

B.Sc. (Part-III) (CBCS Pattern) Semester-VI
USMBT-14 - Microbiology Paper-II : Immunology

P. Pages : 2

Time : Three Hours



GUG/W/24/13334

Max. Marks : 50

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- Notes : 1. All questions are compulsory and carry marks as indicated.
2. Draw diagram wherever necessary.

- 1.** What are lymphoid organs? Describe the Primary lymphoid organs of the immune system and enumerate their functions. **10**

OR

- a) Compare between B lymphocyte and T lymphocyte. **2½**
- b) Draw well labelled diagram of lymph node. **2½**
- c) Write a short note on plasma cell. **2½**
- d) Write a note on Natural Killer cell. **2½**

- 2.** What is adaptive immunity? Explain the mechanism of Humoral immunity in detail. **10**

OR

- a) Write the difference between active and passive immunity. **2½**
- b) What is MHC? Describe MHC-II antigen. **2½**
- c) Write a short note on Phagocytosis. **2½**
- d) Discuss inflammatory response? **2½**

- 3.** Describe the types of antigen-antibody reaction in detail? **10**

OR

- a) Describe the factors determining antigenicity. **2½**
- b) Describe IgM immunoglobulin, structure and their function. **2½**
- c) Write a note on ELISA. **2½**
- d) Describe mechanism of RIA. **2½**

4. Define and classify hypersensitivity. Discuss in detail type I hypersensitivity reaction. **10**
- OR**
- a) Write a short note on Rheumatoid arthritis. **2½**
- b) Differentiate between immediate and delayed type hypersensitivity. **2½**
- c) Discuss the mechanism of Erythroblastosis fetalis. **2½**
- d) Write a short note on Myasthenia gravis. **2½**
5. Solve **any ten** (each question carry one mark) **1x10**
- i) Give the full form of MALT.
- ii) Define Hemopoietic stem cell.
- iii) What is the function of eosinophils?
- iv) Define Immunity.
- v) Enlist the name of antigen presenting cells.
- vi) Define primary dose and booster dose.
- vii) Define Antigen.
- viii) What is the function of secretory component in secretory IgA?
- ix) Which immunoglobulin constituting majorly in serum?
- x) Which antibody is responsible for allergic reaction?
- xi) Define immunological tolerance.
- xii) Give the two examples of autoimmune disorders.
