

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
1	1	Write a java program to explain runtime polymorphism using interfaces		4				
2	1	Write a program that implementts dynamic method dispatch.		4				
3	1	Create class Fruit with method void display(). Create subclasses Apple and Banana that overrides display(). In main method kindly show the concept of Dynamic method dispatch by creating reference of Fruit and object of Apple and Banana respectively and call display().		4				
4	1	Output of following Java program? class Base { public void Print() { System.out.println("Base"); } } class Derived extends Base { public void Print() { System.out.println("Derived"); } } class Main{ public static void DoPrint( Base o ) { o.Print(); } public static void main(String[] args) { Base x = new Base(); Base y = new Derived(); Derived z = new Derived(); DoPrint(x); DoPrint(y); DoPrint(z); } }	A	1	Base Derived Derived	Base Base Derived	Base Derived Base	Compiler Error
5	1	Will this code run successfully? If yes, what will be the output?  public class A { private int x = 50; void m1() { System.out.println(x); } } public class B extends A { } public class Test { public static void main(String[] args) { A a = new B(); a.m1(); } }	C	1	30	40	50	Compiler error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
6	1	<p>Predict the output of following program. Note that foo() is public in base and private in derived.</p> <pre> class Base {     public void foo() { System.out.println("Base"); } }  class Derived extends Base {     private void foo() { System.out.println("Derived"); } }  public class Main {     public static void main(String args[]) {         Base b = new Derived();         b.foo();     } } </pre>	C	1	Base	Derived	Compiler Error	Runtime Error
7	1	<p>What will be the output of the following code?</p> <pre> public class A {     int x = 20; }  class B extends A {     int x = 30; }  class Test {     public static void main(String[] args)     {         B b = new B();         System.out.println(b.x);         A a = new A();         System.out.println(a.x);         A a2 = new B();         System.out.println(a2.x);     } } </pre>	B	1	20,20,30	30,20,20	30,30,30	30,20,30

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
8	1	<pre> class Base {     public static void show() {         System.out.println("Base::show() called");     } }  class Derived extends Base {     public static void show() {         System.out.println("Derived::show() called");     } }  class Main {     public static void main(String[] args) {         Base b = new Derived();         b.show();     } } </pre>	A	1	Base::show() called	Derived::show() called	Compiler Error	None of these
9	1	<p>What is the output of the following code?</p> <pre> abstract class LJU {     LJU()     {         System.out.print("Hi ");     } }  class LJJET extends LJU {     LJJET() {         System.out.print("Bye");     } }  class AbstractClassTesting {     public static void main(String[] args)     {         LJU lj = new LJJET();     } } </pre>	B	1	Hi	Hi Bye	Bye	Bye Hi

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
10	1	What is the output of the following code? <pre> abstract class Book {     abstract void show(); } abstract class Fiction extends Book {     abstract void print(); } class BookStore extends Fiction {     void show() {         System.out.println("Book Store Show");     }     void print() {         System.out.println("Book Store Print");     } } class AbstractClassTesting4 {     public static void main(String[] args)     {         BookStore bs = new Fiction();         bs.show(); } }</pre>	C	1	Book Store Show	No Output	Compile time error	Run time error
11	1	<pre> class A {     void m1(String x){         System.out.print("One ");     } } class B extends A {     public void m1(String x){         System.out.print("Two ");         super.m1(null);     } } class Test{     public static void main(String[] args){         A a = new B();         a.m1(null);     } }</pre>	B	1	One Two	Two One	null null	Compiler error
12	1	Declare a class called book having author_name as private data member. Extend book class to have two sub classes called book_publication&paper_publication. Each of these classes have private member called title. Write a complete program to show usage of dynamic method dispatch (dynamic polymorphism) to display book or paper publications of given author. Use command line arguments for inputting data.		5				
13	1	Which of these keywords are used to define an abstract class?	B	1	abst	abstract	Abstract	abstract class

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
14	1	What is the correct statement in java abstract class?  A) In abstract class every method must be abstract B) In Abstract class we have to define atleast one abstract method. C) In abstract class if we do not define any abstract method then it will not give any error. D) In abstract class every method is public, static and abstract	D	1	A & B	only D	only A	Only C
15	1	Write a abstract class named Person and its two subclasses named student and Employee. A person has a name, address, phone number and email address. A student has enrollment course. An Employee has an office, salary, and designation. Define constructors and methods for input and display for both classes. Define constructor and methods for input and display for both classes. Write a main program to give demonstration of all.		5				
16	1	Describe abstract class called Shape which has three sub classes say Triangle, Rectangle, Circle. Define one method area() in the abstract class and override this area() in these three subclasses to calculate for specific object i.e. area() of Triangle subclass should calculate area of triangle etc. Same for Rectangle and Circle.		5				
17	1	The abstract Vegetable class has three subclasses named Potato, Brinjal and Tomato. Write an application that demonstrates how to establish this class hierarchy. Declare one instance variable of type String that indicates the color of a vegetable. Create and display instances of these objects. Override the toString() method of Object to return a string with the name of the vegetable and its color.		5				
18	1	All Interface variables are ____ by default in Java.	C	1	public Only	final Only	public, static and final	None
19	1	All Interface method are ____ by default in Java.	C	1	public	abstract	public and abstract	final
20	1	A Class implementing an Interface can use ____ access modifier before the implemented methods.	A	1	public	private	protected	default
21	1	Java program to implement interface with hierarchical inheritance		4				
22	1	Which is the keyword used to implement interface in Java?	B	1	extends	implements	instanceof	None of these
23	1	Choose a correct statement about Java Interfaces?	D	1	Interface contains only abstract methods by default.	A Java class can implement multiple interfaces	An Interface can extend or inherit another Interface.	All the mention

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
24	1	What will be the output of the following code? <pre>interface Book {     char type='C'; } public class InterfaceTest3 {     public static void main(String[] args)     {         System.out.println(new Book().type);     } }</pre>	D	1	C	No Output	run time error	Compiler error
25	1	Write a java program to implement the multiple inheritance concepts for calculating area of circle and square		4				
26	1	Write a program that illustrates interface inheritance. Interface A is extended by A1 and A2. Interface A12 inherits from both P1 and P2. Each interface declares one constant and one method. Class B implements A12. Instantiate B and invoke each of its methods. Each method displays one of the constants.		4				
27	1	Create interface Univerity with method takeExam(). Create Interface State with method getName(). Create interface StateUniversity that extends University and State. Create print() inside StateUniversity. Create class TestState that implements StateUniversity interface. and Create a class with main method that calls all methods of TestState class		4				
28	1	Write a program that illustrates interface inheritance. Interface A is extended by A1 and A2. Interface A12 inherits from both P1 and P2. Each interface declares one constant and one method. Class B implements A12. Instantiate B and invoke each of its methods. Each method displays one of the constants		4				
29	1	Write a program that illustrates interface inheritance. Interface P is extended by P1 And P2. Interface P12 inherits from both P1 and P2. Each interface declares one constant and one method. Class Q implements P12. Instantiate Q and invokes each of its methods. Each method displays one of the constants		4				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
30	1	<p>What is the output of the following code?</p> <pre> class King {     public static void main(String[] args) {         King k = new King();         Elephant e = k.new Elephant();         System.out.print(e.step2(2, 3));     }     interface Queen {         float step2(int low, int high);     }     interface Pawn {         float step3(int a, int b, int c);     }     abstract class Knight implements Queen, Pawn {     }     class Elephant implements Queen {         public float step2(int x, int y) {             return 2;         }     } } </pre>	C	1	compile time error	run time error	2.0	2
31	1	<p>What will be the output of the following code?</p> <pre> interface Bus {     void move(); } class ElectricBus implements Bus {     public void move()     {         System.out.println("Implemented move() method.");     } } public class InterfaceTest1 {     public static void main(String[] args)     {         new ElectricBus().move();     } } </pre>	B	1	No output	Implemented move() method.	run time error	Compiler error
32	1	<p>Write a program to demonstrate the multipath inheritance for the classes having relations as shown in figure A-&gt; (B, C) -&gt;D.</p> <pre>       A      / \     B   C      \ /       D </pre>		5				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
33	1	Explain single level and multiple inheritances in java. Write a program to demonstrate combination of both types of inheritance as shown in figure 1. i.e.hybrid inheritance . <pre> A  B  \ /   C       D </pre>		5				
34	1	The Transport interface declares a deliver() method. The abstract class Animal is the superclass of the Tiger, Camel, Deer and Donkey classes. The Transport interface is implemented by the Camel and Donkey classes. Write a test program that initialize an array of four Animal objects. If the object implements the Transport interface, the deliver() method is invoked.		5				
35	1	Create an interface named Polygon. It has a default method getSides() and an abstract method getArea().create two classes Rectangle and Square that implement Polygon.The Rectangle class provides the implementation of the getArea() method and overrides the getSides() method. the Square class only provides the implementation of the getArea() method. while calling the getSides() method using the Rectangle object, the overridden method is called. However, in the case of the Square object, the default method is called.		5				
36	1	Can you call it a full-fledged inheritance of using ABSTRACT classes and INTERFACES in Java?	A	1	NO	YES	There is no such concept of abstract class in JAVA	None of these
37	1	Which two classes use the Shape class correctly?	B	1	public class Circle implements Shape { private int radius; }	public abstract class Circle extends Shape { private int radius; }	public class Circle extends Shape { private int radius; public void draw(); }	public abstract class Circle implements Shape { private int radius; public void draw(); }
38	1	Which of the following is correct? A: All methods in an interface are by default public. We can not change the access specifier to private or protected. B: Abstract methods have to be either protected or public. They can not be private	B	1	Both are incorrect	Both are Correct	only A	Only B



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
39	1	What will be the output of the following code? <pre> interface LJU1 {     void exam(); } abstract class LJJET1 implements LJU1{     public void exam(){         System.out.println("LJJET Exam");     } } class FY extends LJJET1{     public void exam(){         System.out.println("FY Exam");     } } class Fact1{     public static void main(String args[]){         LJJET1 lj = new FY();         lj.exam();     } }           </pre>	A	1	FY Exam	LJJET Exam	No output	compile time error
40	1	What will be the output of the following code? <pre> interface X {     void show(); } interface Y {     void print(); } interface Z extends X, Y{     void display(); } abstract class LJFac implements Z{     public void show(){         print();     }     public void print(){         System.out.print("-Hi ");         display();     } } class LJFYFac extends LJFac{     public void display(){         System.out.print("Hi");     } } class TestEx{     public static void main(String args[]){         LJFYFac f = new LJFYFac();         f.show();    } }           </pre>	D	1	Compile time error : display() Not Found	Compile time error: cannot extend LJFac	Hi-Hi	-Hi Hi

