



NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE & TECHNOLOGY
JANUARY/FEBRUARY 2013 EXAMINATION

Course Code: CIT 831
Time: 3hrs **Credit Unit:** 3
Course Title: Software Engineering Methodologies Course
Instruction: Answer any five (5) questions.
QUESTIONS

- 1a. Risks are inevitable in Software Development. Specify any four (4) of these risks. (8 marks)
- 1b. Generally, the most appropriate life-cycle model depends on a number of factors. List six (6) of these factors. (12 marks)
- 2a. Cite five (5) realistic instances of Software products developed by means of the spiral model that could be prone to hazards. (15 marks)
- 2b. List any five (5) components of the requirements document. (5 marks)
- 3a. Give a concise description of the term 'viewpoint'. (4marks)
- 3b. Enumerate and describe the steps involved in prototyping. (16 marks)
- 4a. Write the inspection pre-conditions. (6 marks)
- 4b. Identify four stages of design. (4 marks)
- 4c. Identify and describe two types of domain-specific models. (8 marks)
- 4d. What is the most effective technique for discovering errors? (2 mark)
5. Give a brief description of the following concepts:
 - a. Software re-use)
 - b. Debugging) (5 marks each)
 - c. Software Testing)
 - d. Software inspection)
 - e. Defect testing)

6a. (i) What are formal specifications? (4 marks)

**(ii) State the factors on which formal specifications are based.
(4 marks)**

6b. Give a brief description of the following:

- i) Software design)**
- ii) Structured methods) (4 marks**
each, Total=12)
- iii) System models)**

7a. When is re-application desirable in an existing software? (12 marks)

**7b. Describe two problems of domain requirements.
(8 marks)**

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