

ST. JOSEPH'S COLLEGE (AUTONOMOUS) BANGALORE-27
M.Sc. BOTANY – III SEMESTER
MID-SEMESTER TEST: AUGUST 2016
BO DE: 9315: ADVANCED PHYSIOLOGY-ELECTIVE

Time: 1 ½ hrs.

Max. Marks: 35

A. Explain or define any FIVE of the following

5 x 2 = 10

- 1) Photomorphogenesis
- 2) Molecular chaperons
- 3) Phytochrome gene family
- 4) GPCRs
- 5) Lethal and sub-lethal temperature
- 6) LEA proteins
- 7) DREB 1A

B. Write critical notes on any THREE of the following

3 x 5 = 15

- 8) Types and functions of phytochromes
- 9) Structural classes of signaling receptors
- 10) Role of heat shock proteins in heat stress
- 11) Biosynthesis of phenolic compounds
- 12) Osmoprotectants

C. Give a comprehensive account of any ONE of the following

1 x 10 = 10

- 13) Mechanism of drought tolerance in plants.
- 14) Give a detailed account of the structure phytochromes