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
41	1	<p>What will be the output of following java program?</p> <pre> interface calculate {     int VAR = 0;     void cal(int item); } class display implements calculate {     int x;     public void cal(int item)     {         if (item&lt;2)             x = VAR;         else             x = item * item;     } } class interfaces {     public static void main(String args[])     {         display[] arr=new display[3];         for(int i=0;i&lt;3;i++)             arr[i]=new display();         arr[0].cal(0);         arr[1].cal(1);         arr[2].cal(2);         System.out.print(arr[0].x+" " + arr[1].x + " " + arr[2].x);     } } </pre>	C	1	0 1 2	1 1 4	0 0 4	0 1 4
42	1	<p>Write a program to demonstrate the multipath inheritance for the classes having relations as shown in figure</p> <pre> A   B   C  \  /   /   D   /       /    E </pre>		5				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
43	1	Q1)Create an abstract class pen with methods write () and refill () as abstract methods Q2)Use the pen class from Q1 to create a concrete class fountain pen with additional method change Nib () Q3)Create a class monkey with jump () and bite () methods Create a class human which inherits this monkey class and implements basic animal interface with eat () and sleep methods Q4)Create a class telephone with () , lift () and disconnected () methods as abstract methods create another class smart telephone and demonstrate polymorphism Q5)Demonstrate polymorphism using using monkey class from Q3 Q6)Create an interface TVremote and use it to inherit another interface smart TVremote Q7)Create a class TV which implements TVremote interface from Q6		5				
44	1	Write a program that demonstrates the instance of operator. Declare interfaces I1 and I2. Interface I3 extends both of these interfaces. Also declare interface I4. class X implements I3. Class W extends X and implements I4. create an object of class W. Use the instance of operator to test if that object implements each of the interfaces and is of type X.		4				
45	2	Which of the following is true about inheritance in Java?  1) Private methods are final. 2) Protected members are accessible within a package and inherited classes outside the package. 3) Protected methods are final. 4) We cannot override private methods.	A	1	1, 2 and 4	Only 1 and 2	1, 2 and 3	2, 3 and 4
46	2	A class member declared protected becomes a member of subclass of which type?	B	1	public Member	Private Member	Protected Member	Static Member
47	2	Which of this access specifiers can be used for a class so that its members can be accessed by a different class in the same package?	D	1	public	protected	default	all of the mention
48	2	Which access specifiers can be used for a class so that it's members can be accessed by a different class in the different package	A	1	public	protected	default	all of the mention
49	2	Choose the correct statement about access modifiers in Java.  A) public, protected and default variables and methods can be accessed outside the package somehow. B) public and protected variables and methods can be accessed outside the package somehow. C) Only public variables and methods can be accessed outside the package somehow. D) all of the above	B	1	Only A	Only B	Only C	B and C

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
50	2	What is the output of the following code? <pre> class A {     public int i;     private int j; } class B extends A {     void display()     {         super.j = super.i + 2;         System.out.println(super.i + " " + super.j);     } } class inheritance {     public static void main(String args[]) {         B obj = new B();         obj.i=1;         obj.j=2;         obj.display();     } } </pre>	D	1	2 2	3 3	1 2	compile time error
51	2	Which of these packages contains abstract keyword?	A	1	java.lang	java.util	java.io	java.system
52	2	Which of these keywords is used to define packages in Java?	C	1	pkg	Pkg	package	Package
53	2	What is the maximum number of levels or depth up to which sub-packages can be defined in Java?	D	1	8	16	32	There is no limit
54	2	Which declaration statement should be the first statement in a Java file	C	1	class	inteface	package	import
55	2	Which is the symbol used to separate a super-package and a sub-package at the time of declaring or importing in a Java program?	A	1	Period (.) or DOT	Dollar (\$)	Pound (#)	Arrow (->)
56	2	Will this code compile successfully? If yes, what is the output? If no, identify the errors. <pre> package pack1; public class A {     private int x = 50;     protected int y = 100;     int z = 200; } package pack2; import pack1.A; public class B extends A { } import pack2.B; public class Test {     public static void main(String[] args) {         B b = new B();         System.out.println(b.x);         System.out.println(b.y);         System.out.println(b.z); } } </pre>	D	1	50	100	200	Compiler Error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
57	2	Which of the following is an incorrect statement about packages?	D	1	Package defines a namespace in which classes are stored	A package can contain other package within it	Java uses file system directories to store packages	A package can be renamed without renaming the directory in which the classes are stored
58	2	The name of a package is the name of the ____ in Java.	D	1	folder	All parent folders separated by DOT symbols	All parent packages separated by DOT symbols	All the above
59	2	Which is the correct syntax to import a Java package below? A) import java.package.*; B) import java package1.package2.*; C) import java package1.package2.Class; D) import java package1.package2.Class.*;	A	1	Only A	Only B	Only C	B and C
60	2	Choose a correct statement about using the classes or interfaces or abstract classes inside the packages in our Java program. A) You can extend the class imported from the package. B) You can implement the interfaces imported from the package. C) You can extend the abstract classes imported from the package.	D	1	Only A	Only B	B and C	A,B and C
61	2	What is the output of the below Java program with packages? //MathClas.java package package1; public class MathClass { public static int getRandom() { //returns a random number from 0 to 999 return ((int) (Math.random() * 1000)); } } //PackageTest3.java import package1.*; public class PackageTest3 { public static void main(String[] args) { System.out.print(MathClass.getRandom()); } }}	C	1	No output	Compiler error	484 (some random number)	run time error
62	2	Program to create user defined package and write a Program to calculate marks & percentage of students		4				
63	2	Create a multiple package and show the uses of different access modifier		4				
64	2	create class circle in pachake 1 and that class calculate the area of circle. Create a class Test in package 2 which print the area of circle of package 1.		4				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
65	2	Create a multiple package which show the difference between protected and default access modifier		4				
66	2	Create class p1 in package 1 and that class calculate the reverse of a number (take user input and protected method). Create a class Test in package 2 which print the reverse of number of package 1		3				
67	2	package P contain a class One that has x as data member. package Q contain a class Two that has y as data member .package R contain a class Test that has add() method which add X and Y of class One and Two.		5				
68	3	Which are the child class of Throwable class?	C	1	Exception	Error	Both A and B	None of the mention
69	3	Which of these keywords is not a part of exception handling?	D	1	try	catch	finally	thrown
70	3	<pre> class p{     public static void main(String[] args) {         try {             System.out.println("Hello");         }     } } </pre>	A	1	compile time error	Run time error	Both A and B	None of the mention
71	3	Which of these keywords must be used to handle the exception thrown by try block in some rational manner?	C	1	try	finally	catch	thrown
72	3	Which of these keywords is used to manually throw an exception?	D	1	try	finally	catch	throw
73	3	What is the base class for all Exception ?	B	1	java.lang.Exception	java.lang.Throwable	java.lang.RuntimeException	java.lang.Error
74	3	These exceptions are seen in NullPointerException,ArrayIndexOutOfBoundsException, ArithmeticException,NumberFormatException ?	B	1	Checked exception	Unchecked exception	Both A and B	none of the mention
75	3	The built-in base class in Java, which is used to handle all exceptions is	C	1	Raise	Exception	Throwable	Error
76	3	Which of the following statements is true about exception handling in Java:	A	1	A try block can have many catch blocks but only one finally block	A try block can have many catch blocks and many finally blocks	A try block must have one finally block for each catch block	A try block must have at least one catch block to have a finally block
77	3	Which keyword is used to handover our created exception objects to the JVM manually?	B	1	try	throw	throws	break

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
78	3	<p>What will be the output of the following Java program?</p> <pre> class exception_handling {     public static void main(String args[])     {         try         {             System.out.print("Hello" + " " + 1 / 0);         }         catch(ArithmeticException e)         {             System.out.print("World");         }     } } </pre>	B	1	Hello	World	HelloWorld	Hello World
79	3	<p>What will be the output of the following Java program?</p> <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");         }         finally         {             System.out.print("C");         }     } } </pre>	D	1	A	B	AC	BC
80	3	<p>Predict the output of following Java program</p> <pre> class Main {     public static void main(String args[]) {         try {             throw 10;         }         catch(int e) {             System.out.println("Got the Exception " + e);         }     } } </pre>	C	1	Got the Exception 10	Got the Exception 0	Compile time error	run time error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
81	3	Predict the output of following Java program <pre>class Hello{     public static void main(String[] args) {         System.out.print("1");         try{             System.out.print("2");         }         finally{             System.out.println("3");         }     } }</pre>	A	1	123	1 2 3	Compile time error	Run time error
82	3	Predict the output of following Java program <pre>class A{     public static void main(String[] args) {         int[] a = new int[5];         a[10] = 50;         System.out.println(a[3]);     } }</pre>	A	1	ArrayIndexOutOfBoundsException	NullPointerException	ArithmeticException	NumberFormatException
83	3	What will be the output of the following Java program? <pre>class P2 {     public static void main(String[] args) {         try {             System.out.println("FY1");         }         finally {             System.out.println("FY2");         }         catch (Exception e) {             System.out.println("FY3");         }     } }</pre>	C	1	FY1FY2FY3	FY1FY3FY2	compile time error	run time error
84	3	What will be the output of the following code? <pre>class P3 {     public static void main(String[] args) {         try {             System.out.print(1 + ",");         } catch (ArithmeticException e) {             System.out.print(7 + ",");         } finally {             System.out.print(8 + ",");         }         System.out.print(9 + ",");     } }</pre>	D	1	1,9,8,	1,7,8,	7,8,9,	1,8,9,



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
85	3	<p>Predict the output of following Java program</p> <pre> class Base extends Exception {} class Derived extends Base {}  public class Main {     public static void main(String args[]) {         // some other stuff         try {             // Some monitored code             throw new Derived();         }         catch(Base b) {             System.out.println("Caught base class exception");         }         catch(Derived d) {             System.out.println("Caught derived class exception");         }     } } </pre>	D	1	Caught base class exception	Caught derived class exception	Compiler Error because derived is not throwable	Compiler Error because base class exception is caught before derived class
86	3	<p>Predict the output of following Java program</p> <pre> class TestException {     static int a,b;     public static void main(String args[]) {         try{             int a1 = Integer.parseInt(args[2]);             int b1 = Integer.parseInt(args[1]);             int c = a1+b1/(a+b);         }         catch(ArrayIndexOutOfBoundsException e) {             System.out.println("Hello"); }         catch(ArithmeticException e) {             System.out.println("Bye");         }         catch(Exception e) {             System.out.println("LJU");         } } } </pre> <p>if I run java code such as : java TestException 0 2 3  What will be the output?</p>	B	1	LJU	Bye	Compile time error	run time error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
87	3	Predict the output of following Java program <pre> class Test {     public static void main(String[] args) {         try         {             int a[]={1, 2, 3, 4};             for (int i = 1; i &lt;= 4; i++) {                 System.out.println ("a[" + i + "]= " + a[i] + "n");             }         }         catch (Exception e) {             System.out.println ("error = " + e);         }         catch (ArrayIndexOutOfBoundsException e)         {             System.out.println ("ArrayIndexOutOfBoundsException");         }     } } </pre>	D	1	ArrayIndexOutOfBoundsException	Error Code is printed	some other output	compile time error
88	3	What will be the output of following java program? <pre> class Test {     public static void main(String[] args) {         String s="null";         try {             System.out.print("n");             System.out.print("u");             System.out.print("l");             System.out.print(s.length());             return;}         catch(NullPointerException e) {             System.out.print("NPE"); }         finally {             System.out.print("l"); }         System.out.print("null");     } } </pre>	D	1	nuINPEInull	nuINPE4	nullnull	nuI4l

