



National Open University of Nigeria
Plot 91, Cadastral Zone, NnamdiAzikwe Express Way, Jabi – Abuja

Faculty of Sciences
October/November Examination 2016

Course Code:CIT721

Course Title:Information Systems Design and programming

Credit Unit:3

Time Allowed: 3hrs

Instruction: Attempt any five (5) questions

Questions

QUESTIONS 1

- a. Briefly explain MIS. (3 marks)
- b. State and briefly explain the 5 elements of a usable MIS system. (10 marks)
- c. List 2 pieces of information that should be contained in an MIS system user manual. (1 marks)

QUESTIONS 2

- a. Discuss briefly (listing examples where possible) the following database models:
 - i. Relational (4 marks)
 - ii. Object-oriented (4 marks)
- b.
 - i. Give 3 examples of questions that should be answered when analyzing a system. (1.5 marks)
 - ii. Briefly explain the 3 steps of the systems approach to system analysis. (4.5 marks)

QUESTIONS 3

- a. Briefly explain the 3 levels of organizational information. (9 marks)
- b. Define the following terms:
 - iii. Transaction Processing System(1 mark)
 - iv. Office Automation System (1 mark)

- v. Expert System (1 mark)
- c. State 4 primary objectives of structured techniques in information system development (2 marks).

QUESTIONS 4

- a. Briefly discuss the definition and functions of the following roles:
 - i. Business analyst (4 marks)
 - ii. Application analyst (3 marks)
 - iii. Computer scientists (3 marks).
- b. In order of execution, list (without explanation) the 8 phases of the SDLC. (4 marks)

QUESTIONS 5

- a. State 3 reasons for the failure of the monopolist approach to management of SDLC. (3 marks)
- b. Explain briefly the laissez-faire approach to management of SDLC stating its potential pitfalls (6 marks)
- c. Explain briefly information-center approach to management of SDLC stating reasons for its potential demise in organizations (5 marks)

QUESTIONS 6

- a. Complete the following table: (8 marks)

Step	People involved	Brief descriptions
Problem definition		
Analysis and design		
Testing and debugging		
Implementation		

- b. List and explain 4 benefits of RAD. **(6 marks)**

QUESTIONS 7

- a. Briefly explain DSS (3 marks).
- b. List 5 benefits of an information system to organizational information. (2.5 marks)
- c. Explain briefly the key features of the monopolist approach to management of SDLC (3.5 marks).
- d. State any 5 stages of data processing system growth (2.5 marks).
- e. Define the term “Risk identification” and state 4 categories of risks to information systems projects. (2.5 marks)