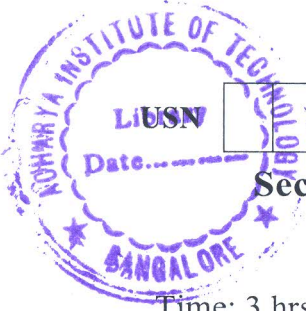


CBCS SCHEME

2



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18BBT242

Second Semester M.Tech. Degree Examination, June/July 2019 Immunotechnology

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Explain isotypes of antibody molecules found in serum with a neat labeled diagram. (10 Marks)
b. Detail the immune response system of humans. (10 Marks)

OR

- 2 a. "Antigens generate a specific immune response". Justify. Describe their types as well. (10 Marks)
b. Describe the organization and structure of lymphoid organs and cells. (10 Marks)

Module-2

- 3 a. What are MHC and their types? Describe the cytosolic pathway for antigen processing. (10 Marks)
b. What is the difference between B – Lymphocyte and T – Lymphocyte? How do B – cells recognize antigens? (10 Marks)

OR

- 4 a. Detail the mechanism of NK cell mediated cell lysis. (10 Marks)
b. Write short notes on :
i) Polyclonal antibodies ii) Macrophage mediated cytotoxicity. (10 Marks)

Module-3

- 5 a. What are the functions of complement system? How does the classical complement pathway get activated? (10 Marks)
b. Detail / Describe Type 1 and Type 2 hypersensitive reactions. (10 Marks)

OR

- 6 a. Detail the production of recombinant DNA vaccines. (10 Marks)
b. Write short notes on : i) Cytokines ii) Autoimmunity. (10 Marks)

Module-4

- 7 a. "Implantation of 'non – self' tissue into the body is possible". Justify. (10 Marks)
b. Explain immunodeficiency disorders. (10 Marks)

OR

- 8 a. "Diseases are cured via immunotherapy with genetically engineered antibodies". Uphold the statement. (10 Marks)
b. Write short notes on :
i) Immuno suppressive drugs ii) Tumor specific antigens. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-5

- 9 a. Describe the process of Blood typing and the principle involved in determining the blood group. (10 Marks)
- b. Write short notes on : (10 Marks)
- i) ELISA ii) Western Blotting.
- OR**
- 10 a. Describe the principle and application of Radio immuno assay (RIA). (10 Marks)
- b. Describe the principle and procedure i) SPR based assay ii) FACS. (10 Marks)
