

**Total No. of Questions: 07**

**BCA (2011 & Onward) (Sem. – 5)**

**PROGRAMMING IN JAVA**

**M Code: 70629**

**Subject Code: BSBC-502**

**Paper ID: [B1155]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS TO CANDIDATES:**

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

**SECTION A**

1. Briefly answer the following:

- a) Differentiate between Java and C++.
- b) What do you mean by constructor overloading?
- c) What are Final variables and methods?
- d) What are Jagged arrays?
- e) What are Vectors in Java? What is its purpose?
- f) Explain the term polymorphism?
- g) What is an abstract class?
- h) Why Java is called platform independent?
- i) What is Java virtual machine?
- j) What is a Package? What is the use of Packages in Java?

### SECTION B

2. What is object-oriented programming? Discuss the basic concepts of object-oriented programming.
3. What are the various looping statements available in Java? Discuss any one with suitable example.
4. Create a Date class in Java having day, month and year data members. Create constructors for initializing data members, functions for validating date, getting values of data members and displaying the date.
5. Define an Applet. How is an Applet different from an application? Describe the lifecycle of an applet.
6. Explain with examples, the various graphics methods supported by AWT. How color of an object can be changed?
7. Describe the Delegation Event Model. What are the Event Sources and Event Listeners? Explain with an example Java code, how various mouse events are handled?