

[LI 345]

APRIL 2016

Sub. Code: 2906

**M.PHARM. DEGREE EXAMINATION
FIRST YEAR
BRANCH II – PHARMACEUTICAL CHEMISTRY
PAPER III – ADVANCED MEDICINAL CHEMISTRY**

Q.P. Code : 262906

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss in detail the medicinal chemistry aspects of Alkylating agents with special emphasis to SAR, mechanism of action, structure and synthesis of any one drug from each class.
2. a) Explain various physicochemical parameters involved in a QSAR study.
b) Outline the application of Craig Plot in QSAR design.

II. Write notes on:

(10 x 6 = 60)

1. Explain the types of Noncovalently binding enzyme inhibitors.
2. Discuss briefly about various classes of antiviral agents.
3. Briefly give an account on the influence of fragments of a lead molecule and variation in inter atomic distance in analog design.
4. Outline various aspects on gastric proton pump inhibitors.
5. Explain the role of immuno modulators with examples.
6. Explain the industrial method of preparation of Pheniramine Maleate.
7. Discuss briefly about calculation of affinity and unknown receptors in molecular modelling.
8. Brief out the practical applications of prodrug design.
9. Explain the importance of regression analysis and 3D-QSAR.
10. Outline the influence of Enantio selectivity in the distribution and metabolism of drugs.
