



MUEO

# **MOI UNIVERSITY**

OFFICE OF THE DEPUTY VICE CHANCELLOR  
(ACADEMICS, RESEARCH & EXTENSION)

## **UNIVERSITY EXAMINATIONS**

### **2013/2014 ACADEMIC YEAR**

#### **FOURTH YEAR FIRST SEMESTER EXAMINATION**

#### **FOR THE DEGREE OF**

#### **BACHELOR OF SCIENCE**

#### **IN**

#### **INFORMATION SCIENCES**

**COURSE CODE:** INS 410

**COURSE TITLE:** MANAGEMENT INFORMATION SYSTEMS

**DATE:** 9<sup>TH</sup> OCTOBER, 2013 **TIME:** 2.00 P.M. – 5.00 P.M.

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### **INSTRUCTION TO CANDIDATES**

- ANSWER QUESTION ONE AND ANY OTHER TWO

THIS PAPER CONSISTS OF (3) PRINTED PAGES

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**QUESTION 1 COMPULSORY [30 Marks]**

- (a) The architecture of a multi-tier computing environment typically includes a client, server, and corporate information systems linked to databases. Sketch a diagram to illustrate such an architecture showing how an organization can utilize communications networks to interconnect its management information systems. [10mks]
- (b) Explain ANY FIVE security measures that an organization must take if it were to link the architecture you have explained in 1 (a) above to the Internet. [10mks]
- (c) An organization utilizes an Inventory Control Information System to capture incoming data on items that have been procured. The captured data is used to provide information about items which are available in the inventory master file. The system also supports online enquiry capability as well as producing management reports.

**Required:**

Model a design of the system described, clearly showing the essential components of the system, and the flow of data/information using directional arrows. [10mks]

**QUESTION 2 [20 Marks]**

- (a) Identify and explain any four ethical concerns associated with the use of information systems in organizations. [10mks]

- (b) Develop a code of computing ethics for an organization using the ethical concerns you have explained in (a) above [10mks]

**QUESTION 3 [20 Marks]**

- (a) Following a successful trial, an insurance company is considering using teleworking for most of its staff. From an MIS perspective discuss any five technical issues that would need to be considered before full implementation of teleworking. [10mks]

- (b) With suitable examples, discuss the types of reports that might be requested from an MIS by managers in a large bank, detailing the purposes for which such reports can

Customer  
Supplier  
Operation manager  
phy procedural  
Invoice  
Delivery ✓  
Orders ✓  
Stock  
Production  
Manufacturing  
Inventory  
Data

Identify & describe facts  
Policy conflict  
Identify stakeholders  
Identify options after an incident  
Identify points: coverage & other costs  
Infrastructure  
Skills

Skills  
Training  
InterTech  
Center  
Org - Structure

Skills  
De  
ex  
proced

be used.

[10mks]

**QUESTION 4 [20 Marks]**

(a) Examine any **five** benefits of using the Internet as a strategic management information tool [10mks]

(b) Analyze, using suitable examples, any **five** factors that a banking institution should take into account when developing its information systems policy. [10mks]

*Steps in design of an IS*

*cost  
maintainability  
compatibility  
security  
compliance*

*USIS*

**QUESTION 5 [20 Marks]**

(a) There has been widespread application of expert systems in organizations in the recent past. Examine any **four** possible reasons for this trend. [10mks]

*Computational intelligence  
preferred interface*

(b) You have been recruited by a company that has recently suffered a major MIS project failure. As an information systems consultant, explain, with justification any **five** possible reasons why the MIS project failed. [10mks]