



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

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**Course Code:** CIT432

**Course Title:** Software Engineering II

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

**Credit:** 3Units

**Instruction:** Attempt 4 questions. Question 1 is Compulsory and any other three (3) Questions

1a. Discuss two advantages and two disadvantages of the interview method of data (5marks)

1b. List and explain some of the key areas where software is increasingly playing a pivotal role. (5marks)

1c. Define computer software and explain its role in a computer system. (5 marks)

1d. What is software engineering and why is it important? (10 marks)

2a. Explain the key features and advancements of third-generation languages (3GL) compared to earlier generations. (5marks)

2b. Describe the fifth generation of languages (5GL) and their applications in artificial intelligence. (10 marks)

3a. What is firmware and how is it different from software stored in random access memory (RAM)? (5marks)

3b. Explain the purpose of system software and list its main components. (10marks)

4a. What are the differences between application software and system software? Provide examples of each. (5marks)

4b. Describe the Waterfall model and its phases. (10 marks)

5a. List and explain any three strengths of the Waterfall Model. (6marks)

5b. List and explain the steps involved in the Prototyping Model. (9marks)

6a. Explain the Waterfall Model of software development. (5marks)

6b. List and briefly describe any five software development models other than the Waterfall model. (10 marks)