QP Code: MLB204

M.Sc. (M.L.T.) Biochemistry

(BF/2023/12)

Genetics, Immunology and analytical Biochemistry

[Paper-IV]

Time: 3 Hours **Max Marks: 80**

Note: 1. **Section A and B:- Question No. 1&2 are Compulsory and attempt any four question out of Question No. 3,4,5,6,7**

2. *ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.*
3. *NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/PROVIDED*
4. ***The Student must write Q.P. Code in the space provided on the Title Page of the Answer Book.***

Section-A

Q. 1.	Describe the process of translation.			[10]
Q. 2.	Explain briefly:	a.	Paper elcetrophoresis	[5]
		b.	EQAS in medical laboratory	[5]
Q. 3.	Differentiate:	a.	Primary and secondary immune response	[3]
		b.	Classical and alternate complement system	[2]
Q. 4.	Write notes on:	a.	Protein electrophoresis.	[3]
		b.	Plasma cell	[2]
Q. 5.	Discuss:	a.	Process of antigen presentation	[3]
		b.	Application of ion exchange chromatography	[2]
Q. 6.	Describe:	a.	Active and passive immunity	[3]
		b.	Process of iso enzyme separation	[2]
Q. 7.	Discuss:	a.	Quality management system in clinical biochemistry laboratory	[3]
		b.	Principle of immuno fluorescence	[2]

Section-B

Q. 1.	What is auto immunity? Describe its mechanism and important auto immune diseases			[10]
Q. 2.	Explain briefly:	a.	Chromatography	[5]
		b.	Cell mediated immunity	[5]
Q. 3.	Describe:	a.	Severe combined immune deficiency	[3]
		b.	Principle and applications of immune electrophoresis.	[2]
Q. 4.	Write notes on:	a.	PAGE	[3]
		b.	Interferon	[2]
Q. 5.	Discuss:	a.	Vaccination	[3]
		b.	Ig A	[2]
Q. 6.	Describe:	a.	Northern blot technique	[3]
		b.	Role of vectors in recombinant DNA technology	[2]
Q. 7.	Write notes on:	a.	Role of mutations in cancer	[3]
		b.	Applications of gas liquid chromatography	[2]
