Q.P. Code – 68501

Fifth Semester B.C.A. Degree Examination, October/November 2019

(CBCS Scheme)

Computer Science

CORE JAVA

Time : 3 Hours] *[Max. Marks : 90*

Instructions to Candidates : Answers ALL the Sections.

SECTION – A

I. Answer any **TEN** questions : **(10 × 1 = 10)**

1. Define the term byte code.
2. Write the difference between length and length ( ) functions.
3. Name two jump statements and their use.
4. What is the result stored in x, after evaluating the following expression int $x = 5$; $x = x + + * 2 + 3 * - - x$.
5. What is nesting of methods?
6. Name the wrapper class of char type and Boolean type.
7. What is an interface?
8. Name the package that contains scanner class.
9. What is an exception?
10. Define encapsulation.
11. What is an applet?
12. What is an event handling in applets?

SECTION – B

II. Answer any **FIVE** questions : **(5 × 3 = 15)**

13. Explain the command line arguments with an example.

14. What is meant by type conversion? How is implicit conversion differs from explicit conversion?

15. Differentiate between static and non-static data members.

16. Mention the characteristics of constructor and destructor.

17. Explain the difference between entry 'controlled loop' and exit controlled loop with suitable example.

18. Write a program to calculate area and perimeter of a rectangle using 'super' keyword.

19. Explain final keyword.

SECTION – C

III. Answer any **SIX** questions : **(6 × 5 = 30)**

20. Explain features of Java.

21. Write a program to input 15 integer elements in an array and sort them in ascending order using the bubble sort technique.

22. Differentiate between private and protected visibility modifiers.

23. What is meant by data abstraction? Explain with an example.

24. Explain the concept of constructor overloading with an example.

25. Write a program in Java for string handling which performs the following :
    (a) Reverse the contents of a string given on console and
    (b) Converts the resultant string in upper case.

26. Explain life cycle of applets.

27. Explain any five graphic methods in applet.

SECTION – D

IV. Answer any **FIVE** questions : **(5 × 7 = 35)**

28. Write a Java program for implementation of relational, logical and conditional operator in Java.

29. Explain try-catch and finally block with programming example.

30. Explain creating user defined package with example and explain naming convention of package.

31. What is inheritance and explain types of inheritance with example.

32. Explain life cycle of a thread. Explain types of error occur in exception.

33. Write Java applet program to illustrate the properties of the font.

34. How to create a frame window? Explain with an example.