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
89	3	What will be the output of following java program? <pre> class Test {     public static void main(String[] args) {         try         {             ArithmeticException e= new ArithmeticException("Division ");             throw e;         }         catch(Exception e)         {             System.out.print(e.getMessage());         }         System.out.println("/0");     } } </pre>	D	1	Division	/0	Division/0	Division /0
90	3	Write a program to handle ArrayIndexOutOfBoundsException using try-catch-finally and throw.		3				
91	3	Write a program to handle InterruptedException, IllegalArgumentException using try-catch-finally and throw		3				
92	3	Write a method for computing $x^y$ by doing repetitive multiplication. x and y are of type integer and are to be given as command line arguments. Raise and handle exception(s) for invalid values of x and y. Also define method main.		4				
93	3	Write an application that searches through its command-line argument. If an argument is found that does not begin with and upper case letter, display error message and terminate.		4				
94	3	Write a program to create user define exception MyException. Define a class ExceptionDemo, that has a method named compute(int a ) which throws a MyException object, when compute(int a )'s integer parameter is greater than 10		4				
95	3	Write a program to handle NullPointerException.		4				
96	3	Write a program to create user define exception MyException. Define a class ExceptionDemo that has a method named compute( ) which throws a MyException object, when compute( )'s integer parameter is divisible by 7 and not divisible by 5.		4				
97	3	Write an application that searches through its command-line argument. If first command line argument is found zero then display error message.		4				
98	3	Write an application that searches through its command-line argument. If sum of first and second command line argument is found 10 then display error message.		4				
99	3	write a program to enter the five subject marks out of 100 of student. If any subject marks is less than 35 then programm will generate exception		4				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
100	3	It is required to maintain and process the status of total 9 resources. The status value is to be stored in an integer array of dimension 3x3. The valid status of a resource can be one of the 2followings:free: indicated by integer value 0 occupied: indicated by integer value 1 inaccessible: indicated by integer value 2 Declare a class called ResourcesStatus, having data member called statusRef, referring to a two dimensional array (3x3) of integers to be used to refer to the above mentioned status values. Define a member method called processStausCount that counts and displays total number of free resources, total number of occupied resources and total number of inaccessible resources. The exception to be raised and handled if total number of occupied resources exceeds total number of free resources. The handler marks status of all inaccessible resources as free. Accept initial status values from command line arguments and initialize the array. Raise and handle user defined exception if invalid status value given		5				
101	3	Write a complete program to accept N integer numbers from the command line. Raise and handle exceptions for following cases : - when a number is -ve - when a number is evenly divisible by 10 - when a number is greater than 1000 and less than 2000 - when a number is greater than 7000 Skip the number if an exception is raised for it, otherwise add it to find total sum		5				
102	3	Declare a class called coordinate to represent 3 dimensional Cartesian coordinates( x, y and z). Define following methods: - constructor - display, to print values of members - add_coordinates, to add three such coordinate objects to produce a resultant coordinate object. Generate and handle exception if x, y and z coordinates of the resultare zero. - main, to show use of above methods.		5				
103	3	Write an application that searches through its command-line argument. If any of command line argument is found nagative then display error message.		5				
104	4	Select the method that should be overridden to provide thread's behavior when Thread class is extended:	D	1	start()	resume()	runnable()	run()
105	4	What are Threads?	A	1	lightweight process	heavyweight process	Both	none of above
106	4	Multithreading is also called as _____	C	1	Recurrent	Crosscurrent	Concurrency	Simultaneity
107	4	What is the default relation b/w Thread & Runnable?	D	1	Thread is child of Runnable	Runnable extends Thread	Thread extends Runnable	Thread implements Runnable

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AI/ML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
108	4	Which method is used to get the object of current thread?	B	1	Thread.CurrentThread()	Thread.currentThread()	Thread.liveThread()	Thread.getThread()
109	4	Which method throws InterruptedException	A	1	join()	start()	run()	currentThread()
110	4	Two threads cannot simultaneously enter into the methods of the same object if the methods are	B	1	static	synchronized	synchronize	synchronization
111	4	Which method is not a part of multi-threading?	A	1	Sleep()	join()	wait()	run()
112	4	methods used for inter thread communication are?	D	1	wait()	notify()	notifyAll()	All of the above
113	4	Which of these are types of multitasking?	C	1	Process based	Thread based	Process and Thread based	None of the mentioned
114	4	If there occurs any exception in thread, then other threads	C	1	stop executing	gets impacted	doesn't gets impacted	daemon thread starts executing
115	4	Which method is used to assign name of thread by programmer?	D	1	run()	start()	getName()	setName(String s)
116	4	Which of these method waits for the thread to terminate?	A	1	join()	stop()	sleep()	isAlive()
117	4	Which of the following method is not available in Thread class?	D	1	join()	run()	sleep()	Run()
118	4	Which function of pre defined class Thread is used to check whether current thread being checked is still running?	C	1	Join()	Alive()	isAlive()	isRunning()
119	4	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?	A	1	wait()	sleep()	notifyAll()	notify()
120	4	What is true about threading?	D	1	run() method creates new thread	run() method calls start() method and runs the code	run() method can be called directly without start() method being called	start() method creates new thread and calls code written in run() method
121	4	Thread synchronization in a process will be required when	D	1	All threads sharing the same address space	All threads sharing the same global variables	All threads sharing the same files	All
122	4	Which of the following is a correct way to synchronize a method in Java code?	A	1	public synchronized void method() { }	public void method() { synchronized { } }	public void synchronized method() { }	public void method() { synchronized void() { } }
123	4	Answer the Question : start() method is called to _____ ?	A	1	Invoke the thread, before the run() method is executed	Execute the thread which is in 'ready to run' state	Transit the thread from 'running' to 'ready to run' state	Transit from runnable to waiting state
124	4	Threads in java share the same memory space and resources.	B	1	FALSE	TRUE	Depends on Compiler	Depends on JVM
125	4	We can create thread in java by a) Implementing Thread Class b) Implementing Runnable Interface c) Implementing Thread Interface d) Extending Thread class e) Extending Runnable class	B	1	a & b only	b & d only	a & e only	c & e only
126	4	The tasks or job that thread needs to perform is written inside	D	1	inner class	Static Block	Constructor	run()

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
127	4	Which is the correct Thread Class constructor? A) Thread(Runnable r) B) Thread(Runnable r, Thread t) C) Thread(Runnable r, String s) D) Thread(String s, Runnable r)	C	1	A & B only	C & D only	A & C Only	A & D Only
128	4	What is the name of the thread in output of this program? Class A { public static void main(String args[]) { Thread t = Thread.currentThread(); System.out.println(t.getName()); } }	A	1	main	java	system	thread
129	4	what is output of this code? class A extends Thread { public void run() { System.out.println("Hello"); } public void start() { System.out.println("Hii"); } } class LJU { public static void main(String[] args) { A a = new A(); a.start(); } }	B	1	Hello	Hii	HelloHii	None of the above
130	4	what is the output of this code? class A extends Thread { public void run() { System.out.println("Hello"); } public void run(int a) { System.out.println("Hii"); } } class LJU { public static void main(String[] args) { A a = new A(); a.start(10); } }	D	1	Hello	Hii	HelloHii	Error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
131	4	<pre>class multithreaded_programing {     public static void main(String args[]) {         Thread t = Thread.currentThread();         Thread t1 = t;         System.out.println(t1);     } }</pre>	C	1	Thread[0,main]	Thread[t,5,main]	Thread[main,5,main]	Thread[t1,5,main]
132	4	<p>Assume the following method is properly synchronized and called from a thread A on an object B:  wait(2000);  After calling this method, when will the thread A become a candidate to get another turn at the CPU?</p>	C	1	Two seconds after thread A is notified	Two seconds after lock B is released	After thread A is notified or after two seconds.	After the lock on B is released and after two seconds.
133	4	Which of these statement is incorrect?	D	1	start() method is used to begin execution of the thread	A thread can be formed by a class that extends thread class	A thread can be formed by implementing Runnable interface only	run() method is used to begin execution of a thread before start() method in special cases
134	4	<p>What will be the output of the following code?</p> <pre>class LJ extends Thread {     public static void main(String[] args) {         LJ t = new LJ();         Thread x = new Thread(t);         x.start(); /* Line 7 */     }     public void run() {         for (int i = 0; i &lt; 3; ++i) {             System.out.print(i + "..");         }     } }</pre>	A	1	0..1..2..	0..1..2..3..	1..2..3..	Compilation fails
135	4	<p>Which of the following line of code is suitable to start a thread ?</p> <pre>class X implements Runnable {     public static void main(String args[])     {         /* Missing code? */     }     public void run() {} }</pre>	C	1	Thread t = new Thread(X);	Thread t = new Thread(X); t.start();	X run = new X(); Thread t = new Thread(run); t.start();	Thread t = new Thread(); x.run();

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
136	4	What will be the output of the following code? <pre>class MyThread extends Thread {     public static void main(String [] args)     {         MyThread t = new MyThread();         t.start();         System.out.print("one. ");         t.start();         System.out.print("two. ");     }     public void run()     {         System.out.print("Thread ");     } }</pre>	B	1	Compile time error	Run time exception	Thread one. Thread two.	one. two. Thread
137	4	What is output of this code? <pre>class A extends Thread {     public void run() {         System.out.println("Hello");     }     public void run(int a) {         System.out.println("Hii");     } } class LJU {     public static void main(String[] args) {         A a = new A();         a.run(10);     } }</pre>	B	1	Hello	Hii	HelloHii	None of the above
138	4	What is the difference between synchronized methods and synchronized blocks in Java?	C	1	Synchronized methods can be used on non-static methods, while synchronized blocks can only be used on static methods	Synchronized methods are less efficient than synchronized blocks	Synchronized blocks can be used to synchronize access to specific parts of a method, while synchronized methods lock the entire method	There is no difference between synchronized methods and synchronized blocks



