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: CIT831

COURSE TITLE: SOFTWARE ENGINEERING METHODOLOGIES

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE QUESTIONS

Question 1: Define the followings terms; **: [Total:**25mks]

i. Software 5mks
ii. Software Engineering 5mks
iii. Software Engineering Methodologies 5mks
iv. Software requirements 5mks
v. Identify Five (5) types of requirements that you know. 5mks

Question 2: [Total:15mks]

i. Identify the three (3) categories of Software attributes. 5mks
ii. List Two (2) attributes of Software under each of the categories identified in (iii) above. 10mks

Question 3: [Total:15mks]

Explain the ACM/IEEE code of ethical behaviour of a Software Engineer under the following principles;

a. Self
b. Client/Employer
c. Profession
d. Public
e. Product

Question 4: [Total:15mks]

i. What is Software Specification?
ii. What is Software Validation?

Question 5: [Total:15mks]

i. Identify at least, Five (5) Software Process (Software Development Life Cycle) Models that you know.
ii. With the aid of a well labelled diagram, explain the V-Model of Software Engineering.
iii. What is a Software Process (Software Development Life Cycle) Model?

Question 6: [Total:15mks]

i. State the Agile Manifesto 2mks
ii. State Five (5) out of the twelve principles of agile software development 10mks
iii. Give Three (3) Examples of Agile Software development methodologies that you know. 3mks