

	E.G.S. PILLAY ENGINEERING COLLEGE (An Autonomous Institution, Affiliated to Anna University, Chennai) Nagore Post, Nagapattinam – 611 002, Tamilnadu.	Rev.1 COE/2020/QB/MC Q
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SUBJECT CODE AND NAME:1902IT402 & JAVA PROGRAMMING				
Academic Year	2020-2021	Question Bank	Programme/Branch	B.Tech-IT
Year / Semester	II/IV		Course Coordinator	Dr.S.MANIKANDAN
Course Objective		Course Outcomes		
1. Enable learners to write Java programming using Object Oriented Programming Concepts 2. Develop Java programming using Event Driven and Strings 3. Familiar with Swings concepts using Java 4. Learn to think Java program using real time concepts and paradigms		At the end of this course, students will able to, CO1: Understand the basic concepts of Java Programming CO2: Develop Java program using classes, objects, and encapsulation CO3: Design Inheritance and Interface using Java CO4: Implement Event Handler, JDBC and Exception Handling concepts using Java CO5: Create real time application using Java		

Module 1: Classes and Objects

Q. No	PART-A 1 MARK QUESTIONS			[CO#, BTL]
1.	Which concept of Java is a way of converting real world objects in terms of class?			[CO1, K1]
	(a) Polymorphism	(c) Abstraction		
	(b) Encapsulation	(d) Inheritance		
2.	Which concept of Java is achieved by combining methods and attribute into a class?			[CO1, K1]
	(a) Encapsulation	(c) Abstraction		
	(b) Polymorphism	(d) Inheritance		
3.	Which component is used to compile, debug and execute java program?			[CO1, K1]
	(a) JVM	(c) JRE		
	(b) JIT	(d) JDK		
4.	What is the extension of compiled java classes?			[CO2, K1]
	(a) .java	(c) .class		
	(b) .js	(d) .txt		
5.	What is byte code in Java?			[CO2, K1]
	(a) Code generated by a Java compiler	(c) Name of Java source code file		
	(b) Code generated by a Java Virtual Machine	(d) Block of code written inside a class		
6.	Which variables are created when an object is created with the use of the keyword 'new' and destroyed when the object is destroyed?			[CO2, K]
	(a) Local variables	(c) Class Variables		
	(b) Instance variables	(d) Static variables		

7.	is used to find and fix bugs in the Java programs.			[CO1, K1]
	(a)	JVM	(c)	JDK
	(b)	JRE	(d)	JDB
8.	Evaluate the following Java expression, if x=3, y=5, and z=10: ++z + y - y + z + x++			[CO2, K2]
	(a)	24	(c)	20
	(b)	23	(d)	25
9.	What do you mean by nameless objects			[CO2, K1]
	(a)	An object created by using the new keyword.	(c)	An object without having any name but having a reference
	(b)	An object of a superclass created in the subclass.	(d)	An object that has no reference.
10.	What is false about constructor?			[CO2, K1]
	(a)	Constructors cannot be synchronized in Java	(c)	Constructor can have a return type
	(b)	Java does not provide default copy constructor	(d)	“this” and “super” can be used in a constructor
11.	Which of the following is a method having same name as that of it's class?			[CO2, K1]
	(a)	Finalize	(c)	Class
	(b)	Delete	(d)	Constructor
12.	Which keyword is used by the method to refer to the object that invoked it?			[CO2, K1]
	(a)	Import	(c)	Catch
	(b)	Abstract	(d)	This
13.	Which of the following is a valid declaration of an object of class Box?			[CO2, K1]
	(a)	Box obj = new Box();	(c)	Box obj = new Box;
	(b)	obj = new Box();	(d)	new Box obj;
14.	What will be the output of the following Java program?			[CO2, K2]
	<pre> class main_class { public static void main(String args[]) { int x = 9; if (x == 9) { int x = 8; System.out.println(x); } } } </pre>			
	(a)	9	(c)	Compilation error
	(b)	8	(d)	Runtime error
15.	What is stored in the object obj in following lines of Java code?			[CO2, K1]
	box obj;			
	(a)	Memory address of allocated memory of object	(c)	Any arbitrary pointer
	(b)	NULL	(d)	Garbage

16.	Which of the below is invalid identifier with the main method?				[CO2, K1]
	(a)	Public	(c)	private	
	(b)	Static	(d)	final	
17.	What is use of interpreter?				[CO2, K1]
	(a)	They convert bytecode to machine language code	(c)	They are intermediated between JIT and JVM	
	(b)	They read high level code and execute them	(d)	It is a synonym for JIT	
18.	Which of the following is not OOPS concept in Java?				[CO1, K1]
	(a)	Inheritance	(c)	Polymorphism	
	(b)	Encapsulation	(d)	Compilation	
19.	What will be the output of the following Java code?				[CO2, K2]
	<pre>class increment { public static void main(String args[]) { int g = 3; System.out.print(++g * 8); } }</pre>				
	(a)	25	(c)	32	
	(b)	24	(d)	33	
20.	Which of these jump statements can skip processing the remainder of the code in its body for a particular iteration?				[CO2, K1]
	(a)	Break	(c)	exit	
	(b)	Return	(d)	continue	
21.	Which method can be defined only once in a program?				[CO1, K1]
	(a)	main method	(c)	static method	
	(b)	finalize method	(d)	private method	
22.	What would be behaviour if the constructor has a return type?				[CO2, K1]
	(a)	Compilation error	(c)	Compilation and runs successfully	
	(b)	Runtime error	(d)	Only String return type is allowed	
23.	From where break statement causes an exit?				[CO1, K1]
	(a)	Only from innermost loop	(c)	Only from innermost switch	
	(b)	Terminates a program	(d)	From innermost loops or switches	
24.	Which of these is used to access a member of class before object of that class is created?				[CO2, K1]
	(a)	Public	(c)	Static	
	(b)	Private	(d)	Protected	
25.	Which of these is used as a default for a member of a class if no access specifier is used for it?				[CO2, K1]
	(a)	Private	(c)	public, within its own package	
	(b)	Public	(d)	Protected	
PART-B					
2 MARK QUESTIONS					
26.	What will be the output of the following program?				[CO2, K2]
	public class Test {				

