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**BP 404 T**

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Azara, Hatkhowapara,  
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**2019**

**B.Pharm. 4th Semester End-Term Examination**

**PHARMACOLOGY THEORY - I**

**(New Regulation)**

**(w.e.f. 2017-2018)**

Full Marks – 75

Time – Three hours

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

1. Group I : Multiple choice questions (MCQs) Answer ALL questions : (20 × 1 = 20)
- (i) Beta-I and Beta-2 receptors are found in
    - (a) Bronchial Tract and Heart
    - (b) Heart and Bronchial tract
    - (c) Blood vessels and heart
    - (d) Blood vessels and Bronchial tract
  - (ii) Anorectic Drug frequently abused by the models is
    - (a) Sibutramine
    - (b) Ritodrine
    - (c) Isosuprine
    - (d) oxymetazoline

[Turn over

- (iii) Tamsulosin
- (a) Used in hypertension
  - (b) Glaucoma
  - (c) Prostetic hypertrophy
  - (d) All of these
- (iv) Pharmacogenetis and Pharmacogenomics
- (a) Genetic information in drug variability and Genetic variability in drug response
  - (b) Genetic variability in drug response and Genetic information in drug variability
  - (c) Only genetic variability in drug response
  - (d) None of these
- (v) Value of  $t_{1/2}$  is
- (a) 0.693/K
  - (b) 6.93/K
  - (c) 69.3/K
  - (d) 693/K
- (vi) Receptors of Opioids are
- (a) Alpha, Beta
  - (b) THC
  - (c) Miu, Kappa, Delta
  - (d) MAOA and MAO B
- (vii) Nootropics are the substance having
- (a) Drugs reduced anxiety and depression
  - (b) Drug used for CNS stimulant action
  - (c) Drug used to enhance the memory and cognitive action
  - (d) All of these



(viii) Ration drugs prescription in Parkinson's disease

- (a) Levodopa
- (b) Carbidopa
- (c) Levodopa+ Carbidopa
- (d) Levodopa-Carbidopa + Antihistaminics

(ix) Drugs used in glaucoma

- (a) Timolol
- (b) Labetelol
- (c) Sotalol
- (d) Pindolol

(x) Cannabis act on

- (a) Alpha, Beta receptor
- (b) THC receptor
- (c) GABA receptor
- (d) MAO A and MAO B

(xi) Which is correct answer?

- (a) GABA neurotransmitter is associated with chloride channel cause hyperpolarisation
- (b) GABA neurotransmitter is associated with Na<sup>+</sup> channel cause hyperpolarisation
- (c) GABA neurotransmitter is associated with K<sup>+</sup> channel cause depolarization
- (d) GABA neurotransmitter is associated with chloride channel cause depolarization

- (xii) Phase —III clinical trial is done for
- (a) Human pharmacology and safety
  - (b) Therapeutic exploration and dose range
  - (c) Therapeutic confirmation
  - (d) All of these
- (xiii) Extrapyramidal side effect mostly found in
- (a) Clozapine
  - (b) Olanzapinr
  - (c) Aripiprazole
  - (d) Haloperidol
- (xiv) MAC value
- (a) Lowest concentration of general anesthetic to produce immobility
  - (b) Maximum concentration of general anesthetic to produce immobility
  - (c) Moderate concentration of general anesthetic to produce immobility
  - (d) Highest concentration of general anesthetic to produce immobility
- (xv) Gray baby syndrome is associated with Chloramphenicol due to
- (a) Adverse Drug Reactions
  - (b) Teratogenic effect
  - (c) Drug interaction
  - (d) All of these



(xvi) CYP2D6 is microsomal enzyme metabolise by

- (a) Oxidation
- (b) Reduction
- (c) Hydrolysis
- (d) Cyclization

(xvii) Animal experiments are conducted under the regulation of

- (a) CPCSEA
- (b) CDSCO
- (c) FDA
- (d) None of these

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(xviii) Failure of oral contraceptives in tubercular patients due to

- (a) Anti-tubercular drugs induce microsomal enzyme and decrease metabolism of oral contraceptive
- (b) Anti-tubercular drugs induce microsomal enzyme and increase metabolism of oral contraceptive
- (c) Anti-tubercular drugs have no effect on metabolism of oral contraceptive
- (d) None of these

(xix) Non-proprietary name of the medicine means

- (a) Brand name
- (b) Generic name
- (c) IUPAC name
- (d) All of the these

(xx) Example of Intravenous anesthetics is

- (a) Thiopentone Sodium
- (b) Desflurane
- (c) Isoflurane
- (d) Halothane

Group II. Long Answers any two :

2. Describe in detail about Drug discovery phase, preclinical evaluation phase, phases of clinical trials and pharmacovigilance in New drug development. (10)
3. Write in brief about adverse drug reactions. Explain in details of signal transduction mechanisms including G-protein-coupled receptors, ion channel receptor, transmembrane enzyme linked receptors, transmembrane JAK-STAT binding receptor and receptors that regulate transcription factors. (2.5 + 7.5 = 10)
4. Write short notes on
  - (a) Drugs used in Parkinsons and Alzheimer's disease. (3 + 2 = 5)
  - (b) Local anesthetic agents. General anesthetics and pre-anesthetics. (2.5 + 1.5 + 1 = 5)

Group II. Short (Answers any Seven)

5. Write the advantages, disadvantages and factors consider in the selection of routes of drug administration with examples of drugs. (5)
6. Describe in details about the metabolism procedure of drug in our system. (5)



7. Write a comment on excretion of drugs and kinetics of elimination. (5)
8. Define with examples (1 + 1 + 2 + 1 = 5)
- (a) Dose response relationship
  - (b) Therapeutic index
  - (c) Combined effects of drugs
  - (d) Examples of factors modifying drug action.
9. Explain about Drug interactions (pharmacokinetic and pharmacodynamic). (5)
10. Define the term with examples: (2+1+1+1= 5)
- (a) Parasympathomimetics
  - (b) Parasympatholytics
  - (c) Sympathomimetics
  - (d) Sympatholytics
11. Write the classification of Anti-epileptics with examples of each drug. (5)
12. Define the following term with examples of each drug. (1+1+1+1+1= .5)
- (a) Antipsychotics
  - (b) Antidepressants
  - (c) Anti-anxiety agents
  - (d) Anti-manics
  - (e) Hallucinogens.
13. Write a short note on Opioid analgesics and antagonists. (5)

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