## **BACHELOR OF PHARMACY EXAMINATION, 2017**

(B. Pharm 2<sup>nd</sup> Year)

# **SECOND SEMESTER EXAM 2017 (Old)**

## Pharmaceutical Chemistry - VI

Time: Three hours.

Full Marks:100

Answer any five questions taking at least two from each group

#### GROUP - A

1. What are piperidine and pyridine alkaloids? Classify with example. Describe different alkaloids of these classes with their source, structural features and therapeutic uses.

$$10+10=20$$

2. Describe three different phyto constituents from each of the following chemical group with their chemical structure and therapeutic uses:

a) Flavonoids

$$7+7+6=20$$

- b) Tannins
- c) Saponin

3. Explain the qualitative test procedures for the following:

5x4 = 20

- a) Quinoline alkaloids
- b) Tropane alkaloids
- c) Glycosides
- d) Carbohydrates

TIME: 3 hrs

F.M.-100

# BACHELOR OF PHARMACY 2<sup>ND</sup> YR 2<sup>ND</sup> SEMESTER-2017(Old) PHARMACEUTICAL CHMISTRY-VI

# GROUP - B

- 4. a) Define natural products with their examples. Discuss in brief the traditional system of Indian medicines.
- b) What are the factors and methodology to be considered for natural products and drug discovery?
- c) Mention the structure and specific use of Physostigmine, Morphine, Cocaine, Camptothecin, Nicotine and Artemesinine.

4+6+10=20

- 3. a) Define and classify terpenoids with examples.
- b) Explain with a scheme how C-C bond formation takes place in terpenoid biosynthesis (upto  $C_{20}$  carbon atoms)?

4+8+8=20

- **6**. a) Discuss the structure, source and uses of the following (any four):
- i) Myrcene ii) Terpeneol iii) Camphor iv) Geraniol v) Limonene vi) Menthol
- b) Draw a scheme of isolation of Capsanthin and Lycopene, also mention their color reaction for identification.

10+5+5=20

- 7. a) Define and classify Carotenoids with examples.
- b) Discuss various types of Carotenoids?
- c) Write a brief note on Pesticides of natural origin.

5+5+10=20