



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions. (10x3=30)

- a. Define soil texture.
- b. What is structure of Auxins.
- c. What are deficiency symptoms of Nitrogen.
- d. What is role of phytochromes in higher plants.
- e. What is difference between hydroponics and aeroponics techniques.
- f. What is difference between Substrate level phosphorylation & oxidative phosphorylation
- g. Enlist the adaptations of xerophytes.
- h. Which pathway plants have adopted to maximize the oxygenase activity of rubisco.
- i. Define wind. What are its effects on plant growth?
- j. Name nitrogen fixing bacteria.

Q.2. Answer the following questions

- i. Explain Water cycle. (10 Marks)
- ii. What is Glycolysis. Draw its pathway with energy consumption. (10 Marks)
- iii. a) What is maximum yield of cytosolic ATP from complete oxidation of sucrose to CO₂ via aerobic glycolysis and the citric acid cycle. (05 Marks)
- b) What are analytic characteristics of plant community. (05 Marks)