JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN SECURITY AND FORENSICS

3RD YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: IIT 3325

COURSE TITLE: MANAGEMENT INFORMATION SYSTEMS

EXAM VENUE: **STREAM: COMPUTER SECURITY & FORENSICS**

DATE: **EXAM SESSION:**

TIME:

INSTRUCTIONS

1. **Answer Question 1 (Compulsory) and ANY other TWO questions**
2. **Candidates are advised not to write on the question paper**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question 1 [30 marks]

a) Define the following terms
    i) Information Technology **(2 marks)**
    ii) Management Information Systems (MIS) **(2 marks)**
    iii) Value chain **(2 marks)**
    iv) Business process management **(2 marks)**
    v) Island of automation **(2 marks)**

b) Define "Functional Process" and state five problems associated with functional processes **(6 marks)**
c) Differentiate between Push manufacturing and Pull manufacturing **(4 marks)**
d) Briefly discuss five benefits of ERP in a business organization **(5 marks)**
e) Briefly discuss the "Five Component Framework" of Information Systems **(5 marks)**

Question 2 [20 marks]

a) Business intelligence tool provide valuable information for decision making in any business. Briefly discuss three primary BI systems **(6 marks)**
b) Briefly discuss any four types of accounting applications commonly used in business today **(4 marks)**
c) You have been contracted to assist with improvement of the current sales management system for a start up company based in Nairobi. The company employees have complained that the recently acquired system does not capture important business process for the organization. You begin with the business process involving "Processing an Order". Armed with your knowledge you acquired in the Management of Information Systems class briefly discuss the you task involved in processing an order. **(10 marks)**

Question 3 [20 marks]

Suppose you decide to start a business that sells designer shoes and clothes to JOOUST students and staff. In starting your business, you know you will be competing with local competitors.

    i) Analyze the structure of this industry according to Porter's five forces model. **(10 marks)**
    ii) Given your analysis in part a, recommend a competitive strategy. **(5 marks)**

iii) Identify four ways that IT would assist your business to be competitive (competitive advantage). **(5 marks)**

Question 4 [20 marks]

a) Identify and discuss any five applications that are part of an Enterprise Resource Planning (ERP). **(10 marks)**

b) You have been asked to lead a project team tasked with developing learning management systems at Jaramogi Oginga Odinga University of Science and Technology. This system will allow students, lecturers and the administration to track student's grades, attendance, assignment submission, etc. Explain how you would use the SDLC to develop this software. You must identify the key phases. **(10 marks)**

Question 5 [20 marks]

You have received an invitation from the local business community in Bondo town to give a talk on the role of information systems (IT) in creating competitive advantage. In your discussion you are requested to explain the relationship between organization strategy and information systems. Briefly summarize your MAIN key points for the presentation beginning with industry structure. In your discuss clearly articulate the five main phases from industry structure to information systems competitive advantage. **(20 marks)**