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)

....