	<pre> public static void main(String[] args) { int count = 1; while (count <= 15) { System.out.println(count % 2 == 1 ? "***" : "+++++"); ++count; } // end while } // end main } </pre>				
	(a)	15 times ***	(c)	8 times *** and 7 times +++++	
	(b)	15 times +++++	(d)	Both will print only once	
27.	What will be the output of the following Java program? <pre> class box { int width; int height; int length; int volume; void volume(int height, int length, int width) { volume = width*height*length; } } class Prameterized_method { public static void main(String args[]) { box obj = new box(); obj.height = 1; obj.length = 5; obj.width = 5; obj.volume(3,2,1); System.out.println(obj.volume); } } </pre>				[CO2, K2]
	(a)	0	(c)	1	
	(b)	6	(d)	25	
28.		What will be the output of the following Java program? <pre> class box { int width; int height; int length; int volume; void volume() { volume = width*height*length; } } class Output { public static void main(String args[]) { box obj = new box(); obj.height = 1; </pre>			[CO2, K2]

		<pre>obj.length = 5; obj.width = 5; obj.volume(); System.out.println(obj.volume); } }</pre>			
	(a)	0	(c)	6	
	(b)	1	(d)	25	
29.		What will be the output of the following Java program? <pre>class main_class { public static void main(String args[]) { int x = 9; if (x == 9) { int x = 8; System.out.println(x); } } }</pre>	[CO2, K2]		
	(a)	9	(c)	Compilation error	
	(b)	8	(d)	Runtime error	
30.		What will be the output of the following Java code? <pre>class area { int width; int length; int area; void area(int width, int length) { this.width = width; this.length = length; } } class Output { public static void main(String args[]) { area obj = new area(); obj.area(5 , 6); System.out.println(obj.length + " " + obj.width); } }</pre>	[CO2, K2]		
	(a)	0 0	(c)	6 5	
	(b)	5 6	(d)	5 5	
31.		What will be the output of the following Java program? <pre>class selection_statements { public static void main(String args[]) { int var1 = 5;</pre>	[CO2, K2]		

		<pre>int var2 = 6; if ((var2 = 1) == var1) System.out.print(var2); else System.out.print(++var2); } }</pre>			
	(a)	1	(c)	3	
	(b)	2	(d)	4	
32.		What would be the output of the following code snippet if variable a=10? <pre>if(a<=0) { if(a==0) { System.out.println("1 "); } else { System.out.println("2 "); } } System.out.println("3 ");</pre>	[CO2, K2]		
	(a)	1 2	(c)	1 3	
	(b)	2 3	(d)	3	
33.		What will be the output of the following Java program? <pre>class Output { public static void main(String args[]) { int a = 1; int b = 2; int c; int d; c = ++b; d = a++; c++; b++; ++a; System.out.println(a + " " + b + " " + c); } }</pre>	[CO2, K2]		
	(a)	3 2 4	(c)	2 3 4	
	(b)	3 2 3	(d)	3 4 4	
34.		What will be the output of the following Java program? <pre>class bitwise_operator { public static void main(String args[]) { int var1 = 42; int var2 = ~var1; System.out.print(var1 + " " + var2); } }</pre>	[CO2, K2]		

	(a)	42 42	(c)	42 -43	
	(b)	43 43	(d)	42 43	
35.		What will be the output of the following Java program? <pre> class rightshift_operator { public static void main(String args[]) { int x; x = 10; x = x >> 1; System.out.println(x); } } </pre>			[CO2, K2]
	(a)	10	(c)	2	
	(b)	5	(d)	20	

ModuleII: ARRAYS, STRINGS, INHERITANCE

Q. No	PART-A 1 MARK QUESTIONS				[CO#, BTL]
1.	Which of these is an incorrect array declaration?				[CO3, K1]
	(a)	int arr[] = new int[5]	(c)	int arr[] = new int[5]	
	(b)	int [] arr = new int[5]	(d)	int arr[] = int [5] new	
2.	Which of these is necessary to specify at time of array initialization?				[CO3, K1]
	(a)	Row	(c)	Both Row and Column	
	(b)	Column	(d)	None of the mentioned	
3.	What is the type of variable 'b' and 'd' in the following Java snippet?				[CO3, K1]
	(a)	'b' and 'd' are int	(c)	b' is int variable; 'd' is int array	
	(b)	'b' and 'd' are arrays of type int	(d)	d' is int variable; 'b' is int array	
4.	What will be the output of the following Java code? <pre> int arr[] = new int [5]; System.out.print(arr); </pre>				[CO3, K2]
	(a)	0	(c)	00000	
	(b)	value stored in arr[0].	(d)	Garbage value	
5.	How to sort an array?				[CO3, K1]
	(a)	Array.sort()	(c)	Collection.sort()	
	(b)	Arrays.sort()	(d)	System.sort()	
6.	Which of these class is superclass of String and StringBuffer class?				[CO3, K1]
	(a)	java.util	(c)	ArrayList	
	(b)	java.lang	(d)	None of the mentioned	
7.	What will s2 contain after following lines of Java code?				[CO3, K2]

