

B.Pharm. Fourth Semester (New)  
**Medical Chemistry - I : BP 402 T**

P. Pages : 3

Time : Three Hours

**AW - 2349**

Max. Marks : 75

- Notes :
1. Answer **all** question.
  2. Illustrate your answer necessary with the help of neat sketches.
  3. Discuss the reaction, mechanism wherever necessary.
  4. Use of pen Blue/Black ink/refill only for writing the answer book.

**1. Multiple choice question.****20**

- i) If more the lipid / water partition coefficient more will be -----
  - a) Water solubility
  - b) Lipophilicity
  - c) Hydrophilicity
  - d) Both A & B
- ii) Conjugation of a drug include the following except.
  - a) Glucuronidation
  - b) Sulfate formation
  - c) Hydrolysis
  - d) Methylation
- iii) Which of the following drugs produce positive inotropic & negative chronotropic action.
  - a) Dopamine
  - b) Epinephrine
  - c) Digoxin
  - d) Isoprenaline
- iv) Which of the following is selective alpha receptor antagonist.
  - a) Clonidine
  - b) Phentolamine
  - c) Prazosin
  - d) Yohimbine
- v) One of the following is resistant to both true & Pseudo cholinesterase enzyme.
  - a) Carbachol
  - b) Acetylcholine
  - c) Methacholine
  - d) Pilocarpine
- vi) An anti-cholinesterase which is used in Alzheimer's disease is
  - a) Arecolin
  - b) Donepezil
  - c) Isoproterolol
  - d) Physostigmine
- vii) The neurotransmitter released at synaptic nerve vessels fiber is
  - a) Epinephrine
  - b) Nor-epinephrine
  - c) Acetylcholine
  - d) Physostigmine
- viii) Skeletal muscle relaxation produced by the drug ----- effectively antagonize by neostigmine.
  - a) Diazepam
  - b) Succinylcholine
  - c) Tubocurarine
  - d) Aminophylline
- ix) Neuromuscular blocking agents a per action are
  - a) Non-depolarizing blocking agent
  - b) Depolarizing agent
  - c) Both
  - d) None of these

- 2. Solve any two.**

a) Discuss the conjugation reaction for Glucuronic acid & Glycine from phase – II Drug metabolism reaction. Why cytochrome P – 450 called cytochrome P – 450?

- b) Define & classify Antipsychotic agent & explain any one drug from each class. Add a note on SAR of Phenothiazine.
- c) Define & classify sedative & Hypnotics drug write in detail about SAR of Benzodiazepines.

3. Solve any seven.

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- a) Write a note on partition coefficient & Bioisosterism.
- b) Explain SAR of sympathomimetic Agents.
- c) Explain Biosynthesis & catabolism of Acetyl choline.
- d) Discuss phase – II drug metabolism via Acetylation & methylation.
- e) Add a note on Cholinesterase reactivator.
- f) Write a note on  $\beta$  blockers.
- g) Explain any four drug from inhalation anesthetics.
- h) Add a note on Narcotic Antagonist.
- i) Explain Phase – I process of hydrolysis with eg.

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