2020

Full Marks : 70

Time : 3 hours

The figures in the right-hand margin indicate marks

Answer from **all** the Parts as directed

Part—A

(Objective Type Questions)

1. Choose the correct answer in each of the following :   5×1

   (a) Which declaration of the main method below would allow a class to be started as a standalone program?

   (i) public static int main (char args[ ])

   (ii) public static int main (string args [ ])

   (iii) static public void MAIN (string arg[ ])

   (iv) static public void main (string...args)

(b) Which is a reserved word in the Java Programming Language?

    (i) Method   (ii) Native

    (iii) Pointer   (iv) Reference

(c) Which two statements are equivalent?

    (A) $16 * 4$ (B) $16 >> 2$

    (C) $16 / 2 \wedge 2$ (D) $16 >>> 2$

    (i) (A) and (B)   (ii) (B) and (D)

    (iii) (C) and (D)   (iv) (A) and (C)

(d) What allows the programme to destroy an object X ?

    (i) X.delete( )

    (ii) X.finalize

    (iii) Runtime.get Runtime( ).gc( )

    (iv) only the garbage collection system can destroy an object

(e) What is the return type of constructors?

    (i) int

    (ii) float

    (iii) void

    (iv) No return type

2. Fill in the blanks with an appropriate word :   5×1

    (a) ——— keyword is used by method to refer to the object that invoked it.

    (b) ——— process allow to define two or more methods within same class that have same name but different parameters declaration.

    (c) A keyword ——— is used to prevent content of a variable from being modified.

    (d) A keyword ——— can be used in subclass to call the constructor of superclass.

    (e) A keyword ——— is used by a class to use an interface defined previously.

Part—B

(Short Answer Type Questions)

Answer *any four* questions in about 200 words each :   4×5

3. What are the differences among JDK, JRE and JUM ?

(4)

4. Why and how Java eliminated the concept of pointers?

5. What are the differences between error and exception?

6. What is this statement in Java? Explain with an example.

7. What are the differences between awt and swing?

8. Can we overload or override static method in Java?

Part—C

(Long Answer Type Questions)

Answer *any four* questions in about *500* words each : 4×10

9. What are the differences between abstract class and interface?

10. What are the uses of super keyword? Explain with an example.

11. What is covariant return type in Java? Explain with an example.

(5)

12. What are the uses of final keyword in Java?

13. How are the exceptions handled in Java by user? Explain with an example.

14. What are the steps to connect to the database in Java?

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