

Sl. No. of Question Paper: 2105

Unique Paper Code : 32173909

Name of the Paper : SEC-9, Pharmaceutical Chemistry

Name of the Course : B.Sc. Chem./ Life Sci./ Phy. Sci./ Industrial Chem. / B.Sc. (Hons)

Semester : III

Duration : 02 hours

Maximum Marks : 37.5 Marks

GC-3

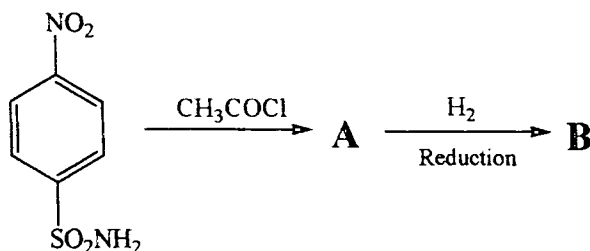
**Instructions for Candidates**

Answer any three of these questions: Each question carries equal marks.

1. Do any five. (2.5 x 5)

- i) How can a drug be targeted to a specific organ?
- ii) What are the advantages and disadvantages of 'herbal medicine'?
- iii) Give method of preparation of Aspirin.
- iv) What are antibacterials? Give one example.
- v) Give structure of chloramphenicol.
- vi) What are antifungal agents? Give one example.
- vii) Describe fermentation process for synthesis of lysine.

2. i) What do you understand by 'screening' in drug development? What is its significance? (4)
- ii) What are analgesic agents? Give two examples. (4.5)
- iii) Complete the following: (4)



3. i) Give structure of Phenobarbital. Describe its use as drug. (3)
- ii) Give preparation of glyceryl trinitrate (GTN). (3)

iii) a) What is fermentation? b) What is aerobic fermentation? c) Explain how fermentation can be used for industrial production of Vitamin B<sub>12</sub> or Vitamin C. (6.5)

4. i) Write short notes on any two of the following: (5,5)

a) Therapeutic index.

b) Retrosynthetic approach in drug development.

c) Discovery of penicillin.

ii) What do you understand by a 'drug'? (2.5)