



SD-3684

**M. Sc. (Integrated Biotechnology) (Sem. IV)
Examination**

April / May – 2011

IBT - 404 : Immunology

Time : 3 Hours]

[Total Marks :70

Instructions :

(1)

नीचे दशांशिक निशानीवाणी विगतो उत्तरवही पर अवश्य कभवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. Sc. (INTREGRATED BIOTECHNOLOGY) (SEM. 4)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="IBT - 404 : IMMUNOLOGY"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="8"/> <input type="text" value="4"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	
Student's Signature	

- (2) Figures to the **right** indicate full marks of the question.
- (3) Draw neat and labeled diagrams wherever necessary.
- (4) Both sections must be written in **separate** answer books.

1 Answer the following : (any **three**) 18

- (a) Discuss in detail about various anatomic barriers as a part of non-specific host defense.
- (b) Explain the types and immunological functions of T-cells.
- (c) Define : Immunity, Differentiate between innate and adaptive immunity.
- (d) Explain the role of complement in non-specific immune response.

2 Answer the following : (any **three**) 18

- (a) Discuss in detail about clonal selection theory.
- (b) Explain biological properties of different classes of antibodies.
- (c) Give an account of adjuvant technology.
- (d) Discuss in detail about applications of monoclonal antibodies.

- 3** Answer the following : (any **three**) **18**
- (a) Explain the role of haemagglutination reactions in diagnostic procedures.
 - (b) Explain *in-vivo* antigen-antibody interactions.
 - (c) Explain the principle and applications of Western blot.
 - (d) Define ; Precipitation and explain the Ouchterlony's Test.
- 4** Write a short note on : (any **two**) **16**
- (a) Role of Mast cells and dendritic cells in immune response.
 - (b) Spleen - Secondary lymphoid organ.
 - (c) Type-III hypersensitivity.
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