

FACULTY : Health Sciences

<u>DEPARTMENT</u> : Department of Nursing Science

CAMPUS : DFC

MODULE : MODULE 1: BASIC PHARMACOLOGY IN NURSING

FAV0001

SEMESTER : First semester

EXAM : June 2019 Examination

DATE : June 2019

SESSION : 08:00 -10:00

ASSESSORS(S) : Mrs P Zibi

MODERATOR : Mr BS Matlala

DURATION: 2 Hours **MARKS**: 80

NUMBER OF PAGES: 3 (Three) PAGES

INSTRUCTIONS:

1. Answer ALL THE QUESTIONS.

2. Number your answers CLEARLY.

3. One mark per motivated fact.

FSAO MODULE CODE: FAV0001 – JUNE EXAMINATION

MODULE 1: BASIC PHARMACOLOGY IN NURSING

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QUESTION 1

The Medicines and Related Substances Act (Act 101 of 1965) as amended, the Nursing Act (Act no 33 of 2005) and the Health Professions Act (Act 56 of 1974) as amended, govern the practice of the nurse regarding the prescription, dispensing and administration of medication.

- 1.1. Identify those areas in the above-mentioned acts that govern nursing practice regarding medication and apply the act to the **prescription** and **administration** of medication. (10)
- 1.2 Being familiar with a medication's indications, safe dosage, route, possible adverse effects, and contraindications are all crucial in ensuring patient safety.
- 1.2.1 Elaborate on this statement regarding prescription and administration of medication to justify the authenticity of this statement (10)
- 1.3 A student nurse was arrested and charged with reckless homicide and patient abuse for a fatal medication error she allegedly committed while working at a hospital. The charges allege that the nurse intended to provide an ordered dose of midazolam (Versed) to an anxious patient with a subdural hematoma who was going into a radiology scanner. The nurse could not find the medicine where it was supposed to be, so she used an override function on a dispensing cabinet and distractedly took out vecuronium (the first "VE" entry) instead of Versed. The patient received the paralysing drug, then experienced respiratory and cardiac arrest and died at the same time. The customary professional disciplinary processes were not followed and the legal route was followed which led to the nurse's arrest. The complaint alleges that the nurse did not record the medication administered, and left without observing the patient after the drug was given. Unlike midazolam, which is stored in a liquid solution, vecuronium is a dry powder whose injection requires a multistep process called reconstitution: sterile water is drawn up from a separate vial, injected into the vecuronium vial to produce the liquid solution that is then injected into the patient.

- 1.3.1 Identify the errors that were committed by the student nurse and give strategies of how you would prevent the errors from occurring again (10)
- 1.3.2 Use the Bergman's model of accountability to ensure that the student nurse has the ability and accountability in the administration of medicines (10)

QUESTION 2

Mr. Solomon is a 63-year old gentleman who has been under your care and presents with shortness of breath which has been progressive over the past five days. He has, however, experienced episodes of shortness of breath during the past four months, especially when exerting himself. He fatigues easily and has lost "all my energy to do anything." He also complains of anorexia. Last night he awoke suddenly from sleep because "I couldn't catch my breath" and developed a dry cough. He generally sleeps with two, sometimes three pillows. Vital Signs: Blood Pressure 160/92mmHg; Heart Rate 110/ beats/min; Respiratory Rate 26/min. There is pitting oedema of both lower extremities. Analyse the scenario above and answer the questions below

- 2.1 Suggest four commonly used drugs from different drug classes that can be used for the patient with congestive heart failure and hypertension and indicate why you would use them and show the benefits for both conditions (10)
- 2.2. Indicate the health education based on the medication that you can give to this patient (10)

QUESTION 3

- 3.1 Differentiate between the two drugs, Warfarin and Heparin. (10)
- 3.2 Indicate the health education measures that you would implement for a patient on anticoagulants and also highlight the side effects of anticoagulants (10)

*TOTAL: 80