

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- Vth SEMESTER-EXAMINATION – MAY/JUNE - 2012****Subject code: 150402****Date: 02/06/2012****Subject Name: Immunology****Time: 02:30 pm – 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is hypersensitivity? Explain in detail Type-I hypersensitivity. **07**
(b) Explain hybridoma technology for the production of monoclonal antibody. **07**

- Q.2** (a) Give an overview on immune system. **07**
(b) What is the function of primary and secondary lymphoid organs? Explain the structure of lymph node and spleen with the help of neat diagrams. **07**

OR

- (b) Make a list of the cells of the immune system. Write short note on lymphoid cells. **07**

- Q.3** (a) Define and differentiate immunogenicity and antigenicity. What are the factors that influence immunogenicity? **07**
(b) Explain the classical pathway for formation of C5b. What is membrane attack complex? **07**

OR

- Q.3** (a) Explain structure and biological activity of different classes of immunoglobulins. **07**
(b) What are the functions of complement? Write short notes on complement deficiency. **07**

- Q.4** (a) Explain the steps involved in western blot. Give its application. **07**
(b) Give an account on recombinant vector vaccine and DNA vaccine. **07**

OR

- Q.4** (a) What is ELISA? Explain its three types. **07**
(b) Explain in short about history of vaccination. Differentiate between active and passive immunization. **07**

- Q.5** (a) Describe in short about rabies. **07**
(b) What is transplantation immunology? Explain it in short. **07**

OR

- Q.5** (a) Explain epidemiology and etiology of malaria. **07**
(b) Write notes on microbial flora of healthy human host. **07**
