Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2021/ F.Y B-Tech	**School of Technology**	**Department: F.Y B-Tech**
Course Code: FYT 123	**Course Title: Biology for Engineers (Old pattern)**	**Semester : I**
Day and Date: TUESDAY,11.05.2021	**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)	List the types of protein structures and their functions. Mention why proteins are only active in their tertiary conformation.	8	L1	CO1
b)	What is Genetic code? Explain the nature and functions of genetic code.	8	L2	CO1
c)	With the help of well labelled diagrams, describe the types of cell junctions that are present in human body. Also put light on their role.	8	L2	CO1
Q.2	**Answer/Solve the following (Any Two)**			
a)	State the functions of cell cycle? What happens if the events of the cell cycle go wrong?	8	L1	CO2
b)	Explain the therapeutic importanceof stem cells.	8	L2	CO2
c)	How is DNA central to the functioning of a cell? Elaborate the important characteristics of a genetic material with this perspective.	8	L3	CO3
Q.3	**Answer/Solve the following (Any Two)**			
a)	What are the four fundamental forces in nature? Explain how they are interrelated.	9	L2	CO2
b)	Demonstrate the mechanism of depolarization and repolarization of a membrane with the help of a neat labelled diagram?	9	L3	CO3
c)	What is a Neuron? Draw a neat labelled diagram and differentiate between the functions of an axon and dendron.	9	L4	CO4