



HX-M2011127

Seat No. _____

M. Pharm (Sem. II) (CBCS) Examination

June / July - 2017

Analysis of Recombinant Proteins & Diagnostics

(Elective - II)

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Answer and tie up both the sections separately.
 - (2) Figures to the right indicates marks.
 - (3) Answer three (03) questions from each section.
 - (4) Question one (01) and question (05) are compulsory.
 - (5) Draw neat and clean diagrams as required.

SECTION - I

- 1 Write a note on following : (any seven) **7×2=14**
 - (A) Chemiluminescence
 - (B) Difference between Probes and Primers
 - (C) Nucleotide
 - (D) DNA Polymerase
 - (E) Immunosensors
 - (F) Bioluminescence
 - (G) Deoxynucleotide triphosphates
 - (H) Difference between Codons and Amino acids
 - (I) Palindromic sequences
 - (J) Iso Electric Focusing

- 2 How to diagnose Cancer and Human retroviral disease **13**
specially AIDS by molecular techniques?

- 3 What is potency assay? Describe in detail in vitro potency **13**
assay and discuss its pros and cons.

- 4 Answer the following questions :
- (A) How to diagnose a disease with abnormal blood cells with the use of molecular techniques? 7
- (B) Write down the ideal characteristics of a good primer for PCR. 6

SECTION – II

- 5 Answer any two out of three : 2×7=14
- (A) How cell culture techniques useful in biomedicine?
- (B) Describe quantitative amino acids analysis and write the principles of Folin-Lowry assay and UV spectroscopy?
- (C) What are the advantages and disadvantages of using a molecular test?
- 6 Write a detailed note on ICH guidelines. 13
- 7 What is Real Time PCR? Describe non-specific Real Time PCR in detail. 13
- 8 Answer the following questions :
- (A) What do you mean by SNPs. Write a note on SNP maps and SNP profiles. 7
- (B) Describe the immunological methods for Protein assay. 6
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