



# SRI KRISHNA INSTITUTE OF TECHNOLOGY

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#29, Chimney Hills, Hesaraghatta Main Road, Chikkabanavara Post, Bengaluru- 560090

## Department of Artificial Intelligence and Machine Learning

**Subject Name:** Object oriented programming with JAVA

**Subject Code:** BCS306A

**SEM:** III

**DIV:** A

**Faculty:** Mr. Amar Sri.A

### Module-1 Question Bank

SL#	Question	CO	Level	Marks
1.	Explain object oriented principles.	CO1	L2	7
2.	Describe the meaning of each of the keyword in “public static void main” and write an example program.	CO1	L1	7
3.	Explain different lexical issues in JAVA.	CO1	L2	8
4.	Explain different types of arrays with simple program.	CO1	L1	7
5.	Explain different promotion rules in JAVA.	CO1	L2	7
6.	Explain the following operations with example. (i)<< (ii)>> (iii)>>> (iv)&	CO1	L2	8
7.	Demonstrate the working of enhanced for loop with an example program.	CO1	L2	7
8.	Write a program to sort the elements using for loop.	CO1	L3	7
9.	Explain four different types of if statements in JAVA with example.	CO1	L2	8
10.	Demonstrate working of break with labels in JAVA	CO1	L2	7
11.	Discuss different versions of for-loop with examples.	CO1	L2	7
12.	Write a program to illustrate break statement with labels	CO1	L2	7

### Module-2 Question Bank

SL#	Question	CO	Level	Marks
1.	What are constructors? Explain two types of constructors with example.	CO2	L3	8
2.	Explain static variable and static methods in JAVA.	CO2	L2	7
3.	Write a program to perform Stack operation using proper class and Methods.	CO2	L2	7
4.	Explain use of <i>this</i> in JAVA with example program.	CO2	L3	8
5.	Explain memory allocation and use of garbage collector in JAVA.	CO2	L3	8
6.	Write a JAVA program demonstrating Method overloading.	CO2	L2	7
7.	Explain call by value and call by reference with example program.	CO2	L2	8
8.	Explain nested and inner classes.	CO2	L2	8
9.	Distinguish between method overloading and method overriding.	CO2	L3	8



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<b>10.</b>	How do you overload a constructor? Explain with a program.	<b>CO2</b>	<b>L3</b>	<b>8</b>
<b>11.</b>	Define recursion. Write a recursive program to find nth Fibonacci number.	<b>CO2</b>	<b>L2</b>	<b>8</b>
<b>12.</b>	What are various access specifiers in Java? List out the behaviour of each of them.	<b>CO2</b>	<b>L2</b>	<b>7</b>

## Module-3 Question Bank

<b>SL#</b>	<b>Question</b>	<b>CO</b>	<b>Level</b>	<b>Marks</b>
<b>1.</b>	Which are the restrictions present for static declared methods?	<b>CO3</b>	<b>L2,L3</b>	<b>8</b>
<b>2.</b>	Explain how interface is used to achieve multiple Inheritances in Java.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>3.</b>	Write a java program to implement multilevel inheritance with 3 levels of hierarchy.	<b>CO3</b>	<b>L3</b>	<b>8</b>
<b>4.</b>	Write a java program to extend interface assuming suitable data.	<b>CO3</b>	<b>L3</b>	<b>8</b>
<b>5.</b>	What is single level inheritance? Explain with suitable example.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>6.</b>	What is meant by interface? State its need and write syntax and features of interface.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>7.</b>	Explain inheritance and polymorphism features of Java.	<b>CO3</b>	<b>L3</b>	<b>8</b>
<b>8.</b>	Explain method overriding with suitable example.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>9.</b>	What is importance of super keyword in inheritance? Illustrate with suitable example.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>10.</b>	Write a single program to implement inheritance and polymorphism in java.	<b>CO3</b>	<b>L3</b>	<b>8</b>
<b>11.</b>	Explain concept of nesting of interface.	<b>CO3</b>	<b>L3</b>	<b>7</b>
<b>12.</b>	What is abstract class and abstract method? Explain with example.	<b>CO3</b>	<b>L3</b>	<b>7</b>

## Module-4 Question Bank

<b>SL#</b>	<b>Question</b>	<b>CO</b>	<b>Level</b>	<b>Marks</b>
<b>1.</b>	Which are the ways to access package from another package? Explain with example.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>2.</b>	How to add new class to a package? Explain with an example.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>3.</b>	What is package? How do we create it? Give the example to create and to access package.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>4.</b>	What do you mean by a package? How do you use it in a Java program? Explain with a program.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>5.</b>	How do you import a package? Explain.	<b>CO4</b>	<b>L2</b>	<b>7</b>
<b>6.</b>	Write a note on access protection in Java.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>7.</b>	Define an interface. Explain how to define and implement an interface with an example.	<b>CO4</b>	<b>L3</b>	<b>8</b>
<b>8.</b>	Differentiate abstract base class and an interface.	<b>CO4</b>	<b>L2</b>	<b>8</b>



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<b>9.</b>	How do you define variables inside interface? List out the characteristics of such variables.	<b>CO4</b>	<b>L2</b>	<b>6</b>
<b>10.</b>	Define an exception. What are the key terms used in exception handling? Explain.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>11.</b>	Demonstrate working of nested try block with an example.	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>12.</b>	Write a program which contains one method which will throw Illegal Access Exception and use proper exception handles so that exception should be printed.	<b>CO4</b>	<b>L3</b>	<b>8</b>
<b>13.</b>	Write a note on: Java's built-in exception Uncaught Exceptions	<b>CO4</b>	<b>L2</b>	<b>8</b>
<b>14.</b>	How do you create your own exception class? Explain with a program.	<b>CO4</b>	<b>L3</b>	<b>7</b>

## Module-5 Question Bank

<b>SL#</b>	<b>Question</b>	<b>CO</b>	<b>Level</b>	<b>Marks</b>
<b>1.</b>	Define Enumerations. Give an example.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>2.</b>	Discuss values() and value Of() methods in Enumerations with suitable examples.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>3.</b>	"Enumerations in Java are class types"-justify this statement with appropriate examples.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>4.</b>	Write a note on ordinal() and compare To() methods.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>5.</b>	What are wrapper classes? Explain with examples.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>6.</b>	Explain auto boxing /unboxing in expressions.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>7.</b>	What is multithreading? Write a program to create multiple threads in JAVA	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>8.</b>	What do you mean by thread? Explain the different ways of creating threads.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>9.</b>	Write a JAVA program to create two threads, one displays "computer science" and another displays "information science" five times.	<b>CO5</b>	<b>L3</b>	<b>8</b>
<b>10.</b>	With syntax, explain use Of is Alive( ) and join( ) methods.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>11.</b>	What is the need of synchronization? Explain with an example how synchronization is implemented in JAVA.	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>12.</b>	Explain with an example how inter thread communication is implemented in JAVA	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>13.</b>	What is meant by thread priority? How to assign and get the thread priority?	<b>CO5</b>	<b>L2</b>	<b>8</b>
<b>14.</b>	Explain how to achieve suspending, resuming and stopping threads with an example program.	<b>CO5</b>	<b>L3</b>	<b>8</b>

**Faculty Signature**