## M.Sc. (Part-II) Semester-III (CBCS) Examination MICROBIOLOGY

## (Immunology)

## Paper-XII

Tin	ime: Three Hours] [Maxim	um Marks : 80
	Note: — All questions are compulsory and carry equal marks.	
1.	(a) Differentiate between primary and secondary immune response.	8
	(b) Describe in detail the primary lymphoid organs.	8
	OR	
	Explain in detail the effects of mechanisms involved in specific and non specific i	mmunity. 16
2.	Discuss the principle and applications of complement fixation tests. Describe in be of complement fixation test.	ricf mechanism 16
	OR	
	(a) Draw well labelled diagrams of various types of immunoglobulins.	8
	(b) Explain the principle of ELISA.	8
3.	. Explain the various mechanisms involved in cell mediated immunity.	16
	OR	
	Explain in detail the classical pathway of complement.	16
4.	. What is hypersensitivity? Give in detail the different types of hypersensitivity re	action. 16
	OR	
	(a) Describe in detail about MHC class molecules.	8
	(b) Differentiate between genetically engineered vaccines and conventional vaccines	cines. 8
5.	. Describe in detail the Hybridoma technology.	16
	OR	
	Describe production of monoclonal antibodies and give its applications.	16

