

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:

$1 \times 20 = 20$

- Which one of the following is triazoloderivatives
a. Barbitol
b. Alprazolam
c. Diazepam
d. Glutethimide
- Which one of the following antipsychotics is a fluoro buterophenone derivatives
a. Sulpiride
b. Haloperidol
c. Loxapine succinate
d. Molindone hydrochloride
- Which one of the following is act as a dissociative anesthetics
a. Halothane
b. Methohexital sodium
c. Ketamine hydrochloride
d. Isoflurane
- Which one of the following is act as a Inhalation anesthetics
a. Halothane
b. Methohexital sodium
c. Ketamine hydrochloride
d. None of these
- Which one of the following is act as a anticonvulsant drug
a. Phenytoin
b. Sulpiride
c. Molindone hydrochloride
d. Alprazolam
- Which one of the following is act as a selective COX-II inhibitor
a. Celecoxib
b. Rofecoxib
c. Valdecoxib
d. All of these
- Which hetero atoms are present in phenothiazines structure
a. O & N
b. O & S
c. N & P
d. S & N
- Which one of the following phenothiazines consists of Ethyl piperidyl side chain
a. Promazine
b. Prochlorperazine
c. Thioridazine
d. Trifluoperazine
- Which one of the following phenothiazines consists propyl piperazine ring.
a. Thioridazine
b. Promazine
c. Prochlorperazine
d. Chlorpromazine

10. Which one of the following is act as a housekeeping enzyme
 a. COX-I
 b. COX-II
 c. Both a and b
 d. NSAIDs
11. Which one of the following is act as a Sympathomimetic agents
 a. Dopamine
 b. Tolazoline
 c. Propranolol
 d. Carbachol
12. Which one of the following is act as a alpha blocker
 a. Dopamine
 b. Tolazoline
 c. Propranolol
 d. Carbachol
13. Which one of the following is act as a Beta blocker
 a. Dicyclomine hydrochloride
 b. Tolazoline
 c. Propranolol
 d. Salbutamol
14. Out of the following which one consists the highest electronegativity
 a. F
 b. O
 c. N
 d. C
15. Which one of the following is act as a Parasympathomimetic agents
 a. Carbachol
 b. Ipratropium bromide
 c. Dicyclomine hydrochloride
 d. All of the above
16. What is the full form of EDTA
 a. Ethylene Diamine Tetra Acetic Acid
 b. Ethylene Diamine Tri Acetic Acid
 c. Ethane Diamine Tetra Acetic Acid
 d. Ethylene Diamine Tetra Acetate
17. In case of barbiturates, If the sum of the carbon atoms of both the substituents at c-5 counts between 5-7 then what is the outcome
 a. Rapid onset and shortest duration
 b. Intermediate duration of action
 c. Slowest onset and longest duration
 d. Rapid onset and longest duration.
18. In case of benzodiazepine, to get the maximum potency which positions should be unsubstituted
 a. 1,2,3
 b. 3,5,7
 c. 6,8,9
 d. 7,6,8
19. Which one of the following pairs is act as a Isosteres.
 a. CO₂ & N₂O
 b. H & P
 c. H₂O & P
 d. C & N
20. Which one of the following is act as a Cholinergic blocking agents
 a. Dicyclomine hydrochloride
 b. Tolazoline
 c. Neostigmine bromide
 d. Carbachol
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(PART-B :Descriptive)

Time : 2 hrs. 30 min.

Marks : 35

[Answer any seven (7) questions]

1. Write the SAR of Phenothiazine derivatives. 5
2. Write the synthesis of Ibuprofen? 5
3. Write the SAR of benzodiazepines. 5
4. Write the synthesis of Halothane and Methohexital sodium. 3+2=5
5. Write the SAR of barbiturates. 5
6. Write the synthesis of Phenylephrine and Salbutamol. 2+3=5
7. Write the SAR of morphine analogue. 5
8. Write the synthesis of Ketamine hydrochloride. 5
9. Write the synthesis of Propranolol and Tolazoline. 3+2=5

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PART-C: Long type questions

[Answer any two (2) questions]

1. Write the synthesis of (*any two*) 10
 - a. Carbamazepine
 - b. Phenytoin
 - c. Ethosuximide.

2. Write the synthesis of 10
 - a. Fentanyl citrate
 - b. Methadone hydrochloride.

3. Write the synthesis of (*any two*) 10
 - a. Diazepam
 - b. Chlorpromazine hydrochloride
 - c. Barbitol.

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