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

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code:　Object Oriented Programming through Java　(20CS0506)
Course & Branch: B.Tech & CSE,CIC&CSIT

Year & Sem:　II & I　　　　　　　　　　　　　　　　　　　　　**Regulation: R20**

UNIT-I
THE JAVA LANGUAGE & INTRODUCTION OF OOP

1	a)	What is meant by paradigm? List the programming paradigms.	[L1][CO1]	**[4M]**
	b)	List and Explain Java Buzz Words?	[L2][CO1]	**[8M]**
2	a)	What is Byte Code? Analyze the different states of Java Program execution?	[L4][CO1]	**[6M]**
	b)	Explain History and Evolution of Java?	[L2][CO1]	**[6M]**
3	a)	What is mean by OOP? Illustrate the Concepts of OOP?	[L3][CO2]	**[6M]**
	b)	Show what is varargs in java? Write the syntax and develop a Program showing the varargs usage.	[L6][CO1]	**[6M]**
4	a)	Define Data Type?Discuss the data types available in Java.	[L2][CO1]	**[6M]**
	b)	Develop a Java program to read different data types using Scanner .	[L6][CO1]	**[6M]**
5	a)	Describe an identifier and give the rules to declare them.	[L1][CO1]	**[4M]**
	b)	How type casting implemented in java?Explain with an example.	[L2][CO1]	**[4M]**
	c)	State what is a variable? Give the declaration of variable in Java and specify the Rules to be followed over the same?	[L1][CO1]	**[4M]**
6		DefineOperator?Discriminate the type of operators in Java with examples.	[L5][CO1]	**[12M]**
7		Explain the Decision Making statements in Java with example.	[L2][CO1]	**[12M]**
8		Give example and Explain about the Iteration Statements.	[L2][CO1]	**[12M]**
9	a)	Give the Structure of Java program?	[L1][CO1]	**[2M]**
	b)	Create a java program to find the greatest of three numbers and give the procedure for compilation and run the same.	[L6][CO1]	**[5M]**
	c)	Describe command line arguments? Develop a Java program to add two numbers using command line arguments.	[L6][CO1]	**[5M]**
10	a)	Define an Array? Classify the types of arrays in Java.	[L4][CO1]	**[6M]**
	b)	Create a Java program to read and display the array elements.	[L6][CO1]	**[6M]**

UNIT-II
INTRODUCING CLASSES

1	a)	Give the definition and syntax of Class, Method and Object?	[L1][CO2]	**[6M]**
	b)	Create a java program to display "Hello! Java" using Class, Object and Method.	[L6][CO2]	**[6M]**
2	a)	Define Constructor?Classify the types of Constructors in Java?	[L4][CO2]	**[7M]**
	b)	Write a java program to illustrate Constructor Overloading.	[L6][CO2]	**[5M]**
3	a)	Illustrate Garbage Collector in Java and explain the its behaviour when used.	[L3][CO2]	**[6M]**
	b)	Differentiate between the usage of static, final keywords with example.	[L4][CO2]	**[6M]**
4	a)	Show the application of final keyword with variable, method and class in detail with an example.	[L1][CO2]	**[9M]**
	b)	Give the difference between final and finalize.	[L4][CO2]	**[3M]**
5		What is Inheritance? Explain types of inheritances.	[L2][CO2]	**[12M]**
6		Create and explain java program for the implementation of single, multi-level and hierarchical inheritance.	[L6][CO2]	**[12M]**
7	a)	Describe about the super keyword in java with example.	[L2][CO2]	**[6M]**
	b)	Give the differences between Abstract class and Interface	[L4][CO2]	**[6M]**
8	a)	Distinguish Method Overriding and Method Overloading.	[L5][CO2]	**[6M]**
	b)	What is an abstract class? Discuss the cases to implement abstract class.	[L2][CO2]	**[6M]**
9	a)	Recallwhat is package?Explain how to create user defined package in java with example program	[L2][CO2]	**[6M]**
	b)	Writeajava programto findthefactorial valueofthegiven numberusinguser definedpackageconcept.	[L6][CO2]	**[6M]**
10	a)	State what is an interface andthe rules to create an interface in java with example program	[L1][CO2]	**[6M]**
	b)	Develop a java program to implement an interface using your own example program	[L6][CO2]	**[6M]**

