PRN:		Course Code :	U40PC101

000612

First Year **B. Sc. Biotechnology** End Semester Examination Winter 2024

Fundamentals of Biotechnology

Day and Date; Fri 6 DEC 2024 Max Marks: **50**

Time : 10:30AM To 12:30PM Duration: **02** hrs

Instructions: All questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Attempt the following**			
	a)	What is green biotechnology?	02	L1	CO1
	b)	What are plant-based vaccines?	02	L1	CO2
	c)	What is stem cell therapy?	02	L1	CO4
	d)	What are pandemic diseases? Give examples.	02	L1	CO4
	e)	Write two ways of using biotechnology in enhancing food quality.	02	L1	CO3
Q.2		**Attempt any two from the following**			
	a)	Explain red and white biotechnology with examples.	05	L2	CO1
	b)	Explain the commercial potential of Biotechnology.	05	L2	CO1
	c)	What is the scope of biotechnology in India? List various institutes associated with biotechnology.	05	L1	CO1
Q.3		**Attempt any two from the following**			
	a)	What are genetically modified crops? Explain the GMOs in agriculture.	05	L1	CO2
	b)	Develop detailed explanation on Biofertilizers and biopesticides.	05	L3	CO3
	c)	Explain plant based vaccines.	05	L2	CO3
Q.4		**Attempt any two from the following**			
	a)	Develop a note on the use of biotechnology for the detection of genetic diseases.	05	L3	CO4
	b)	Explain gene therapy.	05	L2	CO4
	c)	Illustrate the use of biotechnology in food industry.	05	L2	CO3
Q.5		**Attempt any two from the following**			
	a)	Define vaccination. Explain vaccines and their types with examples.	05	L1	CO3

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b)	Summarize pandemic diseases in detail.	05	L2	CO3
c)	Define microorganisms-based process and products in food industries.	05	L1	CO4

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