CBCS SCHEME

18CS653

Sixth Semester B.E. Degree Examination, June/July 2024
Programming in Java

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1 a. What is object oriented programming? Explain the main features of OOP.   (08 Marks)
  b. Explain different access specifies in Java.   (04 Marks)
  c. Discuss the scope and lifetime of variables and also demonstrate with Java program.
                                                                                      (08 Marks)

OR

2 a. Explain primitive data types in Java with examples.   (08 Marks)
  b. What is type casting? Explain explicit type casting with an example.   (04 Marks)
  c. Write a Java program to get the following output.

0			
1	2		
3	4	5	
6	7	8	9

                                                                                      (08 Marks)

Module-2

3 a. Explain the following operators with example.
     i) <<   ii) >>>   iii) &&   iv) ? :   (08 Marks)
  b. Explain the switch statement in Java with an example.   (04 Marks)
  c. Demonstrates the use of break statement in the following manner :
     i) To exit a loop   ii) Form of Goto.   (08 Marks)

OR

4 a. Explain the following iteration statements :
     i) while   ii) do – while.   (08 Marks)
  b. If x = 42, y = 42.25, write a Java program to find : i) x mod 10   ii) y mod 10.   (04 Marks)
  c. Demonstrate the Boolean logical operators with a java program.   (08 Marks)

Module-3

5 a. What is constructor? Explain parameterized constructor with an example.   (08 Marks)
  b. Explain the following :
     i) Garbage collection in Java
     ii) Finalize ( ) method.   (04 Marks)
  c. Explain a stack class with an example.   (08 Marks)

OR

6 a. What is method overloading? Demonstrate the method overloading with Java program.
                                                                                      (08 Marks)
  b. Discuss the need for overriding methods.   (04 Marks)
  c. Explain how the keyword final is used to prevent overriding.   (08 Marks)

Module-4

7 a. Define a package in Java. Explain how access protection is provided with an example.
(10 Marks)

b. Define an interface. Demonstrate with a java program how the interface can be extended.
(10 Marks)

OR

8 a. List the difference between abstract class and interface. Write a Java program to implement interface.
(10 Marks)

b. Explain the following exception handling keywords :
i) try   ii) catch   iii) throw.
(10 Marks)

Module-5

9 a. What an enum? Write a Java program to demonstrate values( ) and value of ( ). **(10 Marks)**

b. What are type wrappers? Write a Java program to demonstrate the concept of type wrappers.
(10 Marks)

OR

10 a. Explain the concept of reading the console input in Java and also demonstrate with Java program to read the characters.
(10 Marks)

b. What is an Applet? Demonstrate the development of SimpleApplet.
(10 Marks)

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