

29/12/2020

BINA CHOWDHURY CENTRAL LIBRARY
(GIMT & RIPS)
Azadi, Hatkhawapara,
Biswaheer-781017

Total No. of printed pages = 4

BP 404 T

Roll No. of candidate

--	--	--	--	--	--	--	--	--	--

2020

B.Pharm. 4th Semester End-Term Examination

Pharmacy

PHARMACOLOGY — I

Full Marks – 75

Time – Three hours

The figures in the margin indicate full marks
for the questions.

1. Answer the following (MCQ) : (20 × 1 = 20)

- (i) Who is the Father of Pharmacology?
 - (a) Paul Ehrlich
 - (b) Oswald Schmiedeberg
 - (c) Galen
 - (d) Rudolf Buccheim
- (ii) Which of the following is/are used in the treatment of Alzheimer's disease?
 - (a) Tacrine
 - (b) Galantamine
 - (c) Rivastigmine
 - (d) All of the above
- (iii) The inactive drugs which undergo metabolism to convert into active metabolites are called as
 - (a) Prodrug
 - (b) Essential drug
 - (c) Orphan drug
 - (d) Individualized drug
- (iv) Which of the following stage of anaesthesia is NOT preferred for performing surgeries?
 - (a) Stage of analgesia
 - (b) Stage of surgical anaesthesia
 - (c) Stage of delirium
 - (d) Both (a) and (b)

[Turn over

- (v) Disulfiram act by inhibiting
- (a) Alcohol dehydrogenase (b) Aldehyde dehydrogenase
(c) Acetylcholinesterase (d) Monoamine oxidase
- (vi) Example of long acting barbiturate is
- (a) Phenobarbitone (b) Pentobarbitone
(c) Thiopentone (d) All of the above
- (vii) Which of the following experimental models is/are used for study of anti-epileptic drug?
- (a) Maximal electroshock seizures
(b) Pentylenetetrazol (PTZ) clonic seizures
(c) Both (a) and (b)
(d) None of the above
- (viii) Which of the following is NOT an amide-linked local anaesthetic?
- (a) Lidocaine (b) Prilocaine
(c) Tetracaine (d) Bupivacaine
- (ix) Which of the following is NOT related to receptor theories?
- (a) Induced fit theory
(b) Molecular perturbation theory
(c) Occupation theory
(d) Arrhenius theory
- (x) _____ have affinity but no intrinsic activity (IA=0).
- (a) Agonist (b) Antagonist
(c) Partial agonist (d) Inverse agonist
- (xi) Which of the following is relevant to the mechanism of insulin?
- (a) Phospholipase C: IP₃-DAG Pathway
(b) Intrinsic ion channel receptor
(c) Intrinsic enzyme receptors
(d) Nuclear receptors
- (xii) Antidote for acute morphine poisoning is
- (a) Codeine (b) Naloxone
(c) Oximes (d) None of the Above

(xiii) ATP binding cassette (ABC) transporters are component of _____ mechanism.

- (a) Primary Active transport
- (b) Passive diffusion
- (c) Pinocytosis
- (d) Secondary Active transport

BINA CHOWDHURY CENTRAL LIBRARY
(GIMT & RIPS)
Azim Hatim Wapara,
Kolkata-700017

(xiv) Find the ODD one in the following related to principle of drug action.

- (a) Stimulation- Caffeine
- (b) Depression- Diazepam
- (c) Irritation- Bitters
- (d) Cytotoxicity- Adrenaline

(xv) Post marketing surveillance is related to which phase of clinical trial?

- (a) Phase I
- (b) Phase II
- (c) Phase III
- (d) Phase IV

(xvi) The capacity of a drug to cause foetal abnormalities is termed as-

- (a) Carcinogenicity
- (b) Teratogenicity
- (c) Mutagenicity
- (d) Idiosyncrasy

(xvii) Topical instillation of atropine on eyes causes-

- (a) Mydriasis
- (b) Cycloplegia
- (c) Abolition of light reflex
- (d) All of the above

(xviii) In Parkinsonism treatment, amantadine acts by-

- (a) MAO-B inhibition
- (b) COMT-inhibition
- (c) Dopaminergic agonistic activity
- (d) facilitating the release of Dopamine

(xix) Fight and flight response is associated with-

- (a) Parasympathetic nervous system
- (b) Sympathetic nervous system
- (c) Somatic nervous system
- (d) Central Nervous system

(xx) The rate and extent of absorption of a drug from a dosage form is called as _____

- (a) Bioequivalence
- (b) Biotransformation
- (c) Bioavailability
- (d) Onset of action

2. Answer any *seven* questions : (7 × 5 = 35)
- (a) Classify the receptors based on transduction mechanisms. Discuss in details about the G-protein coupled receptors (GPCRs). (1 + 4)
 - (b) What are the factors modifying the drug action. Discuss, (5)
 - (c) Classify the antidepressant drugs. Write the pharmacological actions, adverse effects and uses of Morphine. (2 + 3)
 - (d) Explain the different types of adverse effects with suitable examples. (5)
 - (e) Discuss the different absorption mechanism of drug. What are the factors affecting drug absorption. (3 + 2)
 - (f) Write the mechanism of action, adverse effect and uses of- (2.5 + 2.5)
 - (i) Lignocaine
 - (ii) Diazepam
 - (g) Briefly discuss about the following. (1 + 2 + 2)
 - (i) Therapeutic Index
 - (ii) Myasthenia Gravis
 - (iii) Combined effect of drug
 - (h) Write a short note on phase I and phase II metabolism. (5)
 - (i) Justify the reasons for the following. (2 + 1.5 + 1.5)
 - (i) Carbidopa is given along with Levodopa for the treatment of Parkinsonism. Why?
 - (ii) Atypical antipsychotics are preferred over typical antipsychotics in the treatment of psychosis. Why?
 - (iii) Aspirin is trapped inside the gastric mucosal cells. How?
3. Answer any *two* questions : (2 × 10 = 20)
- (a) What is a drug as per WHO? Discuss the different routes of drug administration along with their advantages and disadvantages. (1 + 9)
 - (b) What is epilepsy? Write note on different type of seizures. Classify the antiepileptic drug. Write the mechanism of action, adverse effects of any two antiepileptic drug. (1 + 4 + 1 + 2 + 2)
 - (c) Differentiate local anaesthetics from general anaesthetics? Discuss the different stages of ether anaesthesia. Write note on pre-anaesthetic medications. (2 + 5 + 3)