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
139	4	What is the output? class TestDemo{ public static void main(String args[]) { Thread t = new Thread("ONE"); Thread t2 = new Thread("TWO"); Thread t3 = Thread.currentThread(); System.out.println(t3.getName()); } }	C	1	ONE	TWO	main	No Output
140	4	class newthread extends Thread { Thread t; String name; newthread(String threadname) { name = threadname; t = new Thread(this, name); t.start(); } public void run() {} } class LJ { public static void main(String args[]) { newthread obj1 = new newthread("one"); newthread obj2 = new newthread("two"); try { obj1.t.wait(); System.out.print(obj1.t.isAlive()); } catch (Exception e) { System.out.print("Main thread interrupted"); } } } }	C	1	TRUE	FALSE	Main thread interrupted	None of the mentioned
141	4	what is output of Below Java Programs? public class ThreadExtended extends Thread { public void run() { System.out.println("Thread is running no"); } public static void main(String[] args) { ThreadExtended threadE = new ThreadExtended(); ThreadExtended threadEx = new ThreadExtended(); ThreadExtended threadEx1 = new ThreadExtended(); threadEx.start(); } }	A	1	Thread is running no	Thread is running no Thread is running no	Thread is running no Thread is running no Thread is running no	None of the above

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
142	4	<p>The static method Thread.currentThread() returns a reference to the currently executing Thread object. What is the result of this code?</p> <pre> class Test {     public static void main(String [] args)     {         printAll(args);     }     public static void printAll(String[] lines)     {         for(int i = 0; i &lt; lines.length; i++)         {             System.out.println(lines[i]);             Thread.currentThread().sleep(1000);         }     } } </pre>	D	1	Each String in the array lines will output, and there is no guarantee there will be a pause because currentThread() may not retrieve this thread.	Each String in the array lines will output, with no pause in between because this method is not executed in a Thread.	Each String in the array lines will output, with a 1-second pause.	This code will not compile.
143	4	<p>What is the output of the following code?</p> <pre> class LJU extends Thread {     public void run(){         System.out.print("Hi ");     } }  class Test{     public static void main(String args[])     {         LJU lj = new LJU();         lj.run();         System.out.println("Hello");     } } </pre>	B	1	HelloHi	Hi Hello	compile time error	output will be different every time

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
144	4	What will be the output of the following code? <pre> class One extends Thread {     public void run(){         for(int i=0; i&lt;2; i++)         {             System.out.print(i+" ");         }     } } class Test{     public static void main(String args[])     {         Test t = new Test();         One o = new One();         t.call(o);     }     public void call(One o) {         o.start();     } }           </pre>	B	1	Compile time error	0 1	0 0	null null
145	4	What will be the output of the following code? <pre> class LJ extends Thread {     public void run() {         try {             Thread.sleep( 'a' );         } catch (Exception e) {             e.printStackTrace();         }         System.out.print("L"); } } class runLJ {     synchronized public static void main(String[] args) throws Exception {         LJ t1 = new LJ( );         t1.start();         synchronized(t1) {             t1.wait();         }         System.out.println("U"); } }           </pre>	A	1	LJU	"LJU"	LJ	No Output

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
146	4	<p>What will be the output of the following code?</p> <pre> class LJJET extends Thread {     public void runn() {         System.out.print('A' + 5);         display();     }     static void display() {         System.out.print("Q");     } } class runLJ {     public static void main(String[] args) throws Exception {         LJJET t1 = new LJJET( );         t1.start();         t1.join();         System.out.println('a' + 3);     } } </pre>	D	1	Q100	70Q100	a3	100
147	4	<p>What will be the output of the following code?</p> <pre> class thread implements Runnable {     static Thread m;     public void run(){         try {             m.join( ); }         catch ( Exception e ) {             System.out.print("X"); }         System.out.print("AB"); } } class runLJ {     public static void main(String[] args) throws Exception {         Thread t1 = new Thread( new thread ( ), "Y");         thread.m = Thread.currentThread();         t1.start();         t1.join(1000);         System.out.print("m"); } } </pre>	A	1	mAB	ABm	XAB	Compile time error
148	4	<p>Write an application that creates and starts three threads. Each thread is instantiated from the same class. It executes a loop with 10 iterations. Each iteration displays string "HELLO", sleeps for 300 milliseconds. The application waits for all the threads to complete &amp; displays the message "Good Bye..."</p>		3				
149	4	<p>Write a program to create a child thread to print integer numbers 1 to 10</p>		3				
150	4	<p>Write a program to create two threads, one thread will check whether given number is prime or not and second thread will print prime numbers between 0 to 100</p>		3				

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
151	4	It's IPL 2023 time. In this process of IPL-23 there is a thread called Bowler. This Bowler is going to create two threads with name – “Yorker” and “googly”. Write a java program to perform following task with each thread. Task 1 : if the thread name is "yorker" then it should print "SIXER" Task 2 : if the thread name is "googly" then it should print "WICKET" Make sure first thread bowl must be yorker. When execution of first thread is completed then and only then second bowl googly should work. Hint: Here Bowler is a Thread Class. and It must have execution of SIXER AND WICKET. Both yorker and googly must be from Bowler Thread Only. Give name IPL to the class of Main method.		5				
152	4	Write an application that executes two threads. One thread displays "Good Morning" every 1000 milliseconds & another thread displays "Good Afternoon" every 3000 milliseconds for 10 times.. Create the threads by implementing the Runnable interface.		5				
153	4	Write a program to create two threads, one thread will print odd numbers and second thread will print even numbers between 1 to 100 numbers		4				
154	4	Write a complete multi-threaded program to meet following requirements: o Two threads of same type are to be instantiated in the method main. o Each thread acts as a producer as well as a consumer. o A shared buffer can store only one integer information along with the source & destination of the information at a time. o The information produced is to be consumed by appropriate consumer. o Both producers produce information for both consumers. o Each thread produces 5 information.		5				
155	4	Create PaymentThread class by extending Thread and Make a program to count payments of 10 tickets each of 100 rs. Display total using main thread.		5				
156	4	Write a multithreaded program to print all odd positive numbers in ascending order up to n, where n is a positive integer number given as a command line argument. Instantiate required number of threads, where each thread except the last, examines next 50 numbers and the last thread examines remaining numbers up to n		5				
157	4	Write an application that read limit from user and executes two threads. One thread displays total of first n even numbers & another thread displays total of first n odd numbers. Create the threads by implementing the Runnable interface		4				
158	4	Write a program to create two thread one display alphabet from a to z and other will display numbers from 1 to 100		3				
159	4	write a program that demonstrates the producer consumer concept in detail.		4				
160	4	Explain the concept of Synchronization by taking suitable example.		4				
161	4	Write a complete multi-threaded program to meet following requirements: - Read matrix [A] m x n - Create m number of threads - Each thread computes summation of elements of one row, i.e. ith row of the matrix is processed by ith thread. Where $0 \leq i < m$ . - Print the results		4				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
162	4	Create a program for class PVR having Total_seats as instance variable.Create method for seat booking.Create two threads which try to book seat of PVR screen1 (common object). Use concept of synchronization.		6				
163	4	Make caller thread by extending thread class which calls synchronized receiver method available in receiver class. Make two threads of Caller and display message "Ringing" and thread name according to thread. Thread name must be Caller1 and Caller2.		6				
164	4	Implement a Prime Number Finder Write a Java program to implement a prime number finder that checks if a given number is prime or not in a separate thread. The program should use the join() method to wait for all the threads to finish, and the isAlive() method to check if a thread is still running. To solve this problem, you can create a prime number finder thread that implements the Runnable interface and checks if a given number is prime or not. You can then create multiple instances of the prime number finder thread and start them using separate threads. The main thread can use the join() method to wait for all the threads to finish, and the isAlive() method to check if a thread is still running.		5				
165	4	Problem Statement: Implement a Bank Account  Write a Java program to implement a bank account that allows multiple threads to deposit and withdraw money from the same account. The problem requires synchronization between the threads to prevent race conditions and ensure that the balance is accurate. To solve this problem, you can create a BankAccount class that has a balance variable and synchronized methods for depositing and withdrawing money. You can then create multiple threads that use the deposit and withdraw methods to modify the account balance.		5				
166	5	Which of these class object can be used to form a dynamic array?	B	1	Array	ArrayList & Vector Both	Only Vector	Only ArrayList
167	5	What does get(int index) method define by List interface do ?	C	1	stores an object at the specified index	delete the object at specified index	returns the object at specified index	returns the object at specified index and modifies it's value
168	5	What will be the output of the following code?  import java.util.ArrayList; class IPL{ public static void main(String args[]) { ArrayList<String> gt1 = new ArrayList<String>(); gt1.addList("Hardik"); gt1.addList("Saha"); gt1.addList("Rahul"); gt1.remove(2); System.out.println(gt1.get(1)); } } 	C	1	Saha	Rahul	Compile time error	Runtime error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
169	5	<p>What is the output of the following code?</p> <pre>import java.util.ArrayList; import java.util.List;  public class Test {     public static void main(String[] args) {         List&lt;String&gt; al = new ArrayList&lt;String&gt;();         al.add("A");         al.add("B");         al.add("A");         al.add(null);         System.out.println(al); } }</pre>	D	1	Compile time error	[A, B, null]	[A, B]	[A, B, A, null]
170	5	<p>What is the output of the following code?</p> <pre>import java.util.ArrayList; import java.util.List;  public class Test {     public static void main(String[] args) {          List&lt;String&gt; al1 = new ArrayList&lt;String&gt;();         al1.add("A");         al1.add("B");          List&lt;String&gt; al2 = new ArrayList&lt;String&gt;();         al2.add("P");         al2.add("Q");         al1.addAll(al2);         System.out.println(al1); } }</pre>	C	1	[A, B]	[P, Q]	[A, B, P, Q]	[P, Q, A, B]
171	5	<p>What is the output of the code ?</p> <pre>import java.util.ArrayList; import java.util.List;  public class Test {     public static void main(String[] args) {          List&lt;String&gt; al = new ArrayList&lt;String&gt;();         al.add("A");         al.add("B");         al.add("C");         al.add(1, "Z");         al.add(4, "V");         System.out.println(al); } }</pre>	A	1	[A, Z, B, C, V]	[A, B, C, Z, V]	[Z, A, B, V, C]	None of these

