# **END TERM EXAMINATION**

FOURTH SEMESTER [BCA], MAY - 2011

Paper Code: BCA 206 Subject: Java Programming & Website Design

Paper 1d: 20206

Time: 3 Hours Maximum Marks: 75

Note: Question 1 is compulsory, Attempt one question from each unit.

- Q. 1. (a) What is the difference between a constructor and a method in (5×5=25) Java?
  - (b) Describe an abstract class. Can abstract class be used to instantiate objects?
  - (c) What is the difference between two methods of running an applet program?
  - (d) Provide most common differences between SWING and AWT.
  - (e) What is the role of META Tag in HTML? Give One suitable example where it can be used.

# UNIT-I

Q. 2. (a) What is inheritance? Explain two benefits of inheritance, with an example of each.

(6)

(b) Write a program to implement the Fibonacci series using any control structure.

(6.5)

### OR

(a) What is a constructor? Write a Java program to explain how super class constructors are called in their subclasses.

(6)

(b) "One object in Java can be assigned as reference to another object of the same type." To explain this concept write a complete Java program and explain how a reference object works.

(6.5)

### UNIT-II

Q. 3. (a) What are separators? Describe the various separators used in Java. (6) What is type casting? Why is it required in programming? Give (6.5)

example.

# OR

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61 (9)

Explain in detail about creating and accessing packages with an example program. (6)

(6.5)

(6)

(6)

Write a program to find the number of and sum of all integers (b) greater than 100 and less than 200 that are divisible by 7.

## UNIT-III

- What is a package? Explain, with an example, how name conflicts O. 4. (a) are resolved during package import. (6.5)
  - What is an instance variable? Explain how an instance variable (b) of a class can have different value for each oject of that class. (6)

Distinguish between Input stream and reader classes and Output (a) stream and writer classes.

Describe the various forms of implementing interfaces. Give examples of Java code for each case. (6.5)

# UNIT-IV

What is multithreaded programming? Explain how threads are Q. 5. (a) created in Java. Explain the need of thread synchronization, with an example. (6.5)

> Write a program to explain how parameters are passed in an applet Program. (6)

#### OR

- (a) What is a container? Explain how components are added to a container. What is a default layout of an applet? How can you (6.5)change it?
- What is Hypertext Markup Language? Describe its role in the implementation of Java applets.