	String s1 = "one"; String s2 = s1.concat("two")			
	(a)	One	(c)	Onetwo
	(b)	Two	(d)	Twoone
8.	Which of these method of class String is used to extract a single character from a String object?			[CO3, K1]
	(a)	CHARAT()	(c)	charAt()
	(b)	chatat()	(d)	ChatAt()
9.	Which of these constructors is used to create an empty String object?			[CO3, K1]
	(a)	String()	(c)	String(0)
	(b)	String(void)	(d)	None of the mentioned
10.	Which of this keyword must be used to inherit a class?			[CO3, K1]
	(a)	Super	(c)	This
	(b)	extent	(d)	Extends
11.	Which of these is correct way of inheriting class A by class B?			[CO3, K1]
	(a)	class B + class A {}	(c)	class B extends A {}
	(b)	class B inherits class A {}	(d)	class B extends class A {}
12.	All classes in Java are inherited from which class			[CO3, K1]
	(a)	java.lang.class	(c)	java.class.object
	(b)	java.class.inherited	(d)	java.lang.Object
13.	If super class and subclass have same variable name, which keyword should be used to use super class?			[CO3, K1]
	(a)	super	(c)	upper
	(b)	this	(d)	classname
14.	Which of the following is used for implementing inheritance through an interface?			[CO3, K1]
	(a)	inherited	(c)	extends
	(b)	using	(d)	implements
15.	What would be the result if a class extends two interfaces and both have a method with same name and signature? Lets assume that the class is not implementing that method.			[CO3, K1]
	(a)	Runtime error	(c)	Code runs successfully
	(b)	Compile time error	(d)	First called method is executed successfully
16.	Which of these is a type of stream in Java?			[CO3, K1]
	(a)	Integer stream	(c)	Byte stream
	(b)	Short stream	(d)	Long stream
17.	Which of these class is used to read from byte array?			[CO3, K1]
	(a)	InputStream	(c)	ArrayInputStream
	(b)	BufferedInputStream	(d)	ByteArrayInputStream
18.	What will be the output of the following Java program? <pre> class output { public static void main(String args[]) </pre>			[CO3, K2]

	<pre> { StringBuffer c = new StringBuffer("Hello"); System.out.println(c.length()); } </pre>				
	(a)	4	(c)	6	
	(b)	5	(d)	7	
19.	What is the process of defining a method in a subclass having same name & type signature as a method in its superclass?				[CO3, K2]
	(a)	Method overloading	(c)	Method hiding	
	(b)	Method overriding	(d)	None of the mentioned	
20.	Which of these keywords can be used to prevent Method overriding?				[CO3, K1]
	(a)	static	(c)	protected	
	(b)	constant	(d)	Final	
21.	At line number 2 in the following code, choose 3 valid data-type attributes/qualifiers among “final, static, native, public, private, abstract, protected”				[CO3, K2]
	<pre> 1. public interface Status 2. { 3. /* insert qualifier here */ int MY_VALUE = 10; 4. } </pre>				
	(a)	final, native, private	(c)	final, static, public	
	(b)	final, static, protected	(d)	final, private, abstract	
22.	Which exception is thrown by read() method?				[CO3, K1]
	(a)	IOException	(c)	SystemException	
	(b)	InterruptedException	(d)	SystemInputException	
23.	Which of these class is used to read characters and strings in Java from console?				[CO3, K1]
	(a)	StringReader	(c)	BufferedReader	
	(b)	BufferedReader	(d)	InputStreamReader	
24.	What will be the output of the following Java program?				[CO3, K2]
	<pre> class output { public static void main(String args[]) { StringBuffer s1 = new StringBuffer("Hello"); s1.setCharAt(1,x); System.out.println(s1); } } </pre>				
	(a)	Xello	(c)	Hxlllo	
	(b)	Xxxxxx	(d)	Hexlo	
25.	What will be the output of the following Java program?				[CO3, K2]
	<pre> class output </pre>				

	<pre> { public static void main(String args[]) { StringBuffer c = new StringBuffer("Hello"); StringBuffer c1 = new StringBuffer(" World"); c.append(c1); System.out.println(c); } } </pre>				
(a)	Hello	(c)	Helloworld		
(b)	World	(d)	Hello World		

PART-B
2 MARK QUESTIONS

26.	What will be the output of the following Java program?				[CO3, K2]
	<pre> class String_demo { public static void main(String args[]) { char chars[] = {'a', 'b', 'c'}; String s = new String(chars); String s1 = "abcd"; int len1 = s1.length(); int len2 = s.length(); System.out.println(len1 + " " + len2); } } </pre>				
(a)	3 0	(c)	3 4		
(b)	0 3	(d)	4 3		

27.	What will be the output of the following Java program?				[CO3, K2]
	<pre> class output { public static void main(String args[]) { String c = " Hello World "; String s = c.trim(); System.out.println("\""+s+"\""); } } </pre>				
(a)	""Hello World""	(c)	"Hello World"		
(b)	""Hello World"	(d)	Hello world		

28.	What will be the output of the following Java program?				[CO3, K2]
	<pre> class output { public static void main(String args[]) { String s1 = "Hello"; String s2 = s1.replace('l','w'); System.out.println(s2); } } </pre>				

