

# KASNEB

## DICT LEVEL I

### INTRODUCTION TO COMPUTING

MONDAY: 22 May 2017.

Time Allowed: 3 hours.

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

#### QUESTION ONE

- (a) Using appropriate examples, differentiate between “on-line storage” and “off-line storage”. (4 marks)
- (b) Describe the following types of computer memory:
- (i) Bubble memory. (2 marks)
  - (ii) Holographic memory. (2 marks)
  - (iii) Virtual memory. (2 marks)
- (c) Outline four factors that should be considered when buying a computer anti-virus software. (4 marks)
- (d) Data processing methods have evolved over time in tandem with technological advancements.

#### Required:

In relation to the above statement, state three categories of data processing methods indicating the equipment(s) that could be used in each case. (6 marks)

(Total: 20 marks)

#### QUESTION TWO

- (a) Outline four applications of computers in the home environment. (4 marks)
- (b) Explain why each of the following considerations are important while selecting a laptop computer:
- (i) RAM size. (2 marks)
  - (ii) Wireless connection. (2 marks)
- (c) Distinguish between “information systems” and “information technology”. (4 marks)
- (d) Propose four actions that an organisation might consider taking in order to protect both its system and staff from spams. (8 marks)

(Total: 20 marks)

#### QUESTION THREE

- (a) Explain the following terms as used in modern computing:
- (i) Cybercrime. (2 marks)
  - (ii) Internet of things. (2 marks)
- (b) Computers have evolved over time with many significant changes in the composition and processing capacity. Discuss four characteristics that could help distinguish between “modern computers” and “older computers”. (8 marks)
- (c) Analyse four validation checks that might be employed to ensure that data has been completely entered into a computer. (8 marks)

(Total: 20 marks)

**QUESTION FOUR**

- (a) Describe the two broad categories of computer software available to users today. (4 marks)
  - (b) Technicians have several options to support installation and specific ability to boot computers from time to time.  
In relation to the above statement, describe two options available for booting computers. (4 marks)
  - (c) Citing four reasons, justify why you might need to uninstall software from your computer. (4 marks)
  - (d) Summarise four challenges facing global information systems. (8 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) Explain the following terms as used in information communication technology (ICT):
    - (i) Mobile wallet. (2 marks)
    - (ii) Telematics. (2 marks)
    - (iii) Cloud computing. (2 marks)
  - (b) Summarise three differences between “closed system” and “open system”. (6 marks)
  - (c)
    - (i) Explain the term “expert system”. (2 marks)
    - (ii) Describe three components of an expert system. (6 marks)
- (Total: 20 marks)**
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