

**UNIVERSITY OF SWAZILAND**  
**FACULTY OF HEALTH SCIENCES**  
**DEPARTMENT OF COMMUNITY HEALTH NURSING SCIENCE**  
**FINAL EXAMINATION: MAY, 2017**

**COURSE TITLE: PSYCHOPHARMACOLOGY**

**COURSE CODE: CMH 404**

**TIME ALLOCATED: 2 HOURS**

**TOTAL MARKS ALLOCATED: 75**

**INSTRUCTIONS:**

- 1. PLEASE WRITE CLEARLY AND LEGIBLY**
- 2. PLEASE ANSWER ALL QUESTIONS**
- 3. USE THE PROVIDED ANSWER BOOKLET FOR ALL YOUR ANSWERS**
- 4. START A NEW QUESTION ON A NEW PAGE**
- 5. MAKE SURE THAT ALL YOUR ANSWERS ARE NUMBERED CORRECTLY**

**DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE CHIEF INVIGILATOR OR HIS/HER REPRESENTATIVE**

**QUESTION 1. Multiple Choice.** For each of the following questions, each question has only one correct option as an answer. Choose the most correct answer. Write clearly the question number and the letter that corresponds with the most appropriate or correct answer, e.g. 50. J. Each correctly answered question carries one (1) mark.

1. The primary goal of the acute phase of psychopharmacological intervention in psychotic patients is to:
  - a. Reduce the likelihood to self-harm and harm to others
  - b. Control psychosis
  - c. Monitor side effects
  - d. All of the above
  
2. Which of the following does not belong to the class of antidepressants?
  - a. Mono-amine oxidase inhibitors,
  - b. Selective serotonin reuptake inhibitors
  - c. Tricyclic compounds
  - d. Atypical Neuroleptics
  
3. Selective serotonin reuptake inhibitors belong to which group of psychiatric drugs?
  - a. Anxiolytics
  - b. Mood stabilizers
  - c. Antipsychotics
  - d. Antidepressants
  
4. -----is an example of an Selective Serotonin Reuptake Inhibitors
  - a. Duloxetine
  - b. Epinephrine
  - c. Fluoxetine
  - d. Fluphenazine
  
5. Combining MAOIs with SSRIs may cause
  - a. Extra-pyramidal Symptoms (EPS )
  - b. Neuroleptic Malignant Syndrome (NMS ) - Given
  - c. Serotonin Syndrome
  - d. Agranulocytosis
  
6. Buspirone belongs to which class of antianxiety drugs?
  - a. Azapirones
  - b. Sedatives
  - c. Barbiturates
  - d.  $\beta$  blockers
  
7. Benzodiazepines reduce anxiety by acting on which neurotransmitter?
  - a. GABA
  - b. Sertraline

- c. Noradrenaline
  - d. Dopamine
8. The major constraint in the long-term use of benzodiazepines for anxiety disorders is their potential to produce
- a. Dependence
  - b. Drowsiness
  - c. Loss of muscle tone
  - d. Severe extrapyramidal side effects
9. The pharmacological actions of benzodiazepines include all of the following except:
- a. Antianxiety,
  - b. Sedative and hypnotic,
  - c. Muscle relaxant
  - d. Antipsychotic
10. The adverse effects of benzodiazepines include
- a. Psychomotor and cognitive impairment
  - b. Alteration in sexual function
  - c. Confusional state especially in the elderly
  - d. All of the above
11. When administering anti-anxiety medications to an elderly client, which of the following actions by the nurse is essential?
- a. Suggest reduced doses.
  - b. Implement a fall prevention protocol.
  - c. Taper dose before stopping.
  - d. Monitor Vital signs.
12. The aetiology of sexual dysfunction include
- a. Some medical conditions
  - b. Hormonal deficiencies especially testosterone and oestrogen
  - c. Heavy alcohol use/consumption
  - d. All of the above
13. -----refers to recurrent sexual attraction to unusual objects or sexual activities
- a. Paraphilia
  - b. Fetishism
  - c. Frotteurism
  - d. Voyeurism
14. A person diagnosed with Exhibitionistic disorder is one who
- a. Exposes one's genitals to an unwilling and unconsented stranger
  - b. Sexually touches an unsuspecting person
  - c. Watches unsuspecting others undress or have sex
  - d. Gets sexual gratification by dressing in clothes of the opposite sex

