

2023
B.A./B.Sc.
Fourth Semester
 SKILL ENHANCEMENT COURSE – 2
CHEMISTRY
Course Code: CHS 4.11
 (Pharmaceutical Chemistry)

Total Mark: 35
Time: 2 hours

Pass Mark: 14

Answer two questions taking one from each unit.

UNIT-I

1. (a) Explain the steps required for modern drugs discovery. 5
- (b) Write short notes on the following: 3×2=6
 - (i) Anti-inflammatory agent
 - (ii) Anti-bacterial agent
 - (iii) Analgesic agent
- (c) Give the preparation, properties and uses of chloramphenicol. 6½
2. (a) What are antipyretic agents? How paracetamol is prepared? Give its properties and uses. 2+2+2=6
- (b) What do you understand by basic approach to retrosynthesis? Explain the symbol involved in retrosynthesis with examples. 3+3=6
- (c) Write short notes on the following: 2+3½=5½
 - (i) Sulphonamides
 - (ii) Sulphacetamides

UNIT-II

3. (a) Explain in detail how to synthesize ethanol from ethylene and sulphuric acid. 6½
- (b) Write short notes on the following: 2×3=6
 - (i) Daizepam
 - (ii) Glyceryl trinitrate
 - (iii) Glutamic acid

(c) Explain the discovery of penicillin and give its properties and uses. 5

4. (a) What are antibiotics? What are the required conditions for a substance to be considered as an antibiotic? 1+3=4
- (b) What do you understand by vitamins? 2½
- (c) Explain vitamin B2 and vitamin B12. Give its deficiency and uses. 3+3=6
- (d) Write a short note on any two: 2½×2=5
- (i) Cephalosporin
 - (ii) Dapsone
 - (iii) Streptomycin
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