STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2019-2020 and thereafter)

SUBJECT CODE: 19CS/MC/OP33

B.C.A. DEGREE EXAMINATION – NOVEMBER 2022
THIRD SEMESTER

COURSE   : MAJOR CORE
PAPER   : ESSENTIALS OF OBJECT ORIENTED PROGRAMMING
TIME   : 3 HOURS   MAX. MARKS: 100

SECTION - A
ANSWER ALL THE QUESTIONS   **(20 X 1=20)**

Choose the correct answer

1. What type of language is Java?
    a) Compiled   b) Interpreted   c) Assembled   d) Both (a) and (b)

2. The concept of having methods with same name and different parameters is called as
    _____.
    a) Overloading   b) Overriding   c) Inheritance   d) Polymorphism

3. The keyword used in Java for inheritance is _____.
    a) implements   b) inherit   c) abstract   d) extends

4. The keyword 'final' can be used along with _____.
    a) variable   b) method   c) class   d) all of the mentioned

5. Package is a technique to achieve _____.
    a) abstraction   b) encapsulation   c) hiding   d) morphing

6. The base class for exception handling in java is _____
    a) Throws   b) Exception   c) Throwable   d) Error

7. Which of the following does not require type casting?
    a) Objects   b) Classes   c) Generic   d) Exception

8. Default priority of a thread is _____.
    a) MIN_PRIORITY   b) MAX_PRIORITY
    c) NORM_PRIORITY   d) OTHER_PRIORITY

9. Which of the following classes allow the user to convert primitive type to objects.
    a) Throwable   b) Collection   c) Wrapper   d) list

10. The utility classes are provided by _____ package class.
    a) java.util   b) java.util. calendar
    c) java.util.random   d) java.util.date

Fill in the blanks :

11. JVM converts _____code into machine code.
12. _____class is used to get user inputs.
13. Interface is an _____ class.
14. Java does not support _____ inheritance.
15. _____environmental variable is used to locate and load the .class files.
16. The two types of Packages are _____ & _____
17. Exception handling is used to handle _____errors.
18. Thread is a _____ process.
19. The _____method is used to convert an Integer object into int data type.
20. _____ constructor is used to initialize the object with current date and time.

SECTION - B

Answer all the questions: (5 X 2 = 10)

21. Define Object.
22. What is a protected variable?
23. What is a package?
24. Give two advantages of multithreading.
25. What is a collection framework?

SECTION - C

Answer any eight of the following: (8 X 5 = 40)

26. Illustrate different types of constructors with suitable examples.
27. Distinguish between method overloading and method overriding.
28. Can an abstract class include a non-abstract method? Justify your answer.
29. Discuss the role of interfaces in Java.
30. Write a package "user" containing a method "entry" to welcome the user and print the welcome message in another program by importing the package user.
31. Write a note on exception handling.
32. Explain the two methods used to create threads.
33. Illustrate generic classes with a suitable example.
34. Write any five string handling functions.
35. What are utility classes? Write a note on the Array list.

SECTION - D

Answer any three of the following: (3 X 10 = 30)

36. Explain the features of Java.
37. Discuss the types of inheritance in Java.
38. Write a note on defining and accessing packages.
39. Describe the life cycle of a thread.
40. Discuss in detail about the following interfaces.
    a) Iterator   b) Collection   c) List

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