



NATIONAL OPEN UNIVERSITY OF NIGERIA
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-
ABUJA**
FACULTY OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE
2025_2 EXAMINATIONS_

COURSE CODE : CIT 851

COURSE TITLE : Advanced Systems Analysis and Design

CREDIT UNIT : 3

TIME ALLOWED : 2½ HOURS

INSTRUCTION: Answer Four Questions. Question 1 is compulsory

- 1.a) What views do you have about System Analysts with respect to business system? *[3 marks]*
b) What are the desirable qualities of a systems analyst?. *[2 marks]*
d) Elaborate on the concept of Coupling and share your insights on what it entails. *[5 marks]*
d) State the measures to be adopted by users to protect themselves against viruses *[5 marks]*
e) write short notes on the following;
i) cardinality ii) Decision Tree iii) Stress Testing iv) Direct Approach v) Inference Engine *[10 marks]*
- 2.a) State and explain the different characteristics of a System. *[5 marks]*
b) Define prototyping and provide an explanation of its concept. *[5 marks]*
c) List the fundamental guidelines for input design. *[5 marks]*
- 3.a) Provide an explanation for each of the five layers of a Distributed System. *[5 marks]*
b) State the advantage and disadvantages of Questionnaires. *[6 marks]*
c) Describe how management information systems are used. *[4 marks]*
- 4.a) State the major tasks of structured system analysis. *[4 marks]*
b) List the individuals or groups who typically participate in Joint Application Development (JAD). *[5 marks]*
c) Describe the joint application development in a few sentences. *[6 marks]*
5. a) Explain the role of a systems analyst in modern businesses *[3 marks]*
b) Illustrate the various parts of a data flow diagram using a graphical representation and provide an explanation for each component? *[8 marks]*
c) Describe the four types of managerial skills that a systems analyst must possess in order to serve as the team leader for a project. *[4 marks]*
6. a) With an aid of a diagram depict the different phases of the System Development Life Cycle *[7 marks]*
b) State the guideline required for a good database design. *[5 marks]*
c) Give a real-world example to illustrate the formal system notion. *[3 marks]*