



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR**

**YEAR ONE SUPPLEMENTARY/SPECIAL EXAMINATIONS**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE IN GLOBAL HEALTH AND  
EMPORIATRICS**

**COURSE CODE: NCG 125**

**COURSE TITLE: DRUG AND SUBSTANCE ABUSE**

**DATE: 06/10/2022**

**TIME: 11.30- 2.30 PM**

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**INSTRUCTIONS TO CANDIDATES**

**ANSWER ALL QUESTIONS**

**TIME: 3 HOURS**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of Printed Pages. Please Turn Over.

**SECTION I MCQS (20 MARKS)**

1. Exposure of a non-smoker to secondhand smoke
  - a) is less harmful than smoking because of the lower levels of nicotine and tar in secondhand smoke.
  - b) has been shown to have far fewer negative effects than the media suggest.
  - c) can lead to lung damage.
  - d) has negative effects on the fetuses of pregnant non-smokers but not on the women themselves.
2. The drug Ecstasy is classified as a
  - a) stimulant.
  - b) barbiturate.
  - c) hallucinogen.
  - d) type of marijuana.
3. Which medication is commonly used in treatment programs for heroin abusers to produce a non-euphoric state and to replace heroin use?
  - a) Diazepam
  - b) Carbamazepine
  - c) Clonidine
  - d) Methadone
4. When assessing a client who abuses barbiturates and benzodiazepine one should observe for evidence of which withdrawal symptoms?
  - a) Anxiety, tremors, and tachycardia
  - b) Respiratory depression, stupor, and bradycardia
  - c) Muscle aches, cramps, and lacrimation
  - d) Paranoia, depression, and agitation
5. The community health officer practicing primary prevention of alcohol abuse would target which groups for educational efforts?
  - a) Adolescents in their late teens and young adults in their early twenties
  - b) Elderly men who live in retirement communities
  - c) Women working in careers outside the home
  - d) Women working in the home
6. In the general classification of drugs belonging to the opioid category the drugs are analgesic and
  - a) Depressant
  - b) Hallucinogenic.
  - c) Stimulant.
  - d) Tranquilizing.

7. Brent drinks frequently and requires more alcohol now than he did six months ago to achieve the same effect. He reports that he can out-drink most people. Brent is probably
  - a) genetically predisposed to alcoholism.
  - b) developing a physiological dependence on alcohol.
  - c) acquiring behavioral skills in modulating his drinking.
  - d) deluding himself. This is not physically possible.
8. Ana suddenly stopped taking amphetamines after prolonged abuse of the drug. She became very ill and died. Her death is an example of severe
  - a) substance dependence.
  - b) substance abuse.
  - c) withdrawal symptoms.
  - d) synergistic effects.
9. Delirium tremens may result from
  - a) a sudden drop in alcohol levels in a chronic, heavy drinker.
  - b) high doses of alcohol in a person who has not previously drunk heavily.
  - c) high doses of alcohol in a chronic heavy drinker.
  - d) All of the above can cause the symptoms of delirium tremens.
10. Pregnant women have been encouraged to
  - a) Totally abstain from drinking.
  - b) Not alter their drinking habits.
  - c) Drink now and again, but only during the 3rd trimester of pregnancy.
  - d) Reduce their drinking to no more than several drinks a day
11. Nicotine is the addictive agent in
  - a) Marijuana.
  - b) Hashish.
  - c) Tobacco.
  - d) Cocaine.
12. Smoking marijuana has been shown to
  - a) Seriously impair lung structure and function.
  - b) Cause fatal heart attacks in healthy young men.
  - c) lead to stroke.
  - d) have no significant physically deleterious effects
13. Research has suggested that in cultures or social contexts where heavy drinking is considered normal,
  - a) there are lower consumption rates.
  - b) there are higher consumption rates.
  - c) women are less likely to become alcoholics than women in cultures where drinking is discouraged.

- d) men in the lower social classes are more likely to become alcoholics.
14. Antabuse is a medication for those with alcoholism which
- a) reduces anxiety during the detoxification period.
  - b) helps replace the nutrients lost through malnutrition.
  - c) mimics the physiological effects of alcohol without creating the same psychological effects.
  - d) causes violent vomiting when alcohol is ingested.
15. Which of the following are withdrawal symptoms from caffeine?
- a. headaches
  - b. anxiety
  - c. fatigue
  - d. All of the above
16. Nearly all drugs, including alcohol, stimulate
- a. Sensation seeking pathways.
  - b. GABA pathways.
  - c. Serotonin systems in the brain.
  - d. Dopamine systems in the brain.
17. The initial effect of alcohol is
- a. Depressive.
  - b. Sedating.
  - c. Anxiety-producing.
  - d. A pleasurable feeling.
18. \_\_\_\_\_ is a highly addictive form of cocaine processed into a crystal.
- a. Crack
  - b. Ice
  - c. Junk
  - d. Horse
19. Substance use and delinquency at a young age consistently predicts \_\_\_\_\_.
- a. occasional offending in adulthood
  - b. serious offending in adulthood
  - c. nothing
  - d. death
20. Youth drug use is typically a \_\_\_\_\_ activity.
- a. solitary
  - b. private
  - c. isolated
  - d. group

## **SECTION II; SHORT ANSWER QUESTIONS (40 MARKS)**

1. Explain the meaning of the following phrases (6 marks)
  - a. Drug tolerance
  - b. Drug dependence
  - c. Drug addiction
2. State the functions of the following neurotransmitters in the brain
  - a. Serotonin (4 marks)
  - b. Dopamine (5 marks)
3. State the purpose of the following in the treatment of drug addiction.
  - a. Medications and devices (2 marks)
  - b. Behavioral therapies (3 marks)
4. Explain the classification of substance misuse **complications** using the Bio-psycho-social model (6 marks)
5. Describe the **legal classification** of drugs and substances of abuse (8 marks)
6. Enumerate any 6 effects of alcohol intake on the body (6 marks)

## **SECTION III; LONG ESSAY QUESTIONS (40 marks)**

1. More than three decades of scientific research show that treatment can help drug-addicted individuals stop drug use, avoid relapse and successfully recover their lives. Explain any 10 fundamental principles that characterize effective drug abuse treatment. (20 marks)
2. Harm reduction is a public health strategy that has been used in the management of various public health issues including drug and substance abuse
  - a. Define harm reduction (2 marks)
  - b. State any 5 principles of harm reduction (10 marks)
  - c. enumerate any 8 harm reduction strategies/activities (8 marks)