

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE  
(NURSING)**

**NURS 219: CLINICAL PHARMACOLOGY II.**

**STREAMS: BSC NURSING (Y2S2)**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 05/07/2021**

**2.30 P.M. – 4.30 P.M.**

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**INSTRUCTIONS:**

- Do not write anything on the question paper.
- Mobile phones and any other reference materials are NOT allowed in the examination room.
- The paper has THREE sections. Answer ALL questions
- All your answers for Section I (MCQs) should be on one page.
- Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.

**MULTIPLE CHOICE QUESTIONS (20 MARKS)**

1. A patient receiving an anticholinergic agent to treat nausea and vomiting should be taught to expect which of the following side effects?

- a. Diarrhea      b. Lacrimation      c. Dry mouth      d. Bradycardia

2. During patient teaching, the nurse explains the difference between a sedative and hypnotic by stating:

- a. Sedatives are much stronger than hypnotic drugs and should only be used for short periods of time."
- b. "Sedative drugs induce sleep, whereas hypnotic drugs induce a state of hypnosis."
- c. Most drugs produce sedation at low doses and sleep (the hypnotic effect) at higher doses."
- d. There really is no difference; the terms are used interchangeably."

3. The nurse notes lithium on a patient's drug history upon admission. The nurse would suspect that this patient suffers from:
- Obsessive-compulsive disorder
  - Absence seizures
  - Bipolar disorder
  - Depression
4. Which of the following drugs is used for systemic and deep mycotic infections treatment:
- Nystatin
  - Griseofulvin
  - Amphotericin B
  - Nitrofungin
5. The client has been taking omeprazole (Prilosec) for 4 weeks. The ambulatory care nurse evaluates that the client is receiving optimal intended effect of the medication if the client reports the absence of which symptom?
- Diarrhea
  - Heartburn
  - Flatulence
  - Constipation
6. A patient is admitted to the emergency department with an overdose of a benzodiazepine. The nurse immediately prepares to administer which of the following antidotes from the emergency drug cart?
- naloxone (Narcan)
  - naltrexone (ReVia)
  - nalmefene (Revex)
  - flumazenil (Romazicon)
7. The nurse is obtaining a medication history from an 18-year-old female patient who has been diagnosed with genital herpes. Which of the following drugs would the nurse expect this patient to be prescribed?
- amantadine (Symmetrel)
  - acyclovir (Zovirax)
  - zidovudine (Retrovir)
  - ribavirin (Virazole)
8. The most effective drug for stopping generalized tonic-clonic status epilepticus in adults is:
- Lamotrigine
  - Ethosuximide
  - Diazepam
  - Zonisamide
9. Which of the following drugs belonging to antibiotics have a polyene structure:
- Nystatin
  - Ketoconazole
  - Griseofulvin
  - Terbinafine

10. The primary mechanism of action of local anesthetics is:

- a) Activation of ligand-gated potassium channels
- b) Blockade of voltage-gated sodium channels
- c) Stimulation of voltage-gated N-type calcium channels
- d) Blockade the GABA-gated chloride channels

11. A client with myasthenia gravis is receiving pyridostigmine (Mestinon). The nurse monitors for signs and symptoms of cholinergic crisis caused by overdose of the medication. The nurse checks the medication supply to ensure that which medication is available for administration if a cholinergic crisis occurs?

- A. Vitamin K
- B. Atropine sulfate
- C. Protamine sulfate
- D. Acetylcysteine (Mucomyst)

12. Proton pump inhibitors:

- a. Compete with histamine for binding sites on the parietal cells
- b. Irreversibly bind to H<sup>+</sup>/K<sup>+</sup>ATPase
- c. Cause neutralization of stomach acid
- d. Cannot be used to treat erosive esophagitis

13 Non-narcotic agents cause:

- a. Respiratory depression
- b. Antipyretic effect
- c. Euphoria
- d. Physical dependence

14. Which of the following drugs is the first line treatment for leishmaniasis

- A. Swamin
- B. Melarsoprol
- C. Mecronidazole
- D. sodium stibogluconate

15. Which of the following drugs is used in leishmaniasis treatment:

- A. Pyrimethamine
- B. Albendazole
- C. Sodium stibogluconate
- B. Tinidazole

16. Which of the following antimalarial drugs have gametocidal effect:
- a. Mefloquine
  - b. Primaquine
  - c. Doxycycline
  - d. Sulfonamides
17. The potential central nervous system effects of haloperidol is:
- a. monoamine oxidase inhibition
  - b. cholinesterase inhibition
  - c. blockade of serotonin in the basal ganglia
  - d. blockade of dopamine reuptake
18. A client who has been newly diagnosed with diabetes mellitus has been stabilized with daily insulin injections. Which information should the nurse teach when carrying out plans for discharge?
- A. Keep insulin vials refrigerated at all times.
  - B. Rotate the insulin injection sites systematically.
  - C. Increase the amount of insulin before unusual exercise.
  - D. Monitor the urine acetone level to determine the insulin dosage.
19. Cyanocobalamin (vitamin B12) is indicated for the treatment of:
- a. Acute lymphocytic leukemia
  - b. Pernicious anemia
  - c. Bone marrow suppression
  - d. Optic nerve atrophy
20. Selective serotonin reuptake inhibitors (SSRIs) and tricyclic antidepressants (TCAs) both function by:
- a. Blocking the reuptake of neurotransmitters at nerve endings
  - b. Increasing alertness levels in the brain
  - c. Decreasing levels of epinephrine and serotonin at nerve endings
  - d. Increasing the placebo effect

**SHORT ANSWER QUESTIONS 40 MARKS**

1. List two (2) clinical indications of each of the following;
  - a. Niclosamide
  - b. Tinidazole
  - c. Praziquantel
  - d. Albendazole(4 marks)
2. Outline four (4) clinical indications of antidepressants besides depression. (4 marks)
3. Outline four (4) major adverse effects associated with
  - a. antipsychotics (4 marks)
  - b. Narcotic analgesics (Opioids) (4 marks)
4. Outline three (3) classes of anticonvulsants based on their mechanism of action and for each class give examples of drug(s) (4 ½ marks)
5. Explain, giving relevant examples, any two (2) classes of drugs used in management of angina pectoris. (6 marks)
6. Classify diuretics according to their site of action and explain their mechanism of action and their side effects. (6 marks)
7. Briefly explain three (3) classes of drugs you could use in management of peptic ulcers associated with hyperacidity giving example of drugs in each class. (7 ½ marks)

**ESSAY QUESTIONS (40 MARKS)**

1. Discuss the mechanism of action, side effects and main clinical indications of **any THREE oral hypoglycemic agents** . (10 marks)
  2. Discuss the use of drugs in the treatment of parkinsonism, focussing on the mechanism of action and any side effects of **THREE major classes of antiparkinson drugs**. (10 marks)
  3. Hypertension is the most common cardiovascular disease.
    - a. Explain how the **baroreceptor reflex and RAAS system** maintains blood pressure at a normal set point. (8 marks)
    - b. Explain using relevant examples, any four (4) classes of drugs used in management of hypertension. (12 marks)
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