



Name :

Roll No. :

Invigilator's Signature :

CS/B.Pharm (NEW)/SEM-5/PT-508/2010-11

2010-11

PHARMACOLOGY

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) Local anesthetic blocks nerve conduction by
 - a) Decreasing Na⁺ ion entry
 - b) Increasing K⁺ ion entry
 - c) Decreasing Ca⁺⁺ ion entry
 - d) Increasing Na⁺ ion entry.
- ii) Which of the following is not a cell surface receptor ?
 - a) G-protein coupled receptor
 - b) Receptors with intrinsic ion channel
 - c) Enzymatic receptor
 - d) Receptor regulating gene expression.
- iii) Phocomelia is caused by
 - a) Warfarin
 - b) Thalidomide
 - c) Tetracycline
 - d) Streptomycin.

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[Turn over



- iv) Transport of Ach into synaptic vesicles is blocked by
- a) Botulinus toxin
 - b) Black widow spider toxin
 - c) Vesamicol
 - d) None of these.
- v) Which of the following is atypical antipsychotic agent ?
- a) Clozapine
 - b) Risperidone
 - c) Olanzapine
 - d) All of these.
- vi) Which of the following anesthetics can be used by the open drop method ?
- a) Ether
 - b) Desflurane
 - c) Halothane
 - d) Isoflurane.
- vii) Tolerance to the antiparkinsonian action develops most rapidly in the case of
- a) Levodopa
 - b) Levodopa + carbidopa
 - c) Amantadine
 - d) Bromocriptine.
- viii) The rate limiting enzyme in the synthesis of catecholamines is
- a) Tyrosine hydroxylase
 - b) Dopa decarboxylase
 - c) Dopamine β -hydroxylase
 - d) Noradrenaline *N*-methyl transferase.
- ix) A nonselective α -adrenergic blocker produces the following actions *except*
- a) Postural hypotension
 - b) Bradycardia
 - c) Meiosis
 - d) Inhibition of ejaculation.



GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

7. What is biotransformation ? Explain phase II reaction with suitable example. What changes do occur after biotransformation ? 2 + 9 + 4
8. What is Parkinsonism ? Classify the drugs with example which are used to treat Parkinsonism. What are the benefits obtained when we use carbidopa along with levodopa ? Write briefly about adverse effects of levodopa. 2 + 5 + 3 + 5
9. Classify adrenergic drug by their therapeutic use. Discuss in detail the pharmacology of propranolol. Write a note on sildenafil. 4 + 8 + 3
10. Define & classify receptors with proper example. Describe in detail about the following pathway :
 - a) Adenylyl-Cyclase:cAMP
 - b) Phospholipase C:IP₃:DAG. 2 + 3 + 5 + 5
11.
 - a) What is a narcotic analgesic ?
 - b) Classify narcotic analgesic.
 - c) What are the different types of opioid receptors ?
 - d) Discuss the pharmacology and uses of morphine and its congeners. 2 + 2 + 2 + 9

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