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Register Number :

Date :

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-560027**

**M.Sc. – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2018**

**BO 8315 : 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. **Write on any TEN of the following in one or two sentences 10 × 2 = 20**
2. Conjugated enzymes
3. Isozyme
4. Aquaporins
5. Leghaemoglobin
6. Accessory photosynthetic pigments
7. Binding change mechanism
8. 2,4-D
9. Kranz anatomy
10. Absorption spectrum
11. Significance of HMP pathway.
12. Essential and non-essential fatty acids
13. First step in respiration
14. **Write critical notes on any FIVE of the following 5 × 6 = 30**
15. Laws of thermodynamics with examples
16. Enzyme inhibition
17. Pathway of carbon fixation in members of family Crassulaceae
18. Photorespiration
19. Structure and mode of action of Nitrogenase enzyme
20. Potassium pump theory
21. Schematic representation of Glyoxylate pathway
22. **Give a comprehensive account of any TWO of the following 2 × 10 = 20**
23. Electron transport during light reaction of photosynthesis
24. Citric acid cycle and add a note on its energetics
25. Biosynthesis and physiological effects of Gibberellins

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