



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

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MAIN EXAMINATION

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MAY – AUGUST 2021

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DEPARTMENT OF COMMUNITY HEALTH AND DEVELOPMENT

REGULAR PROGRAMME

DCHD 217: NON-COMMUNICABLE DISEASES

Date: AUGUST 2021

Duration: 3 Hours

SECTION A: Answer ALL Questions. 30

1. Africa accounts for approximately what percentage of global deaths due to non-communicable diseases (NCDs)? [1 mark]
 - A. 68%
 - B. 40%
 - C. 80%
 - D. 54%
2. The following is a good way to prevent non-communicable diseases. [1 mark]
 - A. Eating more sodium chloride
 - B. Eating more sugar
 - C. Eating more vegetables and fruits
 - D. Eating more meat and animal protein
3. What proportion of cancers can be prevented? [1 mark]
 - A. 10%-20%
 - B. 20%-30%
 - C. 30%-50%
 - D. >60%
4. Which is NOT TRUE? [1 mark]
 - A. Anti-retroviral therapy increases the risk of metabolic syndrome and related NCDs.
 - B. Preterm, large & small babies: independent risk factors for diabetes in adult life (due to epigenetic changes that are potentially reversible).

- C. HIV-infection substantially increases the risk of cancer such as cervical cancer.
- D. Nutritional stunting (childhood under-nutrition) is a risk factor for obesity in later life
- E. Tobacco use is a risk factor for hypertension but not diabetes.
5. Which is the recommended level of physical activity per week so as to prevent NCDs? [1 mark]
- A. 150 minutes
- B. 300 minutes
- C. 120 minutes
- D. 60- 120 minutes
6. NCDs are better addressed in the following Sustainable Development Goals (SDGs), EXCEPT? [1 mark]
- A. GOAL 3
- B. GOAL 7
- C. GOAL 11
- D. GOAL 2
- E. GOAL 5
7. It is estimated that tobacco use causes how many deaths annually? [1 mark]
- A. 5 million deaths annually
- B. 6 million deaths annually
- C. 3 million deaths annually
- D. 11 million deaths annually
8. Inadequate physical activity is estimated to be the main cause for approximately [.....] of breast & colon cancers, [.....]% of diabetes and approx. [.....] of ischaemic heart disease burden globally. [3 marks]
9. The systolic blood pressure (BP) threshold is [.....] mmHg while the diastolic blood pressure (BP) threshold is [.....] mmHg or more in subjects aged 18 years and above. [2 marks]
10. [.....], is a type of chest pain that occurs due to decreased blood flow to the heart arrhythmia, or an irregular heartbeat or heart rhythm while [.....] is a sudden blockage to the heart's blood flow and oxygen supply. On the other hand, a bulge or enlargement in an artery that can rupture and bleed is known as [.....] while a narrowing of the heart valve that can cause blockage to blood flow leaving the heart is referred to as [.....] [4 marks]
11. [.....] occurs when a plaque forms along the walls of blood vessels, narrowing them and restricting the flow of oxygen rich blood. [1 mark]

12. The leading risk factor for cancer in high income countries is [---] whereas [---] is the leading cause of cancer in low and middle income countries. [---] [2 marks]
13. State whether **TRUE OR FALSE** on the statements about hypertension [4 marks]
- Primary HTN is an elevation in BP without an identified cause
 - Secondary HTN is an elevation in BP with an exact cause
 - Primary HTN is an elevation in BP with an exact cause
 - Secondary HTN is an elevation in BP without an identified cause
14. Briefly state any three pathophysiologic characteristics of diabetic ketoacidosis. [3 marks]
15. Describe any four (4) lifestyle control measures for cardiovascular diseases. [4 marks]

SECTION B: ANSWER TWO QUESTIONS. 40 Marks

16. As a community health expert, you will be tasked with the prevention of various non-communicable diseases. In your work, you will implement the global strategy for the prevention and control of Non-communicable diseases.
- The global strategy aims to reduce premature mortality and improve quality of life builds on three key components. Outline the three components of this strategy. [3 marks]
 - As a community health researcher, you intend to implement an intervention aimed at meeting the global strategy for prevention of non-communicable diseases. Describe the six objectives of this strategy. [12 marks]
 - Describe any five modifiable risk factors for non-communicable diseases. [5 marks]
17. **Several non-communicable diseases pose a burden in Kenya. Below, you are required to show competency on various diseases**
- Classify obesity with the corresponding body weight. [2 marks]
 - Describe any 6 antihypertensive drugs and their modes of action. [12 marks]
 - State the four mechanisms through which normal blood pressure is maintained. [4 marks]

- iv. State the four (4) leading causes of increase in cancer mortality in low and middle income countries. [4 marks]

END

DET: MAY 2021