	(a)	Hello	(c)	Hewlo	
	(b)	Helwo	(d)	Hewwo	
29.		What will be the output of the following Java program? <pre> class A { int i; void display() { System.out.println(i); } } class B extends A { int j; void display() { System.out.println(j); } } class inheritance_demo { public static void main(String args[]) { B obj = new B(); obj.i=1; obj.j=2; obj.display(); } } </pre>			[CO3, K2]
	(a)	0	(c)	2	
	(b)	1	(d)	Compilation error	
30.		What will be the output of the following Java program if input given is 'abcqfghqbcd'? <pre> class Input_Output { public static void main(String args[]) throws IOException { char c; BufferedReader obj = new BufferedReader(new InputStreamReader(System.in)); do { c = (char) obj.read(); System.out.print(c); } while(c != 'q'); } } </pre>			[CO3, K2]
	a)				
	b)				

		c) abcq d)	
	(a)	Abcqfgh	(c) Abcq
	(b)	Abc	(d) Abcqfghq
31.		What will be the output of the following Java program? <pre> class output { public static void main(String args[]) { String a="hello i love java"; System.out.println(indexof('i')+" "+indexOf('o')+" "+lastIndexOf('i')+" "+lastIndexOf('o'))); } } </pre>	[CO3, K2]
	(a)	6 4 6 9	(c) 7 8 8 9
	(b)	5 4 5 9	(d) 4 3 6 9
32.		What will be the output of the following Java program? <pre> import java.io.*; class filesinputoutput { public static void main(String args[]) { InputStream obj = new FileInputStream("inputoutput.java"); System.out.print(obj.available()); } } </pre>	[CO3, K2]
	(a)	True	(c) prints number of bytes in file
	(b)	False	(d) prints number of characters in the file
33.		What will be the output of the following Java program? <pre> class A { int i; public void display() { System.out.println(i); } } class B extends A { int j; public void display() { System.out.println(j); } } class Dynamic_dispatch { </pre>	[CO3, K2]

		<pre>public static void main(String args[]) { B obj2 = new B(); obj2.i = 1; obj2.j = 2; A r; r = obj2; r.display(); }</pre>			
	(a)	1	(c)	3	
	(b)	2	(d)	4	
34.		What will be the output of the following Java program?	[CO3, K2]		
		<pre>import java.util.*; class ArrayList { public static void main(String args[]) { ArrayList obj = new ArrayList(); obj.add("A"); obj.add("B"); obj.add("C"); obj.add(1, "D"); System.out.println(obj); } }</pre>			
	(a)	[A, B, C, D]	(c)	[A, D, C]	
	(b)	[A, D, B, C]	(d)	[A, B, C]	
35.		What will be the output of the following Java program?	[CO3, K2]		
		<pre>class Output { public static void main(String args[]) { ArrayList obj = new ArrayList(); obj.add("A"); obj.add("D"); obj.ensureCapacity(3); obj.trimToSize(); System.out.println(obj.size()); } }</pre>			
	(a)	1	(c)	3	
	(b)	2	(d)	4	

ModuleIII: EVENT DRIVEN PROGRAMMING

Q. No	PART-A 1 MARK QUESTIONS	[CO#, BTL]
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1.	Which of these is a mechanism for naming and visibility control of a class and its content?			[CO4, K1]
	(a)	Object	(c)	Packages
	(b)	Interfaces	(d)	None of the Mentioned.
2.	Which of this access specifier can be used for a class so that its members can be accessed by a different class in the same package?			[CO4, K1]
	(a)	Public	(c)	No Modifier
	(b)	Protected	(d)	All of the mentioned
3.	Which of the following is the correct way of importing an entire package 'pkg'?			[CO4, K1]
	(a)	import pkg.	(c)	import pkg.*
	(b)	Import pkg.	(d)	Import pkg.*
4.	Which of these package is used for graphical user interface?			[CO4, K1]
	(a)	java.applet	(c)	java.awt.image
	(b)	java.awt	(d)	java.io
5.	Which of this package is used for handling security related issues in a program?			[CO4, K1]
	(a)	java.security	(c)	java.lang.security
	(b)	java.awt.image	(d)	java.io.security
6.	Which of these methods are used to register a keyboard event listener?			[CO4, K1]
	(a)	eventKeyListener()	(c)	addListener()
	(b)	addKeyListener()	(d)	KeyListener()
7.	Event class is defined in which of these libraries?			[CO4, K1]
	(a)	java.io	(c)	java.net
	(b)	java.lang	(d)	java.util
8.	Which of these class is super class of all the events?			[CO4, K1]
	(a)	EventObject	(c)	ActionEvent
	(b)	EventClass	(d)	ItemEvent
9.	MouseEvent is subclass of which of these classes?			[CO4, K1]
	(a)	ContainerEvent	(c)	ComponentEvent
	(b)	ItemEvent	(d)	InputEvent
10.	Which of these are constants defined in WindowEvent class?			[CO4, K1]
	(a)	WINDOW_CLOSED	(c)	WINDOW_ACTIVATED
	(b)	WINDOW_DEICONIFIED	(d)	All of the mentioned
11.	Which of these packages contains all the event handling interfaces?			[CO4, K1]
	(a)	java.awt	(c)	java.awt.event
	(b)	java.event	(d)	java.lang
12.	Which of these methods will respond when you click any button by mouse?			[CO4, K1]
	(a)	mousePressed()	(c)	mouseClicked()
	(b)	mouseEntered()	(d)	all of the mentioned
13.	Which of these functions is called to display the output of an applet?			[CO4, K1]
	(a)	display()	(c)	displayApplet()
	(b)	paint()	(d)	PrintApplet()
14.	Which of these operators can be used to get run time information about an object?			[CO4, K1]
	(a)	Getinfoof	(c)	Instanceof

