

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF GENERAL NURSING SCIENCE
BACHELOR IN NURSING SCIENCE PROGRAMME
MAIN EXAMINATION PAPER MAY 2019

COURSE CODE	: GNS 208
COURSE TITLE	: PHARMACOLOGY FOR NURSES
TOTAL MARKS	: SEVENTY-FIVE
DURATION	: TWO (2) HOURS

INSTRUCTIONS:

1. THE PAPER HAS 9 PAGES (including the front page)
2. THE QUESTIONS ARE DIVIDED INTO THREE SECTIONS
3. ANSWER ALL QUESTIONS IN THE THREE SECTIONS
4. INSTRUCTIONS ARE GIVEN AT THE BEGINNING OF EACH SECTION
5. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED PER QUESTION OR A PART THEREOF
6. HANDWRITING MUST BE LEGIBLE.

DO NOT OPEN THE EXAMINATION PAPER UNTIL PERMISSION HAS BEEN GIVEN BY THE INVIGILATOR

SECTION 1

MULTIPLE CHOICE QUESTIONS

Instruction:

Enter in your EXAMINATION ANSWER BOOK, the alphabet that corresponds with your selected answer. For example: 1.1 = a; 1.2 = b; and so forth

- 1.1 In pharmacology, almost every drug has _____ name/names.
a. one
b. two
c. three
d. four
- 1.2 Again in pharmacology, every drug belongs to at least _____ classes.
a. five
b. four
c. three
d. two
- 1.3 The source of digoxin is _____.
a. minerals
b. animal body parts
c. plants
d. all the above
- 1.4 Drug safety of new drugs is determined and approved by _____.
a. FBA
b. FDA
c. FBI
d. FAD
- 1.5 With regards to pharmacokinetics, active transport, refers to movement of a drug from
a. medium concentration to higher concentration
b. higher concentration to lower concentration
c. lower concentration to higher concentration
d. higher concentration to medium concentration
- 1.6 The following factors affect drug distribution, EXCEPT
a. blood flow
b. volume of distribution
c. drug solubility
d. enzyme inhibition

- 1.7 Biotransformation is interchangeable with drug _____ .
- absorption
 - excretion
 - distribution
 - metabolism
- 1.8 The acronym ADME is associated with _____.
- pharmacology
 - pharmacodynamics
 - pharmacokinetics
 - all the above
- 1.9 Onset of drug action refers to the time between drug administration and
- commencement of therapeutic effects
 - decline in therapeutic effect
 - the appearance of adverse effects.
 - appearance of side effects
- 1.10 The term therapeutic index is associated with the _____.
- onset of action after administering a drug
 - margin of safety of a given drug
 - onset of drug-drug interactions
 - toxic effects of drugs
- 1.11 Among others, the half-life of a drug helps to determine the _____.
- correct drug dosage
 - frequency of administering that drug
 - duration of the course of that drug
 - storage of a drug
- 1.12 the drug methyl dopa is associated with _____.
- increased appetite for food
 - decreased appetite for food
 - decreased libido
 - increased libido
- 1.13 The buccal route entails placement of the drug _____.
- under the tongue
 - at the centre of the tongue
 - at the back of the tongue
 - between the upper cheek and gum of upper teeth.

- 1.14 Immediately following delivery, _____ is/are instilled in the newborn's eyes.
- Vitamin A eye drops
 - Vitamin D eye drops
 - chloramphenicol eye ointment
 - chlorthiazide eye ointment
- 1.15 The drug _____ is used to prevent deep vein thrombosis.
- hydrocortisone
 - tetanus toxoid
 - warfarin
 - cimetidine
- 1.16 As a beta blocker, atenolol is used in clients with
- renal failure
 - liver failure
 - hypertension
 - lung disease
- 1.17 This drug is also referred to as a loop diuretic.
- furosemide
 - phenergan
 - phenobarbitone
 - potassium chloride
- 1.18 One of the following drugs is an antiemetic as well as a sedative.
- phenergan
 - ampicillin
 - mist. magnesium triscilicate
 - metformin
- 1.19 A client on heparin must not be administered with _____ at the same time.
- warfarin
 - aspirin
 - myogel
 - glycerine suppository
- 1.20 Clients with anxiety tend to respond quite well to _____.
- hydrocortisone
 - chlorthiazide
 - epilim
 - diazepam.

1.21 Pharmacotherapeutics takes into account the following

- a. drug-drug interactions
- b. adverse effect
- c. drug-food interactions
- d. all the above.

1.22 Aminophylline is a _____.

- a. vasodilator
- b. bronchodilator
- c. bronchoconstrictor
- d. vasoconstrictor.

1.23 For experiencing shortness of breath, Mr. Simelane was put on _____.

- a. propranolol inhaler prn
- b. glycerine trinitrate prn
- c. ventolin inhaler prn
- d. pethidine inhaler prn

1.24 Since Mr. Zulu was started on _____ he passes urine that is bright yellow in colour

- a. Vitamin C
- b. Vitamin B
- c. Vitamin K
- d. Vitamin E

1.24 which drug is responsible for change of colour stools to a darker colour?

