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Total No. of Pages : 02

Total No. of Questions : 18

B.Sc. (Agriculture) (2014 to 2018) (Sem.-1)

**SOIL SCIENCE-I**

Subject Code : BSAG-104

M.Code : 72211

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**

**Write briefly :**

1. Alluvium
2. Laterization
3. Salinization
4. Bedrock
5. Anion exchange Capacity
6. Bulk density
7. Percolation
8. Drainage
9. Leaching
10. Micelle

### SECTION-B

11. Compare USDA and ISSS particle size for textural classes.
12. In a 45 percent porous soil, the bulk density is 1.52. Calculate the particle density of the soil.
13. Categorize drainage classes of land and explain in detail
14. Discuss significance of soil types in agriculture.
15. Enlist factors of soil formation and any two in detail.

### SECTION-C

16. Define a rock. Discuss the conditions under which different rocks are formed.
17. Discuss the conditions under which saline and sodic soils are formed. Also explain in detail about their reclamation.
18. Derive mathematically Darcy's law showing movement of water under submerged conditions.

**NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.**