



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)**