

Code: EC5T6FE1, EE5T6FE4, ME5T6FE1

III B.Tech - I Semester – Regular Examinations - November 2014

**OBJECT ORIENTED PROGRAMMING
THROUGH JAVA
(Common to ECE, EEE, ME)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain brief overview of Java. 4 M
- b) Explain Java buzzwords. 4 M
- c) Write a Java program to print first n prime numbers. 6 M
2. a) Differentiate string class, string buffer class and string builder. 7 M
- b) What is a constructor? What is the purpose of constructor? How many types of constructors are present in Java. Write a Java program illustrating the use of constructors. 7 M
3. a) Explain method overloading and constructor overloading in Java with an example. 7 M
- b) Explain in detail about Object class in Java with an example. 7 M

4. a) Explain about packages in Java and the accessibility of the variables in packages with respect to their access specifiers. 7 M
- b) Explain the purpose of interface in Java. Write a Java program which creates an interface with a final variable pi and an area() method and override it in two derived classes. Explain the situation with and without overriding. 7 M
5. a) Explain the purpose of multithreading. Explain how to achieve synchronization in Java with an example. 7 M
- b) Explain about the key words try, catch, throw, throws and finally. Write a Java program to create a user defined exception which handles out of funds exception in a bank. 7 M
6. a) Explain about Object serialization in Java. 7 M
- b) Explain file class and any five methods of file class. Write a Java program to copy contents of one file to another file by using file input and output streams. 7 M
7. a) List AWT components with their usages. What are the different layout managers. 7 M

b) Explain methods of Key Listener and Mouse Listener interfaces. 7 M

8. a) Explain vector class, hash table and hash map. 7 M

b) Write a program to create dynamic array using vector class. 7 M