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Total No. of Questions : 07

B.Sc. (CS) (2013 & Onwards) (Sem.-5)

PROGRAMMING IN JAVA

Subject Code : BCS-505

Paper ID : [72578]

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

Q1. Answer briefly :

- a) When do we use protected access specifier? Explain with an example.
- b) What are command line arguments in Java?
- c) Explain the term polymorphism. How does Java support polymorphism?
- d) What are abstract classes in Java? How do they differ from interfaces?
- e) What is Vector class in Java? How is it different from arrays?
- f) What is finally block in Java? How many finally blocks can be associated with try block?
- g) What are system packages in Java?
- h) How exceptions are used for debugging?
- i) What is an Applet? How is an applet different from applications?
- j) What are the methods provided by Graphics class in Java?

SECTION-B

- Q2. Explain how Java is different from C and C++. Also discuss the evolution of Java in brief.
- Q3. What are the various types of operators available in Java? Discuss with suitable examples.
- Q4. 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.
- Q5. What is an Exception? What are the types of exceptions? Discuss in detail exception handling in Java.
- Q6. Describe the different stages in the lifecycle of an applet. Distinguish between init() and start() methods.
- Q7. Discuss in detail how to get data from a user in a Java program. Explain with examples the various methods for input.