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:

$1 \times 20 = 20$

1. Acetylcholine is biosynthesised from
   a. L-cysteine
   b. L-Codeine
   c. L-Serine
   d. L-Cholic acid

2. Anticholinergic useful as spasmolytic is
   a. Pyridostigmine
   b. Dicyclomine
   c. Tropicamide
   d. Glycopyrrolate

3. Which of the following are muscarine effect except?
   a. Decrease Heart rate
   b. Bronchoconstriction
   c. Dryness of mouth
   d. Intestinal cramping

4. Acetylation of morphine yields?
   a. Codeine
   b. Ethyl morphine
   c. Heroin
   d. Hydromorphone

5. Which of the following is used in the diagnosis of myasthenia gravis
   a. Edrophonium
   b. Pilocarpine
   c. Pyridostigmine
   d. Physostigmine

6. Which of the following is not a synthetic cholinergic blocking agent?
   a. Tropicamide
   b. Atropine sulphate
   c. Clinidium bromide
   d. Cyclopentolate

7. Drug that can cross Blood Brain Barrier is — in nature?
   a. Lipophilic
   b. Hydrophilic
   c. Amphoteric
   d. All of the Above.

8. Phase-II of drug metabolism is also known as-
   a. Synthetic Phase
   b. Non- synthetic phase
   c. Conjugation Phse
   d. NOTA

9. Enzyme responsible for catabolism of Catecholamines are-?
   a. COMT
   b. MAO
   c. Both
   d. NOTA

10. A cholinesterase reactivator which is used as an antidote for Parathione?
    a. Pyridostigmine
    b. Parlidoxime chloride
    c. Neostigmine
    d. 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 mandellic 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

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[2]

PART-B : Descriptive

Time : 2 hrs. 30 min.   Marks : 35

[Answer any seven (7) questions]

1. Define Sedative and Hypnotics? Write the MOA of   2+3=5
    Benzodiazepines.

2. Write a note on SAR of morphine analogue.   5

3. Define general anesthetics and write the synthesis of halothane and   1+4=5
    its uses.

4. Write a note on SAR of phenothiazeines.   5

5. Write the structure, MOA and medicinal uses of Acetylcholine,   2.5+2.5
    Neostigmine.   =5

6. Write a note on biosynthesis and catabolism's of catecholamines.   3+2=5

7. Explain the factors effecting the drug metabolisms including   5
    stereochemical aspects.

8. Write a note on phases of drug metabolisms.   .   5

9. Write a note on SAR of benzodiazepines.   5

[3]

[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]