

# C. U. SHAH UNIVERSITY

## Summer Examination-2022

Subject Name: Immunology

Subject Code: 4SC05IMM1

Branch: B.Sc. (Microbiology)

Semester: 5

Date: 22/04/2022

Time: 11:00 To 02:00

Marks: 70

Instructions:

- (1) Use of Programmable calculator & 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.

**Q-1 Attempt the following questions: (14)**

- |  |    |
|--|----|
| a) Define:-Immunology.                                   | 01 |
| b) What is stem cell?                                    | 01 |
| c) What is the role of T cell?                           | 01 |
| d) What is the Function of B cell?                       | 01 |
| e) Expand – NK cell.                                     | 01 |
| f) Define – Hapten.                                      | 01 |
| g) What is Epitope?                                      | 01 |
| h) Draw the structure of Antibody.                       | 01 |
| i) Antibody produced by which cell?                      | 01 |
| j) Expand :- MHC   | 01 |
| k) Write down the examples of Immunodeficiency disorders | 01 |
| l) Define :- Tumor Markers                               | 01 |
| m) Expand – SCID   | 01 |
| n) What is Cross reactivity?                             | 01 |

**Attempt any four questions from Q-2 to Q-8**

**Q-2 Attempt all questions (14)**

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|--|----|
| (a) Write a detail note on ELISA.                          | 07 |
| (b) Write a detail note on causes and therapy for cancers. | 07 |

**Q-3 Attempt all questions (14)**

- |   |    |
|---|----|
| (a) Write a detail note on generation of Cell mediated Immune Response. | 07 |
| (b) Write a detail note on Agglutination.                               | 07 |

**Q-4 Attempt all questions (14)**

- |   |    |
|---|----|
| (a) Write a detail note on Monoclonal and Chimeric antibodies | 07 |
| (b) Write a detail note on Bone Marrow.                       | 07 |



- Q-5**      **Attempt all questions**      **(14)**
- (a) Write a detail note on Major Histocompatibility complex      07
- (b) Write a detail note on DiGeorge syndrome      07
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- Q-6**      **(14)**
- Write down a detail note on Structure, Functions and Properties of:  
Immune Cells - T cell, B cell, NK cell, Macrophage, Mast cell,  
Dendritic cell
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- Q-7**      **(14)**
- Write a detail note on Structure, Types, Functions and Properties of  
antibodies.
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- Q-8**      **Attempt all questions**      **(14)**
- (a) Write down the difference between Innate Immunity & adaptive  
Immunity.      07
- (b) Write a detail note on Contributions of scientists for the development of  
field of immunology - Edward Jenner, Karl Landsteiner, Robert Koch      07

