

Roll No. 

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

Total No. of Pages : 1

Total No. of Questions : 06

M.Pharma(Pharmaceutical Chemistry) (2017 &amp; Onwards) (Sem.-1)

**CHEMISTRY OF NATURAL PRODUCTS**

Subject Code : MPC-104T

Paper ID : [74666]

Time : 3 Hrs.

Max. Marks: 75

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

1. What are Lead molecules? Discuss Paclitaxel and Docetaxel as leads for new pharmaceuticals. (15)
2. a) What are Alkaloids? Classify them. Describe methods of extraction of Alkaloids. (8)  
b) Give Structure elucidation and stereochemistry of Ephedrine. (7)
3. a) What is Isoprene rule? Give structural elucidation of Camphor. (8)  
b) Give chemistry and physiological significance of Vitamin A. (7)
4. a) What is gene therapy? Give clinical applications and advances in gene therapy. (8)  
b) Give active constituents and uses of *Pterocarpus marsupium* and *Curcuma longa*. (7)
5. Give IR,  $^1\text{H}$ NMR,  $^{13}\text{C}$ NMR and MS of Digitalis glycosides and Vitamin D. (15)
6. Write short notes on:  
a) Hybridoma technology (5)  
b) Structure elucidation of Citral (5)  
c) Chemistry of Cortisone (5)