SREENIVASA INSTITUTE OF TECHNOGY AND MANAGEMENT STUDIES

(AUTONOMOUS)

Murukambattu, Chittoor

MCA DEPARTMENT

QUESTION BANK

for

20MCA125 - Object Oriented Programming Through Java

Regulation – R20

Academic Year 2020 – 21

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QUESTION BANK

SUBJECT NAME : Object Oriented Programming Through Java **SUBJECT CODE : 20MCA125**

YEAR &SEM : I& II **Academic Year : 2020-21**

UNIT - 1 : Fundamentals of Object-Oriented Programming & Java Evolution

Introduction, Object-Oriented Paradigm, Basic Concepts of Object-Oriented Programming, Benefits of OOP, Applications of OOP, Java History, Java Features, How Java differs from c and c++, Java Environment, constants, Data Types, Variables, Type Conversion and Casting, Automatic Type Promotion in Expression, Arrays, Operators and Expressions, Control Statements.

PART –A

Q.No.	Questions	Blooms Taxonomy Level
1	List Out the OOPs Principle	Remembering
2	Write about Java Features	Knowledge
3	Distinguish between Variable and Constant	Analyzing
4	Write about the Benefits of OOPs	Understanding
5	Differentiate the two types of Type Casting	Analyzing
6	List out Various Java Operators	Remembering
7	What is an Array	Understanding
8	Illustrate the difference between while and do while	Applying
	PART –B	
1	Explain OOPs Concept in detail	Understanding
2	Discuss the Features of Java	Knowledge
3	Describe the Benefits and Applications of OOPs	Understanding
4	Briefly discuss the Type conversion and Casting in Java	Analyzing
5	Illustrate a single and two dimensional Arrays	Applying
6	Explain Various Java Operators and Expressions	Understanding
7	Briefly Expain various Java Control Statements	Analyzing
8	Explain How C and C++ differs from Java and Java History	Understanding

UNIT II - : INHERITANCE AND PACKAGES

Introduction, Defining a Class, Adding Variables, Adding Methods, Creating Objects, Accessing Class members, Constructors, Method Overloading, Static members, Inheritance, Overriding Methods, Final Variables ,Methods and classes, Abstract Methods and Classes, Visibility control, Packages-Introduction, Java API Package, Using System Package, Naming Conventions, Creating Packages, Accessing a Package.

PART –A

1.	What is Class and Object	Understanding
2.	Distinguish between constructor and method	Analyzing
3.	List out types of Inheritance	Remembering
4.	Define Package	Understanding
5.	Categorize the Visibility control mechanism	Remembering
6.	Differentiate between Method overloading and overriding	Analyzing

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7.	Write about Abstract Method	Understanding
8.	What is Abstract Class	Understanding
	PART –B	
1.	Explain how to create a class, add variables, methods and create Objects	Understanding
2.	Discuss Constructor and Constructor overloading with example	Understanding
3.	Develop a Method Overloading program	Evaluating
4.	Briefly Explain Inheritance and its types with example	Understanding
5.	Explain in detail about Final and Abstract Keyword	Understanding
6.	Explain how to create and Access Packages in detail	Understanding
7.	Discuss static members and Visibility Control mechanism	Understanding
8.	Illustrate the single and Multi level Inheritance	Applying
9.	Identify the need for Visibility Control Mechanism	Analyzing

UNIT III -INTERFACES AND COLLECTION FRAMEWORK

Interfaces-Defining an Interface, Implementing Interfaces, Interfaces can be extended, Collections Overview: The Collection Interfaces – The List Interface, The Set Interface, The Collections Classes – Hash Set, Stack, Linked List, Array List, Vector, Accessing a Collection Via an Iterator, String, String Buffer Class, Utility classes – String Tokenizer, Scanner

	PART – A	
1.	Define Interface	Remembering
2.	Name the collection Interfaces	Understanding
3.	List out various Classes in collection framework	Remembering
4.	Illustrate a Scanner class	Applying
5.	Classify the ways to access a collection	Remembering
6.	Define StringTokizer	Understanding
7.	Identify the need for Scanner Class	Evaluating
8.	Name any four methods of String Class	Remembering
	PART –B	
1.	Illustrate the purpose of Interface with Example	Applying
2.	Write about Collection Framework Interfaces and Classes	Understanding
3.	Implement a java code to create a Stack and Vector	Analyzing
4.	Explain the various ways of accessing items from collection class	Understanding
5.	Identify various methods of string Class with examples	Evaluating
6.	Write a java program to display the given string is palindrome or not	Understanding
7.	Discuss String Tokenizer with an example	Applying
8.	Write about scanner class with example	Applying

UNIT IV - EXCEPTION HANDLING, MULTITHREADING AND APPLETS

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Exception Handling Fundamentals, Exception types, Uncaught Exception, Using try and caught, Multiple catch Clauses, Nested try statements, throw, throws, finally, Java's Built-in Exceptions, user defined Exceptions, Multithreaded Programming – Thread States, Life Cycle of a Thread, Creating a Thread, Creating Multiple Threads, Thread Priorities. Applets: How Applets differ from Applications, Building Applet Code, Applet Life Cycle, Designing a web page, Applet tag, Adding Applet to HTML File, Running the Applet.

	PART – A	
1.	List the Exception Handling keywords	Remembering
2.	Identify the benefits of Exceptional Handling	Evaluating
3.	Keyword used to create a user defined exception	Evaluating
4.	Define MultiThreaded Programming	Understanding
5.	Write about the Thread States	Understanding
6.	Categorize the two ways to create Thread	Remembering
7.	Purpose of Applet	Analyzing
8.	Write about the Applet Life Cycle states	Understanding
	PART –B	
1.	Explain Exception handling Mechanism with its 5 keywords	Understanding
2.	Illustrate a User Defined Exception	Applying
3.	Explain various states of Thread with a neat diagram	Analyzing
4.	Illustrate the process of creating a Thread using two methods	Applying
5.	Explain Thread Priorities with an Example	Applying
6.	Discuss various states of Applet with a neat diagram	Understanding
7.	Write about how to Design a web page, Adding Applet to HTML File, Running the Applet.	Understanding

UNIT V - EVENT HANDLING AND SWINGS

Two Event Handling Mechanism, The Delegation Event Model, Event Classes, Sources of Events, Event Listeners Interfaces, Adapter Classes. Swings - The Origins of Swings, Swing is Built on the AWT, Swing Features , Swing Components and Containers , A Simple Swing Application, Event Handling, Creating a Swing Applet-Exploring Swing.

	PART –A	
1.	Define Event	Remembering
2.	Name any 3 Event Classes, Sources of Events	Remembering
3.	Define Adapter Class	Understanding
4.	List two features of Swing	Remembering
5.	Classify the containers	Evaluating
6.	Difference between swing and AWT	Analyzing
7.	List out the swing components	Remembering
	PART –B	

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1.	Explain Event Handling Mechanism in detail	Understanding
2.	Write about Event classes, source of Events and Events Listeners	Understanding
3.	Explain Swing , swing features and how it is built on awt	Understanding
4.	Discuss various swing components and containers	Understanding
5.	Explore the swing package classes with example	Applying
6.	Illustrate any two swing package Components	Applying