SRI KRISHNA INSTITUTE OF TECHNOLOGY

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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.	C02	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 *this* 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

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

Module-3 Question Bank

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

Module-4 Question Bank

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

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

Module-5 Question Bank

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

Faculty Signature