

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF GENERAL NURSING
MAIN EXAMINATION IN APRIL/MAY 2015

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Course Code	GNS 208
Course Title	Pharmacology for Nurses
No. of Students	33
Duration of paper	Two (2) hours
Total Marks	Seventy-five (75)

INSTRUCTIONS

- 1 Answer ALL four questions
- 2 Instructions for answering are given per each question
- 3 Write all your answers in the provided answer booklet.
- 4 Read all questions thoughtfully
- 5 Handwriting MUST be legible
- 6 Figures in brackets represent marks allocated per question, or a part thereof.
- 7 The paper has a total of eleven (11) pages (including the cover page)

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QUESTION 1

Multiple choice questions (X 40)

INSTRUCTIONS

1. Select the most appropriate answer and write it in your answer booklet. Write only the alphabet. *Example: 1 = a, 2 = b, c = d, and so forth.* Page | 2
 2. Pay attention as some questions are associated with given situations.
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Questions 1.1 through 1.3 are related to Situation A

SITUATION A

The nurse is in the process of admitting a 13-month-old child into the Children's Ward. Upon enquiring about the child's pharmacological history, the mother informs the nurse that the child is taking a certain medication which she bought in one chemist shop. She administers to the child one tablespoonful of this drug three times a day. The mother hands over to the nurse the bottle with the drug. The label on the bottle states that 5ml is equivalent to 5 mg and CAUTION: DO NOT exceed 20 mg/24hours.

1.1 How many mg are equivalent to one ml of this drug?

- a. 1 mg
- b. 1.5 mg
- c. 5 mg
- d. 4 mg

1.2 What dosage in mg has the child been swallowing each time the mother has administered the drug?

- a. 5 mg
- b. 10 mg
- c. 15 mg
- d. 20 mg

1.3 The amount that was being administered to the child was:

- a. an overdose
- b. within the acceptable range
- c. an under dose
- d. a reasonable dose since the child is sick

Questions 1. 4 – 1.6 are related to Situation B

SITUATION B:

The medical officer has just prescribed magnesium trisilicate 20 ml for an unconscious patient.

1.4 Which route will be used to administer the drug?

- a. IV
- b. IM
- c. SC
- d. n/g

1.5 The drug magnesium trisilicate is classified as a/an

- a. vasodilator
- b. anticoagulant
- c. vasoconstrictor
- d. antacid

1.6 Which one of the following signs is an adverse effect of magnesium trisilicate?

- a. constipation
- b. diarrhoea
- c. skin rash
- d. dry skin

1.7 Gcebile has vaginal candidiasis. Which drug presentation is most effective in managing this condition?

- a. nystatin suspension
- b. nystatin creme
- c. nystatin tablets
- d. nystatin capsules

1.8 One of the findings from conducting physical assessment on 40-year-old Mr. Mdluli was hirsutism. Which drug will you suspect as having contributed toward this?

- a. chloroquine
- b. daonil
- c. prednisolone
- d. propranolol

1.9 Mr. Hlatshwayo is 70 years old and has been admitted into a male medical ward. He has the following conditions: anaemia, CCF, rheumatoid arthritis and hypertension. Upon enquiring about his pharmacological history, his wife hands the admitting nurse a small plastic bag containing all the tablets he is taking at home. What immediate action should the admitting nurse take at the sight of 'smarties-like' contents of the small bag of drugs? The nurse will take the following action: receive the plastic with the drugs and

- a. discard the entire small bag into the ward trash bin
- b. give the wife health education about drug storage
- c. send the small bag to pharmacy for sorting out and re-labelling
- d. look at it and return it to the wife to continue administering the drugs since she knows which ones are which

1.10 Which vital sign is very important to monitor when a client is on digoxin?

- a. blood pressure
- b. body temperature
- c. respirations
- d. pulse rate

1.11 In which phase of the nursing process does the nurse establish a comprehensive baseline data for a client?

- a. assessment
- b. planning
- c. implementing
- d. evaluation

1.12 Sipiwe is due 250 mcg PO of drug X . In stock the same drug was dispensed in mg.

Which one is the right dose to administer?

