



ATD LEVEL I

DCM LEVEL I

INFORMATION COMMUNICATION TECHNOLOGY

TUESDAY: 31 August 2021.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

QUESTION ONE

- (a) Many organisations have embraced the concept of cloud computing.

Required:

Explain three disadvantages of cloud computing.

(6 marks)

- (b) The management of ABC Ltd. is planning to install a Local Area Network in the organisation.

Outline five ways the company will benefit as a result of the new infrastructure.

(5 marks)

- (c) Describe four factors that you would consider when determining the type of network topology to use.

(4 marks)

- (d) Veronica bought a laptop with the following specifications:

Windows 10 Pro, 11th Gen Intel[®], HP Sure Shutler and HP Sure View Reflect Privacy Screen.

Required:

Explain each of the above specifications.

(5 marks)

(Total: 20 marks)

QUESTION TWO

- (a) List four types of files extensions.

(4 marks)

- (b) Explain four factors that you might consider when selecting an application software package.

(4 marks)

- (c) Computers have become an integral part of life and work.

Describe four suitable applications that investment groups could use if they computerise their operations.

(8 marks)

- (d) List two examples of devices in each category below:

- (i) Softcopy output device.

(2 marks)

- (ii) Hardcopy output device.

(2 marks)

(Total: 20 marks)

QUESTION THREE

- (a) (i) Describe four occupational diseases associated with people who spend a lot of time using computerised information system.

(4 marks)

- (ii) Suggest the remedy available for each of the occupational diseases identified in (a) (i) above.

(4 marks)

- (b) Using a diagram, illustrate the relationship between information systems and organisation in terms of users, functional perspective and levels of management.

(6 marks)

- (c) Summarise six guidelines that you would follow to evaluate the quality of an operating system.

(6 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Draw the following components used in a computer network:
- (i) MiFi. (1 mark)
 - (ii) Server. (1 mark)
 - (iii) Wireless router. (1 mark)
 - (iv) RJ45 UTP cable. (1 mark)
- (b) Describe four advantages of using wireless peripherals. (4 marks)
- (c) Explain the relationship between data and information. (4 marks)
- (d) Summarise four business objectives of investing in information systems by a firm. (4 marks)
- (e) State two advantages and two disadvantages of using application packages by a business firm. (4 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Outline four characteristics of a good storage system. (4 marks)
- (b) State four categories of programming languages suggesting the basic reason behind their evolution. (6 marks)
- (c) Using an illustration, explain three types of network topologies. (6 marks)
- (d) State four physical security measures that could be put in place to protect an organisation's hardware and software. (4 marks)
- (Total: 20 marks)**

QUESTION SIX

- (a) Using illustrations, recommend two file access methods you could use during file design. (4 marks)
- (b) Explain three factors fostering growth of end user computing in modern computing environment. (6 marks)
- (c) Explain four positive impacts of teleworking to each of the following:
- (i) An organisation. (4 marks)
 - (ii) The society. (4 marks)
- (d) State three business reasons for using secondary storage devices. (2 marks)
- (Total: 20 marks)**

QUESTION SEVEN

- (a) Summarise four business strategic objectives of information systems. (5 marks)
- (b) Benchmarking is one of the key steps during hardware acquisition.
Explain the relevance of this step. (2 marks)
- (c) Explain the following terms as used in emails:
- (i) Cc. (1 mark)
 - (ii) Bcc. (1 mark)
 - (iii) Attachment. (1 mark)
 - (iv) Backscatter. (1 mark)
 - (v) Subject. (1 mark)
- (d) Outline five ways to minimize errors in a computerized information system. (5 marks)
- (e) Highlight three advantages of using 5G network over 4G network. (3 marks)
- (Total: 20 marks)**
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