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GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Second Semester) Examinations, September – 2021

20BTPC202 – Immunology

(Biotechnology)

Time: 2 hrs

Maximum: 50 Marks

(The figures in the right hand margin indicate marks.)

PART – A

Q.1. Answer **ALL** questions

(2 x 10 = 20 Marks)

- a. Which immunity provides primary line of defense and how?
- b. What is the difference between antigen and super-antigen?
- c. What is the role of adjuvant in immunological response and give an example of adjuvant?
- d. Differentiate between primary and secondary immune response.
- e. What is MHC restriction? Name two strategies used in MHC restriction.
- f. Are the mechanisms of cell mediated immunity and the DTH same? Name the effector cells in DTH.
- g. Cytosolic pathway of antigen processing is essential for which type of antigens and why?
- h. What is RIA? Write its applications.
- i. What is hapten? How it differs from antigen.
- j. What is host versus graft reaction?

PART – B (6 x 5 = 30 Marks)

Answer **ANY FIVE** the questions

Marks

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| 2. What is immunity? Describe the mechanism of acquired immunity. | (6) |
| 3. What is lymphoid organ? Classify them and give an account on the structure and function of lymph node. | (6) |
| 4. Briefly explain the structure and functions of immunoglobulin? Add note on its classification | (6) |
| 5. What is ELISA? Explain different types of ELISA with their applications. | (6) |
| 6. What are monoclonal antibodies? Discuss the principle utilized and method followed in the preparation of monoclonal antibodies. | (6) |
| 7. What is hypersensitivity reaction? Explain Gell and Coombs classification of hypersensitivity. | (6) |
| 8. What do you mean by immunization? Give a detailed account on types of vaccines with examples. | (6) |

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