

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E SEM-V Examination-Nov/Dec.-2011

Subject code: 150402

Date: 24/11/2011

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 function of primary immune organs? Explain structure of any one in detail with a neat diagram. **08**
(b) Draw chart of hematopoiesis showing cell lineages. **06**
- Q.2** (a) Differentiate between different classes of immunoglobulins. **07**
(b) Write an account on different cells of immune system. **07**
- OR**
- (b) What is FACS? Explain its working. **07**
- Q.3** (a) Explain the technique of western blotting with a neat diagram. **07**
(b) Differentiate between innate and adaptive immunity. **04**
(c) Define epitope and apoptosis. **03**
- OR**
- Q.3** (a) What should be the nature of a compound for it to be an immunogen? **07**
(b) Differentiate between cell mediated and humoral immunity. **04**
(c) Define adjuvant and hapten. **03**
- Q.4** (a) Explain classical pathway of complement activation with a neat diagram. **07**
(b) Explain type I hypersensitivity and its remedies. **07**
- OR**
- Q.4** (a) Write an account on production of monoclonal antibodies through hybridoma technology using a neat diagram. **07**
(b) Explain whole organism vaccine with a suitable example. **07**
- Q.5** (a) Explain transplantation technology. **07**
(b) Write an account on animal transmitted disease with any one example. **07**
- OR**
- Q.5** (a) Write a short note on microbial flora of healthy human host. **07**
(b) Write an account on vector transmitted disease with any one example. **07**
