



### **QUESTION ONE (30 MARKS)**

- a) Define the term 'Information system' and highlight any three components of an information system. (5 Marks)
- b) Briefly describe the flat structure and give three reasons why they are important in organizations. (5 Marks)
- c) Define prototyping and give three reasons why you may not recommend prototyping as a method for systems development. (5 Marks)
- d) Highlight some of the constraints a systems analyst is likely to encounter in new systems development. (5 Marks)
- e) Briefly discuss any five characteristics of the structured methods of systems development. (5 Marks)
- f) Define system theory. And explain the difference between 'Deterministic' and 'probabilistic' systems. (5 Marks)

### **QUESTION TWO (20 MARKS)**

- a) With a diagram, describe the hierarchical organization management structure and the type of information system required at each level, clearly bringing out the levels of management. (10 Marks)
- b) Define feedback and discuss the various types of feedback. (10 Marks)

### **QUESTION THREE (20 MARKS)**

- a) When developing systems, there are key elements of system strategy that you must take into consideration. Candidly explain the three elements of systems strategy. (10 Marks)
- b) State and explain any five tasks that a system analyst undertakes in systems analysis. (10 Marks)

### **QUESTION FOUR (20 MARKS)**

- a) Discuss the steps used in the Spiral model of software development, and state its advantages and disadvantages. (10 Marks)
- b) Explain why project management is a necessary stage of software development. State the activities undertaken in project management. (10 Marks)

### **QUESTION FIVE (20 MARKS)**

- a) Describe five techniques and tools used during the analysis phase of systems development. (10 Marks)
- b) The feasibility report is the product of the feasibility study. Discuss the contents of the feasibility report. (10 Marks)