MCK-014-003601 Seat No. _____

M. P. M. (Sem. VI) (CBCS) Examination

May / June - 2018

Pharmaceutical Microbiology & Biotechnology - II

Faculty Code : 014

Subject Code : 003601

Time : Hours] [Total Marks : **80**

Instructions : (1) Figure to the right indicates marks.
(2) Answer the three (03) questions from each section.
(3) Question one (1) and question five (5) are compulsory.
(4) Draw neat and clean diagrams as required.

SECTION – I

1 Write notes on following : (any **Seven** out of ten) **2×7=14**

(A) Humulin
(B) Translocation
(C) Frame shift mutation
(D) B cells and T cells
(E) RIA
(F) Steady State
(G) Nucleotide
(H) Nucleosome
(I) Synkaryocyte
(J) Rh factors

2 Answer the following :

(A) What do you mean by Mutation? Write a detail note on types of mutations. **7**

(B) Write a note on physical mutagenic agents. **6**

3 Answer the following :

(A) What is gene expression? Describe Transcription process in detail. **7**

(B) Write a detail note on post transcriptional modifications. **6**

4 Answer the following :

(A) What are monoclonal antibodies? How are they are harvested? **7**

(B) Write a detail note on techniques of protoplast fusion. **6**

SECTION – II

5 Answer any **two** out of three : **7×2=14**

(A) Describe the structure and functions of MHC-II molecule.

(B) What is inflammation? Describe the clinical symptoms and the physiological processes involved with the process.

(C) What do you understand by the term Hypersensitivity? Explain different classes of it?

6 Answer the following :

(A) Discuss the ABO system of blood group? **7**

(B) What do you mean by Haematopoeitic growth factors? Write a detail note on EPO growth factor. **6**

7 Answer the following :

(A) Define Transduction and its mechanism in detail. **7**

(B) Write a detail note on blue white screening? **6**

8 Answer the following :

(A) What is a fermenter? How does it function? **7**

(B) What is downstream processing? What are the various steps involved? **6**