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
172	5	What is the output? import java.util.ArrayList; import java.util.List;  public class Test { public static void main(String[] args) { List<String> al = new ArrayList<String>(); al.add("A"); al.add(4, "V"); System.out.println(al); } } 	D	1	[A, V]	[A, null, null, null, V]	[A, 0, 0, 0, V]	IndexOutOfBoundsException
173	5	Which of these method of ArrayList class is used to obtain present size of an object?	A	1	size()	contains()	capacity()	length()
174	5	Arraylist, LinkedList and Vector are _____	A	1	classes	interfaces	packages	methods
175	5	In Java, the underlying data structure for the LinkedList class is?	B	1	Singly linked list	Doubly linked list	Circular linked list	None of these
176	5	LinkedList class implements?	C	1	List interface	Deque interface	both List & Deque interface	Vector & Stack
177	5	What is the output? import java.util.LinkedList; import java.util.List;  public class Test { public static void main(String[] args) { List<Integer> ll = new LinkedList<Integer>(); ll.add(100); ll.add(220); ll.add(50); ll.add(null); ll.add(100); ll.add(50); ll.add(100); ll.add(null); System.out.println(ll); } } 	C	1	[100, 220, 50, 100, 50, 100]	[100, 220, 50, null]	[100, 220, 50, null, 100, 50, 100, null]	None of these
178	5	What is the output? import java.util.LinkedList;  public class Test { public static void main(String[] args) { LinkedList<Integer> ll = new LinkedList<Integer>(); ll.add(100); ll.add(220); ll.add(50); ll.add(100); ll.add(50);  ll.addFirst(999); ll.addLast(888); System.out.println(ll); } } 	C	1	[100, 220, 50, 100, 50]	[999, 100, 220, 50, 888]	[999, 100, 220, 50, 100, 50, 888]	[999, 100, 220, 50, 100, 50, 888, null]



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
179	5	What is the output of following code snippet? <pre>LinkedList&lt;String&gt; list = new LinkedList&lt;String&gt;(); list.add("A"); list.add("B"); list.add("C"); list.addFirst("D"); list.addLast("E"); list.add(2, "F"); System.out.println(list);</pre>	C	1	[D, A, B, F, C, E]	[D, A, B, C, F, E]	[D, A, F, B, C, E]	[D, A, B, C, E, F]
180	5	What is the output of following code snippet? <pre>LinkedList&lt;Integer&gt; list1 = new LinkedList&lt;Integer&gt;(); list1.add(1); list1.add(2); LinkedList&lt;Integer&gt; list2 = new LinkedList&lt;Integer&gt;(); list2.add(3); list2.add(4); list1.addAll(1, list2); System.out.println(list1.get(3));</pre>	C	1	3	1	2	4
181	5	Which of the following methods is used to get the last element of a LinkedList in Java?	A	1	getLast()	getLastNode()	getLastElement()	getFirst()
182	5	Collection is _____ and Collections is _____.	A	1	Interface and class	class and Interface	In built framework & interface	class and class
183	5	What does the frequency() method of the Collections class do?	A	1	Returns the number of occurrences of an element in a List	Returns the number of occurrences of an element in a Set	Returns the number of occurrences of an element in a Map	None of the above
184	5	What is the output of the following code snippet? <pre>List&lt;Integer&gt; list = new ArrayList&lt;Integer&gt;(); list.add(5); list.add(3); list.add(8); list.add(1); Collections.sort(list); System.out.println(Collections.max(list));</pre>	C	1	5	1	8	3

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
185	5	What will be the output of the following code? import java.util.*; class xyz { public static void main(String[] args) { ArrayList a = new ArrayList(Arrays.asList(5 , 0 , 10 , 7 , 15 , 0 , 5 , 7)); Iterator i = a.iterator(); while(i.hasNext()) { if( ( int ) i.next() % 5 == 0) System.out.print( i.next()); } } }	C	1	55	5	0707	50101505
186	5	Which of the following is a valid way to reverse the order of the elements of a List using the Collections class?	C	1	list.reverse()	reversed(list)	Collections.reverse(list)	collections.reverse(list)
187	5	Which of the following is a valid way to find the smallest element in a List using the Collections class?	A	1	Collections.min(list)	list.min()	Collections.minimum(list)	list.minimum()
188	5	Which of the following is a valid way to find the frequency of an element in a List using the Collections class?	C	1	Collections.count(list, element)	list.count(element)	Collections.frequency(list, element)	list.frequency(element)
189	5	Which of these methods is used to add elements in vector at specific location?	A	1	add()	set()	AddElement()	addElement()
190	5	What is the correct syntax to declare a vector in Java?	A	1	Vector vec = new Vector();	Vector vec[];	Vector vec = {1, 2, 3};	None of the above.
191	5	Which method is used to add an element to the end of a vector?	A	1	add()	insert()	push()	append()
192	5	What is the default capacity of a vector in Java?	B	1	50	10	100	20
193	5	What is the correct syntax to create a vector of Strings in Java?	A	1	Vector vec = new Vector<String>();	vector<String> vec = new Vector();	vector vec = new Vector();	None of the above.
194	5	Which of the following methods is used to insert an element at a specific index in a vector?	B	1	add()	set()	addAll()	setAll()
195	5	Which is not correct way to get the last element of a vector in Java?	A	1	vec.get(0)	vec.get(vec.size() - 1)	vec.lastElement()	vec.elementAt(vec.size() - 1)
196	5	What is the output of the following code snippet?  Vector<Integer> vec = new Vector<Integer>(); vec.add(1); vec.add(2); vec.add(3); System.out.println(vec.get(1));	B	1	1	2	3	4

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
197	5	What is the output of the following code ?  <pre>import java.util.*; class vector {     public static void main(String args[])     {         Vector obj = new Vector();         obj.addElement(new Integer(3));         obj.addElement(new Integer(2));         obj.addElement(new Integer(6));         obj.insertElementAt(new Integer(8), 2);         System.out.println(obj);     } }</pre>	D	1	[3, 2, 6]	[3, 2, 6, 6]	[3, 2, 6, 8]	[3, 2, 8, 6]
198	5	What is the output of the following code snippet? <pre>Vector&lt;Integer&gt; vec = new Vector&lt;Integer&gt;(); vec.add(1); vec.add(2); vec.add(3); vec.add(2); System.out.println(vec.indexOf(2));</pre>	A	1	1	2	3	-1
199	5	What is the output of the following code snippet? <pre>Vector&lt;String&gt; vec = new Vector&lt;String&gt;(); vec.add("Java"); vec.add("Python"); vec.add("C++"); System.out.println(vec.get(2));</pre>	C	1	Java	Python	C++	null
200	5	What is the output of the following code snippet? <pre>Vector&lt;Integer&gt; vec = new Vector&lt;Integer&gt;(); vec.add(1); vec.add(2); vec.add(3); vec.remove(1); System.out.println(vec.get(1));</pre>	C	1	1	2	3	null

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
201	5	What is the output of the following code snippet? Vector<Integer> vec = new Vector<Integer>(); vec.add(1); vec.add(2); vec.add(3); vec.add(1); vec.add(2); vec.add(1); vec.add(2); vec.add(1); vec.add(2); vec.add(1); vec.add(2); vec.add(1); vec.add(2); System.out.println(vec.capacity());	B	1	10	20	14	13
202	5	What will be the output of the following code? import java.util.*; class xyz { public static void main(String[] args) { Vector s = new Vector (); for(int i =0 ; i < 39 ; i++) { s.add(i); } s.add(2); s.add(null); System.out.print(s.get(39)); System.out.println(s.capacity()); } }	C	1	240	3920	280	null40
203	5	Stack class is designed for ?	A	1	FILO Order	FIFO ORDER	LIFO ORDER	None of the above
204	5	What will be the output of the following code? import java.util.Stack;  public class Test { public static void main(String[] args) {  Stack<String> st = new Stack<String>(); st.push("Java"); st.push("Kotlin"); System.out.println( st.pop() + " " + st.pop() + " " + st.pop() ); } }	D	1	Kotlin Java	Kotlin Java null	Compile time error	Exception at run time

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
205	5	<p>What is the output of the following?</p> <pre>import java.util.Stack;  public class Test {     public static void main(String[] args) {          Stack&lt;Integer&gt; st = new Stack&lt;Integer&gt;();         st.add(100);         st.push(50);         st.add(200);          st.pop();          st.add(220);         st.push(50);          System.out.println(st);     } }</pre>	C	1	[50]	[100, 50, 200, 220, 50]	[100, 50, 220, 50]	[220, 50]
206	5	<p>What is the output of the following code?</p> <pre>import java.util.Stack;  public class Test {     public static void main(String[] args) {         Stack&lt;String&gt; st = new Stack&lt;String&gt;();         System.out.print(st.isEmpty() + " ");         st.push("Java");         st.push("Kotlin");         System.out.println(st.isEmpty());     } }</pre>	A	1	true false	false true	true true	false false
207	5	<p>What is the output?</p> <pre>import java.util.Stack;  public class Test {     public static void main(String[] args) {         Stack&lt;String&gt; st = new Stack&lt;String&gt;();         st.push("Java");         st.push("Kotlin");         st.push("Python");         System.out.println(st.search("Java")             + " " + st.search("SQL"));     } }</pre>	B	1	1 0	3 -1	0 -1	3 0

