



**FACULTY OF HEALTH SCIENCES
DEPARTMENT OF NURSING SCIENCE**

PROGRAMME : POST BASIC PHARMACOLOGY FOR NURSING SCIENCE

SUBJECT : MODULE 1: INTRODUCTION TO POST BASIC
PHARMACOLOGY IN NURSING

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EXAMINER : MS PS ZIBI

MODERATOR : MR BS MATLALA

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INSTRUCTIONS : ANSWER ALL QUESTIONS.
(1) MARK PER FACT UNLESS OTHERWISE INDICATED

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MODULE 1

QUESTION 1

Please write the correct answer on the multiple choice questions in your answer book. Only one (1) answer is correct.

- 1.1 The Article 38A permit is still valid in South Africa.
- a. True
 - b. False
 - c. Only if issued by a specialist medical doctor.
- 1.2 Nurses may keep unscheduled medication without a permit.
- a. True
 - b. False
- 1.3 Giving instructions to the patient regarding the correct use of medication is:
- a. the responsibility of the pharmacist
 - b. the responsibility of the nurse
 - c. the responsibility of the prescribing doctor
 - d. the responsibility of the above-mentioned persons
 - e. not needed if the patient is provided with the packaged insert.
- 1.4 In a hospital the nurse may still give unscheduled medicine without a prescription.
- c. True
 - d. False
- 1.5 An enrolled nurse may also be an authorised prescriber.
- c. True
 - d. False
- 1.6 In the hospital, an unknown person approached the nurse and said that he has prescribed medicine for patient X. Choose the correct answer from the following statements:
- a. The nurse is obliged to administer the medicine.
 - b. The nurse should ignore the prescription.
 - c. The nurse must first establish who this person is.
 - d. The nurse must notify the Operational manager of the hospital

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- 1.7 Disciplinary measures can be instituted against a nurse by all, except:
- the employer
 - the South African Nursing Council
 - the Department of Health
 - a colleague if they disagree on something.
- 1.8 According to the Nursing Act No. 33 of 2005), a nurse who is in private practice and has become unfit to purchase, acquire, administer or supply any scheduled substance,
- may have his/her practice suspended
 - can only receive a warning
 - can be criminally prosecuted
 - cannot be registered as a nurse.
- 1.9 Telephonic prescriptions can never be legal.
- True, because only written prescriptions are legal.
 - False, because telephonic prescriptions are as binding as written prescriptions.
 - True, they will only be binding if the doctor signs them within 24 hours.
- 1.10 When the registered nurse signs the prescription chart, his/her signature indicates:
- that the nurse has handed the medicine to the patient to take
 - that the nurse has dispensed the medication
 - the patient actually took the medication
 - that it will be administered on his/her shift.
- 1.11 All new medication is registered. Whose responsibility is it to ensure that the nurse has the necessary knowledge and skills to administer these medications?
- The employer
 - The South African Nursing Council
 - The Pharmacy Council
 - Every individual nurse is responsible for his/her own professional development.
- 1.12 According to the Scope of Practice of the registered nurse, the nurse is allowed to:
- make a medical diagnosis
 - make a nursing diagnosis
 - make a medical diagnosis after obtaining a master's degree.

