Course Code: CIT 703
Course Title: Information Technology and Software Development
Time Allowed: 2½ hours
Credit: 3 Units
Instruction: Attempt four (4) questions. Question one is compulsory and any other three (3) questions.

Question One

1a. Differentiate between executive module test and executive integration test   **3marks**
1b. Outlines five (5) characteristics of evolution of large software systems   **5marks**
1c. Describe Software Automation   **3marks.**
1d. State the five (5) **FURPS+** model for Categories of Requirement Engineering **5marks**
1e. Outlines five (5) factors in Requirements Engineering   **5marks**
1f. List four (4) UML behavioral diagrams   **4marks**

Question Two

2a. Outlines five (5) some version or subset activities of a classic software life cycle models   **5marks.**
2b. What is a software process model?   **5marks**
2c. State five (5) types of Cohesion in Software Engineering   **5marks.**
2d. Who is a software project manager? **2 marks.**

Question Three

3a. List and explain five (5) reasons why we need software engineering   **5 marks**
3b. Outlines five (5) Garvin dimensions of quality in software development   **5 marks.**
3c. State and explain five properties of Software Requirement Specification   **5 marks.**

Question Four

4a. What is a software life cycle model?   **5 marks.**
4b. With the aid of diagram using Waterfall Model briefly discuss the Software Development Activities   **10 marks**

Question Five

5a. Describe the term software maintenance   **4 marks**
5b. State and explain four (4) types of software maintenance   **8 marks**
5c. Who is a system analyst?   **3 marks**

Question Six

6a. Describe software process model   **2 marks.**
6b. Outlines (4) fundamental activities that are common to all software processes **8 marks**
6c. Identify five (5) commonly used software process models   **5 marks.**