Sanjay Ghodawat University, Kolhapur

2020-21

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EXM/P/09/00

Year and Program: 2021/ S.Y B.Sc.	**School of Science**	**Department: S.Y B.Sc.**
Course Code: BOS 202	**Course Title: Botany IV**	**Semester : IV**
Day and Date:	**End Semester Examination**	**Time:2 Hrs. Max Marks:50**

Instructions: 1) All Questions are compulsory.

2) Draw neat labeled diagrams wherever necessary

		Marks	Bloom's Level	CO
Q.1	**Answer/Solve the following (Any Two)**			
a)	Define Water Potential. Write down the properties and functions of water with respect to transpiration.	8	L1	CO1
b)	Explain the mechanism of transport of ions across the cell membrane.	8	L2	CO1
c)	Define Sap? Describe the mechanisms of phloem loading and unloading.	8	L2	CO1
Q.2	**Answer/Solve the following (Any Two)**			
a)	State the pressure flow model with the help of a neat labelled diagram.	8	L1	CO2
b)	How do antennae molecules play an important role in the photosystems? State the difference in C2 and C3 pathway.	8	L2	CO2
c)	Explain the Electron transport chain with the help of a well labeled flow diagram. Also, explain the role of ETC in photosynthesis.	8	L3	CO3
Q.3	**Answer/Solve the following (Any Two)**			
a)	Define Glycolysis. Explain the process of glycolysis in a flow diagram and give its energetics.	9	L2	CO2
b)	With the help of neat labeled diagram, describe the process of biological nitrogen fixation.	9	L3	CO3
c)	What is Photoperiodism?Explain how plants respond to light and temperature.	9	L4	CO4