



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**UNIVERSITY VILLAGE, 91 CADASTRAL ZONE, NNAMDI AZIKWE EXPRESSWAY,**  
**JABI, ABUJA**  
**FACULTY OF SCIENCE**  
**2021 EXAMINATION**

**COURSE CODE: CIT 432**

**COURSE TITLE: Software Engineering II**

**CREDIT: 3 Units**

**TIME ALLOWED: 2½ Hours**

**INSTRUCTION: Answer Question ONE (1) and any other FOUR (4) Questions**

- 1(a) Justify the study of software engineering [ 5 marks]
- (b) Carry out analysis of the prescriptive software life cycle model. [5 marks]
- (c) Outline any three (3) disadvantages of the waterfall model. [3 marks]
- (d) Discuss any four (4) merits of interview method of data collection [ 4 marks]
- (e) Differentiate between Denotational Semantics and Operational Semantics [ 5 marks]
- 2 (a) Appraise the fourth generation of computers in terms of software development [4 marks]
- (b) List five (4) automatic generating functions used in manipulation of words in a word processing software. [ 4 marks]
- (c) What are the opportunities areas and sample direction in software development [4 marks]
- 3 (a) Compare and contrast the low and high level languages [ 5 marks]
- (b) Give a brief analysis of the V-Model [5 marks]
- (c) Outline the two (2) main components of feasibility study [2 marks]
- 4 (a) Carry out a comparative analysis of the Spiral model and the Rapid prototyping model [6 marks]
- (b) Perform an analysis of software testing and integration and outline the difference between unit testing and system testing . [ 6 marks]
- 5 (a) Describe how data is collected using on-site data collection method and name 3 merits of such a data collection instrument. [4 marks]
- (b) State the four (4) goals of system requirements specifications as proposed by Sajjan, M. (2001) [ 4marks]

(c) In order for a programmer to realize an error-free, readable and maintainable codes, he has to observe certain basic rules. State 4 of such rules [ 4 marks]

6(a) Give the syntax of the Select Case Construct [4 marks]

(b) Compare Top-down integration testing and Bottom-up integration testing [4 marks]

(c) Name four (4) features of VDM [ 4marks]