

# KASNEB

CPA PART II SECTION 4

CS PART II SECTION 4

CCP PART II SECTION 4

## MANAGEMENT INFORMATION SYSTEMS

### PILOT PAPER

September 2015.

Time Allowed: 3 hours.

Answer any FIVE questions.

ALL questions carry equal marks.

#### QUESTION ONE

- (a) Highlight six advantages of adopting ICT in business. (6 marks)
- (b) Outline four principal duties of the following ICT personnel:
- (i) ICT Manager. (4 marks)
  - (ii) Computer Technician. (4 marks)
- (c) Explain the meaning of the following ethical concepts:
- (i) Business ethics. (3 marks)
  - (ii) Technology ethics. (3 marks)

**(Total: 20 marks)**

#### QUESTION TWO

- (a) Zack Ltd. has been performing poorly in the soft drinks industry. A consultant has advised the directors of the company to undertake business process re-engineering.

**Required:**

Explain four major pitfalls faced by information systems managers in attempting to re-engineer organisations. (8 marks)

- (b) Distinguish between an “evolutionary prototype” and an “exploratory prototype” as used in prototyping. (4 marks)
- (c) Highlight four types of reports produced by information systems in an organisation. (4 marks)
- (d) Enumerate four benefits of an information systems strategy to an organisation. (4 marks)

**(Total: 20 marks)**

#### QUESTION THREE

- (a) Highlight five business opportunities that can be harnessed using cloud computing by an organisation. (5 marks)
- (b) Transaction Processing Systems (TPS) are the backbone of any organisation’s information system.

**Required:**

- (i) State four reasons why business managers must be conversant with transaction processing systems. (4 marks)
- (ii) Outline the transaction processing cycle. (5 marks)
- (c) Explain sequentially the steps taken during the information systems risk assessment process. (6 marks)

**(Total: 20 marks)**

**QUESTION FOUR**

- (a) (i) Examine three advantages of applying the database approach in information systems. (6 marks)
  - (ii) Describe three techniques that can be used to profile online shoppers for purposes of business forecasting. (6 marks)
  - (b) Enumerate four business opportunities in e-commerce. (4 marks)
  - (c) Examine two vulnerabilities which an organisation may be exposed to after commissioning a computer network with an internet connection. (4 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

- (a) Explain four legal, social and ethical issues raised by information systems. (4 marks)
  - (b) Analyse four major file processing activities. (4 marks)
  - (c) Highlight four circumstances under which it might be deemed appropriate for an organisation to outsource information technology. (4 marks)
  - (d) Evaluate four key activities undertaken in the following phases of system development:
    - (i) System design phase. (4 marks)
    - (ii) System implementation phase. (4 marks)
- (Total: 20 marks)**

**QUESTION SIX**

- (a) Corporate governance in information and communication technology (ICT) requires that management plan, control, evaluate and monitor current and future use of information systems.  
  
In light of the above statement:
    - (i) Highlight four specific objectives that must be met in order to provide reasonable assurance of the security of information systems. (4 marks)
    - (ii) Explain four ways in which management policy and controls can be used to safeguard information systems in an organisation. (8 marks)
  - (b) Distinguish between a “decision support system” and an “executive information system”. (4 marks)
  - (c) Highlight four benefits of the waterfall methodology of system development. (4 marks)
- (Total: 20 marks)**

**QUESTION SEVEN**

- (a) Identify four advantages of data warehousing. (4 marks)
  - (b) Outline four common uses of an extranet in an organisation. (4 marks)
  - (c) Mobile computing devices are increasingly being used in businesses today because of their convenient portability.  
  
**Required:**  
State four ways of minimising theft of mobile computing devices when using them outdoor. (4 marks)
- (d) (i) Identify five characteristics which might indicate that an information system has reached the end of its economic life. (5 marks)
  - (ii) Outline three ways in which ‘internet of things’ is benefiting small and medium sized businesses. (3 marks)
- (Total: 20 marks)**