ATD LEVEL I

DCM LEVEL I

INFORMATION COMMUNICATION TECHNOLOGY

TUESDAY: 28 November 2017.   **Time Allowed: 3 hours.**

Answer any FIVE questions.   **ALL questions carry equal marks.**

QUESTION ONE

(a)   List four external storage devices that could be used to transfer information from one computer to another.   (4 marks)

(b)   Differentiate between a "peer-to-peer" and a "client server" network.   (4 marks)

(c)   Explain the function of the following in a computer system:

    (i)   Mother board.   (2 marks)

    (ii)   BIOS.   (2 marks)

    (iii)   RAM.   (2 marks)

    (iv)   ROM.   (2 marks)

    (v)   CMOS.   (2 marks)

    (vi)   Processor.   (2 marks)
    (Total: 20 marks)

QUESTION TWO

(a)   Outline four advantages of online data capture.   (4 marks)

(b)   Highlight four factors to consider when choosing an input device.   (4 marks)

(c)   State six reasons for using computer based advertising in an organisation.   (6 marks)

(d)   (i)   Describe the term "knowledge based systems" in the context of information systems.   (2 marks)

    (ii)   Explain two benefits of knowledge based systems within an organisation.   (4 marks)
    (Total: 20 marks)

QUESTION THREE

(a)   State the main electronic component used in the following computer generations:

    (i)   First.   (1 mark)

    (ii)   Second.   (1 mark)

    (iii)   Third.   (1 mark)

    (iv)   Fourth.   (1 mark)

    (v)   Fifth.   (1 mark)

(b) (i)   Distinguish between an "impact printer" and a "non impact printer".   (4 marks)

     (ii) Outline two advantages of each of the printers in (b) (i) above.   (4 marks)

(c) Highlight seven safety measures that could be taken when using the social media.   (7 marks)
                                                                                                (Total: 20 marks)

QUESTION FOUR
(a) Explain the following terms as used in information security:

     (i)   Hackers.   (2 marks)

     (ii)   Identify theft.   (2 marks)

     (iii) Viruses.   (2 marks)

     (iv)   Spam.   (2 marks)

(b) Describe three ways in which the intranet could be used in a college.   (6 marks)

(c) (i)   Define the term "cloud computing".   (2 marks)

     (ii)   Highlight two benefits of cloud computing to an organisation.   (4 marks)
                                                                                                (Total: 20 marks)

QUESTION FIVE
(a) Citing a suitable media in each case, explain the following file access methods:

     (i)   Sequential.   (3 marks)

     (ii)   Direct.   (3 marks)

     (iii) Random.   (3 marks)

(b) Outline five main features of a spreadsheet program.   (5 marks)

(c) Describe three benefits of using instant messaging in an organisation.   (6 marks)
                                                                                                (Total: 20 marks)

QUESTION SIX
(a) Distinguish between the following information communication technology terms:

     (i)   "Digital divide" and "network coverage".   (4 marks)

     (ii)   "Teleworking" and "video conferencing".   (4 marks)

(b) In relation to information systems, differentiate between "structured" and "unstructured" decisions.   (4 marks)

(c) Highlight four factors that could lead to a poor management information system.   (4 marks)

(d) Outline four advantages of using fibre optic cables in computer networks.   (4 marks)
                                                                                                (Total: 20 marks)

QUESTION SEVEN
(a) (i)   State four automated data capture techniques that could be used by an organisation.   (4 marks)

     (ii)   Outline two strengths and two limitations associated with automated data capture.   (4 marks)

(b) Explain four main functions of an operating system.   (8 marks)

(c) Distinguish between "productivity software" and "software suite".   (4 marks)
                                                                                                (Total: 20 marks)

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