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
208	5	<pre>import java.util.*; class stack {     public static void main(String args[])     {         Stack obj = new Stack();         obj.push(new Integer(3));         obj.push(new Integer(2));         obj.pop();         obj.push(new Integer(5));         System.out.println(obj);     } }</pre>	A	1	[3, 5]	[3, 5, 2]	[3, 5, 2, null]	[3, 2, 5]
209	5	<p>What is the output of the following code?</p> <pre>import java.util.Stack; class TestDemo2{     public static void main(String[] args) {         Stack s1 = new Stack();         System.out.print(s1.size()+" ");         s1.push("Hello");         s1.push(20.23);         s1.push("JJS");         s1.peek();         s1.peek();         s1.peek();         s1.pop();         System.out.println(s1.size());     } }</pre>	A	1	0 2	0 1	compile time error	run time error
210	5	Write a program in which create two ArrayList. Add odd numbers between 1 to 10 in one arraylist and even numbers between 1 to 10 in another arraylist. Now merge these two ArrayList and sort them in descending order. At last print this sorted ArrayList.		2				
211	5	Write a Java program to create a new array list, add some colors (string) and print out the collection		3				
212	5	Remove Duplicates from an ArrayList Write a Java program to remove duplicates from an ArrayList. You need to implement a function that takes an ArrayList as input and returns an ArrayList with duplicates removed.		4				
213	5	Merge two sorted ArrayLists Write a Java program to merge two sorted ArrayLists into a single sorted ArrayList. You need to implement a function that takes two sorted ArrayLists as input and returns a single sorted ArrayList containing all the elements.		4				
214	5	Write a Java program to copy one array list into another. & sort the second arraylist & search an element in a array list		5				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
215	5	<p>Problem Statement: Employee Management System</p> <p>Implement an employee management system in Java using ArrayList and a class. The system should have the following functionalities:</p> <p>Add an employee to the system</p> <p>Remove an employee from the system</p> <p>Update an employee's details</p> <p>Display all employees in the system</p> <p>To implement this system, you can create an Employee class with attributes such as name, age, salary, etc. Then, you can create an ArrayList to store all the employees. You can then implement functions to add, remove, update and display employees.</p>		5				
216	5	<p>Write a Java program that creates an ArrayList to store a list of students and their grades. The program should provide the following functionality:</p> <p>Add a student: The program should prompt the user for a student name and their grade, and add the student to the ArrayList.</p> <p>Remove a student: The program should prompt the user for a student name and remove the corresponding entry from the ArrayList.</p> <p>Search for a student: The program should prompt the user for a student name and output their corresponding grade. If the student name is not found in the ArrayList, the program should output an error message.</p> <p>Sort students by name: The program should sort the ArrayList by student name in ascending order.</p> <p>Sort students by grade: The program should sort the ArrayList by student grade in descending order.</p> <p>To accomplish these tasks, you can use the following Collections class methods:</p> <p>addAll(collection, elements): Adds all elements from one collection to another. sort(list): Sorts the elements in a list in natural order.</p> <p>sort(list, comparator): Sorts the elements in a list using a custom comparator. reverse(list): Reverses the order of the elements in a list.</p> <p>You can also use the following ArrayList methods:</p> <p>add(element): Adds an element to the end of the ArrayList.</p> <p>remove(element): Removes the first occurrence of an element from the ArrayList.</p> <p>get(index): Returns the element at the specified index in the ArrayList. size(): Returns the number of elements in the ArrayList.</p>		6				
217	5	<p>Problem Statement: Library Management System</p> <p>You are required to design a library management system in Java using ArrayList. The system should have the following classes:</p> <p>Book - This class should contain the following attributes: bookId, bookName, author, and quantity. It should also have a method to display book details.</p> <p>User - This class should contain the following attributes: userId, userName, and booksIssued. It should also have methods to display user details and to issue/return a book.</p> <p>Library - This class should contain an ArrayList to store all the books and an ArrayList to store all the users. It should have methods to add/remove books and users, to display all books/users, to issue/return a book, and to display all books issued by a particular user.</p>		7				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
218	5	Write a Java program to insert the specified element at the specified position in the linked list.		3				
219	5	Write a Java program to get the first and last occurrence of the specified elements in a linked list.		3				
220	5	Write a Java program to clone an linked list to another linked list.		3				
221	5	Write a Java program to append the specified element to the end of a linked list & Write a Java program to iterate through all elements in a linked list.		4				
222	5	<p>Problem Statement: Implement a Phone Book</p> <p>Write a Java program to implement a phone book using an ArrayList and a LinkedList. The phone book should allow users to add, delete, and search for contacts by name or phone number.</p> <p>To solve this problem, you can create a Contact class that stores the name and phone number of each contact. You can then use an ArrayList to store the contacts and a LinkedList to store the indices of the contacts sorted by name.</p>		7				
223	5	<p>I have an Induction machine manufacturing company. My Manager wants to analyze some data of the induction machines of our manufacturing unit.</p> <p>What I have: List of machine's price. Note: each price is in Double.</p> <p>Write a java program that contains list of various machine's price. &amp; do the following tasks.</p> <p>Task 1 - Create a list of 5 machine's price. [10000.0,55000.0,80000.0,25000.0,55000.0]</p> <p>Task 2 - Find the maximum price from the list.</p> <p>Task 3 - sort the list.</p>		5				
224	5	Write a program that contains Stack of 3 items. First insert 3 items in stack. Then do pop operation 2 times. and print the stack.		4				
225	5	<p>Problem Statement: Balanced Parentheses</p> <p>Given a string containing only parentheses, determine if it is balanced. A string is considered balanced if every opening parenthesis has a corresponding closing parenthesis, and they are properly nested.</p> <p>You need to implement a function that takes a string as input and returns true if the string is balanced and false otherwise.</p> <p>HINT: To solve this problem, you can use a stack to keep track of the opening parentheses and pop them off the stack when a closing parenthesis is encountered. If at any point the stack is empty when a closing parenthesis is encountered or if the top of the stack doesn't match the current closing parenthesis, then the string is not balanced.</p>		5				
226	5	<p>Write a Java program to sort a stack of Student objects by their GPA. You need to implement a function that takes a stack of Student objects as input and returns a new stack with the Students sorted in descending order of their GPA.</p> <p>To solve this problem, you can create a Student class with attributes such as name, id, and GPA. You can then create a stack of Student objects and implement a function to sort the stack by their GPA.</p>		5				



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
227	6	What is the output of the following code? import java.util.*; class MCQ3{ public static void main(String[] args) { PriorityQueue<String> bk = new PriorityQueue<String>(); bk.add("paper"); bk.add("pen"); bk.add("pencil"); System.out.println(bk.poll() + " " + bk.peek()); } }	A	1	paper,pen	pen,pencil	pencil,	paper,pencil
228	6	What is the output? import java.util.*; class MCQ2{ static PriorityQueue<String> pq = new PriorityQueue<String>(); public static void main(String[] args) { System.out.print(pq.poll()+" "); pq.offer("Java"); pq.offer("LJ"); pq.offer("LJU"); pq.offer("LJK"); pq.poll(); System.out.println(pq.poll()); } }	B	1	Java LJ	null LJ	LJU LJK	null null
229	6	What is the output? import java.util.*; class HelloWorld { public static void main(String[] args) {  PriorityQueue<Integer> queue = new PriorityQueue<Integer>(); queue.add(10); queue.add(5); queue.add(8); queue.add(3); System.out.println(queue.poll() + " " + queue.peek()); } }	C	1	10 5	3 8	3 5	10 3
230	6	What is the output? import java.util.*; class HelloWorld { public static void main(String[] args) {  Queue<String> queue = new PriorityQueue<String>(); queue.add("apple"); queue.add("banana"); queue.add("orange"); queue.offer("pear"); System.out.print(queue.remove() + " " + queue.element()); System.out.println(queue); } }	B	1	apple banana[pear, orange]	apple banana[banana, pear, orange]	pear orange[apple, banana, pear]	pear orange[apple, banana]
231	6	Which of the following methods is used to remove and return the head of a PriorityQueue?	D	1	remove()	poll()	peek()	Both remove() and poll()

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
232	6	What is the output of the following code? <pre>import java.util.*; class MCQ4{     public static void main(String[] args) {         ArrayDeque&lt;String&gt; ad = new ArrayDeque&lt;String&gt;();         ad.add("cvm");         ad.add("jjs");         ad.add("pat");         ad.add("akp");         p(ad.peek());         p(ad.peekFirst());         p(ad.peekLast());         p(ad.contains("Akp"));         p(ad.poll());         p(ad.pollLast());         p(ad.pollFirst());         p(ad.contains("PAT")); }     private static void p(Object obj) {         System.out.print(obj + " "); } }</pre>	A	1	cvm*cvm*akp>false*cvm*akp*jjs>false*	cvm*cvm*akp>true*cvm*akp*jjs>false*	cvm*cvm*akp>true*cvm*akp*jjs>true*	cvm*cvm*akp>false*cvm*akp*jjs>true*
233	6	What is the output? <pre>import java.util.*; class MCQ1{     public static void main(String[] args) {         ArrayDeque q = new ArrayDeque&lt;&gt;();         q.add(10);         q.peekFirst();         q.addFirst(20);         q.addFirst(30);         q.addLast(50);         q.addLast(40);         for(int i=0;i&lt;2;i++)         {             q.poll();         }         q.peek();         System.out.println(q); } }</pre>	C	1	[10, 20, 30]	[10, 20, 30, 40]	[10, 50, 40]	[10, 20, 30]
234	6	What is the output? <pre>import java.util.*; class HelloWorld {     public static void main(String[] args) {         Deque&lt;Integer&gt; queue = new ArrayDeque&lt;Integer&gt;();         queue.push(10);         queue.push(5);         queue.push(8);         queue.push(3);         System.out.println(queue.poll() + " " + queue.peek()); } }</pre>	B	1	10 5	3 8	3 5	10 3

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
235	6	Which of the following methods is used to retrieve and remove the last element of an ArrayDeque?	A	1	removeLast()	pollFirst()	remove()	peekLast()
236	6	What is the output of the following code? import java.util.*;  class MCQ7{ public static void main(String[] args) { HashSet<Double,String> ljjMap = new HashSet<>(); ljjMap.put(10.23,"JJS"); ljjMap.put(100.23,"AKP"); ljjMap.put(100.23,"PAT"); System.out.println(ljjMap.get(100.23)); } }	A	1	compile time error	AKP	PAT	JJS
237	6	What is the output of the following code? import java.util.*; class HelloWorld { public static void main(String[] args) {  Set<String> set = new HashSet<String>(); set.add("Java"); set.add("Python"); set.add("C++"); set.add("Java"); set.add("java"); System.out.println(set.size()); } }	C	1	2	3	4	5
238	6	What is the output of the code? import java.util.*; class HelloWorld { public static void main(String[] args) {  Set<Integer> set = new HashSet<Integer>(); set.add(1); set.add(2); set.add(3); set.add(1); set.add(6/2); set.remove(2);  for (Integer i : set) { System.out.print(i + " "); } }	D	1	1 2 3 1 3.0	1 3 1 3.0	1 3 3.0	1 3

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
239	6	What is the output of the code? import java.util.*; class HelloWorld { public static void main(String[] args) { Set<Integer> set1 = new HashSet<Integer>(); set1.add(1); set1.add(2); set1.add(3); Set<Integer> set2 = new HashSet<Integer>(); set2.add(2); set2.add(3); set2.add(4); set1.retainAll(set2); System.out.println(set1); } }	B	1	[1, 2, 3, 4]	[2, 3]	[1]	[1, 2, 3, 2, 3, 4]
240	6	What is the output of the code? import java.util.*; class HelloWorld { public static void main(String[] args) {  Set<String> set1 = new HashSet<String>(); set1.add("Java"); set1.add("Python"); set1.add("C++");  Set<String> set2 = new HashSet<String>(); set2.add("java"); set2.add("C++"); set2.add("Python"); System.out.println(set1.equals(set2)); } }	A	1	false	true	Compile time error	Runtime Error
241	6	What is the output of the code? import java.util.*; class HelloWorld { public static void main(String[] args) { Set<Integer> set1 = new HashSet<Integer>(); set1.add(1); set1.add(2); set1.add(3);  Set<Integer> set2 = new HashSet<Integer>(); set2.add(2); set2.add(3); set2.add(4); set1.addAll(set2); System.out.println(set1); } }	A	1	[1, 2, 3, 4]	[1, 2, 3, 2,3,4]	[2, 3, 4, 1]	[1, 2, 3, 4, 2]

