## UNIVERSITY OF SWAZILAND FACULTY OF HEALTH SCIENCES DEPARTMENT OF GENERAL NURSING SUPPLEMENTARY PAPER JULY 2016

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Course Code Course Title **GNS 208** 

Pharmacology for Nurses

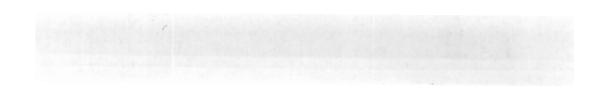
Duration of paper Total Marks

Two (2) hours 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 (8) 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.
- 2. Pay attention as some questions are associated with given situations.

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#### SITUATION A

A 13-month-old infant has been admitted into the Children's Ward for observations as he is not thriving well. Upon enquiring the pharmacological aspect of the infant, the mother informs the nurse that she gives her son one tablespoonful thrice a day of one medication that was obtained over the counter from one chemist shop. The mother hands the nurse the bottle with the medicine. The label on the bottle reads: 5ml is equivalent to 5 mg and CAUTION: <u>DO NOT</u> exceed 20 mg/24hours.

## Questions 1.1 through 1.3 are related to Situation A

1.1 H	How	many	mg a	re eq	uival	lent to	one	ml	of this	drug?
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- a. 1 mg
- b. 1.5 mg
- c. 5 mg
- d. 4 mg
- 1.2 What dosage in mg was the mother administering to her infant each time she gave the infant this medicine?
- a. 5 mg
- b. 10 mg
- c. 15 mg
- d. 20 mg
- 1.3 The answer in 1.2 suggests that the infant was receiving a/an \_\_\_\_\_ dose of the drug.
- a. overdose
- b. safe
- c. under dose
- d. normal

## **SITUATION B:**

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

## Questions 1. 4 – 1.6 are related to Situation B

1.4 The most	effective route o	f administration	of this drug is	
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- a. IV
- b. IM
- c. SC
- d. n/g

<ul> <li>1.5 Generally magnesium trisilicate is classified as a/an</li> <li>a. vasodilator</li> <li>b. anticoagulant</li> <li>c. vasoconstrictor</li> <li>d. antacid</li> </ul>
<ul> <li>1.6 One of the following is an adverse effect of magnesium trisilicate.</li> <li>a. constipation</li> <li>b. diarrhoea</li> <li>c. skin rash</li> <li>d. dry skin</li> </ul>
<ul> <li>1.7 Vaginal thrush is best treated with</li> <li>a. nystatin suspension</li> <li>b. nystatin creme</li> <li>c. nystatin tablets</li> <li>d. nystatin capsules</li> </ul>
1.8 the condition of gynaecomastia is associated with a. chloroquine b. daonil c. prednisolone d. propranolol
<ul> <li>1.9 Removing drugs from their original containers and storing them together in a common container can cause drug</li> <li>a. resistance</li> <li>b. dependence</li> <li>c. tolerance</li> <li>d. interaction</li> </ul>
<ul> <li>1.10 When taking digoxin the client must remember to her/his monitor</li> <li>a. blood pressure</li> <li>b. body temperature</li> <li>c. respiration rate</li> <li>d. pulse rate</li> </ul>
<ul> <li>1.11 In which phase of the nursing process does the nurse establish a comprehensive baseline data for a client?</li> <li>a. assessment</li> <li>b. planning</li> <li>c. implementing</li> <li>d. evaluation</li> </ul>

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1.12	Siphiwe is due 250 mcg PO of drug X. in stock the same drug was dispensed in mg.
	Which of the following 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
	When prescribing drugs for older adult clients, the prescriber must take into account
а.	age and height
b.	body weight and organ function
C.	drug half-life and peak
d.	strength of the drug and side effects
1.15	One of the most serious adverse effects of streptomycin is
a.	profuse discharge of wax
b.	drying up of the ears
c.	ringing in the ears
d.	itchiness of the ears
u.	iteliniess of the ears
1.18	An is a drug that binds to a receptor.
a.	antagonist
b.	agonist
C.	antidote
d.	anti emetic
1.16	A client who complains of pain in his right toes after undergoing below knee
1.10	amputation of his right leg is in need of
_	pethidine
a.	diclofenac
b.	
c.	morphine
d.	non pharmacologic therapy
1.17	One of the following drugs is used to de-worm the pupils by the school health team.
a.	metronidazole tablets
b.	albendazole tablets
c.	ascorbic acid tablets
d.	Vitamin A

