

**W1-2-60-1-6**

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

# **UNIVERSITY EXAMINATIONS 2018/2019**

EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HUMAN NUTRITION

**AFS 2320: NON-COMMUNICABLE DISEASES**

DATE: APRIL 2019 TIME: 2 HOURS

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**INSTRUCTIONS:**

**SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION**

1. Explain the following conditions [6 marks]
2. Liver cirrhosis
3. Atherosclerosis
4. Arthritis
5. Alzhemer’s disease
6. Chronic kidney disease
7. obesity
8. Explain the pathogenesis of diabetes mellitus [6 marks]
9. Explain the components of a metabolic syndrome [6 marks]
10. Describe the NF - KB pathway and its role in development of physiological disorders. [6 marks]
11. Discuss the role of diet in the pathogenesis of non-communicable diseases. [6 marks]

**SECTION B: ANSWER ANY TWO QUESTIONS IN THIS SECTION**

1. Discuss the modifiable and non-modifiable risk factor for cardiovascular diseases [20 marks]
2. Explore the role of functional foods and nutraceuticles in human health [20 marks]
3. Describe the molecular mechanisms of nutraceuticles against pathogenesis of non-communicable diseases. [20 marks]