

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF GENERAL NURSING SCIENCE
MAIN EXAMINATION PAPER APRIL/MAY 2014

COURSE CODE : GNS 208
COURSE TITLE : PHARMACOLOGY FOR NURSING
TOTAL MARKS : SEVENTY-FIVE (75)
DURATION : TWO (2) HOURS

INSTRUCTIONS:

1. THE PAPER HAS THREE QUESTIONS
2. ANSWER ALL THREE QUESTIONS
3. INSTRUCTIONS ARE GIVEN AT THE BEGINNING OF EACH QUESTION
4. FIGURES IN BRACKETS INDICATE MARKS ALLOCATED PER QUESTION OR A PART OF THE QUESTION.
5. **HANDWRITING MUST BE LEGIBLE.**

DO NOT OPEN THE EXAMINATION PAPER UNTIL PERMISSION IS GIVEN BY THE INVIGILATOR

QUESTION 1**Instruction:**

This question has two parts to it (Table 1.1 with (i) Columns A & B and Table 1.2 with Columns C & D. In Table 1.1 you are to match the content in Column A with that of Column B and write in your answer book as per given *examples*: 1 = c, 2 = h, and so forth. Note that some of the drug classifications will not be used.

Table 1.1 Drugs versus their classifications

Name of the Drug Column A	Classification of Drug Column B -
1.1 Glycerine trinitrate = _____	a. analgesic
1.2 Salbutamol = _____	b. anticoagulant
1.3 Colchicine = _____	c. acid neutralizer
1.4 Chloroquine = _____	d. anticoagulant
1.5 Prednisolone = _____	e. anti psychotic
1.6 Warfarin = _____	f. oestrogen replacement
1.7 Nystatin = _____	g. broncho dilator
1.8 Premarin = _____	h. bactericidal
1.9 Haloperidol = _____	i. antihypertensive
1.10 Magnesium triscilicate = _____	j. anti gout
	k. anti malarial
	l. anti inflammatory
	m. antifungal
	n. vasodilator

(10 points)

INSTRUCTION:

In the second part, namely Table 1.2 you are to match the content of Column C with that of Column D. Write the correct answer booklet as per given *example*: 1 = a, 2 = b, 3 = c .

Table 1.2 Drug versus mode of action (5 points)

Drug name Column C	Mode of action Column D
11. gentamycin Is = _____	Is it (a) bactericidal or (b) bacteristatic?
12. Streptomycin = _____	Is it (a) bactericidal or (b) bacteristatic?
13. Ampicillin = _____	Is it (a) bactericidal or (b) bacteristatic?
14. Amoxicillin = _____	Is it (a) bactericidal or (b) bacteristatic?
15. tetracycline = _____	Is it (a) bactericidal or (b) bacteristatic?

(5 points)

[15 points]

QUESTION 2

Instruction:

Answer as guided by each sub question.

Scenario

A 72-year-old elderly woman is admitted into a female medical ward in one regional hospital. Her medical diagnosis is hypertension. Her blood pressure readings are 150/95 mm Hg. According to the *Standard Treatment Guidelines and Essential Medicines List (STG/EML)* of common medical conditions in the Kingdom of Swaziland (2012) both her systolic and diastolic pressure readings require management following entry Step 2 of treatment of hypertension.

- 2.1 Name the drug (1) that will be prescribed for her, dosage (1) and route (1) of administration. (3)
- 2.2 Describe the six 'R's the nurses will observe when administering the drug (3)
- 2.3 Discuss any four common errors that could occur in conjunction with administering of the administration of this drug to the elderly woman. (1x3x4=12)
- 2.4 State any four ways the common errors you have stated in question 2.3 may be avoided when administering the drug to the elderly woman. (4)
- 2.5 State one fact (1) each on how the following will be affected in this elderly woman: absorption (1), metabolism (1) and excretion (1). {3}

[25 points]

MULTIPLE CHOICE QUESTIONS

Instruction:

Select the most appropriate answer and write it in your answer booklet: *Example: 3.1 = A, 3.2 = D and so forth.*

QUESTION 3

- 3.1 Which drug is likely to be included as part of pharmacotherapy to Ringo who has the grand mal type of epilepsy?
- a. chlorpromazine
 - b. chlorthiazide
 - c. epilim
 - d. diazepam.

3.2 Pharmacokinetics includes:

- a. pharmacological effects of drugs
- b. adverse effects
- c. chemical structure of medicinal agent
- d. distribution of drugs in the organism.

3.3 'Active transport' implies:

- a. transport of drugs through a membrane by means of diffusion
- b. transport without energy consumption
- c. transport against concentration gradient
- d. phagocytosis.

3.4 Drug toxicity is most likely to affect the:

- a. pregnant women
- b. elderly person
- c. lactating woman
- d. infant.