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1.18 a. b. c. d.	The most effective drug in the management of gout is warfarin spironolactone colchicine remitadine	
attac	An aminophylline suppository to be administered stat to a client who is having a severe k of bronchiole asthma in order to ease his breathing. Which is the most effective route ministration of this drug?  per os  per rectum  per cutaneous	Page   5
d.	per inhalation	
	Father 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?  0.05ml at 08.00 am and 0.25 ml at 17.00 hours  0.5ml at 08.00 am and 0.25 ml at 17.00 hours  5ml at 08.00 am and 2 ml at 17.00 hours  0.5ml at 08.00 am and 2.5 ml at 17.00 hours	
1.21 a.	Which one of the following prescribed drugs is associated with impotence? methydopa	
b.	amitryptalline	
C.	neurobion	
d.	diazepam	
a. b. c.	The drug is associated with unusual distribution of adipose tissue especially in those clients who are on antiretroviral treatment.  nevirapine  zidvudine lamivudine	
d.	stavudine	
	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?  1 ml  1.5 ml  2 ml  2.5 ml	
1.24	Oral contraceptive drugs are	
a. b.	man-made from plants	
C.	form animal parts	
d.	from minerals elements	

	22-month-old has been prescribed ear drops. In order to ensure that the medication	
	as been correctly administered, the nurse will	
	pull the pinnacles upwards and back	
b.	, , , , , , , , , , , , , , , , , , , ,	
c. d.	instil the drops in the ear canal first and then pull the pinnacles upwards and back instil the drops in the ear canal first and then pull the pinnacles downwards and back	Page I 6
	he drug gentamycin may NOT be administered	0 1
a.	IM	
b.	IV	
	PO	
c. d.	SC	
1.27 (	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	
1.28 P	remarin is prescribed mostly used as therapy.	
a.	acute	
b.	replacement	
c.	palliative	
d.	chronic care	
1.29 B	y 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	
1.30 T	he drug pethidine belongs to of the drug schedule.	
a.	Class 111	
b.	Class 11	
C.	Class 1	
d.	Class 1V	
1.31W	hich drug is more effective in controlling the condition grand mal epilepsy?	
a.	epsom	
b.	chlorthiazide	
С.	diazepam	
d.	epilim	

1.32 V	Vhich of the following 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
4 2 2 4	
	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
1.34 0	rug toxicity readily affects which of the following persons?
a.	pregnant women
b.	children
C.	lactating women
d.	older adults
1 25 0	rolonged use of especially by clients with CCF will result in KCl depletion.
	propranolol
a. b.	colchicine
C.	furosemide
d.	methyldopa
1.37 T	he following drugs are antimicrobials EXCEPT for
a.	ampicillin
b.	ciprofloxacin
C.	prednisolone
d.	chloramphenicol
1.38 T	he following body systems are involved in drug excretion <u>EXCEPT</u>
a.	respiratory
b.	renal
C.	cardio-vascular
d.	gastro-intestinal.
4 20 7	the fallenting and the target of the fall
	the following analgesic drugs are non-habit forming EXCEPT
a. L	buscopan
b.	paracetamol
C.	cannabis
d.	Ibobrufen
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]

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#### **QUESTION 2**

#### Instruction:

Complete the following table by writing the answers as follows in your answer booklet:  $Example\ 3.1 = chronic\ treatment:$  scabies; 3.2 = replacement treatment: generalized oedema and so forth.

Drug	Therapeutic Action (x 10)	Condition for which it is used (x10)	Page   8
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 lodine 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

VVIICC	. III your answ	rei bookiet. Examples. 3.1 -	274.3E, 3.12 - 30111, and 30 10111
3.1	2,745 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	

[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