

M.Sc Semester-2 Examination

407

Biomedical Technology

April-2024

[Max. Marks : 70]

Time : 2-30 Hours]

Q-I	1	What is mutagenesis? Discuss.	(14)
	2	Write a note on Interrupted genes.	
	OR		
	1	Explain the regulation of gene expression by attenuation for the <i>trp</i> operon.	
	2	Write an account of prokaryotic DNA replication.	
Q-II	1	Write a note on structural chromosome aberrations.	(14)
	2	What is euploidy? Discuss.	
	OR		
	1	Write a note on multifactorial disorders with an example.	
	2	Explain: Co-dominance and Incomplete dominance.	
Q-III	1	Describe "Autoimmunity" in brief.	(14)
	2	Give a note on humoral immune response.	
	OR		
	1	Explain briefly: Types of immunoglobulins.	
	2	Discuss allergy reaction in detail.	
Q-IV	1	Explain the "Latex agglutination" test.	(14)
	2	Give a note on Clinical applications of ELISA.	
	OR		
	1	Discuss the role of graft in transplantation.	
	2	Describe "Immunoelectrophoresis" in brief.	
Q-V	Answer any SEVEN out of TWELVE.		(14)
	1	What is C value paradox?	02
	2	What are processed pseudogenes?	02
	3	In the <i>lac</i> operon, the <i>lacY</i> gene encodes for _____ protein and the <i>lacZ</i> gene encodes for _____ enzyme.	02
	4	Differentiate between tetrasomy and tetraploidy.	02
	5	Why are autosomal disorders severe as compared to sex chromosomal disorders?	02
	6	Which is the only surviving monosomy in humans?	02
	7	Add a note on "MHC".	02
	8	Mention the functions of macrophages.	02
	9	Mention the role of Haptens.	02
	10	Define: phenomenon of "precipitin ring".	02
	11	What is MLR testing?	02
	12	Define: Familial grafting.	02

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