Reg. No…….. Name…… **14U607**

B.Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020

SEMESTER **– 6: BOTANY (CORE COURSE)**

COURSE: **U6CRBOT9: PLANT PHYSIOLOGY AND BIOCHEMISTRY**

(For Supplementary - 2014 Admission)

Time: Three Hours Max. Marks : 60

PART A

I. Answer ALL questions; each question carries 1 mark.

1. What is Guttation?
2. What is DPD?
3. Name a pentose sugar.
4. What is chlorosis?
5. An example of a simple protein enzyme
6. Define pH.
7. What is Red drop?
8. What are Phytochromes? (1 x 8 = 8)

PART B

II. **Answer ANY SIX questions; each question carries 2 marks.**

9. List two characteristic features of C4 plants.
10. What is RUBISCO?
11. What are buffers? What is its significance?
12. What is R.Q.? What is its significance?
13. What is vernalization?
14. What is phloem loading?
15. What are the factors affecting photosynthesis?
16. Distinguish between fats and oils.
17. What is the importance of transpiration in plants?
18. Explain Photoperiodism. (2 x 6 = 12)

PART C

III. Answer ANY FOUR questions; each question carries 4 marks.

19. Give a schematic representation of Glycolysis.
20. Explain Munch's Hypothesis.
21. Explain enzyme kinetics.
22. Explain the primary structure of proteins.
23. What are the major characteristics of enzymes?
24. Describe cyclic photophosphorylation. (4 x 4 = 16)

PART D

IV. **Answer ANY TWO questions; each question carries 12 marks.**

25. Explain the structure, characteristics and mode of action of enzymes.

OR

26. With a schematic diagram, explain the Dark reaction of photosynthesis.

27. What are phytohormones? Describe the different types and their physiological roles in plants.

OR

28. Explain the process of aerobic respiration leading to the signature of ATP

(12 x 2 = 24)

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