



Roll No.

--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 01

Total No. of Questions : 06

M.Pharmacy (Pharmacology) (2017 & Onwards) (Sem.-1)**CELLULAR & MOLECULAR PHARMACOLOGY****Subject Code : MPL-104T****M.Code : 74678****Time : 3 Hrs.****Max. Marks: 75****INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of SIX questions.
 2. Each question carry FIFTEEN marks.
-
1. Define gene expression. Explain its regulation. Discuss the importance of microRNA, gene mapping and gene sequencing.
 2.
 - a. Write in brief note on genome organization.
 - b. What are the regulators of cell death? Explain the intrinsic and extrinsic pathways of apoptosis.
 3.
 - a. Write a note on tyrosine kinase receptors.
 - b. Explain the following signaling pathways :
 - a. MAPK signaling
 - b. cAMP signaling pathway
 4.
 - a. Explain the principle and applications of PCR.
 - b. Describe Western Blotting.
 5.
 - a. What are the various types of vectors used in recombinant DNA technology? Explain.
 - b. What is gene therapy? Explain different techniques used for transferring the genes.
 6.
 - a. Write the applications of proteomics.
 - b. What is the principle of cell viability assays? Explain glucose uptake assay. Write the applications of cell viability assays.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

