



Name :

Roll No. :

Invigilator's Signature :

**CS/B.Pharm(OLD)/SEM-6/PT-603/2012
2012**

**PHARMACEUTICAL CHEMISTRY
(MEDICINAL CHEMISTRY)**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :
10 × 1 = 10
- i) Which is the steroidal drug used as an intravenous anesthetic agent which has no hormonal activity ?
 - a) Thiamylal sodium
 - b) Hydroxydione sodium succinate
 - c) Hydroxydione sodium chloride
 - d) None of these.
 - ii) Which type of pain is relieved by Bupivacin Hcl ?
 - a) Labour
 - b) Eye
 - c) Burning skin
 - d) Spinal.
 - iii) In the treatment of chronic insomnia which drug is effective which is a safe hypnotic also
 - a) Zopiclone
 - b) Triazolam
 - c) Zolpidem
 - d) None of these.

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- iv) A class of barbiturates is used in the safest treatment for insomnia
- a) Benzodiazepines b) Nitrazepam
- c) Methy Prylon d) None of these.
- v) Full name of PEMA
- a) primidone ethyl malondiamide
- b) phenyl ethyl malondiamide
- c) phenyl ethyl malonamide
- d) phenyl ethylene malondiamide.
- vi) As an anti-Parkinsonism agent ethopromazine Hcl comes under
- a) Pyrrolidine b) Phenothazine
- c) Pipridine d) None of these.
- vii) Acetazolamide comes under
- a) Carbonic anhydrase inhibitor
- b) Carbonic anhydride inhibitor
- c) Chlorthizaides group
- d) Sulphonamides.
- viii) Which drug is used in men for the treatment of prostatic cancer ?
- a) Diethyl stilbesterol b) Hexestrol
- c) Dienestrol d) None of these.



- ix) In CNS stimulants nikethemide drug is in which classification according to their MOA
- a) convulsant stimulants
 - b) psychomotor stimulants
 - c) respiratory stimulants
 - d) adrenergic stimulants.
- x) Which one is β_2 selective drug ?
- a) Atenolol
 - b) Propranolol
 - c) Sulbutamol
 - d) Labetalol.
- xi) Give an example of oral anticoagulants
- a) Heparine
 - b) Thrombine
 - c) Dicoumadol
 - d) None of these.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

2. Name the three modified versions barbiturates that are used abundantly as intravenous anesthetics with structure.
3. Give the structure, chemical name and uses of a potent non-barbiturate drug having a benzodiazepine nucleus.
4. Write the MOA and SAR hydantoins.
5. Give a brief account of narcotic antagonist and discuss about Nalorphine Hcl briefly.
6. Leaves of digitalis lanata gave two important cardiac glycosides. Give the structure, chemical names and uses.



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

$3 \times 15 = 45$

7. a) What is anti-Parkinsonism and write the classification on the basis of their chemical structure with example.
b) Write the mode of action and synthesis of cycrimine Hcl. 7 + 8
8. a) Write SAR of Benzomorphan and write the therapeutic uses of opioid antagonist.
b) Write the synthesis of following compounds :
i) Nalorphine Hcl
ii) Naloxone Hcl. 7 + 8
9. a) Write the mode of action and therapeutic uses of Oestrogen.
b) Discuss the SAR of 17-a-Hydroxy progesterone.
c) Write the structure of the following compounds :
i) Cholesterol
ii) 17a-methyl-androst-5-ene-3 β , 17 β -diol. 7 + 4 + 4
10. a) What do you mean by diuretics ?
b) What do you mean by mercurialism ?
c) Write the classification of non-mercurial diuretics on the basis of chemical structure with example.
d) Give the synthesis mentioned below :
i) Chlorothiazide
ii) Acetazolamide. 1 + 1 + 5 + 8
11. a) What do you mean by Sedatives and Hypnotics ?
b) Write MOA of Benzodiazepines.
c) Write the classification of local anesthetics according to their chemical structure with example.
d) Write the MOA of the local anesthetics. 2 + 4 + 5 + 4