

[LA 346]

MAY 2012

Sub. Code: 2907

**M.PHARM. DEGREE EXAMINATION**

**FIRST YEAR**

**BRANCH II – PHARMACEUTICAL CHEMISTRY**

**PAPER IV – NATURAL PRODUCTS OF MEDICINAL INTEREST**

*Q.P. Code: 262907*

**Time: 3 hours  
(180 Min)**

**Maximum: 100 marks**

**Answer ALL questions in the same order.**

**I. Elaborate on:**

	<b>Pages (Max.)</b>	<b>Time (Max.)</b>	<b>Marks (Max.)</b>
1. (a) Discuss the salient features involved in the isolation, identification and purification of terpenoids.			
(b) Explain the application of IR, NMR, MAS, CD and ORD in the structural elucidation of terpenoids.	17	40	20
2. (a) Give a detailed account of the structural elucidation of cholesterol.	17	40	20
(b) Write a note on cardiac sugars.			

**II. Write notes on:**

1. Briefly explain the chemistry of rutin.	4	10	6
2. Outline the mechanism of beta – lactamase inhibitors.	4	10	6
3. Write a note on cannabinoids.	4	10	6
4. Outline the various methods adopted to clone fragments of DNA.	4	10	6
5. Discuss the synthetic modifications and S.A.R. of macrolides.	4	10	6
6. Enumerate and write the significance of pharmaceutical products based on rDNA technology.	4	10	6
7. Explain the structural constitution of reserpine.	4	10	6
8. Write briefly on the natural products used as antitumour agents.	4	10	6
9. Give the structure and uses of five currently used glucocorticoids.	4	10	6
10. What is P-UVA? Write the chemistry of xanthotoxin.	4	10	6

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