

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN BIOMEDICAL SCIENCE AND TECHNOLOGY

BMET 221: PATHOPHYSIOLOGY

STREAMS:

TIME: 2 HOURS

DAY/DATE: MONDAY 4/12/2017

8.30 A.M – 10.30 A.M

INSTRUCTIONS:

- **Answer question one and any other two questions**
- **Do not write anything on the question paper**

1. (a) Using examples, describe the difference between physiologic and pathologic hyperplasia. [5marks]
- (b) Describe various ways through which free radicals may be initiated within cells. [5marks]
- (c) Describe how cells become markedly swollen during hypoxic injury. [5marks]
- (d) Explain some of the systemic effects of methamphetamine use. [5marks]
- (e) Describe the mechanisms that are activated during lipid accumulation in liver cells in the event of cellular injury. [10marks]
2. (a) Describe the features that characterize Macrocytic –Normochromic Anemias. [10marks]
- (b) Describe the pathophysiology of pernicious Anemia. [10marks]
3. (a) Describe the clinical manifestations of acute leukemia. [10marks]
- (b) Discuss the different types of necroses that can occur in organs or tissues. [10marks]

4. (a) Describe embolism as an alteration of cardiovascular function. [10marks]
- (b) Describe the pathogenesis of atherosclerosis. [10marks]
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