

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

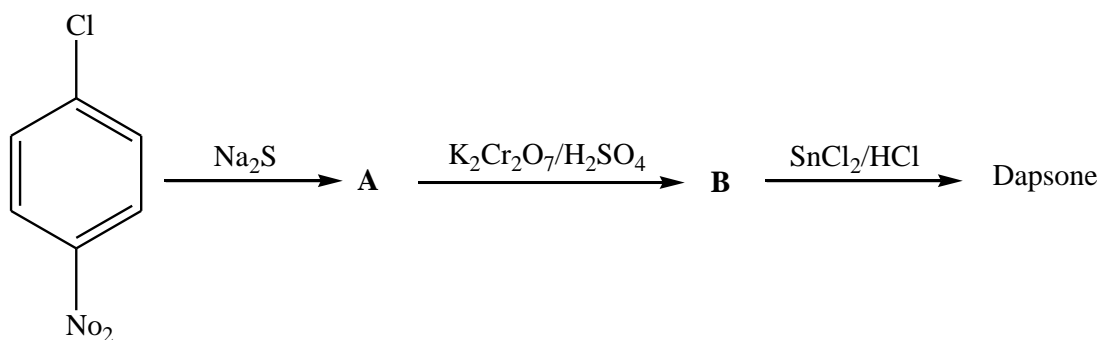
Instructions for Candidates

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)