



CPA PART II SECTION 4

CS PART II SECTION 4

CCP PART II SECTION 4

MANAGEMENT INFORMATION SYSTEMS

FRIDAY: 3 September 2021.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

QUESTION ONE

- (a) Discuss the following types of systems in an organisation:
- (i) Transaction processing systems (TPS). (2 marks)
 - (ii) Management Information Systems (MIS). (2 marks)
 - (iii) Decision Support System (DSS). (2 marks)
 - (iv) Executive Support System (ESS). (2 marks)
- (b)
- (i) Examine three communication technologies that mobile devices could be enabled to use in an organisation. (6 marks)
 - (ii) Outline two limitations of using mobile devices in an organisation. (2 marks)
- (c) Distinguish between “hardware” and “software” in relation to management information systems. (4 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Using an expert system involves an interactive computer based session in which the solution to a problem is explored with the expert system acting as a consultant to an end-user.
- Required:**
- (i) Outline three benefits of an expert system. (3 marks)
 - (ii) Highlight three limitations of an expert system. (3 marks)
 - (iii) Explain five application areas of expert systems in business. (5 marks)
- (b) Discuss the following types of databases:
- (i) Operational databases. (2 marks)
 - (ii) Distributed databases. (2 marks)
 - (iii) External databases. (2 marks)
- (c) Examine three limitations of traditional file processing approaches to data management. (3 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Many organisations have created a senior management position referred to as the chief information officer (CIO) to oversee the use of Information Technology (IT).

With reference to the above statement, highlight three main responsibilities of a chief information officer.

(6 marks)

- (b) Discuss three dimensions of information resource management (IRM). (6 marks)
- (c) (i) Explain four activities that encompass risk planning. (4 marks)
- (ii) Outline four major dimensions of the job of managing global information technology. (4 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Discuss four features of a data warehouse. (8 marks)

- (b) The type of backup device may vary depending on the size of business, the available budget and the importance of data.

Citing a reason for your answer, identify the backup device that you would recommend for:

- (i) Personal usage. (2 marks)
- (ii) Small businesses. (2 marks)
- (c) Explain how the following technology trends could raise ethical issues:
- (i) Profiling. (2 marks)
- (ii) Advances in data storage techniques. (2 marks)
- (iii) Advances in data analysis techniques. (2 marks)
- (iv) Non-Obvious Relationship Awareness (NORA). (2 marks)
- (Total: 20 marks)**

QUESTION FIVE

- (a) Describe four typical scenarios when you would recommend the use of Rapid Application Development (RAD) model in system development. (8 marks)

- (b) Agnes Mwanzia heard her classmates talk about e-Business but she was not able to distinguish it from e-commerce.

- (i) Distinguish between “e-Business” and “e-Commerce”. (4 marks)
- (ii) Highlight four benefits of e-Business to a firm. (4 marks)
- (c) Explain four ways in which digital marketing could help a business to grow. (4 marks)
- (Total: 20 marks)**

QUESTION SIX

- (a) Evaluate four unethical behaviours that are likely to be exhibited by a network administrator in an organisation. (8 marks)

- (b) In each of the following cases, suggest two controls that would be used to minimise or eliminate cases of computer misuse that are likely to occur in a typical organisation:

- (i) An employee secretly changes user privileges for a database. (2 marks)
- (ii) An employee uses a different account to view the contents of a database. (2 marks)
- (c) Chetrum organisation is contemplating acquisition of a new management information system.

Required:

Explain three factors that could be considered for a successful technological change. (6 marks)

- (d) A college has acquired a system that imitates human tutors. This enables students to learn by getting answers from the system which they would normally get from the tutor.

Required:

Give two advantages of this system.

(2 marks)

(Total: 20 marks)

QUESTION SEVEN

- (a) Jane Nyakio has advised the managers of Rubio Company to purchase a tailor-made management information system.

Required:

Explain three reasons for her advice.

(6 marks)

- (b) Different methods could be adopted during the conversion phase from a manual system to a management information system.

Required:

Discuss three such methods.

(6 marks)

- (c) Differentiate between “information communication technology (ICT) governance” and “information communication technology management”.

(4 marks)

- (d) Latemi company management encourages employees to bring their own devices (BYOD) such as laptops and tablets for use in office work.

Required:

Suggest four possible challenges of this trend.

(4 marks)

(Total: 20 marks)

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