3.5 Which drug is more appropriate in the management of a client with myocardial infarction?

- a. magnesium trisilicate
- b. glycerine trinitrate
- c. salbutamol inhaler
- d. furosemide.

3.6 Prolonged use of furosemide alone without replacement of a certain drug will cause:

- a. loss of potassium
- b. loss of magnesium
- c. loss of calcium
- d. loss of lithium.

3.7 Mavis is going to Nigeria for a workshop. She will need to start prophylactic treatment of

- a. metronidazole
- b. ampicillin
- c. chloroquine
- d. tetracycline.

3.8 The following factors affect drug distribution EXCEPT:

- a. blood flow
- b. drug solubility
- c. protein binding capacity
- d. drug inhibiting enzymes.

3.9 Which of the following drugs is effective in the management of pain that is associated with rheumatoid arthritis?

- a. declofenac
- b. paracetamol
- c. pethidine
- d. ibobrufen

3.10 Mr. Brown is on digoxin 0.625mg daily . His pulse rate this morning is 58 beats per minute. What action should he take? He should:

- a. omit today's dose altogether
- b. go ahead and self-administer it but do it sublingually
- c. go ahead and self-administer and swallow the tablet
- d. only self-administer half the daily dose (0.312.5 mg) he is on daily.

3.11 What will be the drip rate if a client is to be infused with 3000ml of dextrose water IV

@ 125 ml/h using a giving set whose drop factor is 10gtt/ml.

- a. 10 gtt/ml
- b. 16 gtt/ml
- c. 21 gtt/ml
- d. 24 gtt/ml.

3.12 Which drug will be most effective in the management of helminthic infestation in 3-year-old Jabulani?

- a. albendazole tablets
- b. ferrous sulphate tablets
- c. Whitfield's ointment
- d. ampicillin.

3.13 Self-administration of over the counter drugs by Khetsiwe who is pregnant is likely to cause _____ effects to her foetus.

- a. harmful
- b. teratogenic
- c. antagonistic
- d. adverse.

3.14 The following are included under pharmacotherapy EXCEPT:

- a. supportive therapy
- b. synthetic drugs
- c. replacement therapy
- d. palliative care.

3.15 Which drug is likely to relieve the spasm-like pain in an adolescent girl who experiences persistent dysmenorrhoea each month?

- a. aspirin
- b. grandpa powder
- c. hyoscine butylbromide
- d. phenergan.

3.16 Mrs Ndlovu has diabetes mellitus that is controlled with soluble insulin injections. She is on sliding scale. She is to self-administer 40 units only right now. In stock there is a 100 units/ml vial. How many ml of insulin should she draw up in the insulin syringe?

- a. 1.0ml
- b. .5ml
- c. .8ml
- d. .4ml.

3.17 Which of the following drugs has diuretic as well as potassium replacing effect?

- a. spironolactone
- b. propranolol
- c. myogel
- d. warfarin.

3.18 An adolescent mother added only two teaspoons of wine in the feeding bottle of her 8-month-old infant who was crying too much. How much of this alcohol drink was added?

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

3.19 Which of the following is **NOT** a controlled drug of addiction?

- a. Marijuana
- b. Diclofenac
- c. Morphine
- d. Pethidine.

3.20 The buccal route of drug administration entails placing the drug:

- a. under the tongue
- b. at the centre of the tongue
- c. between the cheek and teeth
- d. at the back of the tongue.

3.21 The drug premarin is administered to

- a. women who are in labour
- b. women who are in their peri-menopausal stage
- c. women who suffer from rheumatoid arthritis
- d. men who suffer from cancer of the prostate gland.

3.22 Mr Motsa is 42 years old and has been diagnosed as having type 11 diabetes mellitus.

Which drug is likely to help control his condition?

- a. isophane insulin
- b. soluble insulin
- c. metformin
- d. haloperidol.

3.23 Mr Mhlongo is a young adult, married and on methyldopa. Which of the following clinical manifestations is he likely to complain about in the long run?

- a. loss of appetite
- b. loss of hearing
- c. loss of libido
- d. loss of concentration.

3.24 All newborn babies are administered with this drug:

- a. bactrim suspension
- b. chloroquine elixir
- c. chloramphenicol eye ointment
- d. nevirapine suspension.

3.25 The first line antiretroviral treatment in adults (non pregnant) includes:

- a. TDF + 3TC + EFV
- b. TDK + 2TC + EFV
- C. TDG + 1TC + NVP
- d. TDF + 0TC + FRV.

[25 POINTS]

QUESTION 4

4.1 Describe any five routes of drug administration that nurses use on adult clients. (10)

[10 POINTS]

TOTAL = 75 POINTS