=10)**

5. Enumerate the major agro-climatic zones of the country and briefly describe their characteristics. **(10)**

6. What are the characteristics of good soil tilth? How does tillage influence on soil physical properties? **(5+5=10)**

7. Define growth. Give sigmoid growth curve along with distinct phases. **(5+5=10)**

SECTION - B

8. Write short note on Sustainable Agriculture? Discuss the differences between sustainable agriculture and modern agriculture. **(4+6=10)**

9. Differentiate between :- **(5×2=10)**

(a) Manures and fertilizers

(b) Dryland agriculture and rainfed agriculture

(c) Facultative and obligate weeds

(d) Sheet erosion and Rill erosion

(e) Dryland farming and rainfed farming

10. What do you mean by cropping system? What are the types of cropping system practice in Mizoram? **(5+5=10)**

11. What is the concept of weeds? Enlist important characteristics of weeds which are responsible for long persistency in the field. **(5+5=10)**

12. What are the agronomic measures for controlling soil erosion? Enlist various mechanism to conserve moisture. **(5+5=10)**

13. What are the macro and micro plant nutrients? Enlist groups of nutrients based on their functions in the plants. **(4+6=10)**

14. What do you mean by scheduling of irrigation? Enlist the approaches of scheduling of irrigation. **(5+5=10)**

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