



Name :

Roll No. :

Invigilator's Signature :

CS/B.Pharm(OLD)/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

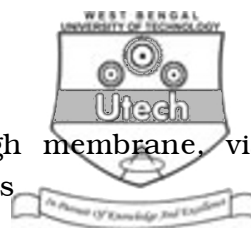
(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :
10 × 1 = 10

- i) When Valproate is administered with phenytoin
 - a) Plasma level of valproate increases
 - b) Plasma level of phenytoin increases
 - c) Both (a) and (b)
 - d) None of these.
- ii) In case of four point bioassay, potency ratio of an unknown substance can be calculated by using the formula
 - a) $s_1 / t_1 \times \text{antilog} (T_2 - S_2 + T_1 - S_1 / T_2 - T_1 + S_2 - S_1) \times \log s_2 / s_1$
 - b) $s_1 / t_1 \times \text{antilog} s_1 / s_2$
 - c) $s_1 / t_1 \times \text{antilog} (T_2 - S_2 + T_1 - S_1 / T_2 - T_1 + S_2 - S_1) \times \log s_1 / s_2$
 - d) $s_1 / t_1 \times \log s_1 / s_2$.

5440

[Turn over



- iii) Transport of two substrates through membrane, via receptor in same direction is termed as
- a) across transport
 - b) symport or cotransport
 - c) antiport
 - d) none of these.
- iv) The therapeutic use of amantadine is
- a) anti-viral
 - b) anti-Parkinson
 - c) both (a) and (b)
 - d) none of these.
- v) The fall in Blood Pressure caused by *d*-tubocourarine is due to
- a) reduced venous pressure
 - b) ganglionic blockade
 - c) histamine release
 - d) all of these.
- vi) The preferred drug for status epilepticus is
- a) I.V. diazepam
 - b) I.V. phenytoin sodium
 - c) I.M. phenobarbitone
 - d) rectal paraldehyde.
- vii) An antidote for acute morphine poisoning is
- a) ferrous sulphate
 - b) nitrazepam
 - c) naloxone
 - d) ketamine.
- viii) Levodopa and carbidopa produce
- a) antagonistic effect
 - b) supraditive effect
 - c) additive effect
 - d) none of these.



- ix) Which of the following is Mydriatic agent ?
- a) Pilocarpine b) Homatropine
 c) Aspirin d) Tropicamide.
- x) The drug having affinity to receptor but it shows negative efficacy, is known as
- a) agonist b) partial agonist
 c) inverse agonist d) antagonist.
- xi) "Child dose" = $\{ \text{Age} / (\text{Age} + 12) \} \infty$ adult dose. This formula is known as
- a) Dilling's formula b) Young's formula
 c) Clerck's formula d) Jacob's formula.
- xii) Paracetamol is known as
- a) Para amino phenol b) Phenacetin
 c) Acetaminophen d) Para-acetaminophen.

GROUP – B

(Short Answer Type Questions)

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

2. What are sedative and hypnotic ? Write briefly on acute barbiturate poisoning.
3. Write briefly on Drug Tolerance.
4. Write briefly about the transport of drug through membrane.
5. Write a short note on the blood brain barrier.
6. Define "Biological Half Life" and explain its significance.



GROUP – C

(Long Answer Type Questions)

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

7. a) Define biotransformation.
b) Briefly discuss about phase II reaction with eample.
c) What is prodrug ? Discuss various applications of prodrug in drug therapy with example.
8. What do you mean by analgesic, antipyretic and anti-inflammatory drugs ? Classify non-selective COX-inhibitors with example. What is the pharmacokinetic property of paracetamol. Write briefly about acute paracetamol poisoning (dose, symptoms, mechanism of toxicity and treatment)
9. What is Epilepsy ? Classify the drugs used for the management of epilepsy with examples. Describe in detail about phenytoin as antiepileptic drug.
10. What are the differences between general anaesthetic and local anaesthetic ? Write in brief about the mechanism of action of general anaesthesia. What is pre-anaesthetic medication ? What are the common complications that occur with general anaesthesia ?
11. Define receptor and classify it with proper example. Describe in detail about Adenylyl cyclase :

$3 + 3 + 2 + 7$

$2 + 5 + 8$

$2 + 4 + 5 + 4$

CMP pathway and phospholipase C : IP3 DAG pathway.

$1 + 8 + 6$

