Roll No. Total No. of Pages : 02

Total No. of Questions: 09

BMCI (2014 & Onwards) (Sem.-4)
PROGRAMMING IN JAVA
Subject Code : BSBC-502

M.Code: 72805

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 FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

## **SECTION-A**

- 1. Answer briefly:
  - a) Differentiate between Java and C++.
  - b) What do you mean by constructor overloading?
  - c) What are Final variables and methods?
  - d) What are Zagged 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 the use of Graphics class in Java?

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## **SECTION-B**

- 2. Discuss the structure of a typical Java program with an example.
- 3. What is an Interface in Java? How is multiple inheritances using interfaces implemented in Java?
- What is an exception? How is it different from an error?
- Write a recursive program in Java to print calculates the factorial of a given number.
- 6. Explain Action Listener in Java with an example.

## **SECTION-C**

- 7. What are the various data types available in Java? Discuss each with an example. Create an
- 8. applet that receives two numeric values as input from the user and then displays the sum, difference and product of these on the screen. Write a sample HTML page to include this applet.
- 9. What is a Stream? Describe the major tasks of input and output stream classes. Discuss and distinguish between them.

NOTE: Disclosure of identity by writing mobile number or making passing re quest on any page of Answer sheet will lead to UMC against the Student.

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