REV-01
BPT/15/20

2025/12

SET A

BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
PHARMACOLOGY
BPT – 305 [REPEAT]

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

Objective

Time: 30 min. **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. The action of Cholinergic receptors on cardiovascular system is
   a. Increased heart rate
   b. Decreased heart rate
   c. Increased blood pressure
   d. No effect on heart rate

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. Increased heart rate and dilated pupils are associated with the activation of :
   a. Sympathetic Nervous System
   b. Parasympathetic Nervous system
   c. Both of them
   d. None of them

5. What is the main neurotransmitter released by parasympathetic nervous system?
   a. Dopamin
   b. Acetylcholine
   c. Nor epinephrine
   d. GABA

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. Benzodiazepines include all of these except
   a. Hypnotics
   b. Anti anxiety
   c. Barbiturates
   d. Anticonvulsants

8. Which of these are not a type of generalized seizures?
   a. Absence Seizures
   b. Myoclonic Seizures
   c. Simple partial Seizures
   d. Atonic Seizures

9. Pick out the parenteral route of medicinal agent administration:
   a. Rectal
   b. Oral
   c. Sublingual
   d. Inhalation

10. The parasympathetic Nervous system is most active during:
   a. Stressful Situation
   b. Rest and Digestion
   c. Physical Activity
   d. Fight Responses

11. Routes of administration of Morphine include all except:
   a. Oral
   b. IV
   c. IM
   d. Inhalational

12. Which division of autonomic nervous system is responsible for the "fight or flight" response?
   a. Sympathetic
   b. Parasympathetic
   c. Central
   d. Somatic

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. Explain the drugs used in treatment of Parkinsonism **10**

2. Drugs used for Cough management **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 Opiod analgesics briefly **7+3=10**

7. Explain the metabolism, Biotransformation and Excretion of Drugs **10**

8. Explain the drugs used in the management shock **10**

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