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Register Number :

Date :

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**M.Sc. – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2019**

**BO 8318 : Plant Physiology And Metabolism**

Time- 2 ½ hrs Max Marks-70

**This paper contains ONE printed page and THREE parts**

**Draw diagrams and write examples where necessary**

1. **Define any TEN of the following in two or three sentences 10 × 2 = 20**
2. Spontaneous and Non-spontaneous reactions
3. First and second law of thermodynamics
4. Isozymes
5. Bolting
6. Z- scheme
7. Photophosphorylation
8. Nod factor
9. Brassinosteroids
10. Gluconeogenesis
11. Water potential
12. SPAC
13. Waxes
14. **Write critical notes on any FIVE of the following 5 × 6 = 30**
15. Allosteric enzymes
16. Structure of ATP synthase
17. Glycolysis
18. Pentose phosphate pathway
19. Mechanism of action of Nitrogenase enzyme
20. Potassium pump theory
21. Synthesis of plant phospholipids
22. **Give a comprehensive account of any TWO of the following 2 × 10 = 20**
23. Enzyme inhibition
24. C4 cycle
25. Biosynthesis and physiological effects of Cytokinins

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