

[LA 345]

MAY 2012

Sub. Code: 2906

**M.PHARM. DEGREE EXAMINATION**

**FIRST YEAR**

**BRANCH II – PHARMACEUTICAL CHEMISTRY**

**PAPER III – ADVANCED MEDICINAL CHEMISTRY**

*Q.P. Code: 262906*

**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>
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|---|----|----|----|
| 1. a) Explain the analog design and detail on bioisosteric replacement with examples.                             |    |    |    |
| b) Discuss the rational of prodrug design and practical consideration.  | 17 | 40 | 20 |
| 2. a) Explain the importance of enantio selectivity in drug absorption, metabolism, distribution and elimination. |    |    |    |
| b) Write briefly about gastric proton pump inhibitors.  | 17 | 40 | 20 |

**II. Write notes on:**

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|---|---|----|---|
| 1. Explain the chemistry and biological significance of prostaglandins. | 4 | 10 | 6 |
| 2. Explain 3D QSAR approaches.  | 4 | 10 | 6 |
| 3. Give detailed account of alkylating agents as anti-neoplastic drugs. | 4 | 10 | 6 |
| 4. Write briefly on Quantum mechanism.                                  | 4 | 10 | 6 |
| 5. Write a note on immuno stimulants.                                   | 4 | 10 | 6 |
| 6. Outline the Steps involved in the manufacture of Diphenhydramine.    | 4 | 10 | 6 |
| 7. Write a note on covalently binding enzyme inhibitors.                | 4 | 10 | 6 |
| 8. Discuss about drug receptor interactions.                            | 4 | 10 | 6 |
| 9. Explain pharmacophore models.  | 4 | 10 | 6 |
| 10. Give the application of Craig plot.                                 | 4 | 10 | 6 |

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