PG Even Semester (CBCS) Exam., May—2017

MICROBIOLOGY

(2nd Semester)

Course No. : MIBCC–201

(Cellular Microbiology and Immunology)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Write short notes on the following : 7+7=14

(a) Signalling mechanisms in eukaryotic cells

(b) Endocrine signalling

2. Discuss the importance and biological action of cytokines in cell-to-cell signalling. 14

UNIT—II

3. *(a)* Discuss the organization of lymphoid system into central and peripheral lymphoid organs. 7

(b) Explain the importance of phagocytic cells, null cells and dendritic cells in the immune system. 7

4. Discuss the mechanisms of the two important immunological responses of the immune system in detail. 7+7=14

UNIT—III

5. Define antigen, and differentiate antigens from immunogens and haptens. Also discuss the various biological classes of antigens. 14

6. Write short notes on the following : 7+7=14

(a) Hemolytic disease of newborn

(b) Newer generation vaccines

UNIT—IV

7. Discuss the mechanism of serological reactions occurring in immunofluorescence test along with its medical significance. 14

8. Discuss the principle and immunological mechanisms involved in enzyme linked immunosorbent assay test with the help of illustration and immunological importance. 14

UNIT—V

9. *(a)* Discuss the primary and secondary mediators of anaphylaxis. 7

(b) Define atopy, and discuss the type II cytotoxic and cytolytic reactions of hypersensitivity. 7

10. Write short notes on the following : 7+7=14

(a) Human Leukocyte Antigen (HLA) tissue typing

(b) Major histocompatibility test

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