#### **BIOTECHNOLOGY**

### Paper 2: Biological Chemistry and Microbiology

Time: 3 hours Max. Marks: 80 SECTION – A

Answer ALL questions

 $4 \times 15 = 60$ 

1 a) Write and Nomenclature of classification of Enzyme with suitable examples?

Or

- b) Define carbohydrate? Add in detail on any three homopolysaccharides?
- 2. a) Write about citric acid cycle?

Or

- b) Write about metabolic reactions of amino acids?
- 3. a) Add a note on biological data bases?

Or

- b) Explain normal distribution and their role in Biology?
- 4. a) Explain the principle, instrumentation and application of UV- Visible Spectroscopy?

Or

b) Describe the importance of radioisotopes in Biology?

#### **SECTION - B**

Answer any FOUR questions

 $4 \times 5 = 20$ 

- 5. Classification of amino acids
- 6. Phospholipids
- 7. Transamination
- 8. Chemiosmotic theory
- 9. DDBJ
- 10. t-test
- 11. TLC
- 12. SDA -PAGE

## Practical Model Question Paper

# Paper 2: Biological Chemistry, Biostatistics and Bioinformatics

Time: 3 hours		Max. Marks: 50	
1.	Colorimetric estimation of any metabolite (carbohydrate/ protein)		20 M
	Or		
	Qualitative analysis of sugars or amino acids/ separation of amino acids	paper	
	chromatography		
2.	Graphical representation of statistical data		10M
3.	Spotters $(4x2.5)$		10M
4.	Record & Viva-voce		<u>10 M</u>
		Total	50 M