

**B. PHARM.
FOURTH SEMESTER
MEDICINAL CHEMISTRY-I
BP402T [REPEAT]
[USE OMR SHEET FOR OBJECTIVE PART]**

**SET
A**

Duration : 3 hrs.

Full Marks : 75

[PART-A: Objective]

Time : 30 min.

Marks : 20

Choose the correct answer from the following:

1×20=20

- Acetylcholine is biosynthesised from
 - L-cysteine
 - L-Codeine
 - L-Serine
 - L-Cholic acid
- Anticholinergic useful as spasmolytic is
 - Pyridostigmine
 - Dicyclomine
 - Tropicamide
 - Glycopyrrolate
- Which of the following are muscarine effect except?
 - Decrease Heart rate
 - Bronchoconstriction
 - Dryness of mouth
 - Intestinal cramping
- Acetylation of morphine yields?
 - Codeine
 - Ethyl morphine
 - Heroin
 - Hydromorphone
- Which of the following is used in the diagnosis of myasthenia gravis
 - Edrophonium
 - Pilocarpine
 - Pyridostigmine
 - Physostigmine
- Which of the following is not a synthetic cholinergic blocking agent?
 - Tropicamide
 - Atropine sulphate
 - Clinidium bromide
 - Cyclopentolate
- Drug that can cross Blood Brain Barrier is—in nature?
 - Lipophilic
 - Hydrophilic
 - Amphoteric
 - All of the Above.
- Phase-II of drug metabolism is also known as-
 - Synthetic Phase
 - Non- synthetic phase
 - Conjugation Phse
 - NOTA
- Enzyme responsible for catabolism of Catecholamines are-?
 - COMT
 - MAO
 - Both
 - NOTA
- A cholinesterase reactivator which is used as an antidote for Parathione?
 - Pyridostigmine
 - Parlidoxime chloride
 - Neostigmine
 - Ecothiophate

11. Which of the following drugs is classified as narcotic antagonist agent?
 - a. Morphine
 - b. Heroin
 - c. Pilocarpine
 - d. Nalorphine HCl
12. Which of the following receptor is not an opioids receptor?
 - a. Muscarinic
 - b. Sigma
 - c. Kappa
 - d. Mu
13. Which of the following is ultra short acting barbiturates?
 - a. Halothane
 - b. Methohexital sodium
 - c. Ketamine HCl
 - d. Cyclopentolate
14. IND stands for-
 - a. Indian New Drugs
 - b. International New Drugs
 - c. Investigational New Drugs
 - d. Intentional New Drugs
15. Precursor for the synthesis of Catecholamines-?
 - a. Tyrosine
 - b. Phenylamine
 - c. Phenylephrine
 - d. Phenylalanine
16. First antibiotics was discovered in the year-?
 - a. 1982
 - b. 1920
 - c. 1945
 - d. 1928
17. Natural products or derivatives or synthetic substance with good binding ability in drug discovery is known as-?
 - a. Hit compound
 - b. Lead compound
 - c. NDA
 - d. IND
18. Which of the following drugs is not an alpha-adrenergic blocker-?
 - a. Bisoprolol
 - b. Prazosin
 - c. Tolazoline
 - d. Phentolamine
19. Final catabolised products of Epinephrine and norepinephrine is -?
 - a. 4-hydroxy-3-methyl phenylglycoaldehyde
 - b. 3-methoxy-4-hydroxy mandelic acid
 - c. 3-phenylalanine
 - d. 4-methyl phenyl amine
20. Which type of hydrogen bonding is generally increase solubility, melting and boiling point?
 - a. Intermolecular hydrogen bonding
 - b. Intra molecular hydrogen bonding
 - c. Both a & b
 - d. NOTA

(PART-B :Descriptive)

Time : 2 hrs. 30 min.

Marks : 35

[Answer any seven (7) questions]

1. Define Sedative and Hypnotics? Write the MOA of Benzodiazepines. 2+3=5
2. Write a note on SAR of morphine analogue. 5
3. Define general anesthetics and write the synthesis of halothane and its uses. 1+4=5
4. Write a note on SAR of phenothiazines. 5
5. Write the structure, MOA and medicinal uses of Acetylcholine, Neostigmine. 2.5+2.5=5
6. Write a note on biosynthesis and catabolism's of catecholamines. 3+2=5
7. Explain the factors effecting the drug metabolisms including stereochemical aspects. 5
8. Write a note on phases of drug metabolisms. 5
9. Write a note on SAR of benzodiazepines. 5

(PART-C: Long type questions)

[Answer any two (2) questions]

1. Draw the structure and medicinal uses of phenobarbitone, methohexital sodium, chlorpromazine hydrochloride, barbital. 2+2+2+2+
2=10
2. Explain briefly the physiochemical properties of drugs in relation of their biological action. 10
3. Write the structure , MOA and uses of any four beta blockers. 2.5+2.5+
2.5+2.5
=10

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[4]