BCS306A SIMP Questions -22SCHEME

BY TIE REVIEW TEAM

Module-1 to 5 SIMP

1. Explain the three object oriented programming principles
2. Describe the meaning of each of the keywords in "public static void main" and write an example program.
3. Explain different lexical issues in JAVA.
4. Write short notes on - 4M*5Q
   (i)Primitive data types
   (ii)different types of arrays with simple program
   (iii) different promotion rules in JAVA
   (iv)Type Inference with Local Variables
   (v) Int() to Float() Type conversion and casting
5. Explain the various selection and iteration statements in Java with syntax and a programming example
6. Explain all the Jump statements in Java with Syntax and Programming Example

7. What are constructors? Explain two types of constructors with examples.
8. Explain static variables and static methods in JAVA.
9. Explain memory allocation and use of garbage collector in JAVA
10. Explain
    (i)Nested and inner classes
    (ii)call by value and call by reference with an example program.
11. Distinguish between method overloading and method overriding.
12. How do you overload a constructor? Explain with a program.
13. Define recursion. Write a recursive program to find nth Fibonacci number.
14. What are various access specifiers in Java? List out the behavior of each of them.

15. What is single and multilevel inheritance? Explain with suitable example, Explain the use of Interface in MLI in Java
16. What is meant by interface? State its need and write syntax and features of interface.
17. Explain inheritance and polymorphism features of Java and write a single program to implement inheritance and polymorphism in java.
18. Explain method overriding with suitable examples.
19. What is the importance of super keywords in inheritance? Illustrate a suitable example.
20. Explain the concept of nesting of interfaces.

21. What is abstract class and abstract method? Explain with example
22. What are Packages? How do we create them? What are the ways to access packages from another package? Explain with examples.
23. Write short notes on (i) import a package (ii)access protection in Java.
24. Define an exception. What are the key terms used in exception handling? Explain.
25. Write a program which contains one method which will throw an Illegal Access Exception and use proper exception handles so that exceptions should be printed.
26. Write a note on: Java's built-in exception and Uncaught Exceptions
27. How do you create your own exception class? Explain with a program.

28. Define **4 to 5M each**
    (i)Enumerations.
    (ii) values() and value Of() methods
    (iii)ordinal() and compare To()
    (iv) wrapper classes
    (v) auto boxing /unboxing
29. What is multithreading? Write a program to create multiple threads in JAVA
30. What do you mean by thread? Explain the different ways of creating threads.
31. What is the need of synchronization? Explain with an example how synchronization is implemented in JAVA.
32. What is meant by thread priority? How to assign and get the thread priority?
33. Explain how to achieve suspending, resuming and stopping threads with an example program.

Note : Please do make sure to practice programs