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- 1.13 A nurse who calls a doctor for a prescription of Panado to administer to a patient in his/her ward:
- obtains a legal prescription
 - is inconsiderate in phoning the doctor for safe medicine such as Panado
 - lacks knowledge about internal procedures.
- 1.14 A person who administers adrenaline to a patient during CPR (no doctor available):
- should be disciplined by the employer for acting outside his/her scope of practice
 - makes him/herself guilty of improper or disgraceful conduct
 - is still accountable for his/her actions and decisions, irrespective of whether the outcome was favourable or not
 - The doctor needs to write on the patients prescription chart to make it legal.
- 1.15 According to the Pharmacy Act No. 53 of 1974 as amended:
- the Act shall not prohibit a nurse to keep or supply medicines to her patient in accordance with the provisions of the Medicines and Related Substances Act 1965
 - the nurse shall prescribe all the scheduled medication
 - the minister shall give permission
 - none of the above
- 1.16 A patient receives experimental medication without his/her knowledge. Which of the following statements are true?
- The benefits outweigh the risks.
 - Patients should not receive experimental medication without their informed consent.
 - As the medical team is better qualified and has more knowledge than the patient, the patient's consent is not really needed.
- 1.17 A diabetic patient (78 years old) was booked for a hip replacement and needs to be admitted to the critical care unit afterwards. The head of the department decides to cancel this patient's surgery and gives the bed to a young trauma patient with a gunshot wound to the chest. Which ethical principle was applied here?
- Autonomy
 - Beneficence
 - Veracity
 - Justice
 - Confidentiality

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- 1.18 A nurse who is a pharmaceutical representative stands in breach of Regulation 387 of 1987 (Acts and Omissions).
- True, because nurses are not to advertise.
 - False, because she is not a nurse anymore, therefore these regulations are not valid.
 - False, because he/she is introducing a product to another professional who are in a position to exercise judgment with regard to the specific product.
- 1.19 According to Medicines and Related Substances Act, Act 101 of 1965 as amended, the following is regarded as an authorised nurse:
- a registered nurse
 - a nurse with a dispensing license
 - a nurse with a doctor's prescription
 - a nurse granted a permit by the Director general.
- 1.20 The term "scheduled drugs" only refers to schedule 5, 6 and 7 medicines.
- True
 - False
- 1.21 Nurses in a general ward in a public hospital are automatically authorised in terms of the Nursing Act 33 of 2005 to prescribe medicine.
- True, because they work without a doctor.
 - True, because the Director General of Health authorised all nurses in private practice to prescribe.
 - False, it is only for nurses of the National Department of Health and other related sectors.
 - False because the doctor is readily available to prescribe the medication
- 1.22 Who is accountable for the management of all medicines in a general ward within a hospital?
- The nursing manager
 - All nurses in the ward
 - The pharmacist
 - All of the above.

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- 1.23 In a hospital the hospital policies override the National Acts.
- True
 - False
- 1.24 The nursing student who does not have the necessary knowledge cannot be held accountable.
- True
 - False
- 1.25 According to the Medical, Dental and Supplementary Health Professions Amendment Act No 45, 1997:
- The nurse, after submitting proof of a qualification, may apply to the council for registration
 - The nurse does not need proof of registration of a qualification
 - The nurse can apply to the courts for a licence
 - The nurse can prescribe any scheduled medication

*[25]

QUESTION 2

Match the ethical principle in **Column B** with the nursing action in **Column A**. For example, if you are of the opinion that a nurse upholds the principle of autonomy when she admits that she forgot to record a patient's blood pressure, you would write in your answer script: **1.3 (a)**. The answer in column B can be used more than once.

COLUMN A	COLUMN B
2.1 The patient refuses to take the prescribed medication	a) Autonomy
2.2 The patient self-medicates with traditional medicines in the ward	b) Beneficence
2.3 The student nurse did not record the treatment that he/she gave to the patient	c) Non-maleficence
2.4 The unit manager allocates the most competent student nurse to administer medication to the critically ill patient.	d) Veracity
2.5 The nurse rudely informs the patient that he will die if he does not take medication	e) Justice
2.6 The nurse provides the patient and his/her family with information with regards to the treatment that the doctor has prescribed.	f) Privacy and confidentiality

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2.7	The nurse monitors the patient to make sure that the patient has swallowed the medication after administering the medication	
2.8	The nurse notifies the doctor that the she/he has made a mistake when writing out the prescription	
2.9	The nurse administered treatment that was not prescribed by the doctor.	
2.10	The patient wants to know in detail about his drug regimen	

*[10]