- a. 2.5 mg
- b. 250 mg
- c. 25 mg
- d. .25 mg

1.13 Most drug references provide paediatric recommended doses based on the child's:

- a. total body water content
- b. fat to lean mass ratio
- c. body weight
- d. height

1.14 When prescribing drugs for older adult clients, the prescriber takes into account

- a. age and height
- b. body weight and organ function
- c. drug half-life
- d. strength of the drug

1.15 One of the most serious adverse effects of streptomycin is

- a. double vision
- b. drying up of the tongue
- c. ringing in the ears
- d. itchiness of the skin

1.16 An _____ is a drug that binds to a receptor.

- a. antagonist
- b. agonist
- c. antidote
- d. anti emetic

1.17 Having undergone below knee amputation of his right leg 5 days ago, Vusumuzi is complaining of pain in his right toes. The most effective drug to relieve his pain will be

- a. pethidine
- b. diclofenac
- c. morphine
- d. non pharmacologic therapy

1.18 Which drug is used by school health programmes to deworming the pupils?

- a. metronidazole tablets
- b. albendazole tablets
- c. ascorbic acid tablets
- d. cloxacillin suspension

1.19 The most effective drug to manage the condition known as gout is

- a. warfarin
- b. spironolactone
- c. colchicine
- d. remitadine

1.20 The Medical Officer has ordered one aminophylline suppository to be administered to a client who is having a severe attack of bronchiole asthma in order to ease his breathing. Which is the most effective route of administration of this drug?

- a. per os
- b. per rectum
- c. topically
- d. per inhalation

1.21 Mrs. Mhlanga is on soluble insulin 40 units at 08.00am and 20 units at 17.00 hours everyday. In stock there is insulin 80units/ml. How many ml will be drawn at 08.00 am and at 17.00 hours?

- a. 0.05ml at 08.00 am and 0.25 ml at 17.00 hours
- b. 0.5ml at 08.00 am and 0.25 ml at 17.00. hours
- c. 5ml at 08.00 am and 2 ml at 17.00 hours
- d. 0.5ml at 08.00 am and 2.5 ml at 17.00 hours

1.22 Very politely Mr. Mavuso says to the nurse “ Nurse, my ‘engine’ (referring to his manhood) has become very weak since I got the tablet you added last month.”

Which drug will you suspect among the following?

- a. methyropa
- b. amitryptalline
- c. neurobion
- d. diazepam

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1.23 Which antiretroviral drug is associated with unusual distribution of adipose tissue?

- a. nevirapine
- b. zidvudine
- c. lamivudine
- d. stavudine

1.24 If Mrs Khumalo is to be administered with 10,000 units of heparin and in stock there is heparin 5000 units per ml, how many ml will be drawn up?

- a. 1 ml
- b. 1.5 ml
- c. 2 ml
- d. 2.5 ml

1.25 Scientific contraceptive methods such as the combined oral pill is a typical examples of

- a. synthetic drugs
- b. drugs that originate from plant
- c. drugs that originate from animals
- d. drugs that originate from minerals elements

1.26 A 22-month-old has been prescribed ear drops. In order to ensure that the medication has been correctly administered, the nurse will

- a. pull the pinnacles upwards and back
- b. pull the pinnacles downwards and back
- c. instil the drops in the ear canal first and then pull the pinnacles upwards and back
- d. instil the drops in the ear canal first and then pull the pinnacles downwards and back

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1.27 The drug gentamycin may NOT be administered

- a. IM
- b. IV
- c. PO
- d. SC

1.28 Otic drug administration of medicine refers to

- a. placing the drug between the cheek and teeth
- b. placing the drug underneath the tongue
- c. instilling the drug inside the ear
- d. applying the drug to the skin

1.29 Premarin is prescribed mostly used as _____ therapy.

- a. acute
- b. replacement
- c. palliative
- d. chronic care

1.30 By adding 2 tbsp of sweet wine into the toddler's feeding bottle, the maid made the child ingest _____ ml of alcohol.

