

Course Code: SE-016

Date: 05/12/2006

Course Name: Component Based Computing

Time Allowed: 3 Hours

Instructor: Parteek Bhatia

Max. Marks: 45

Note: Attempt any five questions. You can see your evaluated answer books on 8.12.2006 at 4 P.M

- 1 a) Explain the architecture of DCOM? 4
- b) What are the benefits of Component Based Computing? How it is helpful in Software Reuse. 3
- c) Write short note on COM Object. 2
- 2 a) Explain the Interfaces of COM. 4
- b) Explain the classification of Active X Components with examples. 3
- c) Write the importance of Java API. 2
- 3 a) Compare COM+, EJB and CCM on the basis of Scalability, State Management, Ease of Development and Deployment issues. 7
- b) Write short note on container managed Persistence. 2
- 4 a) Explain the architecture of JVM with the help of demonstration of a Java program. Explain the status of pc and stack frame at different points in an appropriate java program. 5
- b) Explain the importance of Bento in OpenDoc Architecture. 3
- c) Write the command to see the byte code of a java class. 1
- 5 a) What are the problems of OpenDoc? 3
- b) Explain the life cycle of Message Driven Bean? 3
- c) Briefly explain the J2EE Architecture with diagram. 3
- 6 a) Write the steps for designing, developing and deploying of an EJB application with Net Beans. 4
- b) Write short note on CIL. 2
- c) Write the java source code for the following byte code. 3

```

Compiled from "test.java"
public class test extends java.lang.Object{
public test();
Code:
0:   aload_0
1:   invokespecial   #1; //Method java/lang/Object.<init>():()V
4:   return

public static void main(java.lang.String[]);
Code:
0:   iconst_1
1:   istore_1
2:   new           #2; //class String
5:   dup
6:   invokespecial   #3; //Method java/lang/String.<init>():()V
9:   astore_2
10:  iload_1
11:  iconst_2
12:  iren
13:  ifne          22
16:  ldc           #4; //String First
18:  astore_2
19:  goto         25
22:  ldc           #5; //String Second
24:  astore_2
25:  getstatic     #6; //Field java/lang/System.out:Ljava/io/PrintStream;
28:  aload_2
29:  invokevirtual   #7; //Method java/io/PrintStream.println:(Ljava/lang/Str
ing;)V
32:  return

```