	(b)	Info	(d)	getInfo	
15.	Which of these methods can be used to output a string in an applet?				[CO4, K1]
	(a)	display()	(c)	drawString()	
	(b)	print()	(d)	transient()	
16.	An applet can play an audio file represented by the AudioClip interface in the java, applet package Causes the audio clip to replay continually in which method?				[CO4, K1]
	(a)	public void stop()	(c)	public void play()	
	(b)	public void loop()	(d)	None of the above	
17.	Which are the common security restrictions in applets?				[CO4, K1]
	(a)	Applets can't load libraries or define native methods	(c)	Applets can play sounds	
	(b)	An applet can't read every system property	(d)	Both A & B	
18.	Which method is called only once during the run time of your applet?				[CO4, K1]
	(a)	stop()	(c)	init()	
	(b)	paint()	(d)	destroy()	
19.	What is used to run an Applet?				[CO4, K1]
	(a)	An html file	(c)	Both A & B	
	(b)	An AppletViewer tool	(d)	None of the above	
20.	The following specifies the advantages of It is lightweight. It supports pluggable look and feel. It follows MVC (Model View Controller) architecture.				[CO4, K1]
	(a)	Swing	(c)	Both A & B	
	(b)	AWT	(d)	None of the above	
21.	What is the name of the Swing class used for frames				[CO4, K1]
	(a)	Window	(c)	JFrame	
	(b)	Frame	(d)	SwingFrame	
22.	The package that contains swing classes and interfaces				[CO4, K1]
	(a)	java.swing	(c)	javax.awt	
	(b)	Java.awt	(d)	javax.swing	
23.	The method used to set the text of JLabel object is				[CO4, K1]
	(a)	setTextLabel()	(c)	setText()	
	(b)	setLabel()	(d)	setLabelText()	
24.	Which of the following control is available in Swing but not in AWT				[CO4, K1]
	(a)	Button	(c)	checkbox	
	(b)	Label	(d)	Radiobutton	
25.	The class Graphics2D comes from the package				[CO4, K1]
	(a)	java.awt	(c)	javax.swing	
	(b)	java.swing	(d)	java.awt.image	
PART-B					
2 MARK QUESTIONS					

26.	What will be the output of the following Java program?	[CO4, K2]
	<pre> package pkg; class output { public static void main(String args[]) { StringBuffer s1 = new StringBuffer("Hello"); s1.setCharAt(1, x); System.out.println(s1); } } </pre>	
(a)	Xello	(c) xxxxx
(b)	Hxlllo	(d) Error
27.	What is the Message is displayed in the applet made by the following Java program?	[CO4, K2]
	<pre> import java.awt.*; import java.applet.*; public class myapplet extends Applet { public void paint(Graphics g) { g.drawString("A Simple Applet", 20, 20); } } </pre>	
(a)	A Simple Applet	(c) A Simple Applet 20 20
(b)	Runtime Error	(d) Compilation Error
28.	What is the length of the application box made the following Java program?	[CO4, K2]
	<pre> import java.awt.*; import java.applet.*; public class myapplet extends Applet { Graphic g; g.drawString("A Simple Applet", 20, 20); } </pre>	
(a)	20	(c) Default value
(b)	Runtime Error	(d) Compilation Error
29.	What is the length of the application box made by the following Java program?	[CO4, K2]
	<pre> import java.awt.*; import java.applet.*; public class myapplet extends Applet { public void paint(Graphics g) { g.drawString("A Simple Applet", 20, 20); } } </pre>	
(a)	20	(c) 100
(b)	50	(d) System dependent
30.	What will be the output of the following Java program?	[CO4, K2]

		<pre>package pkg; class output { public static void main(String args[]) { StringBuffer s1 = new StringBuffer("Hello World"); s1.insert(6 , "Good "); System.out.println(s1); } }.</pre>			
	(a)	HelloGoodWorld	(c)	Compilation erro	
	(b)	Hello Good World	(d)	Runtime error	
31.		What is a listener in context to event handling?			[CO4, K1]
	(a)	A listener is a variable that is notified when an event occurs	(c)	A listener is a method that is notified when an event occurs	
	(b)	A listener is a object that is notified when an event occurs	(d)	None of the mentioned	
32.		What will be the output of the following Java program?			[CO4, K2]
		<pre>import java.awt.event.*; import javax.swing.*; public class ButtonExample { public static void main(String[] args) { JFrame f=new JFrame("Button Example "); final JTextField tf=new JTextField(); tf.setBounds(50,50, 150,20); JButton b=new JButton("Click Here "); b.setBounds(50,100,95,30); b.addActionListener(new ActionListener(){ public void actionPerformed(ActionEvent e){ tf.setText("Welcome."); } }); f.add(b);f.add(tf); f.setSize(400,400); f.setLayout(null); f.setVisible(true); } }</pre>			
	(a)	Welcome.	(c)	Click Here	
	(b)	Button Example	(d)	Error	
33.		What is an event in delegation event model used by Java programming language?			[CO4, K1]
	(a)	An event is an object that describes a state change in a source	(c)	An event is an object that describes a state change in processing	
	(b)	An event is an object that describes any change by the user and system	(d)	An event is a class used for defining object, to create events	
34.		Which of these constant value will change when the button at the end of scroll bar was clicked to increase its value?			[CO4, K1]
	(a)	BLOCK INCREMENT	(c)	UNIT DECREMENT	

	(b)	BLOCK DECREMENT	(d)	UNIT INCREMENT	
35.		How does applet and servlet communicate?			[CO4, K1]
	(a)	HTTP	(c)	FTP	
	(b)	HTTPS	(d)	HTTP Tunneling	

