Roll No. Total No. of Pages : 02

Total No. of Questions: 09

# B.Tech. (BT) (2018 Batch) (Sem.-4) IMMUNOLOGY & IMMUNOTECHNOLOGY

Subject Code: BTBT-402-18 M.Code: 77587

Date of Examination: 05-07-22

Time: 3 Hrs. Max. Marks: 60

### **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## **SECTION-A**

# 1. Answer briefly:

- a) Define Hapten.
- b) What is Antisera?
- c) What is GALT?
- d) What is the function of Dendritic cells?
- e) Define Affinity and Avidity.
- f) What is the role of Adjuvant?
- g) What are Epitopes?
- h) What are Immunoglobulins? List Types.
- i) Define agglutination.
- j) What is the difference Between Monoclonal and Polyclonal Antibodies?

**1** M-77587 (S2)- 295

## **SECTION-B**

- 2. What are Different types of Immunity? Explain.
- 3. What is Complement system? Discuss about components and function.
- 4. Write a note on Production of monoclonal antibodies.
- 5. Write Principle and applications of Radio Immuno Assay.
- 6. Discuss Characteristics of an Antigen.

### **SECTION-C**

- 7. Elaborate on Structure, Types, Properties and Functions of Immunoglobulins.
- 8. Explain Role of MHC and Discuss Mechanism of Antigen processing and Presentation.
- 9. Deliberate on Cytokines, their types and role in immune response and Inflammation.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

**2** M-77587 (S2)- 295