

1046
B.A./B.Sc. (General) Third Year
Industrial Chemistry
Paper – B [Opt.(i)]: Pharmaceutical

Max. Marks: 75

Time allowed: 3 Hours

NOTE Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit

x-x-x

I. Attempt the following:-

- Discuss autoclaving as a method of sterilization.
- Discuss the chromatographic method of identification of crude drugs.
- Give the chemical constitution of saponins.
- State the general principle of fermentation processes.
- Write the legal aspects of drugs.

(5×3)

UNIT- I

- II. Explain in detail the development of Indian Pharmacopoeia. (15)
- III. Elaborate the chemistry and quality specifications of the following pharmaceutical excipients.

- Glidants
- Colouring agents
- Flavaring agents
- Gelatin
- Sorbitol

(5×3)

UNIT – II

- IV. Discuss in detail the process, equipments used for the manufacture, methods for sterilization and quality control specifications involved in the manufacture of surgical dressings. (15)

V. Explain the following parameters for evaluation of crude drugs:

- Moisture content
- Extractive value
- Volatile oil content

(5×3)

P.T.O.

(2)

UNIT- III

VI. Give in detail the raw material, process of manufacture and effluent handling of following drugs:

a) Chlaramphenicol

b) Furazolidine

(8,7)

VII. Discuss the isolation procedures for the following active ingredients:

a) Vinca alkaloids

b) Steroids

(8,7)

UNIT- IV

VIII. Give the details for the industrial synthesis of the following bulk drugs:

a) Phenobarbitol

b) Atenolol

c) Methyl dopa

(5x3)

IX. Discuss the manufacture of ephedrine using enzyme catalyzed transformation processes.

(15)

x-x-x