BACHELOR OF PHARMACY EXAMINATION, 2018

(B. Pharm 2nd Year)

SECOND SEMESTER EXAM 2018 (Old)

Pharmaceutical Chemistry – VI

Time: Three hours.   Full Marks:100

Answer any *five* questions taking at least two from each group

GROUP – A

1. Differentiate between the following group of alkaloids with example in each case and their therapeutic uses:

   a) Quinine and Quinidine

   b) Quinoline and Isoquinoline   10+10 = 20

2. a) What is Tropane alkaloid?

   Explain different Tropane alkaloids with their structural features and therapeutic Benefits

   b) Describe the biosynthetic pathway for production of Tropane alkaloids

                                                     10+10 = 20

3. Write short notes on: 5x4=20

   a) Heath benefits of Nutraceuticals

   b) Shikimic acid pathway

   c) Purine alkaloids

   d) Brontrager's Test

   e) TCA cycle

B. PHARM. 2nd YEAR 2ND SEM. EXAM-2018   F. M.-100

PHARMACEUTICAL CHEMISTRY-VI(Old)

GROUP - B

4. a. Define and classify pesticides with examples.

  b. Discuss in brief the pesticides of natural origin

  c. Write a note on diterpenoid.

4+10+6= 20

5. a. What are natural products?

  b. Discuss the factors and methodology for drug discovery and development from natural origin.

  c. Outline the source, structure and therapeutic uses of the following:
     Digitoxin, Morphine, Physostigmine, Artemisinin

2+10+8= 20

6. a. Define and classify Carotenoids with examples. What are the provitamin A functions and other physiological function of carotenoids?

  b. Discuss the source, structure and uses of the following:
     α-carotene, β-carotene, γ-carotene

  c. How can you isolate Capsanthin from Paprika and Lycopene from Tomato? Mention their structure and identification test.

2+4+6+8=20

7. a. Define and classify terpenoids with examples. What is Isoprene rule? Where from Isoprene comes in plant?

  b. Write short notes on
     Geraniol, Limonene, Camphor, Linalol.

  c. Discuss with structure, how can C-C bond formation take place in terpene biosynthesis?

2+2+10+6=20