

[LD 346]

**OCTOBER 2013**  
**M.PHARM. DEGREE EXAMS**  
**FIRST YEAR**  
**BRANCH II – PHARMACEUTICAL CHEMISTRY**  
**PAPER IV – NATURAL PRODUCTS OF MEDICINAL INTEREST**  
*Q.P. Code : 262907*

**Sub. Code: 2907**

**Time : 3 hours**

**Maximum : 100 marks**

**I. Elaborate on :**

**(2x20=40)**

1. (a) Outline the methods of isolation & separation of flavonoid.  
(b) Explain the application of IR, NMR, MASS in the structural elucidation of natural products
2. (a) Discuss the chemistry & S.A.R. of glucocorticoids.  
(b) How do you convert ergosterol to any one of currently used steroid drugs?.

**II. Write notes on :**

**(10x6=60)**

1. Discuss the chemistry & mechanism of action of cephem antibiotics.
2. Outline the general chemistry of terpenoids..
3. Write a note on polypeptide antibiotics.
4. Give the therapeutic applications of curcumin.
5. Write a note on synthetic & semisynthetic derivatives of asperlicin & cannabinoids.
6. Define vector and explain their role in rDNA technology.
7. How will you establish the presence of quinoline nucleus and vinyl group in quinuclidine nucleus?
8. Give reasons for using rDNA to alter DNA sequence with relevant example?
9. Write the skeletal structure mechanism and use of a)Thienamycin b)Sulbactan sodium.
10. Briefly explain the structural constitution of quercetin?

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