(LM 4252)

FEBRUARY 2018

Sub Code: 4252

B.PHARM. DEGREE 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. a) Define polynuclear hydrocarbons. Briefly explain the synthesis and chemical properties of naphthalene and diphenyl methane.

- b) Write briefly about Aldol condensation.
- 2. a) Brief out in detail about SN1 and SN2 reactions.
 - b) Explain the mechanism of halogenations of alkanes.

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

- 1. State with example Markownikoff's rule.
- 2. Write the preparation, test for purity and medicinal uses of sodium lauryl sulphate and iodoform.
- 3. Explain the preparation and synthetic utility of diazonium salt.
- 4. Write a detailed note on free radicals.
- 5. Explain various methods of synthesis and reactions of alkanes.
- 6. Write a note on keto-enol tautomerism with examples.
- 7. Describe briefly Diel's-Alder reaction with mechanism.
- 8. Differentiate primary, secondary and tertiary amines.

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

- 1. Define hyper conjugation.
- 2. What is ozonolysis?
- 3. Huckel's rule of aromaticity.
- 4. Write the medicinal uses of phenindione and urethane.
- 5. Write the structure of acetic anhydride and propanal.
- 6. Write on clemmenson reduction.
- 7. Write about the types of bond fission.
- 8. Carbenes.
- 9. Write one method of synthesis of amines.
- 10. Oxidation of secondary alcohols.