ModuleIV: CONNECTIVITY

Q. No	PART-A 1 MARK QUESTIONS				[CO#, BTL]
1.	When does Exceptions in Java arises in code sequence?				[CO4, K1]
	(a)	Run Time	(c)	Can Occur Any Time	
	(b)	Compilation Time	(d)	None of the mentioned	
2.	Which of the following classes can catch all exceptions which cannot be caught?				[CO4,K1]
	(a)	RuntimeException	(c)	Exception	
	(b)	Error	(d)	ParentException	
3.	Which of the following is a super class of all exception type classes?				[CO4, K1]
	(a)	Catchable	(c)	String	
	(b)	RuntimeExceptions	(d)	Throwable	
4.	Which of the following handles the exception when a catch is not used?				[CO4, K1]
	(a)	Finally	(c)	default handler	
	(b)	throw handler	(d)	java run time system	
5.	What is the use of try & catch?				[CO4, K1]
	(a)	It allows us to manually handle the exception	(c)	It prevents automatic terminating of the program in cases when an exception occurs	
	(b)	It allows to fix errors	(d)	All of the mentioned	
6.	Which of these statement is incorrect?				[CO4, K1]
	(a)	A thread can be formed by implementing Runnable interface only	(c)	start() method is used to begin execution of the thread	
	(b)	A thread can be formed by a class that extends Thread class	(d)	run() method is used to begin execution of a thread before start() method in special cases	
7.	Which function of pre defined class Thread is used to check weather current thread being checked is still running?				[CO4, K1]
	(a)	isAlive()	(c)	isRunning()	
	(b)	Join()	(d)	Alive()	
8.	Thread priority in Java is?				[CO4, K1]
	(a)	long	(c)	Double	
	(b)	Integer	(d)	Float	
9.	Which of these statements is incorrect?				[CO4, K1]
	(a)	By multithreading CPU idle time is minimized, and we can take maximum use of it	(c)	Two thread in Java can have the same priority	
	(b)	By multitasking CPU idle time is minimized, and we can take maximum use of it	(d)	A thread can exist only in two states, running and blocked	

10.	What requires less resources?			[CO4, K1]
	(a)	Thread	(c)	Thread and Process
	(b)	Process	(d)	Neither Thread nor Process
11.	What should not be done to avoid deadlock?			[CO4, K1]
	(a)	Avoid using multiple threads	(c)	Execute foreign code while holding a lock
	(b)	Avoid hold several locks at once	(d)	Use interruptible locks
12.	What is true about threading?			[CO4, K1]
	(a)	run() method calls start() method and runs the code	(c)	run() method can be called directly without start() method being called
	(b)	run() method creates new thread	(d)	start() method creates new thread and calls code written in run() method
13.	Which of these method is used to tell the calling thread to give up a monitor and go to sleep until some other thread enters the same monitor?			[CO4, K1]
	(a)	wait()	(c)	notifyAll()
	(b)	notify()	(d)	sleep()
14.	Which of the following is advantage of using JDBC connection pool?			[CO4, K1]
	(a)	Slow performance	(c)	Using less memory
	(b)	Using more memory	(d)	Better performance
15.	Which of the following is advantage of using PreparedStatement in Java?			[CO4, K1]
	(a)	Slow performance	(c)	Prevents SQL injection
	(b)	Encourages SQL injection	(d)	More memory usage
16.	Which of the following is used to call stored procedure?			[CO4, K1]
	(a)	Statement	(c)	CallableStatment
	(b)	PreparedStatement	(d)	CalledStatement
17.	Which of these method wakes up the first thread that called wait()?			[CO4, K1]
	(a)	start()	(c)	notifyAll()
	(b)	notify()	(d)	wake()
18.	What are the major components of the JDBC?			[CO4, K1]
	(a)	DriverManager, Driver, Connection, Statement, and ResultSet	(c)	DriverManager, Driver, Connection, and Statement
	(b)	DriverManager, Statement, and ResultSet	(d)	DriverManager, Connection, Statement, and ResultSet
19.	Select the packages in which JDBC classes are defined?			[CO4, K1]
	(a)	jdbc and javax.jdbc	(c)	jdbc and java.jdbc.sql
	(b)	rdb and javax.rdb	(d)	sql and javax.sql
20.	Which of the following is used generally used for altering the databases?			[CO4, K1]
	(a)	boolean execute()	(c)	int executeUpdate()
	(b)	ResultSet executeQuery()	(d)	None of the above.

21.	Which of these keywords is not a part of exception handling?			[CO4, K1]
	(a)	Catch	(c)	Thrown
	(b)	Finally	(d)	Try
22.	Which of these method of Thread class is used to Suspend a thread for a period of time?			[CO4, K1]
	(a)	sleep()	(c)	suspend()
	(b)	terminate()	(d)	stop()
23.	Which of these keywords must be used to monitor for exceptions?			[CO4, K1]
	(a)	Try	(c)	Throw
	(b)	Finally	(d)	Catch
24.	Which of these keywords is used to by the calling function to guard against the exception that is thrown by called function?			[CO4, K1]
	(a)	Catch	(c)	Throws
	(b)	Throw	(d)	Try
25.	What exception thrown by parseInt() method?			[CO4, K1]
	(a)	ClassNotFoundException	(c)	ArithmeticException
	(b)	NullPointerException	(d)	NumberFormatException
PART-B 2 MARK QUESTIONS				
26.	What will be the output of the following Java program? <pre> class exception_handling { public static void main(String args[]) { try { int a, b; b = 0; a = 5 / b; System.out.print("A"); } catch(ArithmeticException e) { System.out.print("B"); } } } </pre>			[CO4, K2]
	(a)	A	(c)	Compilation Error
	(b)	B	(d)	Runtime Error
27.	What will be the output of the following Java code?			[CO4, K2]
	<pre> class Output { public static void main(String args[]) { try { </pre>			

	<pre>int a = 0; int b = 5; int c = a / b; System.out.print("Hello"); } catch(Exception e) { System.out.print("World"); } }</pre>			
(a)	Hello	(c)	HelloWorld	
(b)	World	(d)	Compilation Error	
28.	What will be the output of the following Java code?	[CO4, K2]		
	<pre>public class San { public static void main(String[] args) { try { return; } finally { System.out.println("Finally"); } } }</pre>			
(a)	Finally	(c)	The code runs with no output	
(b)	Compilation fails	(d)	An exception is thrown at runtime	
29.	What will be the output of the following Java code?	[CO4, K2]		
	<pre>class newthread implements Runnable { Thread t; newthread() { t = new Thread(this,"My Thread"); t.start(); } public void run() { System.out.println(t.getName()); } } class multithreaded_programing { public static void main(String args[]) { new newthread(); } }</pre>			

