QPC: RN22MSCAG001

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### GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Ag.) (First Semester) Examinations, November – 2022

# **AGRON- 501 – Modern Concepts of Crop Production**

Time: 2 hrs Maximum: 55 Marks

# The figures in the right hand margin indicate marks. PART – A

# Q1. Define (or) Explain the following in one or two sentences.

 $(1 \times 10 = 10 \text{ Marks})$ 

- a. Ephemeral
- b. Lodging
- c. crop modelling
- d. Precision agriculture
- e. Hydrological drought
- f. Contingency Cropping
- g. Baule unit
- h. Aeroponics
- i. Asymptotic response
- j. GPS

#### PART - B

# **Q2.** Answer ANY SIX questions: (Short Answer Questions)

 $(2.5 \times 6 = 15 \text{ Marks})$ 

- a. Explain different types of drought based on duration
- b. Inverse yield nitrogen law
- c. Ideotype of wheat
- d. Effect of light on crop growth
- e. Principle of IFS
- f. Theory of Nitrogen constant 318
- g. Relative constant rate of dry matter accumulation
- h. Stomatal mechanism for water conservation

#### PART - C

# Attempt ANY SIX questions. (Long Answer Questions)

 $(5 \times 6 = 30 \text{ Marks})$ 

- 3. What do you mean by Contingency Cropping? Explain the Contingency Planning for rainfall abnormalities?
- 4. Explain briefly about mechanism that exist in plants for conserving moisture in dry regions?
- 5. Explain the effect of lodging in cereals and its management?
- 6. Describe in brief about the factors affecting crop production and 5P's of yield potential?
- 7. Explain in brief the Agro- Climatic Zones of India according to Planning Commission 1989 and locate it on the Map?
- 8. Define organic farming and write down the History of Organic farming. Explain the aim of organic farming?
- 9. Explain in details about yield and environmental stress on crops with the management practices?
- 10. Explain important features of ideal plant type. Give examples of 2 crops with brief description?

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