



**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR  
(AUTONOMOUS)**

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**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code:** Java Programming (20MC9109)

**Course & Branch:** MCA

**Year & Sem** : I & II

**Regulation:** R20

**UNIT –I  
Java Basics and OOP Concept**

1		Explain in detail about list of operators in java.	[L2][CO1]	[12M]
2		Identify the different types of control flow statements in java.	[L1][CO1]	[12M]
3		Describe Encapsulation, Polymorphism and Inheritance.	[L2][CO1]	[12M]
4		Analyze and Discuss about Java buzzwords in detail.	[L4][CO1]	[12M]
5	a)	Briefly discuss about type conversion.	[L2][CO1]	[06M]
	b)	Clearly explain break and continue with example program.	[L2][CO1]	[06M]
6		What is Constructor? Explain the types of constructors with an example.	[L1][CO1]	[12M]
7		Describe Garbage collection and Constructors.	[L2][CO1]	[12M]
8		Discuss about Generics? Explain the Generics Class & Generics Methods with an example.	[L1][CO1]	[12M]
9	a)	What is Enumeration? Discuss with an example.	[L2][CO1]	[06M]
	b)	Explain in detail with this reference with an example.	[L3][CO1]	[06M]
10	a)	What is an Array?	[L1][CO1]	[04M]
	b)	Explain the types of Array with suitable examples.	[L2][CO1]	[08M]

**UNIT –II****Inheritance, Interfaces and Packages**

1	a)	What is an inheritance?	[L1][CO2]	[06M]
	b)	Explain the benefits of Inheritance.	[L2][CO2]	[06M]
2		List the Inheritance types and explain any two of them with suitable examples.	[L1][CO2]	[12M]
3	a)	What is an interface?	[L1][CO2]	[04M]
	b)	Identify how to define and implement an interface. Explain with suitable example.	[L3][CO2]	[08M]
4		What is Polymorphism? Analyze the types of Polymorphism with an example.	[L4][CO2]	[12M]
5	a)	Define dynamic binding and method overriding.	[L1][CO2]	[04M]
	b)	Define a package. Clearly explain creating and accessing a package with an example.	[L2][CO2]	[08M]
6	a)	What is an abstract class? Construct an example.	[L6][CO2]	[06M]
	b)	Identify the differences between an interface and abstract class.	[L3][CO2]	[06M]
7	a)	Discuss about abstract classes and its methods.	[L2][CO2]	[06M]
	b)	Briefly explain final class with an example.	[L2][CO2]	[06M]
8		Develop a program that illustrates the dynamic binding? Explain.	[L6][CO2]	[12M]
9		Explain details about the CLASSPATH & import of Package.	[L2][CO2]	[12M]
10		What is an Object class? Explain a method of Object class with an example.	[L1][CO2]	[12M]

**UNIT –III**  
**Data structure Creation and Manipulation in Java, Files**

1		What is java collection framework? Explain detail about the ArrayList & LinkedList with an example.	[L1][CO3]	[12M]
2		Explain detail about the Hashset & Treemap with appropriate program.	[L2][CO3]	[12M]
3	a)	What is StringTokenizer? Write a program to add the given numbers using StringTokenizer?	[L1][CO3]	[06M]
	b)	Identify the types of collection interface with an example.	[L3][CO3]	[06M]
4		Discuss in details iteration over collections with an example.	[L2][CO3]	[12M]
5		Identify the types of Enumeration interface with an example.	[L3][CO3]	[12M]
6		What is Iterator interface? Explain about ListIterator interface.	[L2][CO3]	[12M]
7	a)	What is InputStream and OutputStream?	[L1][CO3]	[06M]
	b)	Explain the types of InputStream and OutputStream with an example.	[L2][CO3]	[06M]
8	a)	What is Scanner class? Describe in details Byte Stream & Character Stream with an example.	[L1][CO3]	[06M]
	b)	Define File. Explain the operations of File.	[L2][CO3]	[06M]
9		Build a java program to read the file contents and copy the content to other file.	[L3][CO3]	[12M]
10		Construct a Program of client and server using socket.	[L6][CO3]	[12M]

**UNIT –IV****Exception Handling and Multithreading**

1	a)	What is an exception handling?	[L1][CO4]	[04M]
	b)	Discuss the benefits of exception and classification of exception handling.	[L2][CO4]	[08M]
2		Discuss about exception hierarchy, checked exceptions and unchecked exceptions.	[L1][CO4]	[12M]
3		Explain in detail usage of try, catch, throw, throws and finally with an example.	[L2][CO4]	[12M]
4	a)	Describe in detail of creating in own exception with an example.	[L1][CO4]	[06M]
	b)	Discuss in details of checked and unchecked exception with an example.	[L2][CO4]	[06M]
5	a)	Identify the differences between multiple processes and multiple threading.	[L3][CO4]	[06M]
	b)	What is Multithreading? Explain in details of Thread states with architecture diagram.	[L4][CO4]	[06M]
6	a)	Briefly explain about Exception hierarchy.	[L2][CO4]	[06M]
	b)	Discuss in details about rethrowing exception with an example.	[L2][CO4]	[06M]
7	a)	What are the guidelines for proper use of exceptions?	[L1][CO4]	[06M]
	b)	Discuss about exception specification.	[L2][CO4]	[06M]
8		Explain in detail about life cycle of a thread with a sample example.	[L2][CO4]	[12M]
9	a)	What are thread priorities?	[L1][CO4]	[06M]
	b)	Explain in detail about interrupting threads.	[L1][CO4]	[06M]
10		Explain in detail of Synchronizing thread & daemon thread with an example.	[L2][CO4]	[12M]

**UNIT –V****GUI Programming in Java and Event Handling**

1		What is Swing? Explain in detail about MVC Architecture.	[L1][CO5]	[12M]
2		Explain details about Hierarchy for swing component with an example.	[L2][CO5]	[12M]
3		Write a program to develop a sample application using Jpanel and JFrame.	[L6][CO5]	[12M]
4		Describe in detail of swing components with an example.	[L1][CO5]	[12M]
5		Explain in details of Layout managers with an example.	[L2][CO5]	[12M]
6	a)	What is an applet? Analyze the four methods of applet.	[L4][CO5]	[06M]
	b)	Explain in detail life-cycle of an applet.	[L1][CO5]	[06M]
7	a)	Build a program for passing parameter of applet?	[L6][CO5]	[06M]
	b)	Construct a program of simple banner applet?	[L6][CO5]	[06M]
8		Discuss in detail of Event class with an example.	[L2][CO5]	[12M]
9	a)	Explain in details of Event Listener with an example.	[L2][CO5]	[06M]
	b)	Briefly explain the differences between application and applets.	[L2][CO5]	[06M]
10		Identify the applet security issues? Discuss about adapter classes.	[L3][CO5]	[12M]

*Prepared by – P. Sukanya, Assistant Professor, MCA Department*