

Sr	Unit	Questions	Marks	BL	CO
1	1	Differentiate break and continue.	3	U	CO1
2	1	Implement a two dimensional array named 'marks' and initialize it.	3	A	CO1
3	1	Enlist types of operators and explain anyone with example.	3	R	CO1
4	1	Explain various types of Programming Languages	3	U	CO1
5	1	Explain Primary data types in Java	3	U	CO1
6	1	Explain Operators Precedence & Associativity in java	3	U	CO1
7	1	Explain the use of JVM, JRE, and JDK.	3	R	CO1
8	1	Write a java program to explain basic structure of java syntax	3	A	CO1
9	1	Explain Classification of Tokens with an example	4	U	CO1
10	1	What is Identifier? Write the Rules to declare Identifiers	4	R	CO1
11	1	Write a program to multiply largest number (among two) with '50' using conditional operator.	4	A	CO1
12	1	Any year is entered through the keyboard, write a program to determine whether the year is leap or not.	4	A	CO1
13	1	WAP to print if a number is zero or positive or negative	4	A	CO1
14	1	What is switch case? When to use switch case? Explain switch case with example.	4	U	CO1
15	1	Differentiate while, for and do-while loop. Explain each with appropriate example.	4	U	CO1
16	1	WAP to print factors of a given number	4	A	CO1
17	1	WAP to print multiplication table	4	A	CO1
18	1	Write a program that calculates and prints the sum of the even integers from 1 to 100.	4	A	CO1
19	1	Differentiate break and continue. WAP to calculate the sum of positive numbers using continue statement.	4	U	CO1
20	1	Write a java program to calculate the sum of given numbers, enter -1 to terminate.	4	A	CO1
21	1	Define scope, lifetime and visibility of a variable. Explain variable scope with appropriate example.	4	U	CO1
22	1	Explain lifetime of a variable	4	U	CO1
23	1	Write a function to check whether given number is prime or not.	4	A	CO1
24	1	Write a function to search a given number from an array.	4	A	CO1
25	1	Write a program to check whether given word is palindrome or not.	4	A	CO1
26	1	WAP to count positive number, negative number and zero from an array of n size	4	A	CO1
27	1	WAP to calculate sum and average of n numbers from an array.	4	A	CO1
28	1	WAP to find largest and smallest from an array.	4	A	CO1
29	1	WAP to calculate sum of odd and even elements of an array.	4	A	CO1
30	1	Describe command line arguments? Write a Program to add two numbers using command line arguments.	4	A	CO1
31	1	What is extension Byte code? Explain the significance of byte code.	4	R	CO1
32	1	Explain Multidimensional Array with appropriate example.	4	U	CO1
33	1	Explain 'break' and 'continue' with appropriate example.	4	U	CO1

