

**BACHELOR OF COMPUTER
APPLICATION III YEAR
EXAMINATION, 2010**

Paper — BCAD-502

JAVA PROGRAMMING

Time : 2½ Hours

Maximum Marks : 70

*(Write your Roll No. at the top immediately
on receipt of this question paper.)*

*Answer ALL questions of Section A, any SIX questions of
Section B and any THREE questions of Section C.*

SECTION - A (1 × 10 = 10)

1. Which of the following is TRUE ?
 - a) In java, an instance field declared public generates a compilation error.
 - b) Int is the name of a class available in the package java lang.
 - c) Instance variable names may only contain letters and digits.

P.T.O.

- d) A class has always a constructor (possibly automatically supplied by the Java compiler).
 - e) The more comments in a program, the faster the program runs.
2. Consider the following code snippet
- ```
string river = new String ("Columbia");
System.out.println(river.length ());
```
- What is printed ?
- a) 6
  - b) 7
  - c) 8
  - d) Columbia
  - e) river
3. A constructor
- a) must have the same name as the class it is declared within.
  - b) is used to create objects.
  - c) may be declared private
  - d) a) and b)
  - e) a), b) and c)
4. What is different between a Java applet and a Java application ?
- a) An application in general be trusted whereas an applet can't.
  - b) An applet must be executed in a browser environment.

- c) An applet is not able to access the files of the computer it runs on
  - d) a), b), and c)
  - e) None of the above.
5. Consider
- ```
public class MyClass{  
public MyClass(){/*code*/}  
//more code...  
}
```
- To instantiate MyClass, you would write ?
- a) MyClass mc = new MyClass();
 - b) MyClass mc = MyClass();
 - c) MyClass mc = MyClass;
 - d) MyClass mc = new MyClass;
 - e) It can't be done. The constructor of MyClass should be defined as public void MyClass(){/*code*/}
6. What is byte code in the context of Java ?
- a) The type of code generated by a Java compiler
 - b) The type of code generated by a Java Virtual Machine
 - c) It is another name for a Java source file
 - d) It is the code written with the instance methods of a class.
 - e) It is another name for comments written within a program.

7. You read the following statement in a Java program that compiles and Executes.

```
submarine.dive(depth);
```

What can you say for sure ?

- a) depth must be a int
 - b) dive must be a method.
 - c) dive must be the name of an instance field.
 - d) submarine must be the name of a class
 - e) submarine must be a method.
8. What is garbage collection in the context of Java ?
- a) The operating system periodically deletes all of the Java files available on the system.
 - b) Any package imported in a program and not used is automatically deleted.
 - c) When all references to an object are gone, the memory used by the object is automatically reclaimed.
 - d) The JVM checks the output of any Java program and deletes anything that doesn't make sense.
 - e) Janitors working for Sun Micro Systems are required to throw away any Microsoft documentation found in the employees' offices.

9. Which of the following may be part of a class definition:

- a) instance variables
- b) instance methods
- c) constructors
- d) all of the above
- e) none of the above

10. What is the difference between a TextArea and a TextField

- a) A TextArea can handle multiple lines of text
- b) A TextArea can be used for output
- c) TextArea is not a class
- d) TextAreas are used for displaying graphics

SECTION - B (6 × 5 = 30)

11. Explain the points of differences between Java and C++

12. Explain the different types of access specifiers available in JAVA.

13. What are interfaces ? Explain with the help of a program.

14. What are exceptions ? Name any five types of exceptions.
15. Explain how events are handled in Java ?
16. Write a program in Java to find the biggest of two numbers.
17. Write a program to print Fibonacci series upto 'n' terms.
18. Write a program to find whether a given number is even or odd.

SECTION - C (3 × 10 = 30)

19. Explain the difference between an Applet and Application.
20. What do you mean by method overriding? Explain with the help of a program.
21. Explain the life cycle of an Applet.
22. What are threads ? Explain the ways in which we can create a thread.
23. How can you connect a Java program with a Database?