AR 21



QP Code: RD21MSC065

GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Third Semester) Examinations, December - 2022

20PSPE302 - Plant Physiology

(Life Science – Plant Science)

Time: 3 hrs Maximum: 70 Marks (The figures in the right hand margin indicate marks.) PART - A $(2 \times 10 = 20 \text{ Marks})$ CO# Blooms Q.1. Answer ALL Questions Level CO 1 **K**1 What are the aspects of water potential? CO 1 K1 b. What do you mean by passive absorption of water? CO 2 **K**1 Define velamen tissue? c. CO 2 **K**3 What is the importance of ion-exchange? d. CO3 K2 Define respiratory substrates? e. CO3 K1 f. What is anaerobic respiration? CO 4 K1 Define quantum requirement? g. CO 4 K2 h. What is fluorescence? CO 4 **K**3 Define kranz anatomy? CO 4 K2 What do you mean by parthenocarpy? į. PART - B $(10 \times 5 = 50 \text{ Marks})$ CO# Marks Blooms Answer ANY FIVE questions Level 7 CO 1 K2 2. a. Give an account of ascent of sap in plants? CO 1 K1 3 b. What are the limitation transpiration pull? CO 1 **K**3 7 3.a. Explain in details of Munch's mass flow hypothesis? CO 1 K2 b. Explain mechanism of contact exchange? 3 CO 2 K2 4. a. Describe the importance and deficiency symptoms of five major nutrients? 7 3 CO 2 **K**1 b. Draw the structure of Chloroplast and write its function? 7 CO 3 K2 5.a. Give an account of Kreb cycle? 3 CO 3 K2 b. Explain in details on respiratory quotient? CO 3 **K**3 6. a. Discuss on photophosphorylation of green plants? 7 CO 3 K2 b. Define Quantasome? 3 7.a. Discuss on physiology of flowering in plants? 7 CO 4 **K**3 b. Write on anti-transpirants? 3 CO 4 K2 7 CO 4 K2 8. a. Give an account of photorespiration in plants?

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Discuss about Phytochromes?

3

CO 4

K1