****

Register Number :

Date : 17-04-2017

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

**M.Sc. – II SEMESTER**

**SEMESTER EXAMINATION: APRIL 2017**

**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 wherever necessary**

1. **Define any TEN of the following in two or three sentences 10 × 2 = 20**
2. Exergonic and endergonic reactions
3. Gibb's free energy and its significance
4. Ribozyme
5. Km and it significance
6. Symplast and apoplast
7. Z-scheme
8. Dimorphic chloroplasts
9. CAM plants
10. RUBISCO
11. Cardiolipin
12. Denitrification
13. Aquaporins
14. **Write critical notes on any FIVE of the following 5 × 6 = 30**
15. Enzyme specificity
16. Active and passive transport of water
17. Photosynthetic pigments
18. Photorespiration
19. Schematic representation of Glycolysis
20. β-oxidation of fatty acids
21. Physiological effects, biosynthesis and mode of action of Ethylene
22. **Give a comprehensive account of any TWO of the following 2 × 10 = 20**
23. Structure of ATP synthase and photophosphorylation
24. Kreb's cyce and its significance
25. Biological nitrogen fixation in legumes

BO-8315-A-17