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
242	6	What is output? import java.util.*; class HelloWorld { public static void main(String[] args) { HashMap<String, Integer> map = new HashMap<>(); map.put("John", 25); map.put("Jane", 30); System.out.println(map.get("John") + map.get("Jane")); } }	C	1	25 30	2530	55	Compile time error
243	6	What is the output? import java.util.*; class HelloWorld { public static void main(String[] args) { HashMap<String, Integer> map = new HashMap<>(); map.put("John", 25); map.put("Jane", 30); map.remove("John"); System.out.println(map.size()); } }	B	1	2	1	0	Compile time error
244	6	What is the output? import java.util.*; class HelloWorld { public static void main(String[] args) { HashMap<Integer, String> map = new HashMap<>(); map.put(1, "one"); map.put(2, "two"); map.put(3, "one");  for (int key : map.keySet()) { System.out.println(key + " = " + map.get(key)); } }	B	1	1 = one 2 = two 3 = three	1 = one 2 = two 3 = one	1 = one 2 = two 3 = two	1 = one 2 = one 3 = two
245	6	What is the output? import java.util.*; class HelloWorld { public static void main(String[] args) { HashMap<String, String> map = new HashMap<>(); map.put("Java", "language"); map.put("C++", "language"); map.put("Google", "company"); map.put("Apple", "company"); int count = 0; for (String value : map.values()) { if (value.equals("language")) { count++; } } System.out.println(count); } }	B	1	3	2	4	0

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
246	6	What is the output of the following code? <pre>import java.util.*; class HelloWorld {     public static void main(String[] args) {         HashMap&lt;String, String&gt; map = new HashMap&lt;&gt;();         map.put("Java", "language");         map.put("C++", "language");         map.put("company", "company");         map.put("Apple", "company");          System.out.print(map.containsKey("Java")+" ");         System.out.println(map.containsValue("company"));     } }</pre>	A	1	true true	true false	false false	false true
247	6	What is the output of the following code? <pre>import java.util.*;  class MCQ6{     public static void main(String[] args) {         Map&lt;Integer, Object&gt; testMap = new HashMap&lt;Integer, Object&gt;();         testMap.put(1, null);         testMap.put(null, null);         testMap.putAll(testMap);         System.out.println(testMap); } }</pre>	A	1	{null=null, 1=null}	{null=null, 1=null, null=null, 1=null}	run time error	{null=null, null=null}
248	6	What is the output? <pre>import java.util.*; class MCQ5{     public static void main(String[] args) {         Map&lt;Integer, Object&gt; sampleMap = new HashMap&lt;Integer, Object&gt;();         sampleMap.put(1, null);         sampleMap.put(5, null);         sampleMap.put(3, null);         sampleMap.put(2, null);         sampleMap.put(4, null);         System.out.println(sampleMap); } }</pre>	B	1	compile time error	{1=null, 2=null, 3=null, 4=null, 5=null}	run time error	{null=null, null=null, null=null, null=null, null=null}
249	6	What is the output of the Java code snippet? <pre>import java.util.*; class MCQ{     public static void main(String[] args) {         HashMap&lt;Integer, Object&gt; HashSet = new HashMap&lt;Integer, Object&gt;();         HashSet.put(1, null);         HashSet.put(null, null);         HashSet.putAll(HashSet);         System.out.println(HashSet); } }</pre>	A	1	{null=null, 1=null}	[null=null, 1=null]	{[null=null, 1=null]}	Compile time error

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AI/ML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
250	6	What is the output of the Java code snippet? import java.util.*; class HelloWorld { public static void main(String[] args) { Hashtable<String, String> table = new Hashtable<>(); table.put("Java", "language"); table.put("C++", "language"); table.put("company", "company"); table.put("Apple", "company"); System.out.print(table.containsKey("Java")+" "); System.out.println(table.get("company"));    } }	B	1	true true	true company	false false	false Apple
251	6	What is the output of the following code? import java.io.*; import java.util.*; class MCQ8{ public static void main(String[] args) { Hashtable<String,Integer> table = new Hashtable<String,Integer>(); table.put("jjs", 9898); table.put("cvm", 8989); table.put("mdp", 1010); table.put("jjs", 8585); table.putIfAbsent("jjs", 7878); table.putAll(table); System.out.println(table);    } }	A	1	{jjs=8585, mdp=1010, cvm=8989}	{jjs=8585, mdp=1010, cvm=8989, jjs=9898}	{jjs=7878, mdp=1010, cvm=8989}	{jjs=9898, mdp=1010, cvm=8989}
252	6	What is a HashMap in Java?	B	1	A collection that stores unique elements in no particular order	A collection that stores key-value pairs in no particular order	A collection that stores elements in a specific order	A collection that allows duplicate elements
253	6	Which of the following is NOT a method in the HashMap class?	D	1	put()	get()	add()	remove()
254	6	Which method is used to retrieve the value associated with a given key in a HashMap?	A	1	get()	remove()	peek()	size()
255	6	What happens if we put a key object in a HashMap which exists?	A	1	The new object replaces the older object	The new object is discarded	The old object is removed from the map	It throws an exception as the key already exists in the map
256	6	If two threads access the same hashmap at the same time, what would happen?	C	1	NullPointerException	ClassNotFoundException	ConcurrentModificationException	RuntimeException
257	6	What is the main difference between a HashMap and a HashTable?	B	1	HashMap allows null keys and values, whereas HashTable does not	HashTable is thread-safe, whereas HashMap is not	HashMap has better performance than HashTable	HashTable can store more types of objects than HashMap
258	6	What happens if we try to insert a null value into a HashTable?	A	1	A NullPointerException is thrown	The value is inserted as null	The value is ignored	An IllegalArgumentException is thrown

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
259	6	What is the load factor of a HashTable?	C	1	The number of key-value pairs stored in the table	The capacity of the table	The maximum number of collisions allowed before the table is resized	The threshold at which the table is resized
260	6	Which of the following methods returns a collection view of the mappings contained in a HashTable?	D	1	keys()	values()	elements()	entrySet()
261	6	Write a Java program that takes a list of integers as input from the user and stores them in a PriorityQueue. The program should then remove and display the top three highest integers from the PriorityQueue.		5				
262	6	Sports tournament organizer: Write a program that simulates a sports tournament using a PriorityQueue. The program should allow the user to input team names and their win-loss records. The program should then prioritize teams based on their win-loss records and add them to the PriorityQueue. When it's time for the next match, the program should remove the two highest priority teams from the PriorityQueue and display their names.		5				
263	6	Write a program that simulates a queue of customers at a coffee shop using an ArrayDeque. The program should allow the user to perform the following actions: Add a new customer to the back of the queue Serve the next customer in the queue (i.e. remove the customer from the front of the queue) View the current queue of customers The program should continue to prompt the user for actions until they choose to quit.		5				
264	6	Music player playlist: Write a program that simulates a music player playlist using an ArrayDeque. The program should allow the user to add songs to the playlist, play the next or previous song in the playlist, and shuffle the playlist. The program should keep track of the songs in the playlist using an ArrayDeque, where each element in the deque represents a song. When the user adds a song, you can use the addLast method to add it to the end of the playlist. When the user plays the next or previous song, you can use the removeFirst or removeLast method, respectively, to remove the current song from the front or back of the deque and add it to the end or beginning of the deque. When the user shuffles the playlist, you can use the shuffle method to randomly reorder the songs in the deque.		7				
265	6	Make the system as User interactive and give choices to user. Web browser history: Write a program that simulates a web browser history using an ArrayDeque. The program should allow the user to navigate back and forward through their history of visited web pages, similar to how a web browser works. The program should keep track of the URLs of visited web pages using an ArrayDeque, where each element in the deque represents a visited web page. When the user navigates to a new web page, you can push the URL onto the deque. When the user navigates back or forward, you can pop URLs off the front or back of the deque, respectively.		5				



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
266	6	<p>In my restaurant I used to manage it well as per the order. I never want to skip any order from the customer. So I prepare a rule: When I get the order I add it in the last of my cook queue. And when the order is ready I used to pick it up from the first of the cook queue.</p> <p>So, write a java program with class Restaurant. Create a queue cook which contains item names. Ask user weather he wants to Order or take food. If user press 1 then ask for the name of the item and it should be added in the cook queue.</p> <p>If user press 2 then The first item from the queue should be removed from the queue.</p> <p>If user press 3 then he can see the items of the queue. If user press 4 then he should move out from the Restaurant.</p>		6				
267	6	Write a java program that reads in a list of integers from the user and stores them in a HashSet. The program should then compute the sum of all unique integers in the HashSet and output the result to the user. If the user enters the same integer multiple times, it should only be counted once in the sum.		4				
268	6	Write a program that reads in a list of words from the user and stores them in a HashSet. The program should then prompt the user for a prefix and output all the words in the set that start with that prefix.		4				
269	6	Write a program that reads in a list of names and corresponding phone numbers from the user, and stores them in a HashMap. The program should then prompt the user for a name and output the corresponding phone number, or a message indicating that the name is not in the map.		5				
270	6	Write a program that reads in a list of stock prices for a company and stores them in a HashMap, where the key is the date and the value is the price. The program should then compute the average price for the entire period and output it to the user.		5				
271	6	Write a program that reads in a list of words from a file and stores them in a HashMap, along with their frequency (i.e. how many times they appear in the file). The program should then prompt the user for a word and output the corresponding frequency, or a message indicating that the word is not in the map.		6				
272	6	Write a Java program that takes in a list of student names and their grades from the user and stores them in a HashTable. The program should then prompt the user for a student name and output their grade. If the student name is not found in the HashTable, the program should output an error message.		5				