- a. 30
- b. 25
- c. 20
- d. 15

1.31 The drug pethidine belongs to _____ of the drug schedule.

- a. Class 111
- b. Class 11
- c. Class 1
- d. Class 1V

1.32 Which drug is more effective in controlling the condition grand mal epilepsy?

- a. epsom
- b. chlorthiazide
- c. diazepam
- d. epilim

1.33 Which of the follow best captures the concept 'pharmacokinetics'?

- a. distribution, metabolism, absorption and secretion
- b. absorption, metabolism, depletion and excretion
- c. excretion, metabolism, distribution and absorption
- d. secretion, absorption, polarization and metabolism

1.34 Passive transport is movement of substance from:

- a. low concentration to high concentration
- b. low concentration to medium concentration
- c. high concentration to low concentration
- d. high concentration to medium concentration

1.35 Drug toxicity readily affects which of the following persons? The

- a. pregnant women
- b. child
- c. lactating woman
- d. older adult

1.36 Prolonged use of _____ especially in clients with CCF, will result in KCl depletion.

- a. propranolol
- b. colchicine
- c. furosemide
- d. methyldopa

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1.37 The following drugs are antibiotics EXCEPT

- a. ampicillin
- b. ciprofloxacin
- c. prednisolone
- d. chloramphenicol

1.38 The following body systems are involved in drug excretion EXCEPT

- a. respiratory
- b. renal
- c. cardio-vascular
- d. gastro-intestinal.

1.39 The following analgesic drugs are non-habit forming EXCEPT

- a. buscopan
- b. paracetamol
- c. cannabis
- d. Ibuprofen

1.40 Half-life of a drug helps to determine the

- a. dosage of a drug
- b. frequency with which to administer it.
- c. course of a drug
- d. route of administration

[40 points]

QUESTION 2

Instruction:

Complete the following table by writing the answers as follows in your answer booklet:

Example 3.1 Chloroquine tabs = chronic : scabies ; 3.2 Dexamethazone = replacement: generalized oedema ; and so forth.

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Drug	Therapeutic Action (x 10)	Condition for which it is used (x10)
2.1 Chloroquine tabs		
2.2 Dexamethazone inj.		
2.3 Morphine cocktail		
2.4 Digoxin tabs		
2.5 Epilim capsules		
2.6 Chloramphenicol susp.		
2.7 Amitryptaline tabs		
2.8 KCl tabs		
2.9 Chlormycetin oint		
2.10 Iodine sol		

(20 points)

QUESTION 3

Complete the following conversions.

Instruction:

Write in your answer booklet: Examples: 3.1 = 274.5L, 3.12 = 50ml, and so forth

3.1	2745 ml	= _____ L
3.2	5L	= _____ ml
3.3	1 tsp	= _____ ml
3.4	2 ounces	= _____ ml
3.5	1 tbsp	= _____ ml
3.6	8lbs	= _____ kg

3.7 300mg = _____ kg

3.8 24 mg = _____ g

3.9 600 mcg = _____ mg

3.10 3g = _____ mg

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[10 points]

QUESTION 4

4.1 A client is to be infused with both R/L and D/S in 24h. The R/L is to run in the first 6 hours followed by D/S in the remaining time. A giving set with a drop factor of 20 ggt/ml will be used.

4.1.1 Write out in full the abbreviations R/L and D/S (.5 + .5 = 1)

4.1.2 Calculate the flow rate for both R/L (1)

4.1.3 Calculate the flow rate of D/S. (1)

4.1.4 At what time will the R/L be infused if the IV infusion begins at 08.00 am? (1)

4.1.5 At what time will the last drop of D/S be expected to run in? (1)

[5 points]

THE END