2021

Time : 3 hours
Full Marks: 60
Candidates are required to give their answers in
Their own words as far as practicable.
The figures in the margin indicate full marks.
Answer from all the Groups as directed.

Group – A
(Compulsory)

(1) Choose the correct answer for the following: X10 = 10

(A) Which provides runtime environment for java byte code to be executed?

(I) JDK   (II) JVM   (III) JRE   (IV) JAVAC

(B) The \u0021 article referred to as a

(I) Unicode escape sequence   (II) Octal escape   (III) Hexadecimal   (IV) Line feed

(C) _____ is used to find and fix bugs in the Java programs.

(I) JVM   (II) JRE   (III) JDK   (IV) JDB

(D) What is the return type of the hashCode() method in the Object class?

(I) Object   (II) int   (III) long   (IV) void

(E) Which of the following is a valid long literal?

(I) ABH8097   (II) L990023   (III) 904423   (IV) 0xnf021

(F) What does the expression float a = 35 / 0 return?

(I) 0   (II) Not a Number   (III) Infinity   (IV) Run time exceptions

(G) Which of the following tool is used to generate API documentation in HTML format from doc comments in source code?

(I) javap tool   (II) javaw command   (III) Javadoc tool   (IV) avah command

(H) Which method of the Class. Class is used to determine the name of a class represented by the class object as a String?

   (I)getClass()   (II)intern()   (III)getName()   (IV)toString(

(I) In which process, a local variable has the same name as one of the instance variables?

   (I)Serialization   (II)Variable Shadowing (III)Abstraction   (IV)Multi-threading

(J) Which package contains the Random class?

   (I)java.util package   (II)java.lang package

   (III)java.awt package   (IV)java.io package

2. When the constructor of a class is invoked? Explain with example IX5=5

Group-B

Answer any three questions of the following: 15x3 =45

(3) (I) what are the various access specifiers for Java classes? Explain briefly.
   (II) Explain Feature of Java with Example.
(4) (I) what are Loops in Java? What are three types of loops?
   (II) Write a program in java for greatest of three numbers.
   (III)What the difference is between continue and break statement? Explain with example.
(5)(I) Write a program to allow a user to cast his vote i he is a Indian citizen and his age is 18 or above years.
   (II) How can you generate random numbers in Java? Explain with Example
(6) (I)Can a class be a super class and a sub-class at the same time? Give example.
   (II) What's the difference between comparison done by equals method and == operator? Explain with example.
(7) What is Applet? Explain types of applet. Write a program to give example of Applet