

TKN/KS/16-6996

Fifth Semester Examination for the Degree of Bachelor of Pharmacy

PHARMACOGNOSY AND PHYTOCHEMISTRY III

5 T 4

Time : Three Hours]

[Max. Marks : 80

N. B. : (1) Question No. 1 is compulsory.

(2) Solve any four questions from the remaining.

(3) Draw neat labelled diagram wherever necessary.

(4) Discuss the reaction, mechanism wherever necessary.

 1. Solve any **five** of the following :—

(a) Explain the concept of Maceration.

(b) Differentiate between fixed oil and volatile oil.

(c) Write a note on Tulsi.

(d) Give physical and chemical properties of resins.

(e) Write about method of preparation and chemical constituents of Asafoetida.

(f) Give general principle and applications of ion exchange.

(g) Explain the isolation procedure for citral.

 $5 \times 4 = 20$

2. (a) What do you mean by chromatography ? Describe the principle, procedure and documentation involved in high pressure liquid chromatography. 10

TKN/KS/16-6996

Contd.

(b) What is extraction ? Write a note on super critical fluid extraction. 5

3. (a) Write about classification methods, of extraction and evaluation of volatile oils. 8

(b) Describe 'clove' under pharmacognostic scheme. 7

4. (a) Explain biosynthetic pathways and methods of extraction of resins. 7

(b) Give a pharmacognostic account on Tolu Balsam and Peru Balsam. 8

5. Describe isolation, purification and chromatographic profiles of Eugenol and menthol. 15

6. Explain various steps involved in structural elucidation of camphor. 15

 7. Write notes on any **three** of the following :—

(a) Paper chromatography

(b) Coriander and cinnamon

(c) Myrrh and Benzoin

(d) Structural elucidation of Taxol

(e) Soxhlet extraction

 $5 \times 3 = 15$

TKN/KS/16-6996

2

430