Code No: BP404T **PCI** SET - 1

II B. Pharmacy II Semester Regular/Supplementary Examinations, November - 2020
PHARMACOLOGY-I

Time: 3 hours Max. Marks: 75

Note: 1. Question paper consists of three parts (**Part-I**, **Part-II & Part-III)**
2. Answer ALL (Multiple Choice) Questions from **Part-I**
3. Answer any **TWO** Questions from **Part-II**
4. Answer any **SEVEN** Questions from **Part-III**

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PART –I

1. (i) Majority of drugs cross biological membranes primarily by (1M)
(a) Facilitated diffusion (b) Active transport
(c) Passive diffusion (d) Pinocytosis

(ii) Bioavailability means (1M)
(a) Ratio of drug excreted in urine
(b) Ration of oral to parenteral dose
(c) Ratio of drug excreted in faeces
(d) Ratio of drug that reaches systemic circulation in unchanged form

(iii) Prodrug is (1M)
(a) The prototype member of a class of a drug
(b) The oldest member of a class of a drug
(c) A inactive drug that is transformed in the body to an active metabolite
(d) A drug stored in tissues and gradually released in the circulation

(iv) The following drug metabolizing reaction is entirely non-microsomal (1M)
(a) Reduction (b) Acetylation (c) Glucoronide conjugation (d) oxidation

(v) Which of the following secretions is not stimulated by acetylcholine (1M)
(a) Bile (b) Sweat (c) Tears (d) pancreatic juice

(vi) Identify selective M_3 agonist (1M)
(a) Acetylcholine (b) Pilocarpine (c) Bethanechol (d) Cevimeline

(vii) Identify the ganglion stimulants (1M)
(a) Nicotine (b) Acetylcholine (c) Lignocaine (d) Muscarine

(viii) Muscarinic antagonist used for anesthetic pre-medication (1M)
(a) Atropine (b) Benzhexol (c) Benztropine (d) Dicyclomine

(ix) Identify selective serotonin re-uptake inhibitor (1M)
(a) Fluoxetine (b) Tranylcypromine (c) Phenelzine (d) Moclobemide

(x) NMDA receptor antagonist used in the treatment of dementia (1M)
(a) Donepezil (b) Galantamine (c) Memantine (d) Rivastigmine

(xi) Disulfiram inhibits the following enzyme (1M)
(a) Alcohol dehydrogenase (b) Aldehyde dehydrogenase
(c) Mixed function oxidase (d) Aldehyde oxidase

(xii) Barbiturates show all the actions except (1M)
(a) Analgesic (b) Antianxiety (c) Anticonvulsant (d) Respiratory depressant

(xiii) The following anti-epileptic drug drug is most likely to impair learning and memory, and produce behavioural abnormalities in children: (1M)
(a) Valproic acid (b) Phenobarbitone (c) Phenytoin (d) Ethosuximide
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(xiv) Which of the following drugs has mild anti-parkinsonian action of its own, prolongs levodopa action and allows reduction of its dose by about 25% (1M)
(a) Benserazide (b) Pyridoxine (c) Amantadine (d) Selegiline

(xv) The antipsychotic drug most likely to cause ocular toxicity on long-term use is (1M)
(a) Thioridazine (b)Flupenthixol (c) Haloperidol (d) Pimozide

(xvi) The antidepressant which selectively blocks 5-hydroxytryptamine uptake is (1M)
(a) Fluoxetine (b) Amoxapine (c) Desipramine (d) Dothiepin

(xvii) Which of the following is not a secondary messenger (1M)
(a) cGMP (b) cAMP (c) DAG (d) Protein Kinase A

(xviii) Pharmacokinetics is defined as (1M)
(a) What Drug does to the body (b) What body does to the Drug
(c) Both a&b (d) None of the above

(xix) If C_u is the urinary concentration, C_p is the plasma caoncentration, and V_u is the rate of flow of urine then Renal Clearance CL_{ren} is (1M)
(a) $(C_u * V_u)/ C_p$ (b) $C_p/ (C_u * V_u)$ (c) $(C_p * C_u)/ V_u$ (d) $(V_u * C_p)/ C_u$

(xx) In which phase of clinical trials "Efficacy" is the only criteria (1M)
(a) Phase-I (b) Phase-II (c) Phase-III (d) Phase-IV

PART –II

2. a) Write a note on routes of drug administration? (5M)
   b) Discuss about drug tolerance? (5M)

3. a) Write about the nuclear receptors? (5M)
   b) Explain the neuro-humoral transmission in ANS? (5M)

4. a) Classify anxiolytics? Write a brief note on actions of Buspirone? (5M)
   b) Write a note on MAO inhibitors? (5M)

PART –III

5. Discuss the pharmacology of drugs used in Glaucoma? (5M)

6. Explain about skeletal muscle relaxants? (5M)

7. Discuss the pharmacological aspects of local anesthetics? (5M)

8. Signify the drug treatment for Alzheimer's disease? (5M)

9. Explain the pharmacological actions of benzodiazepines? (5M)

10. Write about the pharmacological actions of Sodium Valproate? (5M)

11. Discuss the pharmacological actions of atropine? (5M)

12. State about Phase I drug metabolism? (5M)

13. Discuss pharmacokinetic drug interactions with an example? (5M)