

Duration: 3 Hrs

Total marks: 75

- N.B. : 1. All questions are compulsory  
2. Figures to right indicate full marks

**1. Multiple Choice Questions (MCQs) (Answer all the questions). 20 marks**

1. Parenteral route is advantageous as:
 

a. it is painful	b. it is route of emergency
c. it causes cell injury	d. it needs to be sterile
  
2. Excretion of majority of drugs occurs through:
 

a. Urine	b. Milk
c. Faeces	d. Bile
  
3. Which of the following is a G protein coupled receptor?
 

a. Muscarinic cholinergic receptor	b. Nicotinic cholinergic receptor
c. Glucocorticoid receptor	d. Insulin receptor
  
4. If the effect of combination of two drugs is equal to the sum of their individual effects, the two drugs are exhibiting:
 

a. Potentiation	b. Additive effect
c. Cross tolerance	d. Antagonism
  
5. An example of irreversible anticholinesterase is:
 

a. Neostigmine	b. Echothiophate
c. Rivastigmine	d. Donepezil
  
6. The smooth muscle structure that is relaxed by cholinergic drugs is:
 

a. Colon	b. Gastric fundus
c. Major bronchi	d. Bladder trigone
  
7. Therapeutic uses of barbiturates are as follows EXCEPT:
 

a. Antiepileptic	b. Anesthetic
c. Hypnotics	d. Antidepressant
  
8. Flumazenil acts on \_\_\_\_\_ binding site on GABA receptor.
 

a. Barbiturate	b. Alcohol
c. Benzodiazepine	d. Nonspecific
  
9. The following drugs are cerebroselective anticholinesterase EXCEPT:
 

a. Donepezil	b. Galantamine
c. Memantine	d. Rivastigmine
  
10. The wine reaction is result of combination of:
 

a. Tyramine rich food and MAO inhibitors	b. Tyrosine rich food and MAO inhibitors
c. Tyramine rich food and MAO inducers	d. Tyrosine rich food and MAO inducers

11. The process by which metabolism of one drug is enhanced by another is known as:  
a. Enzyme induction  
b. Biotransformation  
c. Enzyme inhibition  
d. First pass metabolism
12. Drug potency refers to:  
a. amount of drug needed to produce maximum effect  
b. maximum effect shown by a drug  
c. amount of drug needed to produce certain effect  
d. amount of drug needed to produce toxic effect
13. Beta blocker used for the treatment of Glaucoma include:  
a. Neostigmine  
b. Timolol  
c. Pilocarpine  
d. Methacholine
14. Fetal hydantoin syndrome is adverse effect of:  
a. Sodium valproate  
b. Phenytoin  
c. Carbamazepine  
d. Ethosuximide
15. The drug that produces its action by acting on MAO is:  
a. Carbidopa  
b. Entacapone  
c. Selegiline  
d. Tolcapone
16. Tricyclic antidepressants:  
a. Stimulates reuptake of monoamines  
b. Inhibits reuptake of monoamines  
c. Stimulates synthesis of monoamines  
d. Inhibits synthesis of monoamines
17. High plasma protein binding:  
a. makes the drug short acting  
b. enhances the metabolism  
c. reduces displacement interactions  
d. decreases the volume of distribution
18. Placebo is a:  
a. therapeutic agent  
b. inert substance  
c. toxic substance  
d. prodrug
19. An example of cardioselective beta blocker include:  
a. Labetalol  
b. Atenolol  
c. Pindolol  
d. Propranolol
20. The only gaseous anesthetic is:  
a. Halothane  
b. Ether  
c. Nitrous oxide  
d. Methohexitone sodium

**II. Long Answers (Answer 2 out of 3)**

**20 marks**

- A. Write a note on adverse drug reactions.  
B. Define Sympathomimetics. Classify them and add a detailed note on the pharmacology of Adrenaline.  
C. Classify antidepressants based on their mechanism of action. Add a note on SSRIs.

III. Short Answers (Answer 7 out of 9)

35 marks

- A. What is drug interaction? Write a note on pharmacokinetic interactions.
- B. Write a note on factors affecting absorption.
- C. Explain Phase I reactions.
- D. Classify Peripheral skeletal muscle relaxants and explain mechanism of action of depolarizing blocking agents.
- E. Classify local anaesthetics. Discuss its mechanism of action.
- F. Give mechanism of action of Diazepam and Disulfiram.
- G. Enlist the stages of anesthesia. Comment on halogenated anesthetics
- H. Write a note on cerebroactive anticholinesterases.
- I. Discuss anti-anxiety drugs in detail.

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