	(a)	My Thread	(c)	Compilation Error	
	(b)	Thread[My Thread,5,main]	(d)	Runtime Error	
30.		What is multithreaded programming?			[CO4, K1]
	(a)	It's a process in which two different processes run simultaneously	(c)	It's a process in which many different process are able to access same information	
	(b)	It's a process in which two or more parts of same process run simultaneously	(d)	It's a process in which a single process can access information from many sources	
31.		What is synchronization in reference to a thread?			[CO4, K1]
	(a)	It's a process of handling situations when two or more threads need access to a shared resource	(c)	It's a process by which a method is able to access many different threads simultaneously	
	(b)	It's a process by which many thread are able to access same shared resource simultaneously	(d)	It's a method that allow too many threads to access any information the require	
32.		What is the correct sequence to create a database connection? i. Import JDBC packages. ii. Open a connection to the database. iii. Load and register the JDBC driver. iv. Execute the statement object and return a query resultset. v. Create a statement object to perform a query. vi. Close the resultset and statement objects. vii. Process the resultset. viii. Close the connection.			[CO4, K2]
	(a)	i, ii, iii, v, iv, vii, viii, v	(c)	ii, i, iii, iv, viii, vii, v, vi	
	(b)	i, iii, ii, v, iv, vii, vi, viii	(d)	i, iii, ii, iv, v, vi, vii, viii	
33.		What is the name of the thread in the following Java Program? <pre> class multithreaded_programing { public static void main(String args[]) { Thread t = Thread.currentThread(); System.out.println(t); } } </pre>			[CO4, K2]
	(a)	main	(c)	System	
	(b)	Thread	(d)	None of the mentioned	
34.		Which of the following is correct about Class.forName() method call?			[CO4, K1]

	(a)	This method dynamically loads the driver's class file into memory, which automatically registers it.	(c)	Both of the above.	
	(b)	This method is preferable because it allows you to make the driver registration configurable and portable	(d)	None of the above.	
35.	Which of the following is correct about JDBC?				[CO4, K1]
	(a)	The JDBC API provides the abstraction and the JDBC drivers provide the implementation.	(c)	Both of the above.	
	(b)	New drivers can be plugged-in to the JDBC API without changing the client code.	(d)	None of the above.	

ModuleV: APPLICATION PROGRAMMING

Q. No	PART-A 1 MARK QUESTIONS				[CO#, BTL]
1.	What will be the output of the following JavaScript code? <pre>var arr=[1,2,3]; var rev=arr.reverse(); document.writeln(rev);</pre>				[CO5, K2]
	(a)	1,2,3	(c)	3	
	(b)	3,2,1	(d)	1	
2.	The basic difference between JavaScript and Java is				[CO5,K1]
	(a)	There is no difference	(c)	Variables are specific	
	(b)	Functions are considered as fields	(d)	Functions are values, and there is no hard distinction between methods and fields	
3.	Do functions in JavaScript necessarily return a value?				[CO5, K1]
	(a)	It is mandatory	(c)	Few functions return values by default	
	(b)	Not necessary	(d)	some functions do not return any value	
4.	What will be the possible output of the following JavaScript code? <pre>var a = [1,2,3,4,5]; a.slice(0,3);</pre>				[CO5, K1]
	(a)	Returns [1,2,3]	(c)	Returns [4,5]	
	(b)	Returns [1,2,3,4]	(d)	Returns [1,2,3,4,5]	
5.	What will be the output of the following JavaScript code? <pre>var a=225; document.writeln(Math.sqrt(a));</pre>				[CO5, K1]
	(a)	225	(c)	Error	
	(b)	15	(d)	undefined	
6.	The Java _____ specification defines an application programming interface for communication between the Web server and the application program				[CO5, K1]

	(a)	Servlet	(c)	Program	
	(b)	Server	(d)	Randomize	
7.	The doGet() method in the example extracts values of the parameter's type and number by using				[CO5, K1]
	(a)	response.getAttribute()	(c)	request.getParameter()	
	(b)	response.getParameter()	(d)	request.setParameter()	
8.	When destroy() method is called in servlet ?				[CO5, K1]
	(a)	The destroy() method is called only once at the end of the life cycle of a filter	(c)	The destroyer() method is called after the filter has executed	
	(b)	The destroy() method is called only once at the beginning of the life cycle of a filter	(d)	The destroy() method is called after the filter has executed doFilter method	
9.	What is the maximum size of cookie?				[CO5, K1]
	(a)	4 KB	(c)	4 bytes	
	(b)	4 MB	(d)	40 KB	
10.	How can we invalidate a session?				[CO5, K1]
	(a)	session.discontinue()	(c)	session.disconnect()	
	(b)	session.invalidate()	(d)	session.falsify()	
11.	Which of the following is stored at client side?				[CO5, K1]
	(a)	SSL sessions	(c)	URL rewriting	
	(b)	Hidden form fields	(d)	Cookies	
12.	Which is not a directive?				[CO5, K1]
	(a)	useBean	(c)	export	
	(b)	page	(d)	include	
13.	Which is mandatory in <jsp:useBean /> tag?				[CO5, K1]
	(a)	id, class	(c)	type, property	
	(b)	id, type	(d)	type,id	
14.	Which one of the following is correct for directive in JSP?				[CO5, K1]
	(a)	<%@directive%>	(c)	<%directive%>	
	(b)	<%!directive%>	(d)	<%=directive%>	
15.	Which tag is used to set a value of a JavaBean?				[CO5, K1]
	(a)	<c:set>	(c)	<c:forward>	
	(b)	<c:param>	(d)	<c:choose>	
16.	Java code is embedded under which tag in JSP?				[CO5, K1]
	(a)	Comment	(c)	Scriptlet	
	(b)	Expression	(d)	Declaration	
17.	Which of the following is used for session migration?				[CO5, K1]
	(a)	Persisting the session in database	(c)	Create new database connection	
	(b)	URL rewriting	(d)	Kill session from multiple sessions	
18.	Which type of ServletEngine is a server that includes built-in support for servlets?				[CO5, K1]
	(a)	Standalone ServletEngine	(c)	Add-on ServletEngine	

