Question Bank
Module 1
OOPS using Java (21CIC34)
Semester:3rd

1. Write a note on creation of java. (CO1)
2. Is Java an enhanced version of C++? Justify your answer. (CO1)
3. How Java changed the Internet? (CO1)
4. Write a note on Java's magic : Bytecodes (CO1)
5. Explain how to build and run a java application. (CO1)
6. Explain Java's buzzwords or salient features of Java (CO1)
7. Explain how "compile once and run anywhere" is implemented in java. (CO1)
8. Java is a robust language. Please justify. (CO1)
9. Write a note on Java Development Kit (JDK). (CO1)
10. What is abstraction? Explain with an example. (CO1)
11. Discuss the three OOP principles. (CO1)
12. List the different types of inheritance. (CO1)
13. What is polymorphism? Explain the two different types of it. (CO1)
14. What do you mean by inheritance? Give an example. (CO1)
15. What are literals? Give examples. (CO1)
16. What is a variable? How do you declare and use it, explain with an example. (CO1)
17. Explain the different data types available in java. (CO1)
18. List the default values of the data types available in java (CO1)
19. Write a Java program to check Leap Year or Not (CO1)
20. What is type casting? Explain with examples. (CO1)
21. Differentiate Implicit and explicit type casting with examples. (CO1)
22. What do you mean by automatic type promotion? Explain with example. (CO1)
23. What is an array? How do you define and use an array? Explain with example. (CO1)
24. Write a java program to read and print a matrix (CO1)
25. Write a java program to print the matrix as follows (CO1)

    1 1
    1 1 1
26. Write a java program to print a unit matrix as follows (CO1)

    1 0 0
    0   1 0
    1   0 1
27. Mention the different arithmetic operators available in java. (CO1)
28. Explain the increment and decrement operators in java with examples. (CO1)

29. Write a java program to generate a random number between 1 to 6 (CO1)

30. With example, explain the working of >> and << operators. (CO1)

31. Explain unsigned right shift (>>>) operator with example. (CO1)

32. Discuss and compare the >> and >>> operators (CO1)

33. Explain short circuit logical operators with examples. (CO1)

34. Explain the Bitwise OR, Bitwise AND and Bitwise XOR with examples. (CO1)

35. Discuss the ternary (?) operator with example. (CO1)

36. What are the values of d, e and f?

```
class test2 {
public static void main(String arg[])
{
        int a=32;
        int b=16;
        int c=-1;
        int d=a>>3; int e=c>>24; int f=c>>>24;
        System.out.println("d="+d);
        System.out.println("e="+e);
        System.out.println("f="+f);
}}   ( CO1)
```

37. What are the values of c, d and e? (CO1)

```
class test1
{public static void main(String arg[])
 {
        int a=20;int b=10;
        int c=++a + a++ + --b +b;
        int d= a++ + b + b++ + a;
        int e=--b + --a + a + b;
        System.out.println("c="+c);
        System.out.println("d="+d);
        System.out.println("e="+e);
}
}
```

38. Compare and explain the above two snippets.(CO1)
```
   int num, den;
 if(den!=0 &&num|den>0){  }
 if(den!=0 &num|den==0) { }
```
Compare and explain the above two snippets.

39. class test {
   public static void main(String arg[])

```
{       int a;
            for(int a=0; a<3;a++){
            int b=-1;
            System.out.println("b="+b);
            b=50;
            System.out.println("b="+b);
            }
    }}
```

What is the output of the above code? If you insert another int b; outside the for loop, what is the output? (CO1)

40. Discuss the labeled break and continue statements. (CO1)

41. In java, break statement can be used as a civilized form of goto. Justify the statement with example. (CO1)

42. Explain the for each version of the for loop with example. (CO1)

43. Write a java program to search an element in the array using for each loop. (CO1)

44. Write a java program to find the sum of the elements of the array using for each loop. (CO1)

45. Distinguish while and do-while statements with example. (CO1)

46. Write a java program to check a number is prime or not using for loop. (CO1)

47. Write a java a program to display Fibonacci Series based on the user input using while loop(CO1)

48. Write a java a program to find factorial using while loop(CO1)

49. Explain nested if statements with example. (CO1)

50. Explain the switch statement with example. (CO1)

51. Discuss if-else-if ladder with an example. (CO1)

52. What is the output of the following? (CO1)

```
classMainclass
{
  Public static void main(String args[])
  {
     int a[][]={{4,3},{2,1}};
     inti ,j;
     for(i=1;i>-1;i--)
     {
            for(j=1;j>-1;j--)
            {
            System.out.println(a[i][j]);
            }
     }
  }
}
```

53. What is the output of the following? (CO1)
```
classMainClass
{public static void main (String arg[])
{
System.out.print('h'+'i');
}
          }
```
54. Discuss the output of the following. (CO1)
```
    class Test {
    public static void main(String[] args)
       {
    for (int i = 0; i< 10; i++)
    int x = 10;
       }
    }
```
55. Discuss the ouput of the following(CO1)
```
Class MainClass
{public static void main (String arg[])
{int i;
for(i=1; 1; i++)
{
System.out.print(i);
break;
}
System.out.println();
}
}
```