



**NATIONAL OPEN UNIVERSITY OF NIGERIA,
UNIVERSITY VILLAGE, 91 CADASTRAL ZONE, NNAMDI AZIKWE EXPRESSWAY,
JABI, ABUJA
FACULTY OF SCIENCE
JULY 2017 EXAMINATION**

COURSE CODE: CIT 333

COURSE TITLE: Software Engineering 1

TIME ALLOWED: 3 Hours

INSTRUCTION: Answer **question 1** any other **four (4)** questions.

1a. What are the Software Quality Assurance activities during the architectural (preliminary) design phase? (6 marks)

1b. Clearly explain any five (5) sub-disciplines of Software engineering (5 marks)

1c. Explain the four (4) software engineering goals (4 marks)

1d. Outline any six(6) functions of software engineer (6 marks)

1e. As a software engineer, explain alpha and beta testing (4 marks) **[TOTAL 25]**

2a. Mention three (3) advantages and two (2) disadvantages of incremental model (5 marks)

2b. Explain the four(4) methods used to test non-functional aspects of a software (8 marks)

2c. What do you understand by software crisis (2 marks)

3a. Outline the seven (7) ways in which software crises can be manifested (7 marks)

3b. Outline and explain any four (4) of the fundamental software design concepts (8 marks)

4a. Outline the six (6) disadvantages of waterfall life cycle (6 marks)

4b. What are the problems faced in requirements elicitation? (5 marks)

4c. Outline with explanation the two categories of requirements (4 marks)

5a. Outline the seven (7) merits of top-down programming (7 marks)

5b. Mention any four(4) of the advantages of waterfall life cycle (4 marks)

5c. What are the Software Quality Assurance activities during the during the implementation phase? (4 marks)

6a. What are the Software Quality Assurance activities during the integration and test phase? (5 marks)

6b. Clearly elaborate on critical error and non-critical error (4 marks)

6c. List any two (2) tools program software offers to assist in writing programs. (2 marks)

6d. What do you understand by critical error and non-critical error? (4 marks)