FRIDAY: 1 December 2017.

Answer any FIVE questions.

Time Allowed: 3 hours.

ALL questions carry equal marks.

QUESTION ONE

(a) In a "digital firm", any piece of information required to support key business decisions is available anytime and anywhere in the firm.

Required:
Identify four major systems that could define a digital firm. (4 marks)

(b) The management information system (MIS) in an organisation uses external and internal sources of information.

Required:
Describe four sources of the external information used in a management information system (MIS). (4 marks)

(c) ABC Business Ventures Ltd. intends to embrace information communication technology (ICT) governance in the organisation.

Required:
Outline three primary and three secondary stakeholders in information communication technology (ICT) governance. (6 marks)

(d) A fast growing organisation has information systems that have so far not failed. Before increasing its reliance on information communication technology (ICT), the organisation's insurer has advised the organisation to carry out a risk analysis and then plan what to do.

Required:
(i) Explain what is meant by "risk analysis". (2 marks)
(ii) Outline four criteria that could be used to select a disaster contingency plan. (4 marks)

(Total: 20 marks)

QUESTION TWO

(a) Outline three reasons that could prompt the creation of a new information system in an organisation. (3 marks)

(b) Identify four reasons why a department in an organisation might continue to use manual records rather than a newly installed computerised system. (4 marks)

(c) Distinguish between "pure" and "partial" types of e-commerce. (4 marks)

(d) The manager of Bidii Company complained that the company's information system continually failed to provide the correct level of information.

Required:
Suggest four possible reasons why the system continually failed. (4 marks)
(e) New employees joining a company and using its computer systems are each asked to sign an agreement to adhere to a code of practice.

Highlight five issues that such a code of practice should address. (5 marks)

(Total: 20 marks)

QUESTION THREE
(a) (i) The security of information technology and the security of data are the two major aspects of information systems security.

Required:
Explain what each type of security above entails. (4 marks)

(ii) Summarise six ways of guaranteeing information security in an organisation. (6 marks)

(b) Outline four categories of information from the perspective of a computer application. (4 marks)

(c) Itemise how information systems could help participants in supply chain management. (6 marks)

(Total: 20 marks)

QUESTION FOUR
(a) Outline six activities that could be undertaken in the development of a management information system for an organisation. (6 marks)

(b) A college maintains an extensive database of its full-time students. The database contains personal data, the courses the students attend and higher education or employment applications.

Required:
(i) Suggest five ways in which the college could keep personal data of the students up to date. (5 marks)

(ii) The college wishes to share the personal data of the students with a local sports retailer. An agreement is to be written between the college and the retailer.

Suggest five issues, relating to the data, that should be included in this agreement. (5 marks)

(c) Furaha is a members only club in the suburbs of a city. It boasts of a bar and restaurant, golf course, a tennis court and a swimming pool among its facilities. Members can take golf or tennis lessons, enroll in weekly scheduled events, participate in tournaments and invite guests for certain activities. The club is managed by a board of directors that is responsible for hiring staff and monitoring the budget.

Required:
(i) Identify two of the club’s subsystems. (2 marks)

(ii) Suggest two system interfaces in the club’s operations. (2 marks)

(Total: 20 marks)

QUESTION FIVE
(a) Outline six broad categories of management information systems (MIS). (6 marks)

(b) The top management of your company has decided that they no longer require a head office and their strategic aim is to become a virtual organisation.

However, the company’s auditors have raised concerns that information held in the virtual company would lack security.

Required:
Examine five measures that the management could adopt to ensure that the information held in the virtual platform is secure. (5 marks)

(c) Distinguish between “business process re-engineering” and “reverse engineering” as used in information systems development. (4 marks)

(d) Outline five customer-related factors that are important in the success of any e-commerce venture. (5 marks)

(Total: 20 marks)
QUESTION SIX
(a) Discuss six ways that could be used to classify decision support systems (DSS). (6 marks)
(b) Outline four characteristics of a distributed database management system (DBMS). (4 marks)
(c) Identify four ways in which a commercial bank could make use of data mining. (4 marks)
(d) When a user logs onto a website, the user will access the website through a web portal.

Required:
(i) Explain the term “web portal”. (2 marks)
(ii) Highlight two main functions of a network server. (2 marks)
(iii) Cookies are created when a user logs on to the internet.

Describe one reason why an organisation would wish to leave a cookie on a customer's computer and one reason why a customer might not wish to have the cookies stored on their computers. (2 marks)

(Total: 20 marks)

QUESTION SEVEN
(a) (i) With the aid of an example, distinguish between “project risk” and “business risk”. (4 marks)
(ii) Identify two factors used in evaluating risk exposure and how each of these factors might be assessed qualitatively. (4 marks)

(b) Analyse four key technology matters that could raise ethical issues. (4 marks)

(c) Karibu Hotels is considering implementing m-commerce.

(i) Explain the term “m-commerce”. (2 marks)
(ii) Indicate two reasons why Karibu Hotels would consider using m-commerce. (2 marks)

(d) Online auction sites allow businesses to register as virtual shops and be incorporated in their sites.

Highlight four reasons why a business would like to register as a virtual shop. (4 marks)

(Total: 20 marks)