

Seat No: _____

Enrolment No: _____

PARUL UNIVERSITY
FACULTY OF MEDICINE
M.B.B.S January 2022 Examination

Year: 2

Date: 05/01/2022

Subject Code: 19100285

Time: 10:00am to 1:00pm

Subject Name: Pharmacology - I

Total Marks: 100

Instructions:

1. Attempt all questions from each section.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Write section-A, section-B, and section-C on separate answer sheets.

SECTION A

Q-1 Case based questions (Any 2 out of 3) (20)

- i. A 47year old man presented with pain in chest after exertion. A stress test revealed myocardial ischemia. His serum cholesterol is 240mg/dl. He is diagnosed to have classical effort induced angina. Describe pharmacotherapy for the given condition. **10**

- ii. A 55year-old man with chronic obstructive pulmonary disease presented with oedema feet and breathlessness on exertion. On examination , raised jugular venous pressure and ascitis abdomen was observed and patient was diagnosed to have congestive heart failure.

Describe the pharmacotherapy for the given condition. **10**

- iii. A 36year old woman was brought to the psychiatry OPD with history of agitation, aggressive, sometimes violent behaviour and symptoms of hallucination and paranoia. She was diagnosed to be suffering from Manic-Depressive Psychosis.

a) Describe classification and pharmacology of typical antipsychosis drugs **6**

b) Enumerate 4 atypical antipsychosis drugs. **4**

Q.2 Short notes (Any 3 out of 4) (15)

- i. Describe phases of clinical trials for new drug development **5**
- ii. Descibe pharmacological basis of therapeutic uses of calcium channel blockers **5**
- iii. Atropine substitutes **5**
- iv. Methanol poisoning **5**

SECTION B

Q-3 Case based questions (Any 2 out of 3) (20)

- i. A 50year old male patient came with history of runny nose and dry cough for the past one week. He was diagnosed to have seasonal allergy.

a) Describe the pharmacology and therapeutic uses of antihistamines **8**

b)In which acute allergic condition we use corticosteroids as life saving drugs **2**

- ii) A 45 year old man has frequent attacks of breathlessness with wheezing. He is diagnosed to have bronchial asthma.

Describe use of bronchodilators and corticosteroids in this condition (10)

iii) A 45 year old female patient presented with chronic pain and swelling of left knee joint. She is diagnosed to have osteoarthritis.

Classify Non steroidal anti-inflammatory drugs and describe their mechanism of action, therapeutic uses and adverse effects..

Q.4 Short Notes (Any 3 out of 4) (15)

- i. Therapeutic index
- ii. Therapeutic uses of potassium channel activators
- iii. Alprazolam
- iv. Mucolytics

SECTION C

Q.5 Short answer questions (any 10 out of 11) (20)

- i. What is first order kinetics? Give an example
- ii. Give name and dose of drug used for status epilepticus.
- iii. What is bioequivalence?
- iv. Name two cholinesterase reactivators.
- v. What is disulfiram used for?
- vi. Name two thiazide diuretics
- vii. Name two drugs used for benign prostatic hypertrophy
- viii. What is monteleukast?
- ix. Name two dopamine agonists used in Parkinson's disease
- x. Enumerate two muscle relaxants
- xi. Name the barbiturate used in general anesthesia

Q-6 Tick the correct answer

(10)

1. Aminoglycosides are not absorbed when given orally because
 - a. They are lipophilic
 - b. Destroyed by gastric juice
 - c. They are highly polar
 - d. They are cytotoxic
2. All of the following are oxidation reactions EXCEPT-
 - a. Metabolism of alcohol
 - b. Conversion of imipramine to desipramine
 - c. Glucuronidation of bilirubin
 - d. Metabolism of Noradrenaline
3. All of the following drugs inhibit drug metabolizing enzymes EXCEPT-
 - a. Rifampicin
 - b. Chloramphenicol
 - c. Clarythromycin
 - d. Ciprofloxacin
4. The prodrug of Dopamine is
 - a. Dobutamine
 - b. Adrenalin
 - c. Levodopa
 - d. Carbidopa
5. Life saving drug in the treatment of anaphylactic shock is
 - a. Adrenaline
 - b. Noradrenaline
 - c. Dopamine
 - d. Isoprenaline
6. Long acting beta agonist used in asthma is
 - a. Salbutamol
 - b. Ipratropium
 - c. Fometerol
 - d. Atenolol
7. Which one of the following is used to prevent reinfarction?
 - a. Indapamide
 - b. Low dose aspirin
 - c. Ibuprofen
 - d. Dicumarol
8. Shared toxicities of NSAIDS due to PG synthesis inhibition are all EXCEPT:
 - a. Gastric mucosal damage
 - b. induction of labour
 - c. Bleeding
 - d. Asthma
9. One of these is used to grow hair on bald heads
 - a. Pyridoxine ointment
 - b. Minoxidil 2% solution
 - c. Aloe vera gel
 - d. Cyanocobalmine injections
10. Zolpidem is
 - a. An anticonvulsant
 - b. Anidepressant
 - c. Muscle relaxant
 - d. Hypnotic