GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR
(GIET UNIVERSITY)
B. Sc. (Ag.) (Second Semester - Regular) Examinations, July – 2025
AC-122- Soil Fertility Management

Time: 2 hrs   Maximum: 40 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.	Differentiate between a straight fertiliser and a complex fertiliser.	CO3	K1
b.	What is Hidden hunger?	CO4	K2
c.	Potassium is known as "Quality element". Why?	CO1	K1
d.	Explain Law of Minimum.	CO2	K1
e.	What is a functional element?	CO1	K2

PART – B   **(6 x 5 = 30 Marks)**

Answer *ANY SIX* of the following questions

		Marks	CO #	Blooms Level
2.	What is criteria of essentiality? Provide brief classification of essential nutrients.	5	CO1	K2
3.	Briefly explain the function and deficiency of the following elements. a) Phosphorus b) Sulphur	5	CO1	K2
4.	Explain the mechanism of Ion absorption by plants.	5	CO2	K2
5.	Describe the K-cycle and its dynamics in soil plant system with proper sketch.	5	CO2	K2
6.	List down and elaborate the principle and components of INM.	5	CO3	K2
7.	Briefly explain nitrogen loss from soil.	5	CO4	K3
8.	List and describe the various types of nitrogen fertilizers, along with their characteristics and examples.	5	CO4	K2
9.	Classify chemical fertilizers based on their nutrient content, and provide suitable examples for each category.	5	CO3	K3

--- End of Paper ---