

B.C.A. Part-II (Semester—III) (CBCS) Examination**3 BCA 2****CORE JAVA PROGRAMMING**

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Question No. 1 is compulsory.

(3) Assume suitable data wherever necessary.

(4) Illustrate your answer wherever necessary with the help of neat sketches.

1. (A) Choose the correct alternatives from the following :

(1) Which of the following is not a Java feature ?

(a) Dynamic

(b) Portable

(c) Use of Pointers

(d) Object-oriented

(2) _____ is used to find and fix bugs in the Java Programs.

(a) JVM

(b) JRE

(c) JDK

(d) JDB

(3) Who invented Java Programming ?

(a) Guido Van Rossum

(b) James Gosling

(c) Dennis Ritchie

(d) Bjame Stroustrup

(4) Which statement is true about Java ?

(a) Java is a sequence-dependent programming language

(b) Java is a code-dependent programming language

(c) Java is a platform-dependent programming language

(d) Java is a platform-independent programming language

(5) Which component is used to compile, debug and execute the Java Programs ?

(a) JRE

(b) JIT

(c) JDK

(d) JVM

- (6) Which of these cannot be used for a variable name in Java ?
- (a) Identifier and keyword (b) Identifier
(c) Keyword (d) None of the mentioned

(7) What is the extension of Java Code Files ?

- (a) .js (b) .txt
(c) .class (d) .java

(8) What will be the output of the following Java Code ?

- ```
1. Class increment {
2. Public static void main (string args [])
3. {
4. int g = 3;
5. System. Out. Print (++g *8);
6. }
7. }
```

- (a) 32                                                (b) 33  
(c) 24                                                (d) 25

(9) Which of the following is not an OOPs concept in Java ?

- (a) Polymorphism                                (b) Inheritance  
(c) Compilation                                 (d) Encapsulation

(10) What is the extension of compiled Java classes ?

- (a) .txt                                                (b) .js  
(c) .class                                         (d) .java

10×1=10

(B) Fill in the blanks :

- (1) A SWITCH case statement in Java is a \_\_\_\_\_ control statement.  
(2) In Java, a constructor with no parameters or no arguments is called \_\_\_\_\_ constructor.  
(3) Creating an object from a class is also called \_\_\_\_\_.  
(4) In Java, the keyword used to declare a class is \_\_\_\_\_.  
(5) In Java language, an array index starts with \_\_\_\_\_. 5

(C) Answer the following questions in **one** sentence each :

- (1) What is array in Java ?
  - (2) What is user-defined constructor or parameterized constructor ?
  - (3) What does API stand for ?
  - (4) Which keyword is used to inherit constants and methods of an interface in Java Class ?
  - (5) What is a Package in Java ? 5
2. (A) What is Java ? Explain the features of Java. 8
- (B) Write a short note on Java Virtual Machine. 4

**OR**

3. (A) What is an Array ? How is One-Dimensional Array declared, created and Initialized in Java ? 8
- (B) Explain the following terms :
- (i) Constant in Java
  - (ii) Variables in Java. 4
4. (A) Explain in detail the two methods for searching string with suitable example. 8
- (B) What is the process of importing packages ? Explain with an example. 4

**OR**

5. (A) What is an exception ? State and explain the need to handle exceptions with an example. 8
- (B) State and explain the life cycle of a thread. 4
6. (A) What is thread priority ? How can we change the priority of thread ? Explain in detail. 8
- (B) Explain exception handling fundamentals in detail. 4

**OR**

7. (A) What is an Applet ? Explain in detail with an example. 8
- (B) Explain in detail the system package in Java. 4
8. (A) Explain the interface definition and its implementation with an example. 8
- (B) Explain the passing of the parameter to the applet concept. 4

**OR**

- |                                                                      |   |
|----------------------------------------------------------------------|---|
| 9. (A) Explain the exception term in detail with an example.         | 8 |
| (B) Explain the finally statement in detail.                         | 4 |
| 10. (A) What is a Java API Package ? Explain in detail the Java API. | 8 |
| (B) Explain the thread exception in detail.                          | 4 |

**OR**

- |                                                                         |   |
|-------------------------------------------------------------------------|---|
| 11. (A) Explain in detail the multiple catch statement with an example. | 8 |
| (B) Explain the applet creation with an example.                        | 4 |