

Course: B. Pharmacy

Sem: IV

Subject Name: Pharmacology - I

Subject Code: BP404T

Max Marks: 75

Date: 06/09/2022

Duration: 3.45 Hr.

Instructions –

1. All questions are compulsory
2. Answers to MCQs should be written in full sentences
3. Draw diagrams / figures wherever necessary
4. Figures to right indicate full marks

Q. 1. Multiple Choice Questions (MCQs) = 20 x 1 = 20 (All the questions are compulsory)

- i) Pharmacokinetics involves study of the _____ of a drug.
- a) Side effects
 - b) Mechanism of action
 - c) Distribution
 - d) Therapeutic effects
- ii) By which route of administration, the extensive first-pass metabolism of the drugs occurs?
- a) Oral
 - b) Intravenous
 - c) Intramuscular
 - d) Inhalation
- iii) Which is the fastest route of administration in terms of the effect of a drug?
- a) Intramuscular
 - b) Subcutaneous
 - c) Intravenous
 - d) Intradermal
- iv) Which organ is involved in the excretion of the drugs?
- a) Heart
 - b) Spleen
 - c) Brain
 - d) Kidney
- v) Which statement is CORRECT for the agonist?
- a) It binds to a receptor and produces the biological effect
 - b) It binds to a receptor and does not produce the biological effect
 - c) It binds to a receptor and produces the biological effect opposite to that of the natural ligand
 - d) None of the above
- vi) On repeated use if the effect of a drug decreases progressively, the mechanism is called _____.
- a) Antagonism
 - b) Tolerance
 - c) Anaphylaxis
 - d) Synergism

vii) The ability of a drug to cause abnormalities in the developing fetus when administered to a pregnant woman is called_____.

- a) Teratogenicity
- b) Tachyphylaxis
- c) Superinfection
- d) Anaphylaxis

viii) Clinical trials are carried out in_____.

- a) Rats
- b) Mice
- c) Rabbits
- d) Humans

ix) Which is an adrenergic receptor?

- a) Nicotinic receptor
- b) Mu receptor
- c) Beta receptor
- d) GABA-A receptor

x) Which drug is used for the treatment of myasthenia gravis?

- a) Neostigmine
- b) Atropine
- c) Donepezil
- d) Rivastigmine

xi) Which of the following is NOT the effect of acetylcholine?

- a) Miosis
- b) Increase in rate and force of contraction of the heart
- c) Bronchoconstriction
- d) Gastric acid secretion

xii) By inhibiting which ion channels local anesthetics block nerve conduction?

- a) Na⁺
- b) Mg²⁺
- c) Ca²⁺
- d) Cl⁻

xiii) Which adverse effect is associated with chronic alcoholism?

- a) Fatty liver
- b) Gastritis
- c) Impotency
- d) All of the above

xiv) Disulfiram is used for the treatment of _____ dependence.

- a) Opioid
- b) Nicotine
- c) Alcohol
- d) Benzodiazepine

xv) Sympathetic hyperactivity associated with anxiety disorders can be treated by_____.

- a) Propranolol
- b) Oxazepam
- c) Alprazolam
- d) Chlordiazepoxide

xvi) Which of the following drug is an opioid antagonist?

- a) Methadone
- b) Naloxone
- c) Ephedrine
- d) Fentanyl

xvii) Which drug is used as a first-line drug in the absence seizures?

- a) Phenytoin
- b) Carbamazepine
- c) Ethosuximide
- d) All of the above

xviii) Which is the common adverse effect of selective serotonin reuptake inhibitors (SSRIs)?

- a) Hypotension
- b) Sexual dysfunction
- c) Seizures
- d) Arrhythmia

ix) Which antiviral drug is used in the treatment of Parkinson's disease?

- a) Entacapone
- b) Amantadine
- c) Bromocriptine
- d) Selegiline

xx) Which centrally acting anticholinesterase is not approved for Alzheimer's disease?

- a) Rivastigmine
- b) Donepezil
- c) Galantamine
- d) Physostigmine

Q. 2. Long Answers) = 2 x 10 = 20 (Answer 2 out of 3)

- i) Define drug absorption. Explain the factors affecting drug absorption.
- ii) Define neurohumoral transmission. Explain different steps involved in the neurohumoral transmission of acetylcholine.
- iii) Classify antipsychotic drugs. Explain the mechanism of action, uses, and side effects of chlorpromazine.

Q. 3. Short Answers = 7 x 5 = 35 (Answer 7 out of 9)

- i) Define drug. Write different sources of drugs with suitable examples.
- ii) Write the advantages and disadvantages of the oral route of drug administration.
- iii) Classify receptors with suitable examples. Draw a schematic diagram showing G protein-coupled receptors signaling pathway.
- iv) Explain pharmacotherapy of glaucoma.
- v) Classify cholinergic receptors, and give their distribution.
- vi) Write the mechanism of action of benzodiazepines. Why benzodiazepines are preferred over barbiturates?
- vii) Describe different stages of inhalational general anesthesia.
- viii) Classify drugs used for the treatment of Alzheimer's disease. Explain the mechanism of action of memantine.
- ix) Classify antiparkinsonian drugs. Why levodopa is given in combination with carbidopa?

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