

**BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
PHARMACOLOGY
BPT – 305 [REPEAT]**
[USE OMR SHEET FOR OBJECTIVE PART]

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1×20=20

1. Pharmacokinetics is:
 - a. The study of biological and therapeutic effects of drugs
 - b. The study of absorption, distribution, metabolism and excretion of drug
 - c. The study of mechanisms of drug action
 - d. The study of methods of new drug development
2. Primary action of Flumazenil is
 - a. Antagonizes CNS effects of Opioids
 - b. Predictably reverses benzodiazepine induced respiratory depression
 - c. Has a half life of around 10 hours
 - d. Can precipitate seizures in mixed overdose
3. What does the term “bioavailability” mean?
 - a. Plasma protein binding degree of substance
 - b. Permeability through the brain-blood barrier
 - c. Fraction of an uncharged drug reaching the systemic circulation following any route administration
 - d. Amount of a substance in urine relative to the initial dose
4. In Inhalational anaesthetics
 - a. Isoflurane is the inhalational agent of choice
 - b. Desflurane is extensively metabolised via the liver
 - c. Enflurane is proconvulsant
 - d. Nitrous oxide is a useful adjunct to volatile anaesthetic use in women in the firsttrimester of pregnancy
5. Regarding IV anaesthetic agents
 - a. Ketamine produces Trancelike Unconsciousness
 - b. Propofol has a slow offset of action
 - c. Ideal agents for neuroleptanalgesia are fentanyl and droperidol
 - d. Etomidate causes severe hypotension more commonly than thiopentone
6. Which route of drug administration is most likely to lead to the first-pass effect?
 - a. Sub lingual
 - b. Oral
 - c. Intravenous
 - d. Intramuscular

7. Regarding adverse effects of propofol, which statement is true
 - a. It causes cardiovascular depression
 - b. It causes vomiting
 - c. It causes acidosis
 - d. It causes alkalosis
8. Halothane nowadays are not used widely because:
 - a. They are expensive
 - b. They are difficult to administer
 - c. They produce cardiorespiratory failure
 - d. All of the above
9. Pick out the parenteral route of medicinal agent administration:
 - a. Rectal
 - b. Oral
 - c. Sublingual
 - d. Inhalation
10. Loop Diuretics act by
 - a. Inhibition of Na- Cl Symport
 - b. Inhibition of Na K Cl Cotransport
 - c. Inhibition of Na K ATP ase
 - d. Inhibition of Na Channel
11. Which of the following is a Loop Diuretic
 - a. Furosemide
 - b. Spironolactone
 - c. Acetazolamide
 - d. Thiazide
12. Thiazide causes:
 - a. Metabolic Alkalosis
 - b. Metabolic Acidosis
 - c. Respiratory Alkalosis
 - d. Respiratory Acidosis
13. Which of the following are Cholinergic Drugs?
 - a. Pilocarpine
 - b. Atropine
 - c. Dopamine
 - d. Ephedrine
14. Pharmacodynamics involves the study of following EXCEPT
 - a. Biological and therapeutic effects of drugs
 - b. Absorption and distribution of drugs
 - c. Mechanisms of drug action
 - d. Drug Interactions
15. Toxic Dose of Atropine causes the following:
 - a. Restlessness
 - b. Insomnia
 - c. Delusion
 - d. All of the above
16. Action of Dopamine Include
 - a. Vasodilatation
 - b. Increased Heart Rate
 - c. Vasoconstriction
 - d. None of the above
17. Amphetamine is a drug of abuse due to:
 - a. Euphoria
 - b. Improved Physical Performance
 - c. Alertness
 - d. All of the above
18. Actions of Sympathomimetic Drugs include:
 - a. Increased Heart Rate
 - b. Relaxation of Smooth Muscles
 - c. Bronchodilatation
 - d. All of the above

19. Which of the following is not an anticholinergic Drug?
- a. Atropine
 - b. Cyclopentolate
 - c. Tropicamide
 - d. Pilocarpine
20. Which of the following is not an advantage of IV route of Administration?
- a. Gives 100% Bioavailability
 - b. Large volume and Irritants can be given
 - c. Rapid dose adjustments can be given
 - d. Self-administration is difficult

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(Descriptive)

Time: 2 hrs 30 min

Marks: 50

[Answer question no.1 & any four (4) from the rest]

1. Write in detail about the major Neuro transmission Systems of Central Nervous System. 10
2. Write about stages of Anesthesia. Also write about Intravenous Anesthetic Agents 5+5=10
3. Explain Routes of Drug Administration 10
4. Explain First Pass Metabolism. Also explain in detail about Transdermal Route of Drug Administration 5+5=10
5. Explain the factors responsible for rate of Drug Absorption 10
6. Explain the Sources of Drugs. Also explain Loop Diuretics 7+3=10
7. Explain the metabolism, Biotransformation and Excretion of Drugs 10
8. Pharmacokinetic Characteristics of General Anesthesia. Also explain about Drug Synergism, Antagonism and write a short note on Benzodiazepines. 4+2+2+2=10

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