PRN:		Course Code:	U21PC102

First Year B. Sc. End Semester Examination Winter 2024 000006

Botany - I

Day and Date: Wed, 11 DEC 2024 Max Marks: **35**

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

Instructions: 1) All questions are compulsory.

2) Draw well labelled diagram wherever necessary.

			Marks	Bloom's Level	CLO
Q.1		**Attempt the following**	**07**		
	a)	What components make up a virus?	01	L1	1
	b)	What is the term for bacteria that can survive in the presence of oxygen but do not require it for growth?	01	L1	2
	c)	What is the study of algae called?	01	L2	3
	d)	Explain how *Rhizobium* bacteria function as biofertilizers.	02	L1	4
	e)	What is the significance of using pteridophytes like *Azolla* in rice paddies?	02	L1	4
Q.2		**Attempt the following**	**07**		
	a)	Explain in brief symmetry of virus.	04	L1	1
	b)	Give the economic importance of Virus.	03	L1	1
		OR			
	c)	Illustrate and label the structure of TMV.	03	L3	1
Q.3		**Attempt the following**	**07**		
	a)	Explain in brief bacterial classification based on shape.	04	L1	1
	b)	Explain in brief general characters of bacteria.	03	L1	1
		OR			
	c)	Give negative economic importance of bacteria	03	L1	1

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Q.4		**Attempt the following**	**07**		
	a)	Sketch and label the structure of Heterocyst.	03	L3	2
	b)	Sketch, label and describe the thallus structure of *Spirogyra.*	04	L3	2
		OR			
	c)	Explain in brief characters, association and uses of *Nostoc.*	04	L1	4
Q.5		**Attempt the following**	**07**		
	a)	Explain in brief *Rhizobium* as a biofertilizer.	03	L1	3
	b)	Add a note on preparation of bacterial biofertilizer.	04	L3	4
		OR			
	c)	Explain in brief characters, association and uses of *Tirchoderma.*	04	L1	4

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