

KASNEB

CPA PART II SECTION 4

CS PART II SECTION 4

CCP PART II SECTION 4

MANAGEMENT INFORMATION SYSTEMS

FRIDAY: 25 November 2016.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

QUESTION ONE

- (a) Explain two important ergonomic design features that should be considered for the following workstation items:
- (i) Keyboard. (2 marks)
 - (ii) Video display unit (VDU). (2 marks)
 - (iii) The desk. (2 marks)
- (b) Every organisation needs controls that ensure protection of the organisation's assets, accuracy and reliability of its records and operational adherence to management standards.

Required:

Distinguish between the following types of controls used in a computerised information system:

- (i) "General controls" and "application controls". (2 marks)
 - (ii) "Administrative controls" and "data security controls". (2 marks)
 - (iii) "Input controls" and "output controls". (2 marks)
- (c) Outline four examples of information systems based on each of the following criteria:
- (i) Functional perspective. (4 marks)
 - (ii) Constituency perspective. (4 marks)

Total: 20 marks)

QUESTION TWO

- (a) An organisation keen on developing an information systems strategy constituted an information systems steering committee.

Required:

Summarise six possible specific tasks of the above committee. (6 marks)

- (b) Distinguish between the following terms as used in management information systems:
- (i) "Internet of Things (IoT)" and "Internet of Everything (IoE)". (2 marks)
 - (ii) "Qualitative information" and "quantitative information". (2 marks)
- (c) The management of Kwachu Ltd. intends to acquire equipment for a local area network.

Required:

- (i) Suggest four types of equipment that the company might acquire for a local area network. (4 marks)
- (ii) Analyse six reasons why the management might be compelled to use direct procurement method to acquire the local area network equipment. (6 marks)

(Total: 20 marks)

QUESTION THREE

- (a) Discuss four reasons why an increasing number of organisations are today concerned with the development of quality practices in information systems governance. (4 marks)
- (b) Information communication technology (ICT) risk actions are of two types, that is, “avoidance actions” and “mitigation actions”.

Required:

Citing examples where each of the risk actions might be employed, evaluate the relationship between avoidance actions and mitigation actions. (4 marks)

- (c) (i) Identify two issues that could be addressed when building an e-commerce presence. (2 marks)
- (ii) Explain three ways in which e-commerce has affected business-to-business transactions. (3 marks)
- (d) Examine the role of mobile commerce in business activities. (3 marks)
- (e) Describe four types of information systems that could be used for enterprise-wide knowledge management and their value to a business. (4 marks)

(Total: 20 marks)

QUESTION FOUR

- (a) Compliance with a professional code of conduct and ethics is paramount in an information communication department.

Required:

- (i) Outline five specific roles of a compliant team in an information communication technology department. (5 marks)
- (ii) Suggest five approaches of enforcing rules and regulations among staff in an ICT department. (5 marks)
- (b) To deliver genuine benefits, information systems must be built with a clear understanding of the nature of the organisation in which they will be used.

Required:

Identify six organisational factors to consider when planning a new information system. (6 marks)

- (c) Describe each of the following mechanisms as used in management information systems:
- (i) Early warning mechanism. (2 marks)
- (ii) Exception principle. (2 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) The first step in building a data warehouse involves conducting a thorough business analysis of the information requirements that could be satisfied by a data warehouse.

Required:

Suggest six questions that could be addressed to enable one identify the information requirements for a data warehouse. (6 marks)

- (b) (i) Explain four general features of a system. (4 marks)
- (ii) Describe four challenges associated with enterprise systems. (4 marks)
- (c) Describe the role of the following information communication technology personnel:
- (i) Hardware technician. (2 marks)
- (ii) Database administrator. (4 marks)

(Total: 20 marks)

QUESTION SIX

- (a) Highlight four functions of a network operating system. (4 marks)
- (b) Suggest three benefits of using voice over internet protocol (VOIP). (3 marks)
- (c) In securing an information system you seek to safeguard against loss of confidentiality, integrity and availability.

Required:

Explain the following terms:

- (i) Loss of confidentiality. (2 marks)
- (ii) Loss of integrity. (2 marks)
- (iii) Loss of availability (2 marks)
- (d) Businesses have come to rely on email as a means of communication.

Required:

Explain how email security packages protect against spam.

(3 marks)

- (e) Identify four questions that need to be asked when undertaking analysis of an information system. (4 marks)

(Total: 20 marks)

QUESTION SEVEN

- (a) Highlight four risks associated with cloud computing. (4 marks)

- (b) Discuss the following systems theory concepts:

- (i) Planning. (2 marks)
- (ii) Control. (2 marks)
- (iii) Feedback. (2 marks)
- (iv) Feedforward. (2 marks)

- (c) For each of the following business analytic tools, describe its key features and how it can be used to aid knowledge discovery:

- (i) Online analytical processing (OLAP). (4 marks)
- (ii) Data mining. (4 marks)

(Total: 20 marks)

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