



**NATIONAL OPEN UNIVERSITY OF NIGERIA,**

**PLOT 91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI – ABUJA**

**FACULTY OF SCIENCES**

**2022\_2 Examination**

**Course Code: CIT721**

**Course Title: Information systems Design and Programming**

**Time: 2<sup>1</sup>/<sub>2</sub> Hours**

**Credit: 3 Units**

**Instruction: Attempt 4 questions. Question1 is Compulsory and any other three (3)**

**Questions One**

1(a) Differentiate between Information System (IS) and Information Technology (4 marks)

1(b) Outline and explain the elements of a system (4 marks)

1(c) Describe two (2) measures of system performance (4 marks)

1(d) Enumerate and explain four Components of Computerized Information System (4 marks)

1(e) State at least three concerns in end-user computing.(3 marks)

1(f) Outline and Explain three Quality of Information (6 marks)

[25 marks]

**Question Two**

2(a) State and explain three characteristics of a good systems analyst (6 marks)

2(b ) Outline any four (4) concerns associated with little control over of end-user computing (5 marks)

2(c ) Enumerate the six stages of data processing system (DPS) growth (3 marks)

2(d ) Identify two Sources of Project Requests (2 marks)

[15 marks]

**Question Three**

3(a) Write short notes on the following:

- (i) Organizational Purpose
  - (ii) Organization Culture
  - (iii) Organization Structure
- (2 marks each)

3(b). Describe any four (4) types of Organization structure (4 marks)

3(c ). Enumerate any six major external sources of Data collection (3 marks)

3(d) Describe an Adaptive System (2 marks)

[15 marks]

**QUESTION FOUR**

4(a) Outline the four basic steps of system analysis and design cycle? (4 marks)

4(b) Differentiate between data and information. (4 marks)

4(c ) State four usefulness and procedures for system investigation (4 marks)

4(d) A high-level programming language should possess certain characteristics. Identify 3 characteristics. (3 marks)

[15marks]

**QUESTION FIVE**

5(a) Outline and explain four (4) data analysis techniques you have studied in this course (6 marks)

5(b) Outline the different types of models as studied in this course and describe any two (6 marks)

5(c) Outline three (3) major general design considerations in System Design (3 marks)

[15 marks]

#### QUESTION SIX

6(a) Distinguish the difference between a system flowchart and a program flowchart. Why are both types of flowcharts useful when developing application software? (6 marks)

6(b) Many of the software crisis came as a result of decrease in hardware costs which has occurred over the years. Expatiate. (3 marks)

6(c) Enumerate and explain three categories of Information System (6 marks)

[15 marks]