B. Pharmacy 6th Semester Examination
Chemistry of Natural Products
HBP-310

Time : 3 Hours Max. Marks : 80

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note: Candidates are required to attempt five questions in all selecting one question from each of the section A, B, C and D of the question paper and all the subparts of question in Section-E.

SECTION - A

1. Write the stereoisomerism of citral and menthol. (16)

2. Write the chemical and spectral approaches of simple molecules of natural product. (16)

SECTION - B

3. Classify terpenes. Discuss the chemistry of carvone. (16)

4. Write the chemistry of camphoranic acid. (16)

SECTION - C

5. Write the sources of cardiac glycosides. Discuss the chemistry of digitoxin. (16)

6. Classify alkaloid. Write the chemistry and pharmacological activity of quinine. (16)
7. Classify flavonoid compound. Write the chemistry of quercetin.  

8. Discuss the chemistry of tetracycline.

SECTION - E

9. (a) How could you prove that menthol is a monocyclic compound.

(b) Streptomycin composed of three units. Name those three units.

(c) What do you mean by zeisel determination?

(d) What are the different degradation reaction used in alkaloids structural elucidation and how it is helpful?

(e) Write two applications of the IR taking examples of Natural products.

(f) Write the pharmacological activity of reserpine.

(g) What happens when Atropine undergoes hydrolysis?

(h) What happens when morphine in acetylation. (2×8=16)