Subject: Pharmacology I (Theory) **Year and Sem: S. Y. B. Pharm. Sem IV Rev. 2019**
Duration: 3 Hrs **Total marks: 80**

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

Q. 1. Choose appropriate option for following multiple choice based questions. **20 marks**

1. The phenomenon in which the action of one drug is abolished by the other is known as _____
a. Antagonism
b. Synergism
c. Dose-response relationship
d. Desensitization

2. The theoretical volume of plasma from which the drug is completely removed in unit time signifies _____ of a drug.
a. Absorption
b. Metabolism
c. Volume of distribution
d. Clearance

3. Which of the following effect can be seen in competitive antagonism in a drug-response curve?
a. Non-parallel left shift
b. Non-parallel right shift
c. Parallel right shift
d. Parallel left shift

4. Idiosyncrasy is_____.
a. Type A ADRs
b. Type B ADRs
c. Type C ADRs
d. Type D ADRs

5. Latanoprost is used in the treatment of_____ .
a. Myasthenia gravis
b. Glaucoma
c. Alzheimer's disease
d. Epilepsy

6. An example of surface anaesthetic is _____ .
a. Prilocaine
b. Bupivacaine
c. Benzocaine
d. Chloroprocaine

7. The most unwanted stage of anaesthesia which can be escaped with newer anaesthetic agents.

a. Stage of analgesia
b. Stage of delirium
c. Medullary paralysis
d. Surgical anaesthesia

8. The drug useful in alcohol abstinence is _____.

a. Disulfiram
b. Propranolol
c. Atropine
d. Tubocurarine

9. Nootropic drugs are _____ .

a. CNS depressants
b. Anxiolytics
c. Cognition enhancers
d. Antiepileptic drugs

10. The morphine exerts_____ effect

a. Miosis
b. Increased motility
c. Respiratory stimulation
d. Algesia

11. Low volume of distribution indicates that the drug is distributed in the:

a. Vascular compartment
b. Extracellular fluid
c. Intracellular fluid
d. Tissues

12. Which of the following is a G protein coupled receptor?

a. Muscarinic cholinergic receptor
b. Nicotinic cholinergic receptor
c. Glucocorticoid receptor
d. Insulin receptor

13. Which of the following statement is correct for nasal decongestants?

a. Safer in hypertensives
b. Do not produce any systemic effects
c. They are alpha antagonists
d. Cause impairment of mucosal cilary function

14. The treatment involved in barbiturate poisoning include _____ .
- **a.** Flumazenil
- **b.** Urine alkalization
- **c.** Pralidoxime
- **d.** Atropine

15. Monoamine oxidase B subtype cause oxidation of _____ .
- **a.** Histamine
- **b.** Hydroxytryptamine
- **c.** Adrenaline
- **d.** Phenylethylamine

16. Atypical antipsychotics are preferred over typical antipsychotics mainly because _____.
- **a.** Atypical antipsychotics are potent dopamine blockers
- **b.** Atypical antipsychotics are specific dopamine receptor blocking
- **c.** Excreted unchanged in the urine
- **d.** Minimal extrapyramidal side effect

17. Glutathione conjugation detoxifies which of the following drug?
- **a.** Proguanil
- **b.** Acetazolamide
- **c.** Paracetamol
- **d.** Dopamine

18. A partial agonist can antagonize the effects of a full agonist because it has _____ .
- **a.** High affinity but low intrinsic activity
- **b.** Low affinity but high intrinsic activity
- **c.** No affinity and low intrinsic activity
- **d.** High affinity but no intrinsic activity

19. Dry, flushed and hot skin, dilated pupil, photophobia, dry mouth, excitement, convulsions and coma are the manifestations of _____
- **a.** Organophosphate poisoning
- **b.** Morphine poisoning
- **c.** Belladonna poisoning
- **d.** Heavy metal poisoning

20. The drawback of nitrous oxide as anesthetic agent is
- **a.** It may lead to diffusion hypoxia
- **b.** It has hangover effect
- **c.** It is highly explosive
- **d.** Incompatibility with other anesthetic agents

Q. 2 A **Answer <u>ANY ONE</u> question.** **12 marks**

a Define metabolism. Enlist various Phase I and Phase II reactions. Add a note on enzyme induction and inhibition.

b Classify anti-epileptics. Give the mechanism of action and adverse effects of Phenytoin and Valproic acid.

Q. 2 B **Answer <u>ANY FOUR</u> questions.** **48 marks**

a. i. Define absorption. Add a note on factors affecting absorption.

a. ii Give the advantages and disadvantages of the oral route.

b. i. Classify the receptors along with the examples. Explain in brief ion channel receptors.

b. ii. Define clinical trials, enlist their various phases and write a note on preclinical studies.

c What are sympatholytics? Classify them and add a note on the treatment of Glaucoma.

d Give mechanism of action and anyone therapeutic use of the following drugs: Thiopental, Disulfiram, Ketamine, and Baclofen.

e. i. Write a detailed note on Psychostimulants.

e. ii. Explain the pharmacology of Levodopa.

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