

R07
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Code: R7411002

B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

**OBJECT ORIENTED PROGRAMMING**

(Electronics and Instrumentation Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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1. (a) Explain object oriented programming concepts. Describe a areas of applications of object oriented technology.  
(b) Explain about class hierarchies using suitable example.
2. (a) How does a string class differ from the string buffer class?  
(b) Write a program for banking transactions using a bank account class. Bank account includes the following members:  
Data members: Name of the depositor, account number, type of account, balance amount in the account.  
Methods: to assign initial values, to deposit an amount, to withdraw an amount after checking balance, to display the name and balance.  
(c) Explain bitwise logical operators using x, y (x = 0000 0000 0000 1101, y = 0000 0000 0001 1001).
3. (a) Discuss about member access rules in inheritance using suitable example.  
(b) Give an example where interface can be used to support multiple inheritances. Develop a standalone java program.  
(c) Define overriding and implement overriding concept using suitable programming example in java.
4. (a) Write short notes on java API packages.  
(b) Describe the various forms of implementing interfaces. Give programming examples for each case.  
(c) Explain about package java.io.\*.
5. (a) Define thread and explain life cycle of a thread with help of state diagram.  
(b) Define synchronization and explain how to synchronizing threads.  
(c) Explain how exception handling mechanism can be used for debugging a programming.
6. (a) Write about event sources and event classes.  
(b) Write a simple program for arithmetic calculations (+, -, \*, /) using AWT components.
7. (a) Write about Applet life cycle and its importance? What are the steps involved to run an applet?  
(b) Explain following components using java code:  
(i) JButton class (ii) Text fields (iii) Scroll panes (iv) Tables (v) JApplet.
8. (a) Differentiate between TCP/IP and UDP/IP.  
(b) What is the socket and URL? Explain socket class in java.  
(c) Write a simple program to implement client/ server environment.

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