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Register Number:

DATE: **19-04-2017**

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

**B.Sc. BOTANY-VI SEMESTER**

**SEMESTER EXAMINATION: APRIL-2017**

**BO: 6112 Plant Physiology**

**TIME:3Hrs MAX.MARKS:100**

**\*This question paper has one printed page and three parts**

***\* Draw diagrams wherever necessary***

**A. Define / Explain briefly any TEN of the following: 2 x 10 = 20**

1. Imbibition
2. Biological clocks
3. Phytochrome
4. Vernalization
5. Protoplasmic streaming hypothesis
6. 2,4-D
7. Hydathodes
8. Deficiency symptoms of K
9. Incipient plasmolysis
10. Apical dominance
11. Photoperiodism
12. Bolting

**B. Write critical notes on any FIVE of the following: 7 x 5 = 35**

1. Fluid mosaic model
2. Hydroponics
3. Physiological effects of Cytokinins
4. Give an account of Sigmoid curve
5. What is Seed dormancy? Explain briefly any two methods of breaking seed dormancy
6. Factors affecting mineral uptake
7. Water potential and its components

**C. Write a comprehensive account of any THREE of the following: 15 x 3 = 45**

1. Explain the mechanism of ascent of sap
2. Describe any two theories to explain mechanism of stomatal movement
3. Role of Ethylene and ABA
4. Write notes on a) Phototropic movements b) Seismonastic movements
5. Explain the mechanism of water absorption in plants

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