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Date:

Registration number:

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

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

**SEMESTER EXAMINATION: APRIL 2022**

**(Examination conducted in July 2022)**

**BO 6118 - Plant Physiology and Phytochemistry**

Time- 2 ½ hrs Max Marks-70

This question paper contains **one** printed page and **Three** parts

\*Draw diagrams wherever necessary

**Part-A: Answer any 10 questions in one or two sentences 10X2= 20**

1. Define imbibition and give one example
2. Osmotic potential
3. Define transpiration pull
4. Write any two conditions required for opening of stomata
5. What are hydathodes?
6. Define microelements and write any two examples
7. Write the use of radioactive isotopes in transport of organic solutes
8. What is Photosystem-1?
9. Second law of Thermodynamics
10. Cristae
11. Define Law of limiting factors
12. Define foliar nutrition.

**Part-B: Write short notes on any 5 questions` 5X6= 30**

1. Mechanism of active absorption of water
2. Mechanism of active Ion uptake
3. Any six factors affecting phloem transport
4. Mechanism of photorespiration
5. Anaerobic respiration
6. Explain photoperiodism
7. Briefly describe phototropism and geotropism

**Part-C: Explain any 2 questions in detail 2X10= 20**

1. Mechanisms of carbon fixation in C4 plants
2. Describe Glycolysis
3. Bioassay of Gibberellins and its physiological application