

Roll No. 8479

Total No. of Pages : 2

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PC 2574-N

U-1/2114

JAVA PROGRAMMING-314

Semester-V

Time Allowed : Three Hours]

[Maximum Marks : 80

Note:- Attempt *five* questions in all by selecting at least *one* question each from the Sections A, B and C. Section D is compulsory. Each question in Sections A, B and C carries 15 marks. Question in Section D carries 20 marks.

SECTION—A

✓ (a) How Java is different from traditional procedural programming languages like C ? 4

(b) What are the various data types available in Java ? Briefly discuss each. 4

✓ 2. What are the various looping constructs used in a Java Program ? Discuss each with suitable example. 10

SECTION-B

✓ 3. Give the reason why main () method in Java is defined as public and static and void ? Also explain why name of the class containing main () is same as name of file in which it is stored ? 3

4. Create a class in Java for performing search on an array of n numbers.

SECTION-C

5. What is an Exception ? What are the types of exceptions ? Discuss in detail exception handling in Java.
6. (a) Explain with an example how a thread can be created using Thread Class.
(b) State and explain the methods used for thread synchronization.

SECTION-D

7. Write brief notes on the following :

- ~~(i)~~ Briefly explain the associativity rules.
- (ii) Explain the term polymorphism. How does Java support polymorphism ?
- (iii) What are abstract classes in Java ? How do they differ from interfaces ?
- ~~(iv)~~ What is a Constructor and how is it different from a method ?
- ~~(v)~~ Discuss method overloading in Java.
- (vi) What is Vector class in Java ? How is it different from arrays ?
- (vii) What is finally block in Java ? How many finally blocks can be associated with a try block ?
- (viii) Give any two reasons for non-execution of a thread.
- (ix) What are the standard input and output streams in Java ?
- (x) What are command line arguments in Java ?