

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

B.Sc. Agriculture (2014 to 2018) (Sem.-4)

**MANURES AND FERTILIZERS**

Subject Code : BSAG-407

M.Code : 72759

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. NADEP Compost
2. Biogas slurry
3. Non-edible cake
4. Secondary nutrients
5. Vermibed
6. Bio char
7. Consortium
8. Localized placement
9. Fertigation
10. Poultry manure

## SECTION-B

11. Define green manuring. Write down the characteristics of good green manuring crop. Write three commonly grown green manuring crops and procedure of sowing green manuring crop after wheat harvesting.
12. Define complex fertilizers. Write down properties of complex fertilizers.
13. a) Discuss the precautions while storing fertilizers.  
b) Discuss volatilization losses of nitrogen.
14. Discuss different methods of fertilizer application.
15. Discuss fate and reaction of urea in the soil.

## SECTION-C

16. Differentiate secondary and micro nutrients. Write down deficiency symptoms of zinc and manganese and how their deficiency can be rectified. Write down the crops in which the deficiency of various micro nutrients is observed.
17. a) Write down the properties of nitrogenous, phosphatic and potassic fertilizers.  
b) Define bio gas. Discuss the benefits of biogas and how biogas slurry can be recycled in agriculture.
18. a) How can you check adulteration in fertilizers?  
b) Discuss the fertilizer control order, in detail.

**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.**