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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Agriculture) (2014 & Onwards) (Sem.-3)

**SOIL CHEMISTRY, FERTILITY AND NUTRIENT MANAGEMENT**

Subject Code : BSAG-307

Paper ID : [72557]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

**Q1 Write short notes on the following :**

- (a) Top dressing
- (b) Role of Ca, Mg and S in plant growth
- (c) Sodium adsorption ratio
- (d) Critical limit
- (e) Muriate of potash
- (f) Incomplete complex fertilizers
- (g) Macronutrients
- (h) Nutrient deficiency
- (i) Soil with pH < 7
- (j) Bone meal fertilizers

### **SECTION-B**

- Q2 Discuss role of beneficial and essential plant nutrients for plant growth.
- Q3 How DRIS approach is beneficial for plant analysis?
- Q4 Discuss different chemical methods for reclamation of acidic soils.
- Q5 Explain different techniques to increase nitrogen use efficiency.
- Q6 Explain plant tissue tests for nutrients availability.

### **SECTION-C**

- Q7 Discuss salt affected soils and conditions under which these are formed.
- Q8 Explain different approaches for soil fertility evaluation.
- Q9 Describe fertilizer recommendations of N, P and K fertilizers for some important oil seed crops grown under irrigated conditions.