15. Siphila is a 43 year old outpatient who is receiving treatment for brief psychotic disorder. He has been on treatment for seven months and now complains of progressive loss of penile erection. The background history is that Siphila was a thriving businessman who, however, lost everything after a bank sued him for non-payment of a loan. During education the nurse explains the possible cause of the loss of erection as:
- Related to the antipsychotic medication
  - His age
  - His stressful life event
  - Lack of exercise
16. Avolition, Alogia, anhedonia, Asociality and blunted affect are examples of
- Negative symptoms of schizophrenia
  - Positive symptoms of schizophrenia
  - Alcohol withdrawal syndrome
  - Alcohol use disorder
17. Kholiwe who is receiving a traditional antipsychotic agent complains that she is gaining weight. The nurse would:
- Be aware that this is probably delusional thinking because these agents cause weight loss.
  - Discuss a switch to a high-potency agent so the weight gain will not be a problem
  - Establish a contract with the client to carefully follow her high-calorie diet.
  - Encourage the client to follow a healthy diet and use diet soda to help stabilize her weight.
18. Antidepressants generally exert influence by:
- Changing the availability of dopamine
  - Changing the availability of selected neurotransmitters
  - Increasing the reuptake of nor-epinephrine
  - Altering the action of the cyproprotein
19. Sedation associated with use of antidepressants is attributed to the
- Blockade of muscarinic acetylcholine receptors
  - Blockade of histamine H1 receptor
  - Antagonism of 5-HT2 receptors
  - Blockade of alpha-1-receptors
20. Sheila who has been on a low-potency antipsychotic for 2 weeks has shown minimal response. The most probable explanation is:
- The client is definitely not taking the medication.
  - The client needs a stronger medication.
  - It is too early to see a full therapeutic response
  - The client probably has refractory illness.

21. Which of the following condition is associated with long-term use of lithium in mood disorders?
- Hyper-prolactinemia
  - Hypoglycemia
  - Hypothyroidism
  - Tardive dyskinesia
22. Drug A has a half-life of 2 hours. If the initial plasma level of the drug, given as a single dose, is 1200mg/L, what will its plasma level be after 8 hours?
- 600mm/L
  - 300mm/L
  - 150mm/L
  - 75mm/L
23. When monitoring a client who is taking benzodiazepines, the nurse should be alert for which CNS side effects?
- Seizures, tremors, diaphoresis
  - Blurred vision, anorexia, dysarthria
  - Libido changes, edema, dystonia
  - Ataxia, sedation, dizziness
24. Which of the following is NOT associated with the use of Tricyclic Antidepressants (TCA)?
- Blurred vision
  - Urinary Incontinence
  - Dry mouth
  - Constipation
25. What would be the first appropriate management of a patient who experiences neuroleptic malignant syndrome?
- Withhold the next dose of the antipsychotic agent the patient is taking and Inform the psychiatrist at once
  - Administer muscle relaxant
  - Both A and B
  - Lower the dose and observe the patient

## QUESTION 2

- A. Pharmacokinetics is defined as the study of the time course of drugs and their metabolites through the body, and involves four processes. Discuss the four process of pharmacokinetics. For each process state two factors that may affect it. **(20 marks)**
- B. What is meant by a drug half-life and why is it important in psychopharmacology? **(5marks)**

### QUESTION 3

Lomadlozi is a 68 year old lady admitted to the National Psychiatric Referral Hospital with a history of wandering away from home, talking to self, stripping naked in public and poor sleep. According to history all these symptoms started after she lost her only son through a motor vehicle accident. On examination she is very frail but clean and well kempt, and has a strong odour of urine suggestive of urine incontinence. There is evidence of hallucinations, poverty of speech with almost inaudible tone. The psychiatrist puts her on Haloperidol 5mg p.o. nocte and Artane 2mg p.o. daily.

- A. Is the prescription the correct one for Lomadlozi? Explain your answer. **(5marks)**
- B. Briefly explain the mechanism of action of haloperidol? **(5 marks)**
- C. State the nursing implications of haloperidol. **(1 mark each =10 marks)**
- D. The psychiatrist decides to reduce Lomadlozi's haloperidol to 0.04mg per kg body weight per day and she weighs 60kg. The hospital has 5mg tablets. How many tablets will Lomadlozi get per day? Show your calculation. **(5marks)**