

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2022

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| Course : B. Pharmacy | Date: 09/02/2023 |
| Subject Name : Medicinal Chemistry-I | Sem: IV |
| | Subject Code: |
| | BP402T |
| Max Marks : 75 | Duration : 3 Hr. |

Instructions:

- 1. All questions are compulsory**
 - 2. Draw diagrams / figures wherever necessary**
 - 3. Figures to right indicate full marks**
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Q. 1. One or Two answer sentence (Answer all the questions) (10 x 2) = 20

- Describe in detail about Bioisosterism.
- Write down the synthesis of Tolazoline.
- Explain β adrenoreceptors.
- Draw the structure and IUPAC name of Tacarine hydrochloride
- How does benzodiazepine affect the action of GABA?
- Write MOA of major tranquillizer
- Why phenytoin does not give sedation through rest drugs of hydantoin class shows sedation
- Write a note on Opioid antagonist.
- Write a MOA of Aspirin
- What is partition coefficient?

Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20

- Discuss the SAR of Sympathomimetic agent and write a note on Biosynthesis & Catabolism of Catecholamine.
- Classify narcotics analgesic. Add a note on SAR and MOA Fentanyl citrate and Methadone hydrochloride.
- Enlist various physicochemical properties affecting the biological activity of drug. Add a note on Phase-I reaction.

Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35

- What is mean by drug metabolism? Describe the factors affecting drug metabolism.
- Write a note on biosynthesis and release of acetylcholine.
- Outline the synthesis of Salbutamol and Ibuprofen.

- iv) Classify sedative and hypnotics. Write the SAR and MOA of Barbiturates.
- v) Write a note on cholinergic blocking agent. And write the SAR of Ipratropium bromide.
- vi) Classify antipsychotic drug. Add a note on Chlorpromazine hydrochloride.
- vii) Define epilepsy and describe general mechanism of action of anticonvulsant drug.
- viii) Write a note on adrenergic receptor. Classify sympathomimetic drugs with e.g.
- ix) Describe the SAR of morphine analogues. Add a note on anti-inflammatory agent.

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