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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. Agriculture (2014 &amp; Onwards) (Sem.-7)

**SOIL PHYSICAL AND BIOLOGICAL ENVIRONMENT**

Subject Code : BSAG-CS-701

M.Code : 74828

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**

1. Write short notes on the following :

- (a) Aggregation
- (b) Particle density
- (c) Erosion
- (d) Soil consistence
- (e) Redistribution of water
- (f) Soil micro organism
- (g) Sulphur transformation in soil
- (h) Iluviation
- (i) Soil aeration
- (j) Soil texture





**SECTION-B**

2. Discuss infiltration and redistribution of water in soil.
3. Discuss in detail the soil thermal regimes of humid and arid regions.
4. Explain different processes which affect soil temperature
5. Enlist factors of soil formation and discuss role on any one in detail.
6. Explain management techniques to check soil erosion.

**SECTION-C**

7. Discuss microbial transformation of carbon and nitrogen in soils.
8. Derive mathematically Darcy's law showing movement of water under unsubmerged conditions.
9. Classify soil organism and explain their role in soil with reference to plant growth.

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

