97692

B.C.A. 6th Semester (New)

Examination–November, 2016

Object Technologies & Programming Using Java

Paper–BCA-307

Time : 3 hours   *Max. Marks : 80*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Question No. 1 is **compulsory**. Attempt any **four** more questions from the remaining four units selecting at least **one** question from each Unit. All questions carry equal marks.

1. Answer the following questions briefly :

         [8×2 = 16]

 (a) Discuss the importance of Encapsulation in Java.

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7. Explain the following with examples in Java :

 (a) Types of exceptions and throwing exceptions.   [8]

 (b) Catching multiple exceptions and its uses.   [8]

Unit-IV

8. (a) What is Java thread model? How is it used and useful in Java? Discuss with examples.   [10]

 (b) Explain using instance of Native Methods in Java with suitable examples.   [6]

9. Explain the following with Java codes :

 (a) Reading and Writing files in Java   [8]

 (b) String classes and string operations in Java.   [8]

(b) List two major applications of packages.

(c) Explain primitive data types in Java with examples.

(d) Discuss static methods in Java briefly.

(e) Describe method overriding with an example.

(f) What is string buffer class in Java ?

(g) Write the use and advantages of constructors in Java.

(h) Explain use of abstract classes in Java.

Unit-I

2. (a) Define Abstraction. How is it useful and used in Java? Discuss with examples.
   [8]

(b) Discuss uses of polymorphism in Java with an example.
   [8]

3. Explain the following briefly with suitable examples in Java :

(a) Differentiate between object-oriented and procedure-oriented approaches. [8]

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(b) Advantages of various types of Inheritance in Java.
   [8]

Unit-II

4. (a) Define garbage collection? How is it useful and used in Java? Explain with an example.

(b) Explain overloading of constructors in Java with examples and Java code.
   [8]

5. Describe the following with examples in Java:

(a) Java virtual machine and its uses   [8]

(b) Polymorphism and its advantages in Java.
   [8]

Unit-III

6. (a) What are exception sub-classes? How are these used and useful in Java? Explain with examples and Java codes.
   [8]

(b) Explain uses and advantages of interface in Java with suitable examples.
   [8]

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