

B.PHARMACY DEGREE COURSE (NON-SEMESTER EXAMINATIONS)
SECOND YEAR (Regulation 2009-2010)
PAPER III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 564258

Time: Three hours

Answer ALL questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. (a) What are vitamins and classify them with example?
(b) Explain the structural elucidation of Vitamin A.
2. (a) What are alkaloids? Classify them with example.
(b) Write a note on Resolution of Racemic modification.

II. Write notes on:

(8 x 5 = 40)

1. Explain the chemistry of uric acid.
2. Explain the sequence rule.
3. Explain the various elements of symmetry with examples.
4. Explain the mechanism and application of clemmensen reduction.
5. Write the synthesis and properties of pyrrole.
6. Write the Interrelationship between caffeine, Theophylline and Theobromine.
7. Write a note on Walden Inversion.
8. Explain the chemistry of Hesperidin.

III. Short answers on:

(10 x 2 = 20)

1. Define glycosides with example.
2. Define Terpenoids with example.
3. Define stereo mutation.
4. What is Birch Reduction?
5. Write any two reactions of furan.
6. Write the structure and uses of digitoxin.
7. Write the synthesis of pyridine.
8. Define Enantiomers.
9. What is Cis-Trans isomerism?
10. Write the structure and use of Vitamin B₁.
