

# 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)**