



DICT LEVEL I

INTRODUCTION TO COMPUTING

MONDAY: 27 November 2017.

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 following terms as used in information communication technology:
- (i) Malware. (2 marks)
 - (ii) Botnet. (2 marks)
 - (iii) Social Engineering. (2 marks)
- (b) Using an example in each case, distinguish between a “computer system” and “software”. (4 marks)
- (c) A bookstore company that serves many institutions is planning to automate its operations. Explain two options available to the company in relation to acquisition of an appropriate software. (4 marks)
- (d) One of the sectors greatly impacted by ICT is government services delivery. In relation to the above statement, describe three government services that have been made efficient by the use of technology. (6 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Explain the phrase “tech-savvy” as used in information communication technology. (2 marks)
- (b) (i) Citing an example in each case, distinguish between data sources and data collection methods. (4 marks)
- (ii) Analyse the three key steps followed in data processing. (6 marks)
- (c) Highlight four reasons for the importance of information centres in education sector. (4 marks)
- (d) In order to interact with the computing device, there has to be a suitable user interface. With reference to the above statement, outline four qualities of a good user interface. (4 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Explain each of the following characteristics of information sub-systems:
- (i) Decoupling. (2 marks)
 - (ii) Decomposition. (2 marks)
 - (iii) System simplification. (2 marks)

- (b) Summarise three roles of information systems to the management of an organisation. (3 marks)
- (c) Argue three cases in favour of laser printers as compared to daisy wheel printers. (6 marks)
- (d) Using a well-labelled diagram, illustrate the fundamental components of a computer system. (5 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Differentiate between an “abstract system” and “a physical system”. (4 marks)
- (b) Describe three ways through which bank customers could access different services with the help of information communication technology (ICT). (6 marks)
- (c) You have been tasked to evaluate the integrity of the election management information system (EMIS) in your country.

Required:

- (i) Explain the meaning of “integrity of the election management information system”. (2 marks)
- (ii) Analyse four measures that could be used to guarantee the integrity of EMIS. (8 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) With the aid of diagrams, distinguish between random method and sequential method of data storage. (4 marks)
- (b) Outline two reasons why many organisations are currently using cloud storage. (2 marks)
- (c) Describe the following types of data files:
- (i) Master file. (2 marks)
 - (ii) Transaction file. (2 marks)
 - (iii) Archive file. (2 marks)
- (d) The use of information communication technology (ICT) has demystified the world into a global village. Support the above statement, citing four ways in which globalisation has been achieved. (8 marks)
- (Total: 20 marks)**
-