

Seat Number

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W-19

**BP 402 T**  
**Medicinal Chemistry – I**  
**(724402)**

P. Pages : 2

Time : Three Hours

Max. Marks : 75

## Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All the questions are compulsory.

1. Solve the following questions. 20
- a) Define the following terms.
    - i) Agonist
    - ii) Antagonist
  - b) Give the mechanism of action of Ibuprofen.
  - c) Enlist the factors affecting on drug metabolism.
  - d) Draw the following structures.
    - i) Adrenaline
    - ii) Ephedrine
  - e) Define the following terms
    - i) Prodrug
    - ii) Geometrical isomerism
  - f) Classify parasympathomimetic agent with examples.
  - g) Give the stages of Anesthesia.
  - h) Write the catabolism of Acetylcholine.
  - i) What do you mean by dissociation constant?
  - j) Explain the method of synthesis of diazepam.

## 2. Solve any two.

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- a) Classify Anticonvulsant agents with examples. Add a note on Mechanism of action and SAR of Anticonvulsant agent.
- b) Define Sedative and Hypnotics. Classify the Barbiturates and give SAR of Barbiturates.
- c) What are Analgesic and Anti-inflammatory drugs? Classify non – steroidal anti-inflammatory drugs with examples.

## 3. Solve any seven.

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- a) Explain the factors affecting on drug metabolism.
- b) Give biosynthesis and catabolism of Catecholamine.
- c) Classify Anti – adrenergic antagonist and give the SAR of  $\beta$  – blockers.
- d) Give the structure of Benzodiazepines and SAR of it.
- e) Define General Anesthetics and classify it along with examples.
- f) Give the SAR of Salicylic acid derivatives.
- g) Define biotransformation and explain the phase – I reaction in detail.
- h) Explain the SAR of phenothiazine.
- i) What are Sympathomimetic agent? Classify them with examples.

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