

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2021

Subject Name : Immunology

Subject Code : 5SC03IMM1

Branch: M.Sc. (Microbiology)

Semester: 3

Date: 15/12/2021

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

SECTION – I

Q-1	Attempt the Following questions	(07)
	a. What is Tumor?	01
	b. Define- Central Tolerance.	01
	c. Which antibody is available in tear?	01
	d. Which Subtype of Ig G antibody used to activate complement system?	01
	e. Enlist the types of complement pathway.	01
	f. Give the full form of MHC.	01
	g. What is Nude Mice?	01
 Q-2	Attempt all questions	 (14)
	a Describe any one pathway for antigen processing and presentation.	07
	b Write a detail note on Adaptive Immunity.	07
OR		
Q-2	What you understand by Blotting? Enumerate the working principle & Applications of Western Blotting techniques.	(14)
 Q-3	Attempt all questions	 (14)
	a Explain T cell maturation in thymus.	07
	b Enumerate the detail about animal model of primary immunodeficiency (nude mouse)	07
OR		
Q-3	Attempt all questions	(14)
	a Describe immune deficient disease: SCID	07
	b Write a brief note on antigenic determinants on antibodies.	07



SECTION – II

- Q-4 Attempt the Following questions (07)**
- How many Polypeptide chain available in the structure of Ig? **01**
 - Define – Antigen. **01**
 - What is Autoimmunity? **01**
 - Which technique is used to produce Monoclonal Ab? **01**
 - What is Antibody engineering? **01**
 - Which complement activation pathway is depend upon antigen -antibody interaction? **01**
 - Example of Secondary Immune Organ. **01**
- Q-5 Attempt all questions (14)**
- Explain the generation of Cell Mediated Immune Response. **07**
 - Give the detail about MHC complex. **07**
- OR**
- Q-5 Attempt all questions (14)**
- Write a brief note on Abzyme. **07**
 - Write a short note on the contributions of any two scientists to the field of immunology **07**
- Q-6 (14)**
- Give the information about Hypersensitivity with the help of examples.
- OR**
- Q-6 Attempt all Questions (14)**
- Discuss about any one Primary immune organ. **07**
 - Describe the Types of ELISA techniques **07**

