

2920/302

MANAGEMENT INFORMATION SYSTEMS

July 2017

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE III

MANAGEMENT INFORMATION SYSTEMS

3 hours

INSTRUCTION TO CANDIDATES

This paper consists of EIGHT questions.

Answer any FIVE of the EIGHT questions in the answer booklet provided.

Candidates should answer the questions in English

This paper consists of 5 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) Outline **three** approaches used in classifying Information Systems in an organisation. (3 marks)
- (b) The ICT manager of HeavyTec Company is required to talk to new recruits on ethical issues related to using a modern information system. Explain **three** points that the manager should include in the talk. (6 marks)
- (c) A hospital intends to implement a new information system. Explain **three** types of information system plans that should be formulated at the strategic level. (6 marks)
- (d) A certain organisation is in the process of acquiring a new information system.
- (i) Outline **two** factors that could influence the choice of the system to be acquired. (2 marks)
- (ii) Outline **three** reasons that would lead to acquisition failure of this information system. (3 marks)
2. (a) Explain **two** causes leading to maintenance of an information system. (4 marks)
- (b) (i) Outline **four** problems that ICT managers may face while undertaking their roles in their organisations. (4 marks)
- (ii) Outline **four** impacts caused by implementation of information systems in organisations. (4 marks)
- (c) Placet Company intends to commence on a new information system project. Explain **two** planning methodologies that the company could use. (4 marks)
- (d) Waops Company uses information systems in its transportation business. Describe **two** types of systems that could be ideal for the company. (4 marks)
3. (a) Explain **two** application areas of information societies in developing countries. (4 marks)
- (b) (i) Explain **two** circumstances that would lead an organisation to make decisions of a semi structured nature. (4 marks)
- (ii) Connet Ventures Ltd intends to establish an effective decision making process in their business. Explain **three** characteristics that these decisions should possess. (6 marks)
- (c) Nowadays organisations are using cloud-computing technologies for their business processes. Outline **two** advantages that these organisations accrue from this approach. (2 marks)
- (d) Distinguish between *knowledge based information system* and *office automation system* as used in management information systems. (4 marks)
4. (a) Explain **two** issues that could affect the cost of maintaining information systems. (4 marks)
- (b) Many organisations that use information systems at their initial stages implement modules that support their transaction operations. Explain **three** functions performed by these systems. (6 marks)

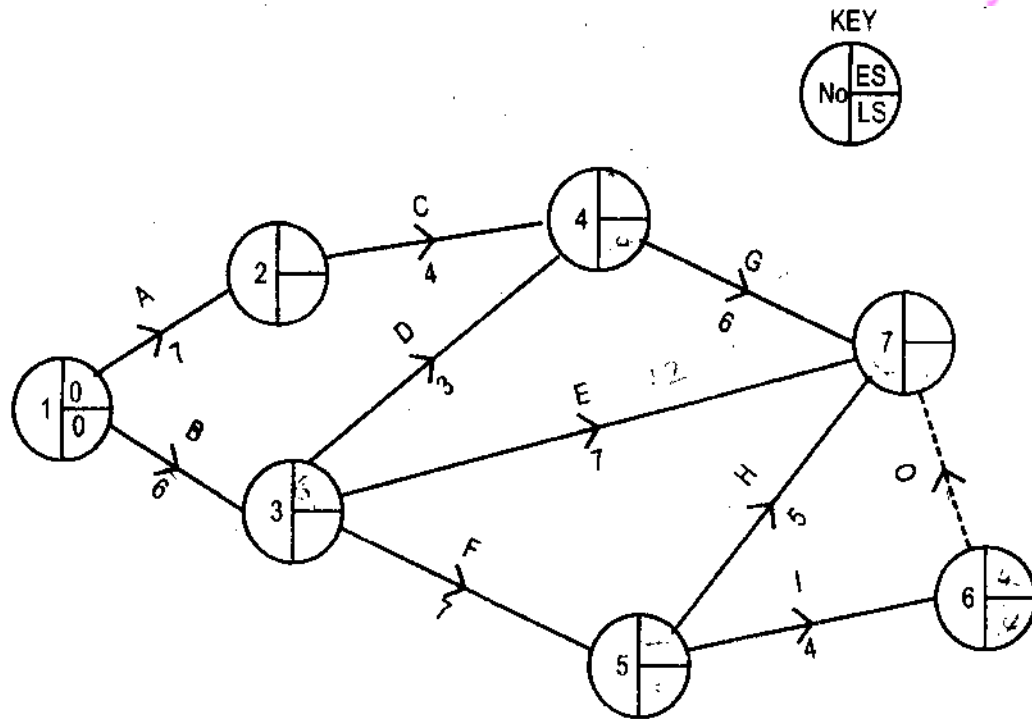


Figure 1

- (i) Re-draw the network diagram clearly indicating the *Earliest Start Times* (ES) and *Latest Start Times* (LS). (4 marks)
 - (ii) List in *ascending order* the four last activities that must be completed for the project to be deemed complete. (4 marks)
7. (a) (i) Outline **two** conflicting factors that would affect Information systems projects. (2 marks)
- (ii) State **two** application software that may be used for project management. (2 marks)
- (b) FutureTec Company specialises in resource management information systems. Explain **two** reasons that would influence an organisation to seek the company's services. (4 marks)
- (c) Explain **three** techniques that an organisation may use to prevent computer crimes. (6 marks)
- (d) The planning phase of an information system is important if success is to be realised. Explain **three** challenges that are encountered by the stakeholders during this phase. (6 marks)
8. (a) Explain the reason for creating *dummy* activities in project management network diagrams. (2 marks)
- (b) (i) Outline **four** qualities of information generated by a good information system. (4 marks)
- (ii) Explain **three** uses of information generated using information system. (6 marks)

- (c) Differentiate between *most likely* and *optimistic* times assumption in Program Evaluation Review Technique (PERT) project-management method. (4 marks)
- (d) Assume you have been hired as a system administrator in a newly established company. Outline **four** responsibilities that you would expect other employees in the company to have to ensure security of information systems. (4 marks)

THIS IS THE LAST PRINTED PAGE.