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34	1	In a company an employee is paid as under: If his basic salary is less than Rs. 1500, then HRA = 10% of basic salary and DA = 90% of basic salary. If his salary is either equal to or above Rs. 1500, then HRA = Rs. 500 and DA = 98% of basic salary. Employee's salary is input through the keyboard, write a program to find his gross salary.	7	A	CO1
35	1	Write a menu driven program that allows user to enter five numbers and then choose between finding the smallest, largest, sum or average. Use switch case to determine what action to take. Provide error message if an invalid choice is entered.	7	A	CO1
36	1	Define function. Write a function to check whether given number is prime or not.	7	A	CO1
37	1	WAP to perform addition of two 3 x 3 matrices	7	A	CO1
38	1	Java Array Program to Find the Largest Element in an Array	7	A	CO1
39	1	Java Array Program to Copy All the Elements of One Array to Another Array	7	A	CO1
40	1	Java Array Program to Check Whether Two Matrices Are Equal or Not	7	A	CO1
41	1	Java Array Program to Add Two Matrices	7	A	CO1
42	1	Java Array Program to Remove Duplicate Elements From an Array	7	A	CO1
43	1	Java Array Program to Remove All Occurrences of an Element in an Array	7	A	CO1
44	1	Write a java program for cricket score board using 2-Dimensional Array. User should enter number of over and runs for each ball or option such as No Ball, Wide Ball or Wicket. Print average run rate and total run.	7	A	CO1
45	1	Define Array. Write a program to print user defined array elements in reverse order.		A	CO1
46	2	Differentiate class and object with appropriate example.	2	U	CO2
47	2	Explain static block in java.	2	U	CO2
48	2	Compare Object oriented programming with sequential programming.	3	U	CO2
49	2	Differentiate between constructor and method of a class	3	U	CO2
50	2	What is a String? Explain different String declarations with an example.	3	U	CO2
51	2	What's the difference between constructors and other methods?	3	U	CO2
52	2	Write the difference between String and String Buffer classes.	3	A	CO2
53	2	Explain static keyword in java.	4	U	CO1
54	2	Explain any 4 string handling functions in java with example.	4	U	CO2
55	2	WAP to find equality of two strings. If both the string are equal then print its length else concat both the strings.	4	U	CO2
56	2	Define Object. Give any 5 example of real world object.	4	R	CO2
57	2	What is constructor? Explain constructor overloading with example	4	U	CO2
58	2	Differentiate static and non-static function with appropriate example.	4	U	CO2
59	2	Explain copy constructor with example.	4	U	CO2
60	2	Differentiate Constructor and method	4	U	CO2
61	2	Differentiate Constructor and destructor. What is garbage collector in java.	4	U	CO2
62	2	Explain anonymous inner class in java with example.	4	U	CO2
63	2	How a garbage collection done in java? What is the purpose of finalize () method?	4	U	CO2
64	2	Write a program to count number of occurrences of a character in a given string.	4	A	CO2
65	2	Define and explain OOP Principles with appropriate example.	7	U	CO2

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66	2	Explain the words 'static' and 'this' with the help of example.	7	U	CO2
67	2	Justify: 1) Why we declare main() method as public and static member. 2) Why we generally declare constructor as public member. 3) Why there is no destructor in java	7	U	CO2
68	2	Explain following terms with example: (A) Nested Class (B) Anonymous Inner Class	7	U	CO2
69	2	Explain Constructor with its property. Explain parameterized constructor with example.	7	U	CO2
70	2	Explain Constructor Overloading with example.	7	U	CO2
71	2	Write down 5 Classes of any one system with minimum 2 methods and 3 attributes. Show the relationship among the classes and draw UML class Diagram.	7	A	CO2
72	2	Define Class. Write a program to create a Shape class with an area () function to find an area of a circle, square, triangle.	7	A	CO2
73	2	Write a program to display Student's Enrollment number and Division using methods of Student Class.	7	A	CO2
74	2	Explain Wrapper class with appropriate example.	7	U	CO2
75	2	Explain static keyword in java. WAP to demonstrate static block, static variable, static method in a single application.	7	U	CO2
76	2	WAP and explain concept of inner class/anonymous inner class in Java.	7	U	CO2
77	2	When will you declare a method as a static? Explain static method with suitable example		U	CO2
78	2	Compare String, StringBuffer and StringBuilder class.	7	U	CO2
79	2	Explain Auto boxing and Unboxing in Java	4	A	CO2
80	2	Explain pass by reference in java with example	4	A	CO2
81	2	Explain Math class methods in java with example.	4	U	CO2
82	3	What will happen when we overload java main() method?	2	U	CO2
83	3	How to prevent overriding of method in java?	2	U	CO2
84	3	How to prevent a class from being inherited in java?	2	U	CO2
85	3	Differentiate Class and Interface	2	U	CO2
86	3	Differentiate Encapsulation and Abstraction.	2	U	CO2
87	3	Distinguish between method overloading and overriding with suitable example.	4	U	CO2
88	3	Explain types of inheritance in java. Why multiple and hybrid inheritance are not supported in java.	4	U	CO2
89	3	Write a program to call members of parent class using super keyword.	4	U	CO2
90	3	Explain method overriding with example.	4	U	CO2
91	3	Explain final keyword in java with example.	4	U	CO2
92	3	Differentiate abstract Class and Interface with example.	4	U	CO2
93	3	What is abstract class? Explain it with example.	4	U	CO2
94	3	Define interface. Explain it with an example	4	U	CO2
95	3	Can Interface be extended? If yes then explain with example.	4	U	CO2
96	3	Discuss Following with example: (i) Super Keyword (ii) Final Keyword (iii) this keyword	7	U	CO2
97	3	Explain dynamic method dispatch with example?	7	U	CO2

