

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 2 1/ 2 (Two and Half) marks each and students has 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 the following :

Q1 Bulk density

Q2 Cation exchange capacity

Q3 Infiltration rate

Q4 Charge on clay micelle

Q5 Marshy soils

Q6 Soil colloid

Q7 Colluvium

Q8 Eluviation

Q9 Volatilization

Q10 Denitrification

## SECTION-B

- Q11 Discuss processes of soil formation and discuss role on any one in detail.
- Q12 Describe the source of negative charge on silicate clay minerals.
- Q13 Explain the composition of earth crust with the help of diagram.
- Q14 Bulk density and particle density of a field were reported as 1.65 and 2.80 respectively. Calculate the percent porosity of soil.
- Q15 Derive a relation among bulk density, particle density and porosity.

## SECTION-C

- Q16 Explain beneficial and harmful effects of soil organism.
- Q17 Describe the conditions under which acidic soils are formed and write in detail about their reclamation.
- Q18 Define rock and explain its detailed classification.

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.