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 mar¹

(c)   Outline four examples of information systems based on each of the following criteria:

      (i)   Functional perspective.   ⸱ 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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