

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY  
FACULTY OF COMMERCE  
DEPARTMENT OF BANKING**

**RISK MANAGEMENT AND VULNERABILITY ASSESSMENT  
TECHNIQUES  
DDMP 2001**

**SUPPLEMENTARY EXAMINATION**

**OCTOBER 2008**

**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

**Answer any FOUR (4) questions**

**INFORMATION FOR CANDIDATES**

**The number of marks is given in brackets [ ] at the end of each question or part question.**

**Questions may be written in any order, but must be legibly numbered.**

**The businesses in this question paper are intended to be fictitious.**

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**[Turn over]**

### **QUESTION 1**

Comment on the statement that vulnerability assessment serve as the basis for more continuous “ habit” of monitoring trends in physical, socioeconomic and infrastructure conditions of disaster prone areas.

**TOTAL**

**[25 MARKS]**

### **QUESTION 2**

Risk assessment is viewed as an extremely difficult process to undertake. Using practical examples, discuss critically .

**TOTAL**

**[25 MARKS]**

### **QUESTION 3**

(a) Write brief notes on the following variety of actions under hazard mitigation.

- (i) Risk avoidance
- (ii) Risk spreading
- (iii) Vulnerability reduction

**[15 Marks]**

(b) Describe the process of determining risk using its main three components.

**TOTAL**

**[10 MARKS]**

### **QUESTION 4**

(a) Performing a Cost Benefit Analysis [CBA] must consider costing saved lines. What is the basic approach and what other factors are considered.

**[15 Marks]**

(b) Briefly explain the following concepts;

- (i) RVAT model
- (ii) Risk
- (iii) Capacity building
- (iv) Complex emergency and chaos
- (v) Vulnerability to risk

**[10 Marks]**

**TOTAL**

**[25 MARKS]**

**QUESTION 5**

Appraise the major factors that affect risk perception in disaster prone areas.

**TOTAL**

**[25 MARKS]**

**QUESTION 6**

Argue how as a hazard manager you could take social differentiation into account in designing mitigation strategies aimed at reducing vulnerability.

**TOTAL**

**[25 MARKS]**