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?

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?

4. What is an exception? How is it different from an error?

5. 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.

8. Create an 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 request on any page of Answer sheet will lead to UMC against the Student.

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