



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-ABUJA**  
**FACULTY OF COMPUTING**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**2025\_1 EXAMINATION**

**COURSE CODE: CIT851**

**COURSE TITLE: ADVANCED SYSTEM ANALYSIS AND DESIGN**

**COURSE CREDIT: 3 UNITS**

**TIME ALLOWED: 3 HOURS**

**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS**

**Question 1:**

(a.) Write short note on systems development	(4marks)
(b) Write a short note to discuss the five characteristics of a system	(10marks)
(c) Write a short note to discuss the physical design of records	(6marks)
(d) Write a short note to discuss the Denormalization	(5marks)

**Question 2:**

(a) Write short note on the four classifications of a Systems	(4marks)
(b) What are file organization options available to an enterprise?	(5marks)
(c) Mention five important reasons why organization should adopt CASE tools	(6marks)

**Question 3:**

(a) Discuss the five layers of distributed system architecture	(4marks)
(b) List and explain eight types of CASE tools	(8marks)
(c) Write short note to discuss the implementation of systems	(3marks)

**Question 4:**

(a) What are the three established standards for consistent development of a system	(3marks)
(b) Explain the key sequence of activities undertaken during system testing	(5marks)
(c) Explain how best an organization should prepare for conversion plan papers	(5marks)
(d) Identify three factors militating against smooth maintenance of software	(2marks)

**Question 5:**

(a.) What the differences between the structured analysis and design approach?	(5marks)
(b) Highlight five demerits of site visit conducted by system analyst to examine existing system closely and record the activities of the system	(5marks)
(c) What are the pertinent issues likely to be faced during software maintenance	(5marks)

**Question 6:**

(a.) Explain the three ways of installing a new information system for a business	(3marks)
(b.) Why is site visit a top choice for system analyst in their attempt to understand the existing system and its operations. Identify five of such reasons.	(5marks)
(c.) Discuss the concept of legacy system when undertaking IT projects	(5marks)