SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
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QUESTION BANK (DESCRIPTIVE)

Subject with Code: Java Programming (19MC9113)	**Course & Branch**: MCA
Year & Sem. : II - I	**Regulation:** R19

UNIT –I
Java Basics and OOP Concept

1	Explain in detail about list of operators in java.	[L2][CO1]	[12M]
2	Explain the different types of control statements & looping in java.	[L2][CO1]	[12M]
3	Describe the following concepts a) Encapsulation. b) Polymorphism. c) Inheritance.	[L1][CO2]	[12M]
4	Explain about Java buzzwords in detail.	[L2][CO2]	[12M]
5	What is Constructors? Explain the types of constructors with an example.	[L1][CO2]	[12M]
6	Explain in details of OOP.	[L2][CO2]	[12M]
7	a) Describe in detail about types of overloading with an example. b) What is Generics? Explain the Generics Class & Generics Methods with an example.	[L3][CO3] [L1, L2][CO2]	[06M] [06M]
8	a) What is Enumeration? Discuss with an example of Enumeration. (b) Explain in detail with this reference & super keyword with an example.	[L2][CO1] [L3][CO2]	[06M] [06M]
9	What is Array? Explain details about types of Array with an example.	[L1][CO1]	[12M]
10	Write a java program of Factorial with class and object?	[L3][CO3]	[12M]

UNIT –II

Inheritance, Interfaces and Packages

1	a) What is inheritance? Explain the benefits of Inheritance.	[L1][CO2]	[06M]
	b) Discuss the types of inheritance in java with an example.	[L2][CO2]	[06M]
2	a) What is interface? Explain the support of multiple interfaces with an example.	**[L4][CO2]**	[06M]
	b) How will you define and implementing an interface with an example?	**[L2][CO2]**	[06M]
3	a) What is Polymorphism? Discuss with types of Polymorphism with an example.	**[L1,L2][CO2]**	[06M]
	b) Write a program of the Method Overriding & Method overloading?	**[L2][CO3]**	[06M]
4	a) Define a package. Describe the details of crating and access a package with an example.	**[L2][CO2]**	[06M]
	b) Write a program of statement displaying using CLASSPATH package and import package using a display the statement?	**[L3][CO3]**	[06M]
5	a) What is abstract class? Give with the example.	**[L1][CO2]**	[06M]
	b) Give differences between an interface and abstract class.	**[L4][CO2]**	[06M]
6	a) What is final? Explain details about final class, methods, variable in detail with an example.	**[L3][CO3]**	[06M]
	b) Write a program that illustrates the preventing of inheritance?	**[L3][CO3]**	[06M]
7	a) Write a program of arithmetic operator to implements multilevel hierarchy? Explain.	**[L3][CO3]**	[06M]
	b) Write a program that illustrates the dynamic binding? Explain.	**[L3][CO3]**	[06M]
8	Explain details about the CLASSPATH & import of Package with an example.	**[L2][CO2]**	[12M]
9	Explain details about the accessing implementation through interface references & extending interface with an example.	**[L1][CO2]**	[12M]
10	What is 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][CO4]	[12M]
2	Explain detail about the Hashset & Treemap with appropriate program.	[L2][CO4]	[12M]
3	a) What is StringTokenizer? Write a program to add the given numbers using StringTokenizer?	[L1][CO3]	[06M]
	b) Describe in detail types of collection interface with an example.	[L1][CO2]	[06M]
4	Discuss in details iteration over collections with an example.	[L2][CO2]	[12M]
5	a) Write a program to file operation to implement a random access file operations?	[L3][CO3]	[06M]
	b) Explain in detail Reader class & Writer class with an example.	[L2][CO2]	[06M]
6	a) What is Inputstream, Outputstream? Explain the types of Inputstream and Outputstream with an example	[L1][CO2]	[06M]
	b) Describe in details Byte Stream & Character Stream with an example.	[L2][CO2]	[06M]
7	Explain the details about Legacy Collection classes with an example.	[L2][CO2]	[12M]
8	a) What is Scanner class? Write a program of Scanner class to read a various datatype input?	[L1][CO3]	[06M]
	b) Define File? Explain the operations of File.	[L1][CO2]	[06M]
9	Write a java program to read the file contents and copy the content to other file.	[L4][CO3]	[12M]
10	a) Write a Program of client and server using socket?	[L4][CO3]	[06M]
	b) Explain in details about Utility class Formatter, Observer, and Random with an example.	[L2][CO2]	[06M]

UNIT –IV

Exception Handling and Multithreading

1	What is an exception handling? Discuss the benefits of exception and classification of exception handling.	[L1,L2][CO2]	[12M]
2	Explain the try…catch() block in detail. Write a program of Arithmetic Exception and ArrayIndexOutOfBoundsException using try…catch block.	[L2][CO3]	[12M]
3	Explain in detail usage of try, catch, throw, throws, finally with an example.	[L1][CO3]	[12M]
4	a) Describe in detail of creating in own exception with an example. b) Discuss in details of checked and unchecked exception with an example.	[L2][CO2] [L1][CO2]	[06M] [06M]
5	a) Write a difference between multiple processes and multiple threading. b) What is Multithreading? Explain in details of Thread states with architecture diagram.	[L4][CO2] [L2][CO2]	[06M] [06M]
6	a) Write short notes on Exception hierarchy? Discuss in details about rethrowing exception with an example. b) Give a guideline of proper use of exception handling with a sample program.	[L2][CO3] [L4][CO3]	[06M] [06M]
7	Explain in details of life cycle of a thread with a sample example.	[L2][CO2]	[12M]
8	Describe in detail about runnable interface with an example.	[L2][CO3]	[12M]
9	a) Differentiate the thread class and runnable interface with a sample example. b) What is thread class? Explain in detail of Thread class and thread priorities with a sample example.	[L4][CO3] [L2][CO2]	[06M] [06M]
10	Explain in detail of Synchronizing thread & daemon thread with an example.	[L2][CO2]	[12M]

UNIT –V

GUI Programming in Java and Event Handling

1	What is Swing? Explain in detail about MVC Architecture.	**[L2][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.	**[L3][CO5]**	[12M]
4	Describe in detail of swing components with an example.	**[L1][CO5]**	[12M]
5	Explain in details of Layout mangers with an example	**[L2][CO5]**	[12M]
6	a) What is an applet? Discuss in briefly four methods of applet. b) Explain in detail life-cycle of an applet.	**[L2][CO5]** **[L1][CO5]**	[06M] [06M]
7	a) Write a program of passing parameter of applet? b) Write a program of simple banner applet?	**[L3][CO5]** **[L3][CO5]**	[06M] [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. b) Difference between application and applets.	**[L2][CO5]** **[L4][CO5]**	[06M] [06M]
10	Draw a smiley in java applet.	**[L6][CO5]**	[12M]

Prepared by – P. Karthikeyan, Assistant Professor, MCA Department