



K24P 1064

Reg. No. : .....

Name : .....

**Second Semester M.Sc. Degree (C.B.C.S.S. – OBE-Regular)**  
**Examination, April 2024**  
**(2023 Admission)**  
**BOTANY**

**MSBOT02C09 : Plant Physiology and Biochemistry**

Time : 3 Hours

Max. Marks : 60

**PART – A**

Answer **any five** questions. **Each** question carries **3** marks.

1. Explain the significance of pentos phosphate pathway.
2. Distinguish between essential and non-essential fatty acid.
3. Describe the structure and function of ATP synthase.
4. Comment on MHC.
5. Write the importance of antifreeze proteins.
6. Explain Michelis-Menten equation.

(5×3=15)

**PART – B**

Answer **any three** questions. **Each** question carries **6** marks.

7. Briefly explain photoperiodism.
8. Add note on secondary structure of protein.
9. Explain cyanide resistant pathway.
10. What are the factors which influence enzyme activity ?
11. Briefly explain fatty acid oxidation.

(3×6=18)

P.T.O.

K24P 1064



**PART – C**

Answer **any three** questions. **Each** question carries **9** marks.

12. Briefly explain the response of plants to various stresses.
13. Describe the structure and biosynthesis of the four nitrogen bases present in DNA.
14. Classify lipids.
15. Describe briefly the role of any three phytohormones.
16. Write an essay on immunity and the disorders due to impaired immune system.

(3×9=27)

