(LJ 4252) AUGUST 2016 Sub Code: 4252

B.PHARM. EXAMINATION FIRST YEAR PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 564252

Time: Three hours Maximum: 100 Marks

I. Elaborate on : $(2 \times 20 = 40)$

1. Explain the Kekule's structure, aromaticity and resonance structures of benzene including Huckel's rule and stability.

2. Explain the mechanism, reactivity and orientation of E1 and E2 reaction.

II. Short notes on: $(8 \times 5 = 40)$

- 1. Describe the mechanism of addition reaction of conjugated dienes.
- 2. Write the preparation and properties of phenanthrene.
- 3. Mention the preparation, test for purity and medicinal uses of lactic acid and mephenesin.
- 4. Give the nomenclature and preparation of Cycloalkanes.
- 5. Describe Williamson synthesis.
- 6. Describe the properties of Alpha (α) unsaturated carbonyl compounds.
- 7. Write the preparation and synthetic utility of Grignard reagent.
- 8. Describe the methods of preparation of alcohols.

III. Short answers on : $(10 \times 2 = 20)$

- 1. Define Conjugation.
- 2. Write about Mesomeric effect.
- 3. Give the structural formula of Urethane and Acetanilide.
- 4. Define Ozonolysis.
- 5. Brief about reduction of Carboxylic acids.
- 6. Give the structural formula and IUPAC name of Acetaldehyde.
- 7. Define Hybridization.
- 8. Define Intra-molecular forces.
- 9. Define Nucleophiles.
- 10. Mention the medicinal uses of Vanillin and Carbromal.