- a. gentian violet
- b. atropine sulphate
- c. ferrous sulphate
- d. scopex

1.26 The most effective route of administering drugs is the _____ route.

- a. topical
- b. parenteral
- c. inhalation
- d. All the above

1.27 Which of the following drugs must NOT be discontinued suddenly?

- a. tetracycline
- b. prednisolone
- c. procaine penicillin
- d. benzyl benzathine penicillin

1.28 Which drug may be responsible for breast development in men?
complications

- a. declofenac
- b. prednisolone
- c. oxytocin
- d. tetanus toxoid

1.29 Teratogenic effects are associated with _____.

- a. elderly clients
- b. nursing women
- c. expectant women
- d. special populations

1.30 The drug chlorpheniramine is an _____.

- a. anti inflammatory
- b. antihistamine
- c. ant emetic
- d. antineoplastic

1.31 One bad characteristic of antineoplastic drugs is that they are _____ against rapidly dividing cells and also affects normal rapidly dividing cells.

- a. selective
- b. agonistic
- c. non selective
- d. antagonistic

1.32 Which one of the following tests must be performed regularly when a client is on anticoagulant therapy?

- a. therapeutic time
- b. perfusion time
- c. prothrombin time
- d. liver function time

1.33 One of the following drugs does not belong. Which one?

- a. scopex
- b. pethidine
- c. morphine
- d. methadone.

1.34 Colchicine is an _____ drug.

- a. antigout
- b. antihistamine
- c. antacid
- d. emetic

- 1.35 The first line antiretroviral treatment in adults (non pregnant) includes the following combinations
- Tenofovir, Lamivudine and efavirenz.
 - Tenofovir, Abacavir, and Emtriva
 - Tenofovir, Lamivudine and Nevirapine
 - Tenofovir, Zidovudine and Nevirapine.

[35 POINTS]

SECTION 2
MISCALLENEOUS 20 POINTS

Instruction:

Convert the following mixed measurements as directed for each one. Write the correct answer only in your answer book. Example: 2.1 = 10g, 2.2 = 60mg

Measurement conversions

- | | | |
|------|--------------------|------------|
| 2.1 | 1000 mg | = _____ g |
| 2.2 | 6g | = _____ mg |
| 2.3 | 1200mg | = _____ kg |
| 2.4 | 250 ml | = _____ L |
| 2.5 | 1kg | = _____ lb |
| 2.6 | 1L | = _____ ml |
| 2.7 | 1 tablespoon (Tsp) | = _____ ml |
| 2.8 | 1 teaspoon (tsp) | = _____ ml |
| 2.9 | 25 mcg | = _____ mg |
| 2.10 | 1 ounce | = _____ g |

[10 POINTS]

Drug calculations

Instruction:

From 2.11 through 2.16 you have been given calculations to work out. Give the formula for drug and IV fluid calculations first and show all your work in your answer book, Remember to underline once only your final answer.

- 2.11 Calculate the dose of amoxicillin suspension in ml for treatment of otitis media for a 1-yr old child weighing 22 lb. The dose required is 40 mg/kg/day divided BID. The drug suspension is available in the concentration 400 mg/5 ml. (4)
- 2.12 If 1,200mg of a drug is to be administered and in stock there is 600mg, how many tablets will be administered to the client. (1)
- 2.13 The minimum and maximum therapeutic doses of drug X are between 100mg - 300mg in 24 hours. This drug is to be administered three equal doses in 24 hours. Write down your Comment if a client receives 75mg TDS of the same drug? (1)
- 2.14 A child is to be administered with phenobarbitone 20 mg BD. This drug is currently available in the concentration 10mg/2.5mL. How many ml will be administered to this child? (2)
- 2.15 A client with diabetes mellitus type 11 is being discharged on sliding scale soluble insulin for two weeks only. She is to self-administer soluble insulin 20 units BD before breakfast and supper. In stock at pharmacy , soluble insulin is available in the strength 40 units/ml vials only. How many ml of soluble insulin will the client self-administers? (2)
- 2.16 Calculate the IV flow rate if 1500 ml normal saline 0.09% is to be transfused run over 12 hours using an IV giving set whose drop factor is 15 gtt/min. (3)
- 2.17 A client is to be administered 100,000 units of heparin via the drip whose regimen is 1L 12 hourly. In stock there is heparin 5000 units/ml. How many ml of heparin will be added to the vacolitre each time? (2)

[15 POINTS]

**SECTION 3
SPECIAL POPULATIONS**

Instruction:

In your answer book, write either **T** for true or **F** for false as your chosen answer for each question from 3.1 through 3.9 Example: 3.1 = T, 3.2 = F and so forth.

- 3.1 Gastric content pH that is above 7 does not readily promote the process of drug absorption in children. True / False
- 3.2 Pregnant women may buy OTC drugs and self-administer for minor ailments only. True / False
- 3.3 The decrease in gastro intestinal tone and motility in expectant mothers does not have any effect of the process of drug absorption. True / False
- 3.4 Injectable contraception contributes is associated weight gain in breastfed infants. True / False
- 3.5 Owing to changes in liver functioning, elderly persons run the risk of developing drug toxicity. True / False
- 3.6 Very young children are equally able in excreting drugs. True / False
- 3.7 Owing to lesser quantities of hydrochloric acid, drug absorption in the elderly is quick. True / False
- 3.8 It is not necessary to take into account the infant's suckling behavior and sleep pattern when prescribing medications for mothers.
- 3.9 Women in their first trimester are allowed to self-administer OTC drugs since pregnancy will be at an early stage. True / False

[9 POINTS]

4. Explain any six rights of drug administration. (6)

THE END