



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES
KENYA REGISTERED COMMUNITY HEALTH NURSING
End of Semester Examinations Dec 2024

COURSE CODE AND TITLE: DNS 118: Pharmacology I

DATE: THURSDAY 4TH DECEMBER 2024

TIME: 2 Hours

Start: 0900 HOURS

Finish: 1100 HOURS

INSTRUCTIONS

- 1. This exam will be marked out of 70 Marks**
- 2. ALL Questions are compulsory.**
- 3. The Examination has Three Sections: Section A- Multiple Choice Questions, Section B: Short Answer Questions, Section C: Long Essay Questions**
- 4. Answer all Questions in the ANSWER BOOKLET provided**

SECTION I: MULTIPLE CHOICES QUESTIONS

(20 MARKS)

1. The study of how drugs affect the body is rereferred to as: -
 - a) Pharmacokinetics
 - b) Pharmacodynamics
 - c) Toxicology
 - d) Pharmacogenetics
2. Laws that regulates the manufacture, sale, and use of dangerous drugs are found in the:
 - a) Control Drug Act (CDA)
 - b) Pharmacy and Poisons Act
 - c) Narcotic Drugs Control Act
 - d) FDA Drug Act
3. The correct term for the amount of drug to be administered based on the patient's weight:
 - a) Unit dose
 - b) Titration
 - c) Body surface area calculation
 - d) Dosage calculation
4. Anti-tuberculosis drugs are contraindicated in: -
 - a) Liver disease
 - b) Respiratory infections
 - c) Pregnancy
 - d) Immunocompromised status
5. The following are true about Mebendazole EXCEPT is: -
 - a) Inhibits microtubule synthesis
 - b) Parent drug appears to be the active form
 - c) Its efficacy varies with GI transit time and intensity infection.
 - d) There are narrow spectrum.

6. A contraindication for narcotic analgesics includes:

- a) Hypotension
- b) Severe pain
- c) Fever
- d) Respiratory depression

7. One of the following is an advantage of the oral route of drug administration: -

- a) Easy and convenient
- b) Rapid onset of action
- c) Avoids first-pass metabolism
- d) Suitable for unconscious patients

8. A half-life of a drug refers to -

- a) First pass effect
- b) Time taken for drug to be eliminated by half
- c) Time taken for the half drug of be distributed in the body
- d) Time taken for the half of the drug to be absorbed in the system

9. A common adverse reaction to sulphonamides is: -

- a) Stevens-Johnson syndrome
- b) Hypertension
- c) Bradycardia
- d) Hyperglycemic

10. Bioavailability is: -

- a) The percentage of a drug formulation that is absorbed
- b) Not affected by first pass metabolism
- c) Close to 80% for orally administered verapamil
- d) Equivalent to absorption minus the extraction rate for an orally administered drug

11. One of the following is not the subject for pharmacodynamics: -

- a) Mechanism of action.
- b) Duration of effect.
- c) Adverse effects.
- d) Phases of metabolism.

12. The duration of therapeutic effect depends on: -
- Route of administration.
 - Frequency of administration.
 - Form of the drug.
 - Elimination route.
13. The ratio of quantity of drug reaching systemic blood flow and total amount of introduced drug in different forms, or manufactured by different producers is referred to as: -
- Pharmacokinetics.
 - Pharmacodynamics.
 - Pharmacoeconomics.
 - Bioavailability.
14. The following is a first-generation cephalosporin: -
- Cefuroxime
 - Ceftazidime
 - Cefadroxil
 - Ceftriaxone
15. The following are true about Ibuprofen EXCEPT: -
- Is an irreversible cyclo-oxygenase inhibitor
 - Has analgesic properties
 - Has antipyretic properties
 - Is a reversible cyclo-oxygenase inhibitor
16. Ingestion of the drug refers to :-
- Digestion effects on the drug
 - Excretion through kidney
 - Break down in the Intestine
 - Oral taking of drug

17. When the medicine is administered into the spinal cavity, this route is known as: -

- a) Intrathecal
- b) Intra osseous
- c) Intra peritoneal
- d) Intracardiac

18. When a drug is administered through the layers of skin into areolar tissue, this is known as-

- a) Intradermal administration
- b) Intra-arterial administration
- c) Subcutaneous administration
- d) Intramuscular administration

19. Before giving an injection, the nurse should be able-

- a) To document in the nurses cardex appropriately
- b) To empathize with the clients
- c) To prepare the medications as desired.
- d) To call for assistance

20. Which fact is true about paracetamol-

- a) It is a strong anti-inflammatory
- b) It has weak anti-inflammatory property.
- c) It causes Gi bleeding in large dose.
- d) Good in gout treatment

SECTION B: SHORT ANSWER QUESTIONS**(30 MARKS)**

1. Explain the concept of first pass effects and first pass elimination. (5 marks)
2. State Three (3) biological barriers that influence distribution of drugs. (3 marks)
3. State Four (4) uses of drugs. (4 marks)
4. State Five (5) Factors to consider when choosing the route of drug administration. (5 marks)
5. State Five (5) Nurses' responsibility in drug administration. (5 marks)
6. Explain pharmacokinetics process. (8 marks)

SECTION C: LONG ANSWER QUESTIONS**(20MARKS)**

1. Analgesic is widely used to in Kenya today
 - a) Describe the mode of action of Non-Steroidal Antifactory Drug (NSAID). (10 marks)
 - b) Explain Two (2) classification of NSAID. (4 marks)
 - c) State Six (6) major effects of Acetylsalicylic acid (Aspirin). (6 marks)