

UGANDA MANAGEMENT INSTITUTE

POSTGRADUATE DIPLOMA IN PUBLIC ADMINISTRATION AND MANAGEMENT (DPAM); PROCUREMENT & SUPPLY CHAIN MANAGEMENT (PSCM); INFORMATION SYSTEMS MANAGEMENT (DISM); MARKETING MANAGEMENT (DMM); MONITORING AND EVALUATION (DME), EVE

SECOND SEMESTER EXAMS 2017/2018

MODULE:

MANAGEMENT INFORMATION SYSTEMS

Date: Wednesday 11 July 2018

Time: 04.00 PM – 07.00 PM

INSTRUCTIONS

- **1.** Answer FOUR Questions.
- 2. Question ONE in Section A is compulsory and carries 40 marks.
- **3.** Answer any other THREE Questions from Section B. Each question carries 20 marks.
- 4. Write clearly and legibly.
- 5. <u>Do not</u> write anything on the question paper.
- 6. <u>Do not</u> take Mobile Phones into the examination room.
- **7.** Follow the instructions of the Examination Supervisor.
- 8. Indicate questions answered on the Answer Sheet in the column of Questions.

This paper consists of 4 printed pages

Good Luck! `

SECTION A:

COMPULSORY

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QUESTION ONE

- a) Information systems are implemented within an organization for the purpose of improving the effectiveness and efficiency of that organization. Capabilities of the information system and characteristics of the organization, its work systems, its people, and its development and implementation methodologies together determine the extent to which that purpose is achieved. Explain at least four benefits of information systems to organizations. [8 Marks]
- b) It is argued that much as information systems further the quest for achieving efficiency and effectiveness, it is critical to carry out information systems planning before acquiring or developing new information systems. Explain the strategies and types of information systems planning. [10 marks]
- c) Explain the difference between computer crime and computer abuse. [4 marks]
- d) One of the most critical stages in Information systems implementation is Conversion.
 Describe at least four conversion strategies. [8 Marks]
- e) Although managers and business professionals do not need to be computer technology experts, they should have a basic understanding of the role of hardware and software in the organization's information technology (IT) infrastructure so that they can make technology decisions that promote organizational performance and productivity.

eXPLAIN with examples any five components of a contemporary computer system.

[10 marks]

SECTION B: ANSWER ANY THREE QUESTIONS FROM THIS SECTION QUESTION TWO

- a) Discuss the five major management challenges to building and using information systems in organizations. [10 marks]
- b) Computer abuse has been described as the unethical use of computers; explain using five examples cases of computer abuse in organizations as documented in the literature.
 [10 marks]

QUESTION THREE

You have been incorporated into a team to develop an information systems plan for Uganda Management Institute. Discuss the major considerations you would look at as you identify a new information system for the Institute. [20 marks]

QUESTION FOUR

"Ransomeware attack locked Jennifer's mother laptop"

Two days before Thanksgiving, Jennifer's mother got hit by a ransomware attack. 5,726 files got locked by CryptoWall, an encryption malware so powerful, it is technologically impossible to break open.

Jennifer's mom contacted the attacker through the ransomware's communication feature and told him she can either pay to get her files back or lose them forever. Despite backing up her files 6 months ago, she decided that losing half a year's worth of photos, documents and other files was too much, and so decided to pay the ransom. The price to unlock her files was 500\$ in the first week and 1000\$ in the second week, after which the files would be deleted. Payment was to be done in Bitcoin, an obscure and unfamiliar process which she had to learn on the fly.

Because of a major snowstorm that closed down the banks, Jennifer's mom couldn't pay the ransom in the first week, and ended up having to plead with her attacker to not increase the price to 1,000\$. Surprisingly, he accepted and gave her the key to unlock her files.

From the above extract you note that Information security is a daunting challenge to all, explain what you understand by the term information security. Discuss the three pillars of information security and how they can be achieved? [20 marks]

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QUESTION FIVE

Many organizations today are shifting to producing their own application software especially where they think they may gain a competitive advantage over other companies. Describe the activities that go into producing a new information system.

[20 Marks]

QUESTION SIX

Explain the following terminologies with examples.

(20 marks)

- i. The Internet of Things
- ii. Cloud computing
- iii. Big data.
- iv. Cryptography

END