

Roll No.: .....

**SGT UNIVERSITY****END TERM THEORY EXAMINATION JULY - 2022**

<b>Faculty/College of Study:</b>	<b>Agricultural Sciences</b>	<b>Year/Semester:</b>	<b>2<sup>nd</sup> Semester</b>
<b>Program:</b>	<b>M.Sc. Agriculture (Agronomy)</b>	<b>Duration:</b>	<b>02:00 Hrs.</b>
<b>Course/Subject:</b>	<b>Principles and Practices of Soil Fertility and Nutrient Management</b>	<b>Maximum Marks:</b>	<b>40</b>
<b>Course/Subject Code:</b>	<b>11060207</b>	<b>Batch:</b>	<b>2020 &amp; 2021</b>

**Instructions: -**

1. Write Your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against each question.
4. Illustrate your answer with diagram wherever required.

**SECTION-A****(Very Short Answer Type Questions)****Note: All Questions are compulsory: -****[10X1=10]**

<b>S. No.</b>	<b>Question</b>	<b>Marks Allotted</b>
1	Explain organic farming	1
2	Name the essential macro nutrients of plant growth	1
3	Define complex fertilizers	1
4	Explain Integrated Nutrients Management	1
5	Write two green manure crops	1
6	In general, What is N, P, and K composition in FYM	1
7	When phosphate and potassium fertilizers are applied	1
8	Define bio fertilizer	1
9	In which forms, nitrogen and sulphur are taken up by plants	1
10	Define manures	1

**SECTION-B**  
**(Short Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[3X2=6]**

S. No.	Question	Marks Allotted
11	Discuss the criteria of essentiality	2
12	What are the deficiency symptoms of nitrogen in plants	2
13	Explain the concept of foliar application of fertilizers	2

**SECTION-C**  
**(Descriptive Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[3X4=12]**

S. No.	Question	Marks Allotted
14	Discuss the differences between soil fertility and productivity	4
15	What are the functions of nitrogen and sulphur in plants	4
16	Explain the process of nitrification and denitrification	4

**SECTION-D**  
**(Long Answer Type Questions)**

**Note: All Questions are compulsory: -**

**[2X6=12]**

<b>S. No.</b>	<b>Question</b>	<b>Marks Allotted</b>
17	Discuss the preparation and use of vermicomposting	6
18	Describe agronomic methods of increasing fertilizer use efficiency.	6