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98	3	Differentiate between Interface and abstract class. When Interface is preferred over abstract class.	7	U	CO2
99	3	Describe Inheritance and its types with suitable example.	7	U	CO2
100	3	Explain Super keyword and its use in java. Write a program to call superclass constructor.	7	U	CO2
101	3	What is compile time polymorphism? Use the compile time polymorphism in a Java program to create the objects.	7	U	CO2
102	3	Define polymorphism. Differentiate method overloading and overriding with example.	7	U	CO2
103	3	Explain dynamic method dispatch with example?	7	U	CO2
104	3	Differentiate between final, finally and finalize. What will happen if we make class and method as final?	7	U	CO2
105	3	WAP which you will declare an abstract class Vehicle inherits this class from two classes' car and truck using the method engine in both display "car has good engine" and "truck has bad engine".	7	A	CO2
106	3	Create an interface TV_remote and use it to inherit another interface smart_TV_remote. Create a class TV that implements the TVremote interface.	7	A	CO2
107	3	Explain Abstract class with appropriate example.	7	U	CO3
108	3	Explain interface with appropriate example.	7	U	CO3
109	3	What is an interface? Rules to create an interface in java with example	4	U	CO3
110	4	Discuss public, private, default and protected access modifiers.	4	U	CO4
111	4	Enlist and explain access modifier in java.	4	R	CO4
112	4	Explain exception keywords in java.	4	U	CO4
113	4	Write a program of exception handling with multiple catch statement.	4	U	CO4
114	4	Differentiate checked and unchecked exception and give example of both.	4	U	CO4
115	4	What are Java's Built-in Exception? Write the importance of finally block.	4	U	CO4
116	4	Explain about Nested try statements with an example.	4	A	CO4
117	4	Explain Thread Synchronization with an example.	4	A	CO4
118	4	Define Multithreading. Explain Thread priority with example.	4	U	CO4
119	4	What is Exception? Demonstrate how you can handle different types of exception separately.	7	U	CO4
120	4	Explain following keywords with example 1) throw 2) throws	7	U	CO4
121	4	Explain throw statement with example. Compare Throw and Throws keywords.	7	U	CO4
122	4	Explain throws statement with example.	7	U	CO4
123	4	Explain the thread state, thread properties and thread synchronization. Explain Thread Synchronization with example.	7	U	CO4
124	4	Explain the use of Package. Write a program to demonstrate use of package.	7	U	CO4
125	4	What is package? What are the benefits of package? Explain Java API packages.	7	U	CO4
126	4	How packages are used to resolve naming conflicts in Java? With an example show to add classes to packages and how to import packages in classes.	7	U	CO4

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127	4	How to create custom exception in java. Explain it with example of creating your own custom exception.	7	A	CO4
128	4	Explain Thread life cycle in detail. Write a program to create a child thread to print integer numbers 1 to 10.	7	A	CO4
129	4	What is a package? How to create user defined package in java with example.	7	A	CO4
130	4	WAP to implement Multithreading using Thread class and Runnable interface both.	7	A	CO4
131	5	What is collection in java? Describe about collection class in java.	7	R	CO5
132	5	Write short notes on collection frameworks of java.	7	R	CO5
133	5	Write a short note on Character Stream classes.	4	R	CO5
134	5	Write a program illustrating following framework. a)Array List b)Vector	7	A	CO5
135	5	Discuss about the File Input Stream and File Output Stream in java with examples.	7	A	CO5
136	5	How to create a file in java with example	4	A	CO5
137	5	How to Write and Read a file in java with an example.	4	A	CO5
138	5	Write a program that counts number of characters, words, and lines in a file. Use exceptions to check whether the file that is read exists or not.	7	A	CO5
139	5	Write a program to replace all "word1" by "word2" from a file1, and output is written to file2 file and display the no. of replacement.	7	A	CO5
140	5	Write an application that reads a file and counts the number of occurrences of digit 5. Supply the file name as a command-line argument.	7	A	CO5
141	5	Create a class called Student. Write a student manager program to manipulate the student information from files by using FileInputStream and FileOutputStream.	7	A	CO5

*BL Level: Bloom's Taxonomy*  
*R:Remembrance U:Understanding A:Application*