UNIT-III
EXCEPTION HANDLING & MULTITHREADED PROGRAMMING

1	a)	Summarize what is Java Exception and its Types	[L2][CO3]	**[6M]**
	b)	Illustrate abouttry, catch, and throw statements usinga java program.	[L3][CO3]	**[6M]**
2	a)	Discuss in detail Java exception hierarchy	[L2][CO3]	**[6M]**
	b)	Give the difference between checked and unchecked exceptions?	[L4][CO3]	**[6M]**
3	a)	Explain about Nested try statements with an example.	[L2][CO3]	**[6M]**
	b)	What are Java's Built-in Exception? Write the importance of finally block.	[L1][CO3]	**[6M]**
4	a)	Show about creating your own Exception clauses	[L2][CO3]	**[5M]**
	b)	Develop a java program to create own exception for Negative Value Exception if the user enter negative value.	[L6][CO3]	**[7M]**
5	a)	Statewhat is Multithreading? Illustrate the ways to create multiple threadsin java.	[L2][CO4]	**[6M]**
	b)	Sketch and explain Thread Life Cycle.	[L3][CO4]	**[6M]**
6	a)	Discriminate what is Daemon Threads and it's implementation with an example.	[L5][CO4]	**[6M]**
	b)	Apply join() method in multithreading java program to show its usage.	[L3][CO4]	**[6M]**
7	a)	Describe how to set the priority to threads? what are the different ranges.	[L2][CO4]	**[6M]**
	b)	Write a java program to create two threads and executesimultaneously.	[L6][CO4]	**[6M]**
8	a)	Illustrate creating of Thread in Java.	[L2][CO4]	**[5M]**
	b)	Write a Java program that creates three threads. First thread displays —GoodMorning, every one second, the second thread displays Hello, every two seconds andthe third thread displays Welcome every three seconds.	[L6][CO4]	**[7M]**
9	a)	What is synchronization? How many types? Explain in detail.	[L2][CO3]	**[6M]**
	b)	Write a java program to sort the given names into ascending order.	[L3][CO4]	**[6M]**
10	a)	Define String? Write the difference between String and String Buffer classes.	[L4][CO4]	**[6M]**
	b)	Create a java program to check the given string is palindrome or not.	[L6][CO4]	**[6M]**

UNIT-IV
GENERICS & INTRODUCING FILE HANDLING

1	a)	Define Generics. State the importance of generics in java	[L1][CO2]	**[4M]**
	b)	Demonstrate the implementationof Generics in javawith an example program.	[L2][CO2]	**[8M]**
2		Illustrate General form of Generic class with an example.	[L2][CO2]	**[12M]**
3	a)	List and describe about collection class in java.	[L2][CO2]	**[6M]**
	b)	Implement the following concepts with java programs a) Array list b) TreeSet c) LinkedHashMap	[L4][CO6]	**[6M]**
4	a)	Discuss in detail on collection interfaces and their methods	[L2][CO6]	**[6M]**
	b)	Apply the following interfaces with java programs a) The Collection Interface b) The Set c) The Map.Entry	[L3][CO6]	**[6M]**
5		Create program illustrating following framework. a)Vector b)Array List c)Hash Table d)Stack	[L6][CO6]	**[12M]**
6		Illustratefile handling using File class.	[L3][CO4]	**[12M]**
7	a)	Develop a java Program to read from a file using FileReader class?	[L6][CO4]	**[8M]**
	b)	Explain File operations in java?	[L2][CO4]	**[4M]**
8		Describein detail about various stream classes in java.	[L2][CO4]	**[12M]**
9		Discuss about the File Input Stream and File Output Stream in java with examples.	[L2][CO4]	**[12M]**
10	a)	Interpret how to create a file in java with example program.	[L3][CO4]	**[6M]**
	b)	Develop a java program to show Read and Write a file in java with an example program.	[L6][CO4]	**[6M]**

UNIT-V
INTRODUCING THE AWT & JAVA8 FEATURES

1		Develop a java Program to design Simple Registration page window using AWT Controls.	[L6][CO5]	**[12M]**
2		Apply an AWT based calculator with basic operations using java.	[L3][CO5]	**[12M]**
3	a)	State the features of swing in java.	[L1][CO5]	**[4M]**
	b)	Difference between AWT andSWING?	[L4][CO5]	**[8M]**
4		Illustrate the steps for creating simple Login Page using javaswing with an example program.	[L3][CO5]	**[12M]**
5		What is Swing? Discuss about Swing controls.	[L2][CO5]	**[12M]**
6	a)	State the importance of Lambda Expression with syntax	[L1][CO5]	**[6M]**
	b)	Develop a java program to pass multiple parameters with Lambda Expression	[L6][CO5]	**[6M]**
7		List and Explain Java Method References with an example.	[L2][CO5]	**[12M]**

8		Explain the following methods injava.
		    a) Default method
		    b) Static method
		    c) forEach()method
			[L2][CO5]	**[12M]**

9	a)	Illustrate with an example to explain the similarities for method reference operator and Lambda Expression	[L3][CO5]	**[6M]**
	b)	DescribeReference to an instance method of an arbitrary object of a particular type	[L2][CO5]	**[6M]**
10	a)	Interpret the usage ofDate and Time API with anexample program.	[L3][CO6]	**[8M]**
	b)	Discuss in detail the operations onStreams.	[L2][CO6]	**[4M]**

Prepared by

Mr. V Samba siva
Associate Professor, Dept.of CSE
Mr.A Sathish
Assistant Professor, Dept.of CSE
Mr. N Babu
Assistant Professor, Dept.of CSE
Ms. N Poornima
Assistant Professor, Dept.of CSIT