



DICT LEVEL I

INTRODUCTION TO COMPUTING

MONDAY: 17 May 2021.

Time Allowed: 3 hours.

Answer ALL questions. Marks allocated to each question are shown at the end of the question.

QUESTION ONE

- (a) Explain the term “information centres”. (2 marks)
- (b) Distinguish between “graphical user interface” and “command line interface”. (4 marks)
- (c) Several hardware devices that are critical to any computing process have continued to evolve to support emerging and existing user needs.

With reference to the above statement, describe three such devices and how they have evolved over time. (6 marks)

- (d) In an information technology (IT) seminar, one of the facilitators noted that “Even with the continued technological development, the key factors considered when selecting a computer for personal or business use remains the same”.

With reference to above statement, discuss four factors that are considered when selecting a computer. (8 marks)
(Total: 20 marks)

QUESTION TWO

- (a) (i) State four devices that are used for direct data capture. (4 marks)
- (ii) Outline three advantages of direct data entry. (3 marks)
- (b) James Maya wishes to acquire an operating system for his computer. He needs to choose between Linux and Windows operating systems.

Analyse four differences between the two operating systems that he needs to consider before he makes a choice. (8 marks)

- (c) A personal computer (PC) system consists of some of the following components: Processor, RAM, hard disk drive, monitor and printer.

Summarise the role of each of the above listed components in the PC system. (5 marks)
(Total: 20 marks)

QUESTION THREE

- (a) (i) Explain the term “virtual banking”. (2 marks)
- (ii) Outline three advantages and three disadvantages of virtual banking. (6 marks)
- (b) Amina Murad was surfing the internet in a computer laboratory using her laptop. After a while she started observing some unusual behaviour on her laptop. She suspected that her laptop had been attacked by a computer virus.

Required:

- (i) Explain to Amina Murad the difference between a “resident virus” and a “multipartite virus”. (4 marks)
 - (ii) Propose four symptoms that indicate her laptop had been attacked by a computer virus. (4 marks)
- (c) Explain the following abbreviations as used in computer hardware:
- (i) ROM. (2 marks)
 - (ii) EEPROM. (2 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Describe each of the following computer security threats:
- (i) Dictionary attack. (2 marks)
 - (ii) Phishing attack. (2 marks)
 - (iii) Malware attack. (2 marks)
- (b) Analyse four areas where an online data processing mode is applied. (8 marks)
- (c) Summarise three differences between a Management Information System (MIS) and a Decision Support System (DSS). (6 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Explain the role of the following computer hardware devices:
- (i) Network cards. (2 marks)
 - (ii) Routers. (2 marks)
- (b) Propose three key drivers which are expected to continue shaping the prospects for using Information Communication Technology (ICT) effectively in a developing country’s agricultural sector. (3 marks)
- (c) The Information Systems generally relate to each other in a computing business environment. With the help of a diagram, describe the hierarchical relationship between the different information systems. (6 marks)
- (d) Leah Moraa wishes to procure a Management Information System (MIS) for her drug’s store. Outline seven characteristics of the MIS that she should put into consideration. (7 marks)
- (Total: 20 marks)**
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