

www.FirstRanker.com

www.FirstRanker.com

Roll No. Total No. of Pages : 1 Total No. of Questions : 06 M.Pharmacy (Pharmacology) (2017 & Onwards) (Sem.–1) CELLULAR & MOLECULAR PHARMACOLOGY Subject Code : MPL-104T Paper ID : [74678]	
Tim	ne : 3 Hrs. Max. Marks: 75
 INSTRUCTIONS TO CANDIDATES : 1. Attempt any FIVE questions out of SIX questions. 2. Each question carries FIFTEEN marks. 	
1.	Draw a labeled diagram of animal cell. Explain the functions of the cell organelles.
2.	a. Differentiate between autophagy and necrosis.
	b. Describe the different phases of cell cycle. How is the cell cycle regulated?
3.	a. Write a note on GPCRs.
	b. Explain the following secondary messengers
	i) Cyclic AMP ii) Diacylglycerol
4.	a. Explain the principle and applications of DNA electrophoresis.
	b. Describe ELISA.
5.	a. Define recombinant DNA technology. What is the basic principle of recombinant DNA technology? Enumerate the steps involved in recombinant DNA technology. Classify the restriction enzymes with examples.
	b. Give the applications of gene therapy. Write a note on recent advances in the field of gene therapy.
6.	a. How does polymorphism affect the metabolism of drug?
	b. Describe the principle and applications of flow cytometry.
1 M-74678 (S31)-1675	