

Roll No.....

S. No. of Question Paper :
Unique Paper Code : **32173909**
Name of the Paper : **Pharmaceutical Chemistry**
Name of the Course : **B.Sc.(H) Chemistry/B.Sc. Prog. (SEC)**
Semester : **III**

Duration: 1.30 Hours

Maximum Marks: 38

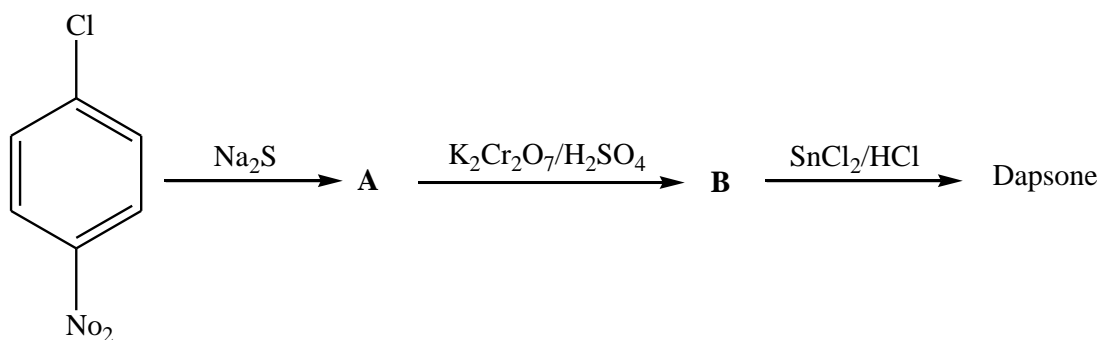
Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question papers.

2. Attempt any **two** questions

1. Answer the following questions

- (i) Give the synthesis of Aspirin with its mode of action? (4)
- (ii) What is meant by pharmaceutical aids? Give two examples? (3)
- (iii) How is AZT-Zidovudine synthesized? (3)
- (iv) Differentiate between aerobic and anaerobic fermentation? (3)
- (v) Discuss about the side effects of thalidomide and ibuprofen? (3)
- (vi) Complete the followings: (3)



- 2 (i) Explain the synthesis of Streptomycin using fermentation method and therapeutic uses of this drug? (5)

Or

Describe the fermentation process for citric acid?

- (ii) What are anti-convulsant agents? Give one suitable example with its method of Synthesis? (5)
- (iii) Discuss the importance of Retrosynthetic approach in drug discovery with suitable Example? (5)
- (iv) What do you understand the meaning of term 'Prodrug' and 'Analog's'? (4)

- 3 (i) Write short notes on the followings: (3x3)

- (a) Therapeutic Index
- (b) Bioisoterism
- (c) Sedative

- (ii) Draw the structure of followings: (1x4)

- (a) Cephalosporin (b) Diazepam (c) Chloromycetin (d) Trimethoprim

- (iii) Briefly explain the basic approach of drug discovery? (4)
- (iv) What is difference between drug and poison? (2)

- 4 (i) How fermentation could be useful for the industrial production of Vitamin C? (5)

- (ii) What is the medicinal importance of the drug Sulfamethoxazole? Give its commercial synthesis? (5)

- (iii) What are Antibiotics? Give a note on synthetic penicillins? (5)

- (iv) What are bacteriostatic and bactericidal agents with one example for each? (4)