

Total No. of printed pages = 6

END SEMESTER EXAMINATION – 2021

Semester : 5th (New)

Subject Code : Co-505

JAVA PROGRAMMING

Full Marks – 70

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Instructions :

1. *All* questions of PART – A are compulsory.
2. Answer *any five* questions from PART – B.

PART – A

Marks – 25

1. Fill up the blanks : 1×10=10

(a) JVM stands for Java _____.

(b) Java do not support _____ inheritance.

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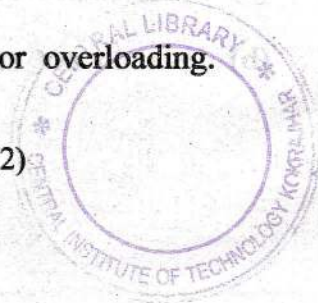
- (c) Output of java compiler is called _____.
- (d) The _____ statement is used to include another java package in a java program.
- (e) _____ command is used to invoke java interpreter.
- (f) The mechanism of binding data with the code is known as _____.
- (g) _____ is the function that returns a character against the character position in a string.
- (h) The ability to take more than one form is called _____.
- (i) _____ is a special type of method in Java.
- (j) The multiple inheritance is implemented in Java by using _____.

2. Write true or false : 1×10=10

- (a) A package is a collection of classes and interfaces.
- (b) Java supports operator overloading.

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(2)



- (c) Java supports multithreaded programming.
- (d) Java does not provide destructor.
- (e) Instance variables are declared outside a class.
- (f) The vector class is contained in java.util package.
- (g) It is not possible to define, a method in the sub-class that has the same name, same arguments and the same return type.
- (h) The full form of API is Application Programming Interface.
- (i) JDK stands for Java Definition Kit.
- (j) The Java constructors cannot be overloaded.

3. Choose the correct answer : 1×5=5

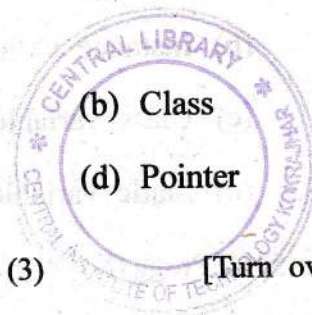
(i) Which one of the following is used to create an object ?

- (a) Array
- (b) Class
- (c) Structure
- (d) Pointer

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(3)

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(ii) Which of the following is used to allocate memory to an array variable in Java ?

- (a) malloc (b) calloc
(c) new malloc (d) new

(iii) Which of the following data type is returned by a relational operator ?

- (a) float (b) int
(c) boolean (d) double

(iv) Which of the following is not a Java keyboard ?

- (a) double (b) switch
(c) then (d) instanceof

(v) Which of the following is created while we create an object using new ?

- (a) Local variable
(b) Instance variable
(c) Class variable
(d) Static variable.



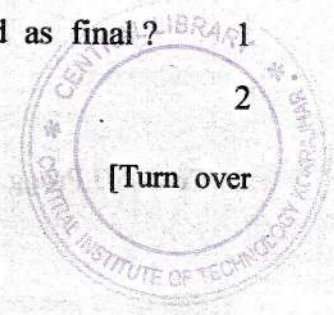
PART – B

Marks – 45

4. (a) Give any four differences between C and Java. 4
- (b) Explain how Java is platform independent. 3
- (c) What is an applet program ? 2
5. (a) Differentiate between object and class. 2
- (b) Define Encapsulation. 2
- (c) Write a Java program to read the age of 10 students. Find their average age. 5
6. (a) Describe hierarchical inheritance with one example. 5
- (b) Explain any four methods of String class. 4
7. (a) Explain static variables and methods with example. 4
- (b) What is an abstract class ? 2
- (c) When a class be declared as final ? 1
- (d) Define multithreading. 2

85/Co-505/J.Progg.(N) (5)

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8. Write a Java program to create a class "Student" with data members : 9

rollno, name, marks in maths, eng, science, total, result and division.

Create methods getdata(), calculate() and display().

Using getdata() read rollno, name, marks in maths, eng, science of 5 objects.

Find total, result and division using calculate() and display everything by using display().

9. Write short notes on any *three* : 3×3=9

- (a) Polymorphism (b) Interface
(c) Package (d) Exception handling.

