

TDC Even Semester Exam., 2019

BIOTECHNOLOGY

(Honours)

(4th Semester)

Course No. : BTCH-401

(Immunology—II)

*Full Marks : 35**Pass Marks : 12**Time : 2 hours**The figures in the margin indicate full marks for the questions*

1. (a) What is MHC polymorphism? 3
 (b) State the role of MHC in immunity. 4

OR

2. (a) Differentiate between exogenous and endogenous antigens. 2
 (b) Chalk out the pathway of processing of endogenous antigens. 5

3. (a) Give the basic mechanism of the immune response against an infectious agent. 5
 (b) What are interleukins? Why are they so called? 2

OR

4. (a) With an example, illustrate what is autoimmunity. 3
 (b) Write brief notes on : 2+2=4
 (i) Hashimoto's thyroiditis
 (ii) SLE

5. (a) Give the structure of HIV. 3
 (b) Illustrate the key points of the HIV life cycle. 4

OR

6. (a) Elucidate in brief the immune mechanism in cancer. 5
 (b) Enlist the cells implicated in anti-tumor cytotoxicity. 2

(3)

7. (a) Write brief notes on : $2\frac{1}{2}+2\frac{1}{2}=5$
(i) Immunoelectrophoresis
(ii) Immunoblotting
- (b) Give two examples of immunodiffusion techniques. 2

OR

8. (a) What is affinity chromatography? 1
(b) Give a detailed account of monoclonal antibodies. 6

9. (a) What is ELISA? Classify different types of ELISA. $1+2=3$
(b) Illustrate the basic mechanism of sandwich ELISA. 4

OR

10. (a) What is recombinant vaccine? 3
(b) Write a note on antibody as diagnostic tool. 4
