

(LN 4258) **AUGUST 2018** Sub. Code: 4258

B.PHARM. DEGREE EXAMINATION SECOND YEAR

PAPER III - ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

O.P. Code: 564258

Time: Three hours Maximum: 100 Marks

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

1. a) Explain the various methods of determination of configuration of geometric isomers.

- b) Give important methods of preparation and chemical reactions of indole.
- 2. a) Discuss the chemistry of camphor.
 - b) Explain the chemistry of Vitamin B₂ and Folic acid.

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

- 1. Explain the method of resolution by formation of diastereomers with examples.
- 2. Explain optical isomerism in Meso Tartaric acid.
- 3. Discuss the chemistry of pyrimidine.
- 4. Write the important reactions of quinoline.
- 5. Write the chemistry and uses of alpha-pinene.
- 6. Explain the basic ring system and nomenclature of steroid nucleus.
- 7. Discuss the inter-relationship between caffeine, theophylline and theobromine.
- 8. Discuss the chemistry of Digoxin.

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

- 1. What is conformational analysis?
- 2. Define relative configuration and absolute configuration.
- 3. Give two uses of mercuric acetate.
- 4. What is Darzen's reaction?
- 5. Give two methods of synthesis of thiazole.
- 6. Write any two reactions of Pyrazole.
- 7. Classify terpenoids.
- 8. What are sennosides?
- 9. Write the tautomers of uric acid.
- 10. Write the structure of Vitamin B₆ and its uses.
