CBCS SCHEME

USN | | | | | | | | | | |

18BT43

Fourth Semester B.E. Degree Examination, July/August 2022
Immunotechnology

Time: 3 hrs. Max. Marks: 100

Note: ***Answer any FIVE full questions, choosing ONE full question from each module.***

Module-1

1 a. Define Immunity. Explain Innate Immunity and Adaptive Immunity. **(10 Marks)**

b. Explain how the Primary and Secondary lymphoid organs are necessary for immune response. **(10 Marks)**

OR

2 a. Define Antibody. Explain the structure of Ig G and its biological functions. **(10 Marks)**

b. Define Isotypic , Allotypes , Idiotypes and Anti-idiotopic antibodies in details. **(10 Marks)**

Module-2

3 a. What are Monodonal Antibody and write the production by hybridoma technology and its applications. **(10 Marks)**

b. Explain the mechanism of T – cell activation in detail. **(10 Marks)**

OR

4 a. What are Polyclonal Antibody? Write the production procedure and its application. **(10 Marks)**

b. What is Major Histocompatibility Complex? Give different classes and explain it. **(10 Marks)**

Module-3

5 a. Discuss the type – I and type – II hypersensitivity reactions. **(10 Marks)**

b. Define Autoimmune disorders. Explain any two autoimmune disorders in detail. **(10 Marks)**

OR

6 a. Define Immunodeficiency disorders in detail. Explain with examples. **(10 Marks)**

b. Give a brief note on Vaccines and their types. **(10 Marks)**

Module-4

7 a. Describe the various steps involved in mechanism of graft rejection. **(10 Marks)**

b. Write a note on Transportation and its classification. **(10 Marks)**

OR

8 a. Write explanatory note on Tumor Specific Antigens and Tumor Associated Antigens. **(10 Marks)**

b. Explain in detail about Immune suppression and with examples, explain Immune suppressive drugs. **(10 Marks)**

Module-5

9 a. Write a note on :
i) Precipitation reactions ii) Agglutination reactions. **(10 Marks)**

b. Explain the principles, types of ELISA techniques and its applications. **(10 Marks)**

OR

10 a. Explain the Principle , Procedure of Radio Immuno assay and add a note on its application. **(10 Marks)**

b. Write explanatory note on :
i) Immunofluroscence ii) Western blot analysis. **(10 Marks)**

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