



NATIONAL OPEN UNIVERSITY OF NIGERIA
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-
ABUJA**
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
2024 1 EXAMINATION

COURSE CODE : CIT 851

COURSE TITLE : Advanced Systems Analysis and Design

CREDIT UNIT : 3

TIME ALLOWED : 2¼ HOURS

INSTRUCTION : Answer Four Questions. Question 1 is compulsory

1. a) After looking at what systems analysis is. Is it helpful to know what *systems analysis* is **'NOT'**. Explain. [6 marks]
b) Enumerate the initial four phases that were put forth by Herbert Simon to enable problem solving. [4 marks]
c) What is Cohesion?. Differentiate between the *Functional and Sequential Cohesion* [5 marks]
d) Explain the techniques involved in concurrent Audit. [5 marks]
e) What are the general principles for input design? [5marks]
2. a) Define the concept of subsystem and provide an example of a subsystem that exists in a real-world business setting based on your explanation. [3 marks]
b) What is the importance of system documentation in the context of the software development? [6 marks]
c) A good design should aim to produce a system that is simple to understand, programed, and maintain. List the objectives for a successful design. [6 marks]
3. a) What distinguishes information requirements determination from information requirements specification? [6 marks]
b) Explain the two categories or types of questionnaires that are commonly used. [4 marks]
c) What benefits do forms provide in a database management system? [5 marks]
4. a) Explain each principle of design that is used in creating the modules specifications [6 marks]
b) Enumerate the procedures or actions that should be taken to ensure a successful Joint Application Development (JAD) session. [3 marks]
c) Describe the issues or problems related to operational viability. [6 marks]
5. a) Based on your understanding of usability, who is a system user? [3 marks]
b) Eexplain the purpose of data dictionaries for analysts and provide five reasons why they are considered essential in the field of data analysis? [5 marks]
c) Describe the tools used for the representation of various design aspects [7 marks]
6. a) List five feasibility types that are considered during the analysis phase. [5 marks]
b) State the relevant goals of a good design [5 marks]
c) Can you explain in detail why organizations need systems analysts? [5 marks]