	(b)	Embedded ServletEngine	(d)	None of the above	
19.	Which cookie it is valid for single session only and it is removed each time when the user closes the browser				[CO5, K1]
	(a)	Persistent cookie	(c)	All the above	
	(b)	Non-persistent cookie	(d)	None of the above	
20.	Which of the following is a way of embedding Client-side JavaScript code within HTML documents?				[CO5, K1]
	(a)	By using body tag	(c)	External file specified by the src attribute of a “script” tag	
	(b)	By using a header tag	(d)	From javascript:encoding	
21.	When does JavaScript code appear inline within an HTML file?				[CO5, K1]
	(a)	Between or Outside the “script” tag	(c)	Outside the “script” tag	
	(b)	Between the header tag	(d)	Between the “script” tag	
22.	What will be done if more than one page requires a file of JavaScript code?				[CO5, K1]
	(a)	Must be re executed	(c)	Retrives from the browser cache	
	(b)	Downloads that many times	(d)	Must be included in all the pages	
23.	Which is not a form of client-side storage?				[CO5, K1]
	(a)	Offline Web Applications	(c)	FileSystem API	
	(b)	Online Web Applications	(d)	Web Databases	
24.	The localStorage and sessionStorage belongs to				[CO5, K1]
	(a)	Window object	(c)	Hash object	
	(b)	DOM object	(d)	Element object	
25.	How constructor can be used for a servlet?				[CO5, K1]
	(a)	Setup() method	(c)	Initialization and Constructor function	
	(b)	Constructor function	(d)	Initialization	
PART-B					
2 MARK QUESTIONS					
26.	What will be the output of the following JavaScript code?				[CO1, K2]
	<pre><p id="demo"></p> <script> document.getElementById("demo").innerHTML = Number(true); </script></pre>				
	(a)	1	(c)	True	
	(b)	0	(d)	Undefined	
27.	Which of the following is true about servlets?				[CO5, K2]
	(a)	Servlets execute within the address space of web server	(c)	Servlets are platform-independent because they are written in java	
	(b)	Servlets can use the full functionality of the Java class libraries	(d)	Servlets execute within the address space of web server, platform independent and uses the functionality of java class libraries	

28.	Which are the session tracking techniques? i. URL rewriting ii. Using session object iii.Using response object iv. Using hidden fields v. Using cookies vi. Using servlet object			[CO5, K2]	
	(a)	i, ii, iii, vi	(c)		i, ii, iii, v
	(b)	i, ii, iv, v	(d)		i, vi, iii, v
29.	What is the difference between servlets and applets? i. Servlets execute on Server; Applets execute on browser ii. Servlets have no GUI; Applet has GUI iii. Servlets creates static web pages; Applets creates dynamic web pages iv. Servlets can handle only a single request; Applet can handle multiple requests			[CO5, K2]	
	(a)	i, ii, iii are correct	(c)		i, ii are correct
	(b)	i, ii, iii, iv are correct	(d)		i, iii are correct
30.	Which one of the following statements is NOT correct about HTTP cookies ?			[CO5, K1]	
	(a)	Cookies can be used to track the browsing pattern of a user at a particular site	(c)		A cookies is a piece of code that has the potential to compromise the security of an Internet users
	(b)	A cookie has an expiry date and time	(d)		cookie gains entry to the user's work area through an HTTP header
31.	What will be the output of the following JavaScript code? <pre>const obj1 = { a: 10, b: 15, c: 18 }; const obj2 = Object.assign({c: 7, d: 1}, obj1); console.log(obj2.c, obj2.d);</pre>			[CO5, K2]	
	(a)	7,1	(c)		Undefined
	(b)	18,1	(d)		Error
32.	What will be the output of the following JavaScript code? <pre><p id="demo"></p> <script> var carName = "Volvo"; var carName; document.getElementById("demo").innerHTML = carName; </script></pre>			[CO5, K2]	
	(a)	Undefined	(c)		Error
	(b)	Volvo	(d)		Garbage value

33.		What will be the output of the following JavaScript code?	[CO5, K2]	
		<pre> <p>The result of adding "5" + 2 + 3:</p> <p id="demo"></p> <script> x = "5" + 2 + 3; document.getElementById("demo").innerHTML = x; </script> </pre>		
	(a)	523	(c)	10
	(b)	Error	(d)	5
34.		If the user presses “ok” in the dialog box then what will be the output of the following JavaScript code? <pre> function msg() { var v= confirm("Are u sure?"); if(v==true) { alert("yes"); } else { alert("no"); } } </pre>	[CO5, K2]	
	(a)	True	(c)	yes
	(b)	no	(d)	undefined
35.		What will be the output of the following JavaScript code? <pre> function totalelements() { var allgenders=document.getElementsByName("gender"); alert("Total Genders:"+allgenders.length); } <form> <input type="radio" name="gender" value="male"> <input type="radio" name="gender" value="female"> <input type="button" onclick="totalelements()" value="Total Genders"> </form> </pre>	[CO5, K2]	
	(a)	2	(c)	0
	(b)	1	(d)	Error