



NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16, Ahmadu Bello Way, Victoria Island

SCHOOL OF SCIENCE AND TECHNOLOGY
October, 2013 Examination

Course Code: CIT 703

Time Allowed: 3 Hours

Course Title: Information Technology and Software Development

Course Unit: 3

Instruction: Answer Any Five Questions

1. Explain the following terms:
 - i) Requirement Analysis and Specification
 - ii) Functional Specification
 - iii) Software Integration and Testing
 - iv) Software Maintenance

3 ½ marks each
2. a. Explain what is meant by software process. 5 marks
b. State the purpose of software process. 4 marks
c. List five goals of software process. 5 marks
3. Outline four levels of software testing activities and state the specific goal of each. 14 marks
4. a. Explain what is meant by Extreme Programming (XP). 4 marks
b. Describe four basic activities performed by XP within the software development. 10 marks
5. a. Explain the UML concept. 4 marks
b. List the parts of the UML 2.x specification. 4 marks
c. Outline how UML diagrams represent two different views of a system model: 6 marks
6. a. Explain the following terms:
 - i. Transition network
 - ii. State
 - iii. Transition

6 marks

b. Describe the following: Conditions, Actions and Events 6 marks
c. What is a state transition diagram? 2 marks
7. a. Describe the following concepts in software project planning
(i). Work breakdown (ii) Task allocation (iii) Guesstimation 6 marks
b. List and explain two problems encountered in guesstimation 4 marks
c. Describe the two key control elements in software project planning 4 marks

