

**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 FOOD SERVICE AND HOSPTIALTIY MANAGEMENT**

**AFM 2209: FOOD TOXICOLOGY**

**DATE: APRIL 2019 TIME: 2 HOURS**

**INSTRUCTIONS:** Answer all questions in section A and any two in section B.

SECTION A

QUESTION ONE

Define the following:

a. Xenobiotic (2 marks)

b. Teratogen (2 marks)

c. Necrosis (2 marks)

d. Risk (2 marks)

e. Metabolic endotoxemia (2 marks)

QUESTION TWO

Sketch a dose-response curve for a substance that has both beneficial and adverse effects depending on the dose. (5 marks)

QUESTION THREE

Name one beneficial and one adverse effect of glucosinolates. (2 marks)

QUESTION FOUR

Distinguish between phase I and phase II metabolism of toxicants. (5 marks)

QUESTION FIVE

Wrapping meat with newspapers is a common practice in some places. Comment on the safety of this practice. (2 marks)

QUESTION SIX

Explain how processing method influences the level of toxicants in potatoes. (4 marks)

SECTION B

QUESTION SEVEN

Discuss the effect of aflatoxin B1 metabolism on its toxity. (20 marks)

QUESTION EIGHT

Describe the mechanism by which consumption of aflotoxin –free peanut may lead to death.

(20 marks)

QUESTION NINE

Discuss the physiological disorders one may experience due to chromic or acute consumption of inadequately processed cassava. (20 marks)