

## NATIONAL OPEN UNIVERSITY OF NIGERIA University Village, Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja FACULTY OF SCIENCES

JULY 2017 EXAMINATION

**Course Code: CIT 831** 

**Course Unit: 3** 

**Course Title: Software Engineering Methodologies** 

Instruction: Answer Question One and Any Four Other Questions

Time allowed:  $2 \frac{1}{2}$ 

- 1a. Enumerate threeattributes of a goodsoftware 6 marks
- b. What are CASE Tools?

4 marks

c. Distinguish between testing and debugging.

6 marks

- d. Write a short note on Software Requirements Engineering 6 marks
- 2a. What are the requirements for an engineering process?  $4\frac{1}{2}$  marks
- b. List and explain three types of requirements6 marks
- c. Explain how viewpoints are identified?

1½ marks

- 3a. List and explain the different types of interview 3 marks
- b. List the guidelines for writing requirements marks

 $4\frac{1}{2}$ 

- c. With the aid of a well labeled diagram describe the waterfall life cycle paradigm  $4\frac{1}{2}$  marks
- 4a. What do you understand by requirements management? 3 marks
- b. Describe any three architectural models.
- c. discuss two problems with the prototyping 6 marks
- 5a. State threedisadvantages of repository models 3 marks
- b. Write a short note on the relevance of system modelling 5 marks

- c. List the modular decomposition models. 4 marks
- What is the principal benefit of formal methods? 6a. 2 marks
- Enumerate and explain the specification operations. b. 4 marks
- Write a short note on the following
  i. Sub-System
  ii. Module c.

  - Modular Decomposition iii.

6 marks