



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Optomtry-2021/B.Optomtry-2022

Course Name – Basic & Ocular pharmacology

Course Code - BOPTOC404

(Semester IV)

Full Marks : 60

Time : 2:30 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 15=15

1. Choose the correct alternative from the following :
 - (i) Choose the factor that does not alter bioavailability of a drug:
 - a) State of ionization
 - b) Route of administration
 - c) Degree of plasma protein binding
 - d) Vascularity at site of administration
 - (ii) Identify the process not involved in transport of drug across biological membranes:
 - a) Passive diffusion
 - b) Active transport
 - c) Facilitated diffusion
 - d) Pinocytosis
 - (iii) Select the correct route of administration of elixirs:
 - a) Rectal
 - b) Oral
 - c) Subcutaneous
 - d) Intramuscular
 - (iv) Choose the type of injection for sensitivity testing:
 - a) Intradermal
 - b) Intramuscular
 - c) Subcutaneous
 - d) None of These
 - (v) Select the shortest acting non-benzodiazepine.
 - a) Diazepam
 - b) Zopiclone
 - c) Zolpidem
 - d) Zaleplon
 - (vi) Choose the correct statement about osmotic diuretics:
 - a) They are large molecular weight substances which form colloidal solution
 - b) Their primary site of action is collecting ducts in the kidney
 - c) They increase water excretion without increasing salt excretion
 - d) They can lower intraocular pressure
 - (vii) Widespread and prolonged use of an antibiotic leads to emergence of drug resistant strains because antibiotics are associated with:
 - a) Induce mutation in the bacteria
 - b) Promote conjugation among bacteria
 - c) Allow resistant strains to propagate preferentially
 - d) None of These
 - (viii) Superinfections are more commonly associated with:

- a) Use of narrow spectrum antibiotics
 c) Use of antibiotics that are completely absorbed from the small intestines
- b) Short courses of antibiotics
 d) Use of antibiotic combinations covering both gram positive and gram negative bacteria
- (ix) Identify the factor on which the loading dose of a drug depends:
 a) Volume of distribution
 c) Rate of administration
- b) Clearance
 d) Half life
- (x) A common side effect associated with all NSAID drugs:
 a) Constipation
 c) Gastric irritation
- b) Xerostomia
 d) Drowsiness
- (xi) Select the correct statement about the drugs applied to the eye:
 a) can be absorbed by pigments in the iris and retarded in its action
 c) will leave the eye mostly via retinal blood supply
- b) will distribute equally between the anterior and posterior part of the eye
 d) penetrates mostly through the conjunctiva into the eye
- (xii) Select the corticosteroid produced naturally by the body is:
 a) Methylprednisolone
 c) Triamcinolone
- b) Dexamethasone
 d) Hydrocortisone
- (xiii) Select the following drug that is obtained from flowers:
 a) Strychnine
 c) Quinine
- b) Tubocurarine
 d) Vincristine
- (xiv) Name the drug that relieves itching:
 a) Anti-pruritics
 c) Anti-tussives
- b) Anti-spasmodics
 d) Anti-septics
- (xv) The smell of pain relief balm Iodex is related to:
 a) Methyl Salicylate
 c) Propyl Salicylate
- b) Ethyl Salicylate
 d) Butyl Salicylate

Group-B

(Short Answer Type Questions)

3 x 5=15

2. State the phase I reactions of drug metabolism. (3)
3. Discuss the uses of Chloroquine. (3)
4. Predict the changes in pupillary size after applying atropine. (3)
5. Describe the procedure for giving intravitreal injection. (3)
6. Classify Injectable Local anaesthetic agents based on duration of action. (3)

OR

Explain the role of immunosuppressants in ophthalmology. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Define Rational Use of Drugs. Explain the key principles and benefits of it. (5)
8. Explain the common characteristics of Aminoglycosides. Name two drugs belonging to this group (5)
9. Enumerate the uses and adverse effects of Chloroquine. Name one antimalarial antibiotic. (5)
10. Enumerate the uses and pharmacokinetics of Adrenaline. (5)
11. Explain the MoA of NSAID in brief. Give examples of Non-selective COX and selective COX-II inhibitors. Write in brief about the treatment of acute paracetamol poisoning. (5)
12. Classify Anti-asthmatic drugs. Compare Mucolytics and expectorants with one example of each. (5)

OR

Classify the drugs used in Peptic ulcer. Give example of an osmotic laxative.

(5)
