

**Code No.: ETCS 304**  
**Paper: Object Oriented Software Engineering**

**L T C**  
**3 1 4**

**INSTRUCTIONS TO PAPER SETTERS:**

**MAXIMUM MARKS: 75**

1. Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 25 marks.
2. Apart from question no. 1, rest of the paper shall consist of four units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be of 12.5 marks.

**UNIT – I**

Introduction to Software Engineering: Software Engineering Development, Software Life Cycle Models, Comparison of various models

Requirement Elicitation: Introduction to Object Oriented Methodology, Overview of Requirements Elicitation, Requirements Model-Action & Use cases, Requirements Elicitation Activities, Managing Requirements Elicitation.  
**[No. of Hrs.: 11]**

**UNIT – II**

Architecture: Introduction, System development is model building, model architecture, requirements model, analysis model, the design model, the implementation model, test model  
Analysis: Introduction, the requirements model, the analysis model

**[No. of Hrs.: 11]**

**UNIT – III**

Construction: Introduction, the design model, block design, working with construction  
Testing: introduction, on testing, unit testing, integration testing, system testing, the testing process  
**[No. of Hrs.: 11]**

**UNIT – IV**

Modelling with UML: Basic Building Blocks of UML, A Conceptual Model of UML, Basic Structural Modeling, UML Diagrams.  
Case Studies  
**[No. of Hrs.: 11]**

**TEXT BOOKS:**

1. Ivar Jacobson, “Object Oriented Software Engineering”, Pearson, 2004.
2. Grady Booch, James Runbaugh, Ivar Jacobson, “The UML User Guide”, Pearson, 2004.
3. Wendy Boggs, Boggs, Michael Boggs “Mastering UML with Rational Rose”, BPB Publication, 2003.

**REFERENCES BOOKS:**

1. Stephen R. Scach, “Classical & Object Oriented Software Engineering with UML and Java: McGraw Hill, 1999.
2. Richard C. Lee, William M. Tepfenhard, “UML and C++, A Practical guide to object-oriented Development”, Pearson Education, 2002.