

# KASNEB

ATD LEVEL I

DCM LEVEL I

## INFORMATION COMMUNICATION TECHNOLOGY

TUESDAY: 22 November 2016.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

### QUESTION ONE

- (a) Identify four devices that could be used in a supermarket to input data at the point of sale. (4 marks)
- (b) Highlight four disadvantages of using the internet as a research tool. (4 marks)
- (c) Explain three factors that a company could consider when choosing an online data storage. (6 marks)
- (d) Outline three differences between “first generation computers” and “second generation computers”. (6 marks)
- (Total: 20 marks)**

### QUESTION TWO

- (a) Explain the meaning of the following terms as used in word processing software:
- (i) Mail merge. (2 marks)
- (ii) Thesaurus. (2 marks)
- (iii) Spell checker. (2 marks)
- (iv) Zoom. (2 marks)
- (b) Describe six ways that information communication technology could be used to prevent crime. (6 marks)
- (c) Citing an example in each case, differentiate between “wired” and “wireless” data transmission media. (6 marks)
- (Total: 20 marks)**

### QUESTION THREE

- (a) Outline four areas where flash memory cards could be used. (4 marks)
- (b) State three functions of primary memory in a computer. (3 marks)
- (c) (i) Describe four health problems associated with prolonged use of computers. (4 marks)
- (ii) Explain how each problem in (c)(i) above could be prevented. (4 marks)
- (d) Highlight five ways that could be used to prevent unauthorised access to information in a computer within a networked organisation. (5 marks)
- (Total: 20 marks)**

### QUESTION FOUR

- (a) Highlight four differences between a hard disk and a CD ROM. (4 marks)
- (b) State an example of an information system used in the following levels of management:
- (i) Strategic. (1 mark)
- (ii) Tactical. (1 mark)
- (iii) Operational. (1 mark)
- (c) Explain three roles of information systems in each of the levels of management stated in (b)(i)-(iii) above. (9 marks)
- (d) State four elements of a computer file. (4 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) Highlight two similarities between a “compiler” and an “interpreter” as used in computer programming. (4 marks)
  - (b) Explain three reasons for using a Graphical User Interface (GUI) rather than a Command Line Interface (CLI). (6 marks)
  - (c) Identify four functions of a router in a computer network. (4 marks)
  - (d) State three advantages and three disadvantages of online shopping to a company. (6 marks)
- (Total: 20 marks)**

**QUESTION SIX**

- (a) State two functions of Power On Self Test (POST) during the booting process of a computer. (2 marks)
  - (b) Distinguish between the following terms as used in computer files:
    - (i) “File sorting” and “File merging”. (4 marks)
    - (ii) “Transaction file” and “Backup file”. (4 marks)
  - (c) Differentiate between “Animation” and “Transition” as used in presentation software. (4 marks)
  - (d) Describe three types of charts available in a spreadsheet program. (6 marks)
- (Total: 20 marks)**

**QUESTION SEVEN**

- (a) Identify four uses of extranet in an organisation. (4 marks)
  - (b) Giving an example in each case, distinguish between “physical access control” and “logical access control” in the context of information systems. (6 marks)
  - (c) Explain the effect of variation in the following on computer system performance:
    - (i) Clock rate. (2 marks)
    - (ii) Cache size. (2 marks)
    - (iii) Word size. (2 marks)
  - (d) Describe four limitations of a computer. (4 marks)
- (Total: 20 marks)**
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