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GIET UNIVERSITY, GUNUPUR – 765022
 B. Tech (Third Semester - Regular) Examinations, December – 2022
21BAEPC23001 – Principles of Agronomy
 (AGE)

Time: 3 hrs

Maximum: 70 Marks

Answer ALL questions
 (The figures in the right hand margin indicate marks)

PART – A**(2 x 5 = 10 Marks)**Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. What is the difference between tillage and tilth?	CO1	PO1
b. Define bio-fertilizer and give suitable examples.	CO2	PO1
c. Differentiate between bulky organic manures and concentrated organic manures.	CO2	PO1
d. Define Available soil moisture.	CO3	PO1
e. What are three criteria of essential nutrients?	CO2	PO1

PART – B**(15 x 4 = 60 Marks)**Answer ALL questions

	Marks	CO #	Blooms Level
2. a. What is criteria of essentiality?	5	CO2	K1
b. Define macro and micro nutrient and write down the macro nutrient deficiency symptoms in plants.	10	CO2	K1
(OR)			
c. Write about the classification of Nitrogenous fertilizer.	8	CO2	K1
d. Explain about biofertilizers in detail.	7	CO2	K1
3.a. Write about the classification of Phosphatic fertilizer.	8	CO2	K1
b. Define Vermi composting, vermi wash and green manuring.	7	CO2	K1
(OR)			
c. Classify different types of soil water in detail with its characteristics.	8	CO3	K1
d. Explain about different types of surface drainage.	7	CO3	K1
4.a. Explain different types of soil water movement	8	CO3	K1
b. Write down about beneficial and harmful effect of weeds.	7	CO4	K1
(OR)			
c. Write about direct and indirect methods of soil moisture measurements.	8	CO3	K1
d. What is tilth and what are the characteristics of good tilth?	7	CO1	K1
5.a. What are the different methods of fertiliser application to increase the soil fertility?	10	CO2	K1
b. What is the difference between soil fertility and soil productivity?	5	CO2	K1
(OR)			
c. What is tillage and What are the objectives of tillage?	8	CO1	K1
d. Mention about the advantage and dis-advantage of zero tillage.	7	CO1	K1

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