Roll No.

Total No. of Pages: 02

Total No. of Questions: 18

B.Voc.(Agriculture) (2018 & Onwards) (Sem.-1)

SOIL SCIENCE
Subject Code: BVAG-105-18

M.Code: 75653

Time: 3 Hrs. Max. Marks: 30

## **INSTRUCTIONS TO CANDIDATES:**

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

# **SECTION-A**

## Write short notes on:

- Q1. Air porosity
- Q2. Microscopic and capillary water
- Q3. Salinization and water logging
- O4. Percolation
- Q5. Soil colloids
- Q6. Soil organisms
- Q7. Soil texture and soil structure
- Q8. Immobilization
- Q9. Penetrometer
- Q10. Mineral matter and organic matter

**1** M-75653 (S2)-475

### **SECTION-B**

- Q11. Explain the concept of hardsetting in soils; give the problems associated with this phenomenon.
- Q12. Discuss the role of soil temperature and air on plant growth.
- Q13. Write a short note on reclamation of saline and alkaline soil.
- Q14. Discuss briefly how sedimentary rocks are formed?
- Q15. Discuss in details the effect of organic matter on soil properties.

## **SECTION-C**

- Q16. Discuss the influence of various structural types on soil properties such as aeration and drainage among others.
- Q17. a) Give examples of any five colloidal materials present in the soil.
  - b) In each case, highlight the influence of the colloidal material on soil properties.
- Q18. Define Anion and Cation Exchange Capacity. Discuss the factors affecting AEC and CEC.

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.

**2** | M-75653 (S2)-475