



BRAINWARE UNIVERSITY

Term End Examination 2023-2024
Programme – D.Pharm-2022
Course Name – Pharmacology - Theory
Course Code - ER20-21T
(Year II)

Library
Pharmaceutical Technology
Brainware University
Barasat, Kolkata-700125

Full Marks : 80

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :
- (i) Select the correct answer: General anesthetic is useful because it causes-
 - a) Excellent analgesia
 - b) Unconsciousness
 - c) Muscle relaxation and unconsciousness
 - d) Abolition of reflexes
 - (ii) Select the correct clinical use of codeine.
 - a) Analgesic.
 - b) Antitussive.
 - c) Anti-diarrhoeal.
 - d) All of these.
 - (iii) Predict which of the following is a stool softener.
 - a) Castor oil.
 - b) Docusate sodium.
 - c) Cascara Sagrada.
 - d) Phenolphthalein.
 - (iv) What kind of drugs can't penetrate membranes by passive diffusion?
 - a) Lipid-soluble.
 - b) Non-ionized substances.
 - c) Hydrophilic substances.
 - d) Interaction of substances
 - (v) Predict which of the following is not an adsorbent.
 - a) Kaolin.
 - b) Pectin.
 - c) Activated charcoal.
 - d) Paracetamol.
 - (vi) Predict when bronchodilators are used.
 - a) Only when cough is non productive.
 - b) Only when cough is associated with thick sticky secretions.
 - c) Only when reflex bronchoconstriction is associated.
 - d) Irrespective of nature of cough or associated features.
 - (vii) Choose the fastest acting inhaled bronchodilator.
 - a) Salbutamol.
 - b) Adrenaline.
 - c) Atropine.
 - d) Salmeterol.
 - (viii) Select the correct use of diphenhydramine.
 - a) Opioid type antitussive.
 - b) Non-opioid type antitussive.
 - c) Antihistamine type antitussive.
 - d) None of these.

- (ix) Which medication is commonly used to prevent and treat venous thromboembolism and pulmonary embolism?
a) Clopidogrel. b) Apixaban.
c) Enoxaparin. d) Nitroglycerin.
- (x) Predict the drug of choice for acute renal failure.
a) Furosemide. b) Prazosin.
c) Verapamil. d) Methyldopa.
- (xi) Choose the correct adverse effect of H1-antagonistic drugs.
a) Blocking of gastric secretions. b) Teratogenic effect.
c) Nausea. d) Flushing.
- (xii) Choose the correct formula of apparent volume of distribution.
a) Amount of drug in the body/Plasma drug concentration b) Amount of drug in the plasma/Plasma drug concentration
c) Amount of drug in the urine/Plasma drug concentration d) Amount of drug in the tissue/Plasma drug concentration
- (xiii) Choose the correct adverse effect of methyldopa.
a) Lethargy. b) Tachycardia.
c) Nightmare. d) Nasal Stiffness.
- (xiv) Choose the primary mechanism of action of loop diuretics.
a) Inhibition of carbonic anhydrase b) Blockade of sodium-potassium-chloride cotransporter
c) Inhibition of aldosterone d) Inhibition of vasopressin
- (xv) Select the active thyroid hormone.
a) T3 b) T4
c) TSH d) All of these
- (xvi) Select the correct option: Streptomycin is
a) A kanamycin antibiotics b) A β -lactam antibiotic
c) A macrolide antibiotic d) An amino-glycoside antibiotic
- (xvii) Which of the following drugs is a commonly used topical anesthetic for minor surgical procedures and dental work?
a) Morphine b) Lidocaine
c) Aspirin d) Propranolol
- (xviii) Which of the following drugs is commonly used to treat neuropathic pain?
a) Acetaminophen b) Ibuprofen
c) Gabapentin d) Morphine
- (xix) Which of the following drugs is a skeletal muscle relaxant commonly used for short-term relief of muscle spasms?
a) Baclofen b) Diazepam
c) Methocarbamol d) Cyclobenzaprine
- (xx) Identify the correct physiological role of parathormone.
a) Bone resorption b) Mood regulation
c) Coordination d) None of these

Group-B

(Short Answer Type Questions)
(Answer any Ten from the following)

3 x 10=30

2. Define bioavailability and bioequivalence. (3)
3. Explain the properties of an ideal antacid. (3)
4. Write a short note on open angle glaucoma. (3)
5. Illustrate the pharmacological actions of aspirin. (3)
6. Define the term: antibiotics. (3)

7. Classify antibiotics with suitable examples. (3)
8. Define the term: sedatives and hypnotics. (3)
9. What is the classification of antiarrhythmic drugs? (3)
10. Write the adverse effects of potassium-sparing diuretics and carbonic anhydrase inhibitors. (3)
11. Classify sedatives drugs with suitable examples. (3)

OR

Illustrate the physiological role of serotonin. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30
(Answer any Six from the following)

12. Describe the basic principles of chemotherapy. (5)
13. Explain the mechanism of action of general anesthetics. (5)
14. Classify the chemotherapeutic agents on the basis of mechanism of action. (5)
15. Classify sulphonamides with examples. (5)
16. Illustrate the mechanism of action of the various classes of bronchodilators. (5)
17. Explain the mechanism of action of diuretics for the treatment of hypertension. (5)

OR

Illustrate the mechanism of action of the various classes of laxatives. (5)

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