

B.PHARM. DEGREE EXAMINATION
SECOND YEAR
PAPER III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 564258

Time: Three hours

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain stereochemistry of cyclic compounds.
b) Explain various methods of determination of configurations of geometric isomers.
2. a) Discuss the chemistry and uses of ephedrine.
b) Explain the chemistry and medicinal uses of Vitamin B₁ and Vitamin E.

II. Write notes on:

(8 x 5 = 40)

1. Define and explain the pharmaceutical importance of chirality.
2. Explain conformational analysis of 1, 2 dichloroethane.
3. Explain various methods of resolution of racemic modification.
4. Discuss the chemistry of imidazole.
5. Explain the chemistry and uses of thymol.
6. Discuss the chemistry of lanatoside.
7. Explain the chemistry of uric acid.
8. Explain metal hydride reduction as synthetic tools.

III. Short answers on:

(10 x 2 = 20)

1. What is Fischer projection?
2. Define asymmetric synthesis.
3. What is E-Z system of nomenclature?
4. Write the structure and medicinal uses of camphor.
5. What are sennosides?
6. Write the structure and uses of folic acid.
7. Write the structure and medicinal uses of caffeine.
8. Give the medicinal uses of flavonoids.
9. What is periodic acid oxidation?
10. Give the synthetic uses of hydrazine and its derivatives.
