

KASNEB

CPA PART II SECTION 4

CS PART II SECTION 4

CCP PART II SECTION 4

MANAGEMENT INFORMATION SYSTEMS

FRIDAY: 26 May 2017.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

QUESTION ONE

- (a) Describe the following concepts as used in information systems:
- (i) Software-as-a-service (SAAS). (2 marks)
 - (ii) Open source software (OSS). (2 marks)
 - (iii) Total cost of ownership (TCO). (2 marks)
- (b) Distinguish between the following types of information:
- (i) "Knowledge information" and "organisational information". (4 marks)
 - (ii) "Planning information" and "control information". (4 marks)
- (c) Summarise three business benefits and three technical benefits that could accrue to a university from implementing an enterprise resource planning (ERP) system. (6 marks)
- (Total: 20 marks)**

QUESTION TWO

- (a) Evaluate five areas of information communication technology governance in an organisation. (10 marks)
- (b) Application software can be developed and modified by an organisation's own non-programming staff. This approach to software development is known as end-user development.
- Required:**
Highlight six benefits of end-user development. (6 marks)
- (c) The management of DAX Supermarkets Ltd. intend to construct a data warehouse with the aim of using online analytical processing (OLAP) tools in decision making.
- Required:**
Identify four benefits that the supermarket could realise as a result of implementing the new system. (4 marks)
- (Total: 20 marks)**

QUESTION THREE

- (a) Differentiate between "e-commerce" and "traditional commerce". (6 marks)
- (b) There are many types of actors who pose risks to businesses via information communication technology (ICT) assets.
- Required:**
Examine five types of actors who could pose risks to an organisation through its ICT assets. (5 marks)
- (c) Prototyping is the process of building an experimental system quickly and cheaply for demonstration and evaluation so that end users can better define information requirements.
- Required:**
Identify four steps of developing a prototype. (4 marks)
- (d) Enumerate five benefits of computer database systems. (5 marks)
- (Total: 20 marks)**

QUESTION FOUR

- (a) Differentiate between information communication technology (ICT) “ethics” and “law”. (10 marks)
- (b) Highlight four types of intellectual property. (4 marks)
- (c) Discuss six reasons why many organisations have invested heavily in information systems. (6 marks)

(Total: 20 marks)

QUESTION FIVE

- (a) The ability to exchange data and communicate efficiently is the main purpose of computer networking. However, we have to consider beyond these points to evaluate the feasibility of networking.

Required:

Analyse three advantages and three disadvantages of computer networking. (6 marks)

- (b) Distinguish between “entropy” and “symbiosis” as used in general systems theory. (4 marks)
- (c) Many organisations are today incorporating information systems plans into their business planning at all levels.

Required:

(i) Explain the term “information systems planning” as used in management information systems. (2 marks)

(ii) Outline four steps involved in information systems planning process. (4 marks)

- (d) Kritex Traders Ltd. intends to set up a juice processing company to compete with established brands in the market.

Required:

Suggest four ways in which they could use information systems to gain competitive advantage in the industry. (4 marks)

(Total: 20 marks)

QUESTION SIX

- (a) Paul Ndege, an information systems developer, prefers to use web-based information systems project management tools over the conventional methods.

Required:

Explain six reasons for the above preference by Paul Ndege. (6 marks)

- (b) Outline two reasons for outsourcing information systems by an organisation under each of the following categories:

(i) Financial reasons. (2 marks)

(ii) Technical reasons. (2 marks)

(iii) Political reasons. (2 marks)

- (c) Distinguish between “transmission control protocol” and “internet protocol” as used in data communication networks. (4 marks)

- (d) Explain the concept of “disaster recovery planning” as used in information communication technology risk management. (4 marks)

(Total: 20 marks)

QUESTION SEVEN

- (a) Evaluate how a customer relationship management system could be used to improve data and information of an e-business. (4 marks)

- (b) Collaboration and communication systems enable employees to interact with each other, managers, vendors and customers.

Required:

Analyse six types of collaboration and communication systems that could be used by an e-business. (6 marks)

- (c) Describe the main components that should be included in the organisation’s framework report for improving systems security and control. (10 marks)

(Total: 20 marks)