**DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY**

**SYSTEM ANALYSIS AND DESIGN.**

**November 2018**

**DIP- Module II.**

1. a) Outline four rules that should be observed when drawing a data flow diagram. (4 marks)

b) Explain three responsibilities of a project manager in an Information Communication Technology project. (6 marks)

C) Nina a system analyst at Faida company, developed system documentation. Explain three purpose of this documentation. (6 marks)

d) Techbriz company is undertaking an Information Communication Technology Project which is almost failing. Explain two signs exhibited by such project. (4 marks)

1. (a) Outline four advantages of using questionnaires in data gathering. (4 marks)

(b) The table below shows activities completion time and preceding activities of a project. Use it to answer the answer that follows:

i) Draw a network diagram for the project. (2 marks)

ii) Determine the critical path for the project using the earliest and latest times. (2 marks)

c) Differentiate between preventive and perfective system maintenance. (4 marks)

d) Diztech Company has acquired a new system and would like to train the users. Describe three categories of such users. (6 marks)

3. (a) Baraka company limited has acquired a Management Information system (MIS). Explain two benefits that the company would realize from this system. (4 marks)

(b) Outline four advantages of using Gantt chart during project management. (4 marks)

(c) (i) With an aid of a diagram, Describe the waterfall model as used in system design. (4 marks)

(ii) Explain two benefit of carrying out feasibility study in system development. (4 marks)

(d) Hilary used a top down analysis Methodology in ICT project. Explain four reasons for his choice. (4 marks)

4. (a) (i) Describe one component of a user manual. (2 marks)

(ii) Faith a system designer, used the Jackson structured programming to design a system. With an aid of a sketch, describe two notations she could have used. (4 marks)

(b) A team leader of an ICT project realized that they may not achieve the laid down objectives. Explain three strategies that the leader would apply to achieve the objectives. (6 marks)

(C) A system analyst prepared the term of reference for a system. Outline four items that the analyst could have included in his document. (4 marks)

(d) Distinguish between leasing and outsourcing system acquisition method. (4 marks)

5. (a) Outline four advantages of using structured narrative as a system design tool. (4 marks)

(b) Describe each of the following types of systems. (6 marks)

(i) Open;

(ii) Probabilistic;

(iii) Adaptive;

(c) Explain a circumstance under which each of the following system change over technique would be appropriate (4 marks)

(i) Parallel;

(ii) Direct;

(d) A system designer used functional decomposition in a system. Explain three advantages of this tool. (6 marks)

6. (a) (i) State two objects of a data dictionary. (2 marks)

ii) Paul used a data dictionary in analyzing a system. Outline two benefits he realized from using this. (2 marks)

(b) James a system analyst carried out a feasibility study for a system. Explain three areas of such studies. (6 marks)

(c) Differentiate between structured and Menu driven system analysis approaches. (4 marks)

(d) LizTech, an ICT company, uses project management software in a project. Explain three uses of this software. (6 marks)

7. (a) (i) Outline three advantages of using flowchart as system analysis tool. (3 marks)

(ii) Elimubora Technical intends to develop a system using a new trend of system development. Outline three such trends. (3 marks)

(b) Distinguish between a system designer and a system developer. (4 marks)

(c) Explain two reasons why employees should be trained to use new systems. (4 marks)

(d) With an aid of a diagram, describe the stages in the spiral system development life cycle. (6 marks)

8. (a) Outline four disadvantages of a structured chart design tool. (4 marks)

(b) Explain three components of system design. (6 marks)

(c) A system intends to use interview techniques to collect data for a project. Explain two disadvantages of this technique. (4 marks)

(d) Paul developed a system using a structural system analysis and design methodology (SSADM). Describe three model of this Methodology that he could have used. (6 marks)