

Course code	Course Name	L-T-P - Credits	Year of Introduction
EE361	Object Oriented Programming	3-0-0-3	2016
<b>Prerequisite:</b> EE207 Computer programming			
<b>Course Objectives</b>			
<ul style="list-style-type: none"> <li>To familiarize the student with the Object Oriented Programming Concepts</li> <li>To give a fair idea about Programming in Java and its use as an Application development tool</li> </ul>			
<b>Syllabus</b>			
Review of Object Oriented Concept, Components of Object-oriented programming, File management concepts, Database programming, Application development concepts			
<b>Expected outcome.</b>			
<ul style="list-style-type: none"> <li>The students will be able to develop simple application programs using object-oriented concepts and Java</li> </ul>			
<b>Text Books:</b>			
<ol style="list-style-type: none"> <li>Cay S. Horstmann and Gary Cornell, "Core Java: Volume I &amp; II- Fundamentals", Pearson Education, 2008.</li> <li>Herbert Schildt, The Complete Reference Java2, Eighth Edition, Tata McGraw Hill</li> </ol>			
<b>References:</b>			
<ol style="list-style-type: none"> <li>Doug Lea, Concurrent programming in Java Design Principles and Patterns, Pearson Education.</li> <li>K. Arnold and J. Gosling, "The JAVA programming language", Pearson Education.</li> <li>Timothy Budd, "Understanding Object-oriented programming with Java", Pearson Education. 3.</li> </ol>			
<b>Course Plan</b>			
Module	Contents	Hours	Sem. Exam Marks
I	Review of Object Oriented Concepts - Objects and classes in Java – defining classes – methods – access specifiers	7	15%
II	– static methods– constructors, Arrays – Strings -Packages – JavaDoc comments,	7	15%
<b>FIRST INTERNAL EXAMINATION</b>			
III	Inheritance – class hierarchy – polymorphism – dynamic binding – final keyword – abstract classes – the Object class – Reflection – interfaces – object cloning – inner classes	7	15%
IV	Streams and Files -Use of Streams, Object Streams, . Applet Basics-The Applet HTML Tags and Attributes, Multimedia, The Applet Context, JAR Files.	7	15%
<b>SECOND INTERNAL EXAMINATION</b>			
V	File Management. Multithreaded programming– Thread properties – Creating a thread -Interrupting threads –Thread priority- thread synchronization – Synchronized method -Inter thread communication	7	20%
VI	Database Programming -The Design of JDBC, The Structured Query Language, JDBC Installation, Basic JDBC Programming Concepts, Query Execution	7	20%
<b>END SEMESTER EXAM</b>			

## QUESTION PAPER PATTERN:

Maximum Marks: 100

Exam Duration: 3Hours.

**Part A:** 8 compulsory questions.

One question from each module of Module I - IV; and two each from Module V & VI.

Student has to answer all questions. (8 x 5)=40

**Part B:** 3 questions uniformly covering Modules I & II. Student has to answer any 2 from the 3 questions: (2 x 10) =20. Each question can have maximum of 4 sub questions (a,b,c,d), if needed.

**Part C:** 3 questions uniformly covering Modules III & IV. Student has to answer any 2 from the 3 questions: (2 x 10) =20. Each question can have maximum of 4 sub questions (a,b,c,d), if needed.

**Part D:** 3 questions uniformly covering Modules V & VI. Student has to answer any 2 from the 3 questions: (2 x 10) =20. Each question can have maximum of 4 sub questions (a,b,c,d), if needed.

