This question paper contains 2 printed pages]

### NB-15-2023

### FACULTY OF SCIENCE

# B.Sc. (First Year) (Second Semester) EXAMINATION

## **NOVEMBER/DECEMBER, 2023**

(New Course)

#### **BIOTECHNOLOGY**

(Biomolecules)

(Tuesday, 05-12-2023) Time: 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

- $\pmb{N.B}$ . :— (i) All questions are compulsory.
  - (ii) All questions carry equal marks.
  - (iii) Draw diagram if necessary.
- 1. Define carbohydrates. Discuss in detail classification of monosaccharides.15

Or

- (a) Describe in detail structure and functions of oligosaccharides. 8
- (b) Describe in detail structure and functions of polysaccharides. 7
- 2. Describe in detail nomenclature and classification of Enzyme 15
  P.T.O.

WT		(2) NB	-15-2023
		Or Jet Linds	
	(a)	Describe in detail classification and role of Enzymes.	8
	( <i>b</i> )	Discuss peptides classification with example.	3000
3.	Descri	ibe in detail Watson & Crick model.	15
		or plant the state of the state	
	(a)	Explain nucleotides and nucleosides.	8
	(b)	Explain properties and biological roles of nucleic acid.	7
4.	Define	e Lipids and discuss classification of lipids with examples.	15
	(a)	Explain structure and functions of fat soluble vitamins.	8
	( <i>b</i> )	Describe in detail Water Soluble Vitamins.	7
5.	Write	short notes on (any three):	15
	( <i>i</i> )	Glycogen	
	(ii)	ATP OF THE STATE O	
	(iii)	X-helix	
	(iv)	Biological role of lipids	
	(v)	Forms of DNA.	