Department of MCA

Class: I MCA – II SEM	**Academic Year:** 2023-24
Course Title: OBJECT ORIENTED PROGRAMMING THROUGH JAVA	
Faculty: Ms. P. Lalitha Sagari	**Branch:** MCA

Model Question Bank

Module – I: Basic concepts of java

S.NO	Question	CO	BTL	Marks
1	Explain Java buzz words in java.	1	2	12
2	a) Explain the History and Evolution of Java. b) Explain JVM Architecture.	1	2	6 6
3	a) Define variable and how to declare, initialize and access variable? b) What is scope and life time of a variable in java with an example program?	1	2	6 6
4	Illustrate the use of different data types used in java with an example.	1	2	12
5	Explain different types operators used in java.	1	2	12
6	Explain the Structure of Java program.	1	2	12
7	Explain the evaluation of expression and operator precedence with example.	1	2	12
8	Describe the different types of conditional statements with an example for each.	1	2	12
9	Write a java program to find the given number is prime or not.	1	3	12
10	Explain Iterative control statements in java with an example	1	3	12
11	What is type casting and explain different types of type casting with an example program?	1	3	12
12	Explain the working of Command Line Arguments in java.	1	3	12

Module – II: Arrays and Strings

S.NO	Question	CO	BTL	Marks
1	Define an array. Explain how to declare, create and initialize an array with example program.	2	2	12
2	Write a program to find the largest and smallest numbers from the given set of integers using arrays.	2	2	12
3	Write a java program to implement matrix multiplication with all validations.	2	2	12
4	Write a java program to implement a) Matrix addition b) Matrix subtraction c) Matrix transpose	2	3	12
5	What is var-arg methods and explain with example?	2	2	12
6	a) What is the need of Wrapper Class in java? Write a program for implementation of the wrapper class in Java?	2	2	12
7	a) Define a string class. b) Describe string methods with an example for each one.	2	2	2 10
8	Describe StringBuffer methods and StringBuilder methods	2	2	12
9	Write a program to sort the given strings in the ascending order using arrays	2	2	12
10	Write a java program to check the given string is palindrome or not.	2	3	12
11	Write a java program to delete the number of characters from the string.	2	2	12
12	Write a java program to implement 2-D array given below: 	1				
2	3			
4	5	6		
7	8	9	10	
11	12	13	14	15		2	3	12

Module – III: OOPs Concepts

S.NO	Question	CO	BTL	Marks
1	Explain the basic concepts of OOPS?	3	2	12
2	a) What is a method? Explain types of methods in java. b) Explain how to declare and access methods in java.	3	2	6 6
3	What is Constructor? Explain types of Constructors with example?	3	3	12
4	Explain the following with an example. 1. this keyword 2. super keyword 3. final keyword	3	2	4 4 4
5	Demonstrate the types of inheritance with example?	3	2	12
6	a) what is an abstract class in java b) what are the member access rules	3	2	6 6
7	What is Method overloading explain with example	3	2	12
8	What is Method overriding explain with example	3	2	12
9	What are the differences between Method overloading and overriding?	3	3	12
10	a) Define an interface? b) Explain Implementing and Accessing interface with example	3	2	4 8
11	How to implement multiple inheritance in java. Explain with an example program	3	3	12
12	Explain the uses of final keyword with example programs.	3	2	12

Module – IV: Packages, Exception Handling

S.NO	Question	CO	BTL	Marks
1	a) Define a package in java. b) Explain creating and accessing package in java with example.	4	2	2 10
2	a) List and explain the predefined packages in java. a) What is accessing Protection in packages?	4	2	6 6
3	How to create and access a user defined package with suitable example.	4	3	12
4	Write a program to create a user defined package which implements multiple inheritance.	4	2	12
5	a) What is an exception? b) Explain the exception handling mechanism with example program.	4	2	2 10
6	Describe the fundamentals of Exception Handling in java with exception class hierarchy.	4	3	12
7	Explain Built-in Exceptions in java with an example.	4	3	12
8	Describe the use of try-catch-finally in java with an example.	4	2	12
9	Write a program to demonstrate multiple catch blocks in java.	4	3	12
10	What are the uses of throw, throws keywords in java explain with an example?	4	2	12
11	Explain how to create our own Exceptions in java.	4	2	12

Module – V: Multi-Threaded Programming, Files and Applets

S.NO	Question	CO	BTL	Marks
1	Explain how to create thread by using Thread class with an example.	5	2	12
2	Explain the life cycle of a thread with neat diagram along with its methods.	5	2	12
3	Explain thread priorities with an example program.	5	2	12
4	What is the use of isAlive () and join ()? Explain with an example.	5	2	12
5	Explain thread synchronization with an example program	5	3	12
6	Discuss input and output classes in java.	5	3	12
7	Write a program to display the content of given file along with line numbers	5	2	12
8	Explain Random Access Files in java with example.	5	2	12
9	Write a program to copy the contents of one file to another file.	5	3	12
10	Write a program to create a file and how to write the data into the file.	5	3	12
11	How to passing parameters to an applet with an example program	5	2	12
12	Explain Applet Life Cycle with an example.	5	2	12

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