

# KASNEB

CPA PART II SECTION 4

CS PART II SECTION 4

CCP PART II SECTION 4

## MANAGEMENT INFORMATION SYSTEMS

FRIDAY: 27 May 2016.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

### QUESTION ONE

(a) Distinguish between the following e-commerce business models:

(i) "E-tailer" and "market creator". (4 marks)

(ii) "Content provider" and "service provider". (4 marks)

(b) Explain why the use of ICT risk management techniques is becoming increasingly important in managing information systems. (4 marks)

(c) Describe the following ethical terms as used in an information society:

(i) Responsibility. (2 marks)

(ii) Accountability. (2 marks)

(iii) Liability. (2 marks)

(d) Differentiate between a "boundary" and a "constraint" as used in system theory. (2 marks)

**(Total: 20 marks)**

### QUESTION TWO

(a) Suggest three reasons why it could be difficult to measure the benefits of information communication technology infrastructure in an organisation. (6 marks)

(b) Propose six ways in which information communication technology (ICT) governance could act as a foundation for delivering the ICT strategy in an organisation. (6 marks)

(c) Highlight eight disadvantages of using a database system in an organisation. (8 marks)

**(Total: 20 marks)**

### QUESTION THREE

(a) ABC Ltd. is a small software development company employing 50 information communication specialists.

#### Required:

(i) Advise the company on how it could develop an information systems strategy. (4 marks)

(ii) Describe three criteria which the company could use to ensure that the information systems strategy developed in (a) (i) above is sound. (6 marks)

(b) Evaluate ten internet abuses common in a modern workplace. (10 marks)

**(Total: 20 marks)**

#### QUESTION FOUR

- (a) (i) Distinguish between “business intelligence” and “advanced analytics” as used in organisations. (4 marks)
- (ii) In a computer network, noise in signal is the random disturbance or fluctuation in analogue or digital signals.  
Explain four classifications of noise. (8 marks)
- (b) (i) Demonstrate the key difference between “backward error correction” and “forward error correction” as used in computer networks. (2 marks)
- (ii) Designing a database requires an understanding of both the business functions to model and the database concepts and features used to represent those business functions.  
Highlight three factors to consider when designing a database for an organisation. (3 marks)
- (iii) List three examples of enterprise systems used in business organisations. (3 marks)
- (Total: 20 marks)**

#### QUESTION FIVE

- (a) Explain the meaning of the following concepts as used in system theory:
- (i) Sub-optimisation. (2 marks)
- (ii) Decoupling. (2 marks)
- (iii) Equifinality. (2 marks)
- (b) The systems approach to organisational problems emphasises the need to consider both hard and soft properties of a system.  
Differentiate between “hard properties” and “soft properties”. (4 marks)
- (c) Explain the relationship between file hit rate, file organisation method and type of storage device as used in the context of information systems. (6 marks)
- (d) Identify four qualities of good management information. (4 marks)
- (Total: 20 marks)**

#### QUESTION SIX

- (a) Public domain software is a software that is not protected by copyright and thus may be duplicated by anyone at will.  
Explain three reasons behind developing and distributing public domain software. (6 marks)
- (b) Distinguish between the following forms of computer crimes and abuses:
- (i) Jamming and spamming. (2 marks)
- (ii) Cyber bullying and flaming. (2 marks)
- (iii) Sniffing and spoofing. (2 marks)
- (c) One of the emerging trends in information technology which has strategic implications for business firms is the move towards open systems.  
**Required:**
- (i) Explain the meaning of the term “open system concept”. (2 marks)
- (ii) Suggest three implications of the move towards open systems for organisations that have already invested in proprietary information systems. (6 marks)
- (Total: 20 marks)**

**QUESTION SEVEN**

(a) The introduction of information systems in organisations may lead to changes in work processes that may require re-training.

Suggest three areas of training that might be required by the following personnel:

(i) Senior managers. (3 marks)

(ii) Users of the new system. (3 marks)

(b) Identify the unique features of the following:

(i) Digital markets. (1 mark)

(ii) Digital goods. (1 mark)

(c) A firm's revenue model describes how the firm will earn revenue, generate profits, and produce a superior return on investment.

**Required:**

Discuss six e-commerce revenue models.

(12 marks)

**(Total: 20 marks)**

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