

B.Pharm. Fifth Semester (C.B.S.) Examination

PHARMACOGNOSY AND PHYTOCHEMISTRY—III (Chemistry of Natural Products)

Paper—4

Time : Three Hours]

[Full Marks : 80

Note :— (1) Q. No. **1** is compulsory.

(2) Attempt any **four** questions from the remaining.

(3) Draw neat labelled diagram wherever necessary.

1. Solve any **five** :

(a) Describe the principle and procedure of paper chromatography.

(b) Write a short note on Maceration.

(c) Give biological source, chemical constituents and uses of caraway.

(d) Differentiate between Tolu balsam and Peru balsam.

(e) Define and classify resins with examples.

(f) Write a note on theory of mass transfer.

(g) Add a note on Benzoin.

5×4=20

2. (A) Define and classify volatile oil with example. Give the general extraction method for volatile oils.

8

(B) Write Pharmacognostic account on Cinnamon bark.

7

3. (A) Give isolation, purification and chromatographic profiles for Eugenol.

8

(B) Write a short note on High performance thin layer chromatography.

7

4. (A) Write structure elucidation of camphor.

8

(B) Write pharmacognostic account of Eucalyptus.

7

5. Define chromatography. Enlist different chromatographic techniques. Write a detailed account on thin layer chromatography and its applications.

15

6. Give biological source, chemical constituents, chemical test and uses of the following (any **three**) :

(a) Tulsi

(b) Ginger

(c) Clove

(d) Nutmeg

(e) Colophony.

5×3=15

7. Write short notes on (any **three**) :

(a) Super critical fluid extraction

(b) Structure elucidation of Taxol

(c) Turmeric

(d) Asafoetida

(e) Fennel.

5×3=15