

F-1/2051

**B. Pharmacy II Sem  
Paper-2002 (SET 2)  
Organic Chemistry**

5925/MJ

**M. marks: 70**

**Time: 3h**

**Note: Attempt three questions each from section A and Section B. Section C is compulsory.**

**SECTION A**

- |      |  |   |
|------|--|---|
| Q.1. | Describe various methods of preparation of aldehydes | 7 |
| Q.2. | Describe various methods of preparation of alcohols. | 7 |
| Q.3. | Describe various reactions of alkenes.               | 7 |
| Q.4. | Describe various reactions of amines.                | 7 |

**SECTION B**

- |      |  |   |
|------|--|---|
| Q.5. | Write a note on alkylation of carbonyl compounds via enamines. | 7 |
| Q.6. | Write a note on chemical reactions of benzene.                 | 7 |
| Q.7. | Write a note on Diels alder reaction.                          | 7 |
| Q.8. | Write a note on Michael addition.                              | 7 |

**SECTION C**

- |        |   |   |
|--------|---|---|
| Q.9.a. | Define Diastereomers.   | 2 |
| b.     | Define optical activity.  | 2 |
| c.     | What is hydrogen bonding?                                       | 2 |
| d.     | How will you identify carboxylic acid functional group?         | 2 |
| e.     | Write the structure of malic acid and lactic acid.              | 2 |
| f.     | Define nucleophile.   | 2 |
| g.     | What are carbanions?  | 2 |
| h.     | Why trichloroacetic acid is more acidic than chloroacetic acid? | 2 |
| i.     | What is steric strain in cyclobutane?                           | 2 |
| j.     | What is inductive effect?                                       | 2 |
| k.     | What is S <sub>N</sub> 2 reaction?                              | 2 |
| l.     | What is Markovnikoff's rule?                                    | 2 |
| m.     | What is resonance?  | 2 |
| n.     | Write the structure of anthracene and phenanthrene.             | 2 |