QUESTION 3

Mr Spur Ribs has had his leg amputated because he has cancer. He confesses that he wants to die. He refuses to take the medication prescribed by the doctor because it will delay his death. He says that his wife must not be told about his refusal to take the medication because she will force him to drink it. He is mentally sound and his arguments are reasonable. The staff privately told his wife the news about her husband and in turn the wife shouted at the patient and promised to divorce him. The nurses have threatened him that he will die a painful death and are forcing him to take the medication. He claims that he wants to be transferred to another hospital because a friend has promised to give him medication that will end his life quicker. He has already started to take this medication but has not displayed any deterioration in his condition. He claims that he saw God who said it was time for him to go. **In a table form:**

- 3.1 From the scenario above identify 5 errors that were committed by the health care professionals. From the errors identified, indicate five rights that were violated and match each right to the ethical principle violated. [15]

ERROR (5)	VIOLATED RIGHTS (5)	VIOLATED ETHICAL PRINCIPLES (5)
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TOTAL 50

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MODULE 2

QUESTION 4

4.1 Discuss Cholestyramine as a known antilipemic under the following headings: (10)

4.1.1 Drug Class (1)

4.1.2 Mechanism of action (2)

4.1.3 Side Effects (2)

4.1.4 Health education to be given to a patient on antilipemics (5)

QUESTION 5

Please write the correct answer on the multiple choice questions in your answer book. Only one (1) answer is correct. (10)

5.1 Adrenergic drugs mimic the action of

- a. Acetylcholine
- b. Nor epinephrine
- c. Atropine
- d. Digoxin

5.2 Which adrenergic antagonist block B₁ and B₂ receptors

- a. Atenolol
- b. Sotalol
- c. Propranolol
- d. None of the above

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- 5.3 Which of these findings would be most significant if a patient who is asthmatic was prescribed propranolol
- Apical pulse of 100 beats per minute
 - Expiratory wheeze
 - Urinary tract infection
 - Headache
- 5.4 Which of these conditions, if identified in the history of a patient receiving a drug that blocks beta₁ adrenergic blocking agents would be a concern to the nurse
- Severe allergy to bee stings
 - Atrioventricular Heart Block
 - Tachycardia
 - BP ¹⁰⁰/₆₀
- 5.5 An Alpha antagonist is prescribed for a patient with high blood pressure. State if the following is TRUE or False
- Because it increases TPR thus reducing blood pressure
 - Because it causes vasodilatation thus reducing blood pressure
- 5.6 A patient is receiving Methyldopa 250mg BD but the blood pressure persists to be ¹⁷⁰/₁₄₀. State if the following is TRUE or FALSE
- The medication must be continued but the patient must be on bedrest
 - The medication must be discontinued and reviewed as a matter of urgency
- 5.7 Epinephrine is
- An alpha and beta blocker
 - An alpha and beta agonist
 - An alpha, beta and muscarinic agonist
 - A muscarinic and nicotinic antagonist
- 5.8 A patient who has been getting the same medication over a period of time but still experiences the same problem after the medication had been working for 5years. This may be an example of
- Addiction
 - Physical dependence
 - Tolerance

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- 5.9 Drugs that are given to a patient and are absorbed easily are
- Water soluble
 - Lipid soluble
 - None of the above
- 5.10 Atenolol is drug that is a selective antagonist for the B₁ receptors that will lead to
- Hypotension and tachycardia
 - Hypertension and tachycardia
 - Hypotension and bradycardia
 - None of the above

QUESTION 6

Use the following table to answer the questions below. Fill in the rest of the table with the correct answers: *[20]

NAME OF DRUG	PHARMACOLOGICAL ACTION [2] marks per drug
1. Furosemide	
2. Atenolol	
3. Nitroglycerine	
4. Prazocin	
5 Warfarin	
6. Digoxin	
7. Simvastatin	
8. Aspirin	
9. Verapamil	
10. Cholestyramine	

QUESTION 7

- 7.1 Design health education strategies for a patient on Warfarin (10)