



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
BACHELOR OF SCIENCE IN NURSING
END OF SEMESTER DECEMBER 2023 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 222 CLINICAL PHARMACOLOGY

DATE: 14-DECEMBER-2023

Duration: 2 HOURS

Start: 11:15 AM

Finish: 1:15 PM

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section I: Multiple Choice Questions (20 marks)
Section II: Short Answer Questions (30 marks) and Section III: Long Answer Questions (20 marks)
3. Answer ALL Questions.
4. Do Not write anything on the question paper -use the back of your booklet for rough work if need be.

SECTION I: MULTIPLE CHOICE QUESTIONS**(20 MARKS)**

1. The nurse will watch out for renal toxicity in a patient with which antifungal agent: -
 - a) Clotrimazole
 - b) ketoconazole
 - c) Nystatin
 - d) Amphotericin B
2. Chelation is a drug interaction associated with:-
 - a) Aminoglycosides
 - b) Sulphonamides
 - c) Fluroquinolones
 - d) Tetracyclines
3. Enzyme inhibition can result in: -
 - a) Increased serum concentration of the metabolite
 - b) Increased serum half -life of the drug
 - c) Increased hepatic metabolism
 - d) Increased drug clearance from the body
4. The formulation of drugs inserted in the anal region are referred to as : -
 - a) Suppositories
 - b) Pessaries
 - c) Creams
 - d) Lotions
5. Indicate whether the statements are true or false: -
 - I. Alternative medicine is well regulated in Kenya
 - II. Herbal medicine has better efficacy than conventional medicine
6. A second line antituberculosis agent is: -
 - a) Cloxacillin
 - b) Benzyl penicillin
 - c) Gentamycin
 - d) Amikacin
7. Ethambutol is associated with: -
 - a) Red green colour blindness
 - b) Orange stain of body fluids
 - c) Peripheral neuropathy
 - d) Nephrotoxicity
8. A beta lactamase inhibitor is : -
 - a) Clavulanic acid
 - b) Vancomycin
 - c) Bacitracin
 - d) Cycloserin
9. The route of drug administration with the fastest absorption rate is: -
 - a) Subcutaneous
 - b) Intradermal
 - c) Intramuscular

d) Rectal route

10. Select the correctly matched anthelmintic agent and the worm it treats :-

- a) Mebendazole- Schistosomiasis
- b) Praziquantel- Round worms
- c) Diethylcabamazine (DEB)- Filariasis
- d) Albedazole – Amoebiasis

11. The following drug has both alpha selective and beta-blocking effects: -

- a) Propranolol
- b) Labetalol
- c) Atenolol
- d) Acebutolol

12. The mechanism of action of methylxanthines is: -

- a) Inhibition of the enzyme phosphodiesterase
- b) Stimulation of Beta-2 adrenoreceptor
- c) Inhibition of the M-cholinoreceptors
- d) Inhibition of production of inflammatory cytokines

13. The mechanism of action of metoclopramide involves: -

- a) H₁ and H₂ receptor blocking effects
- b) M-cholinoreceptor stimulating effect
- c) D₂-dopamine and 5HT₃-serotonin receptor blocking effect
- d) M-cholinoreceptor blocking effect

14. The drug stimulating the protective function of the mucous barrier and the stability of the mucous membrane against damaging factors is: -

- a) Ranitidine
- b) Sucralfate
- c) Omeprazole
- d) Misoprostol

15. The following agent is a full antagonist of opioid receptors: -

- a) Meperidine
- b) Buprenorphine
- c) Naloxone
- d) Butorphanol

16. The following preparation combines carbidopa and levodopa in a fixed proportion: -

- a) Sinemet
- b) Selegiline
- c) Tolcapone
- d) Biperiden

17. The anxiolytic agent which relieves anxiety without causing marked sedative effects is: -

- a) Diazepam
- b) Chlordiazepoxide
- c) Buspirone
- d) Clorazepate

18. The competitive antagonist of benzodiazepine receptors is: -
- Zolpidem
 - Flumazenil
 - Temazepam
 - Buspirone
19. The antiseizure drug which has an important effect on the T-type calcium channels in thalamic neurons is: -
- Phenytoin
 - Lamotgrine
 - Carbamazepine
 - Ethosuximide
20. The drug of choice for status epilepticus in infants and children is: -
- Clonazepam
 - Sodium valproate
 - Phenobarbital sodium
 - Gabapentin

SECTION II: SHORT ANSWER QUESTIONS (30 MARKS)

- State four (4) classes of penicillins giving an example in each class (4 Marks)
- State 4 nursing considerations when administering insulin (4 Marks)
- Describe the mechanism of action of gentamycin (4 Marks)
- Using appropriate examples, describe drugs used in the management of bronchial asthma (8 Marks)
- Explain THREE (3) major classes of anti-hypertensive drugs, indicating their modes of action, clinical uses, example and appropriate dose for each (6 marks)
- Using relevant examples, classify and explain drugs used for pain management (4 marks)

SECTION III: LONG ANSWER QUESTION – (20 MARKS)

- Enumerate five (5) mechanisms of action of anti-diarrhoeal drugs (5 marks)
 - Discuss the pharmacological approaches used in management of peptic ulcer disease (10 marks)
 - Outline five (5) mechanisms of action among the different classes of diuretic drugs (5 marks)