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
273	6	Write a Java program that implements a HashTable to store a dictionary of words and their definitions. The program should prompt the user for a word and output its definition. If the word is not found in the HashTable, the program should ask the user if they would like to add the word and its definition to the HashTable. The program should use the following methods of the HashTable class: put(K key, V value): Adds a key-value pair to the HashTable. In this program, it should be used to add new words and their definitions. get(Object key): Retrieves the value associated with the given key from the HashTable. In this program, it should be used to retrieve the definition of a word. containsKey(Object key): Returns true if the HashTable contains a mapping for the specified key. In this program, it should be used to check if a word is already in the HashTable. keySet(): Returns a Set of all keys in the HashTable. In this program, it should be used to print out a list of all words in the dictionary.		5				
274	6	Write a Java program that creates a HashTable to store information about books in a library. The HashTable should use the book titles as keys and store information about each book, such as the author, publisher, and year of publication. The program should provide the following functionality: Add a book: The program should prompt the user for a book title, author, publisher, and year of publication, and add the book to the HashTable. Remove a book: The program should prompt the user for a book title and remove the corresponding entry from the HashTable. Search for a book: The program should prompt the user for a book title and output the corresponding information stored in the HashTable, such as the author, publisher, and year of publication. If the book title is not found in the HashTable, the program should o List all books: The program should list all books in the HashTable, along with their corresponding information. To accomplish these tasks, you can use the following HashTable methods: put(key, value): Inserts a key-value pair into the HashTable. remove(key): Removes a key-value pair from the HashTable. get(key): Returns the value corresponding to a given key in the HashTable. containsKey(key): Returns true if the HashTable contains a given key. keySet(): Returns a Set of all the keys in the HashTable.		5				
275	7	Which of these stream contains the classes which can work on character stream?	C	1	InputStream	OutputStream	Character Stream	All of the mentioned
276	7	Which of these classes are used by Byte streams for input and output operation?	A	1	InputStream	InputOutputStream	Reader	All of the mentioned
277	7	Which of these methods can be used to writing console output?	D	1	print()	println()	write()	All of the mentioned
278	7	The ..... package contains a large number of stream classes that provide capabilities for processing all types of data.	B	1	java.awt	java.io	java.util	java.net
279	7	The InputStream class defines methods for performing input functions such as i) reading bytes                      ii) closing streams iii) skipping ahead in a stream      iv) flushing streams	B	1	ii, iii and iv only	i, ii and iii only	i, iii and iv only	All i, ii, iii and iv
280	7	Which of the following method(s) not included in InputStream class.	C	1	available( )	reset( )	flush()	close()

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
281	7	_____ returns true if called on a file and returns false when called on a directory.	C	1	IsFile()	Isfile()	isFile()	isfile()
282	7	What will be output for the following code? import java.io.*; class files { public static void main(String args[]) { File obj = new File("/java/system"); System.out.print(obj.getName()); } } }	B	1	java	system	java/system	/java/system
283	7	What will be output for the following code? Note: file is made in c drive import java.io.*; class files { public static void main(String args[]) { File obj = new File("/java/system"); System.out.print(obj.canWrite()); System.out.print(" " + obj.canRead()); } } }	D	1	true false	false true	true true	false false
284	7	Which stream does Java application uses to read data from a source, it may be a file, an array, peripheral device or socket?	A	1	InputStream	OutputStream	Input/OutputStream	None of the above
285	7	Which class gives you access to the attribute of a file?	C	1	InputStream	OutputStream	File	None of the above
286	7	What is the output of the following code? import java.io.*; class MCQ9{ public static void main(String[] args) { File f1 = new File("D://java.txt"); boolean bool2 = f1.exists(); boolean bool1 = f1.equals(f1); bool1 = bool2; System.out.println(bool2); } } (Note :- Consider, file is not existing )	A	1	false	true	compile time error	run time error
287	7	Consider there is directory LJU having some files inside. Select answer based on this code.  import java.io.File; public class FileListExample { public static void main(String[] args) { File directory = new File("LJU"); String[] files = directory.list(); for (String file : files) { if (file.isFile()) { System.out.println(file); } } } }	D	1	The code will throw a NullPointerException at runtime.	The code will only print the names of all files in the specified directory.	The code will only print the names of all directories in the specified directory.	The code will fail to compile.

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
288	7	What is the output of the Java code snippet? import java.io.*; class MCQ{ public static void main(String[] args) throws IOException { File f = new File("D://txt.text"); System.out.println(f.getPath().length()+f.getAbsolutePath().length()); } }	C	1	19	20	22	24
289	7	What is the output of the Java code snippet? import java.io.*; class HelloWorld { public static void main(String[] args) throws IOException { File dir = new File("LJU.txt"); File file = new File("LJU.txt"); dir.mkdir(); System.out.println(file.exists() +" "+ file.isFile()); } }	C	1	true true	false true	true false	false false
290	7	What is the output of the following code? import java.io.*; import java.lang.String; import java.io.FileInputStream; class test { public static void main(String args[]) { try { // Suppose, the input.txt file contains the following text // This is a line of text inside the file. FileInputStream input = new FileInputStream("input.txt"); // Reads 3 bytes from the file input.read(); input.read(); input.read(); // Returns the number of available bytes System.out.println("Available bytes " + input.available()); input.close(); } catch (Exception e) { }}}	B	1	Available bytes 39	Available bytes 36	Available bytes 35	Available bytes 37
291	7	Which of these is used to read a string from the input stream?	C	1	get()	read()	readLine()	getLine()
292	7	Which of these class contains the methods print() & println()?	D	1	System	System.out	BufferedOutputStream	PrintStream
293	7	Which of these methods can be used to writing console output?	D	1	print()	println()	write()	All of the mentioned
294	7	File class is _____	C	1	An abstract of file representation only	An abstarct of path name only	An abstract which can be use to represent path name or file	An abstarct which ca represent a file in any formate

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
295	7	what will be happen if write a following line File f1 = new File("dirname"); File f2 = new File(f1, "filename")	D	1	A new directory called dirname is created in the current working directory	A new directory called dirname is created in the current working directory. A new file called filename is created in directory dirname.	A new file called filename is created in the current working directory.	No directory is created, and no file is created.
296	7	What value does read( ) return when it has reached the end of a file?	B	1	0	-1	1	null
297	7	How can you change the current working directory using an instance of the File class called FileName ?	D	1	FileName.chdir("DirName").	FileName.cd("DirName").	FileName.cwd("DirName").	The File class does not support directly changing the current directory.
298	7	Write a java program which read source file and destination file name and copy the content of source file to destination file using InputSteam class.		4				
299	7	Write a java program which read numbers from number.txt file and store even number to even.txt and odd number into odd.txt file		4				
300	7	Read employee salary and calculate the income tax based on 10% of income and store it in tax.txt file for five different employees.		5				
301	7	Write a program that counts the no. of words in a text file. The file name is passed as a command line argument. The program should check whether the file exists or not. The words in the file are separated by white space characters		4				
302	7	Write a program to check that whether the name given from command line is file or not? If it is a file then print the size of file and if it is directory then it should display the name of all files in it.		5				
303	7	Write a program to check that whether the name given from command line is file or not? If it is a file then print the size of file and if it is directory then it should display the name of all files in it.		5				
304	7	Write a program that reads file name from user, through command line argument and displays/reads content of the text file on console.		4				
305	7	Write a program to create directories (/home/abc/bcd/def/ghi/jkl) in the home directory /home/abc and list the files and directories showing file/directory, file size. Read-writeexecute permissions.		5				
306	7	Write a program to find the sum of all the number in Number.txt file and print the result in console.		4				
307	7	Write a program to create a new file and write the number into it and sort that file content into different file.		4				
308	8	Which of these class is used to read characters in a file	A	1	FileReader	FileWriter	FileInputStream	InputStreamReader
309	8	Which of these method of FileReader class is used to read characters from a file?	A	1	read()	scanf()	get()	getInteger()
310	8	The ..... class implements the DataInput and DataOutput interfaces for performing I/O using the primitive data types.	A	1	RandomAccessFile	OutputStream Reader	InputStreamReader	DataOutputStream

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
311	8	What will be the output of the following program? import java.io.*; public class ExampleRandomAccessfile { public static void main(String[] args) throws IOException { File file = File.createTempFile("Alphabets", "txt"); RandomAccessFile raf = new RandomAccessFile(file, "rw"); raf.write("ABCDE\nFGHIJK".getBytes()); System.out.print(raf.readLine() + "~"); raf.seek(1); System.out.print(raf.readLine()); raf.close(); } } 	B	1	ABCDE~BCDE	null~BCDE	null~null	compile time error
312	8	What will be the output of the following program? import java.io.*; public class HaphazardAccess { public static void main(String[] args) throws Exception { File file = File.createTempFile("Alphabets", "txt"); RandomAccessFile raf = new RandomAccessFile(file, "rw"); raf.write("ABCDEFGHJKLMNOP\nQRSTUVWXYZ\n".getBytes()); System.out.print(raf.readLine() + "~"); raf.seek(20); System.out.print(raf.readLine() + "~"); raf.write("1234567890\n1234567890\n1234567890\n1234567890\n".getBytes()); raf.setLength(40); System.out.print(raf.readLine() + "~"); raf.seek(30); System.out.print(raf.readLine() + "~"); raf.seek(0); System.out.print(raf.readLine() + "~"); raf.close(); } } 	D	1	ABCDEFGHJKLMNOP~TUVWXYZ~null~34567890~ ABCDEFGHJKLMNOP~	null~TUVWXYZ~null~null~ ~ABCDEFGHJKLMNOP~	Runtime Error	null~TUVWXYZ~null~34567890~ ABCDEFGHJKLMNOP~
313	8	What will be the output of the following program?  import java.io.*; public class ExampleRandomAccessfile { public static void main(String[] args) throws IOException { File file = File.createTempFile("Alphabets", "txt"); RandomAccessFile raf = new RandomAccessFile(file, "rw"); raf.write("ABCDE\nFGHIJK".getBytes()); System.out.print(raf.readLine() + "~"); raf.seek(1); System.out.print(raf.readLine() + "~"); raf.write("12345\n6789".getBytes()); raf.seek(3); System.out.print(raf.readLine()); raf.close(); } } 	C	1	ABCDE~BCDE~DE	ABCDE~BCDE~45	null~BCDE~DE	null~BCDE~45

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
314	8	What is the output of the following code? import java.io.*; class MCQ{ public static void main(String[] args) throws IOException{ File f1 = new File("lj.txt"); FileWriter fw = new FileWriter(f1); fw.write("TU SHER HAI MERE BHAI SHER"); fw.close(); FileReader fr = new FileReader(f1); int r = fr.read(); int i=10; while(i>6){ r = fr.read(); i=i-4; } System.out.println((char)r); } } 	B	1	T	U	H	S
315	8	What is the output of the Java code snippet? import java.io.*; class NewMCQ { public static void main(String[] args) throws IOException { File f = new File("Hello World.txt"); FileWriter file = new FileWriter(f); BufferedWriter bw = new BufferedWriter(file); bw.write("Hello\n"); System.out.print(f.length()); bw.write(65); System.out.print(f.length()); bw.close(); file.close(); } } 	B	1	61	0	62	71
316	8	//What is the output? if prompted in console, user inputs: XYZ.JAVA import java.io.*; class ReadLine { public static void main(String[] args) throws IOException { InputStreamReader file = new InputStreamReader(System.in); BufferedReader line = new BufferedReader(file); System.out.println(line.read()); } } 	A	1	88	89	90	91
317	8	Which of these class is used to read characters and strings in Java from console?	A	1	BufferedReader	BufferedReader	BufferedReader	InputStreamReader
318	8	Which of these classes are used by character streams output operations?	B	1	InputStream	Writer	ReadStream	InputStream
319	8	RandomAccessFile cab be use to _____	C	1	read from random access file	write from random access file	read and write from random access file	restrict read and write to a random access file
320	8	Reader class is _____	A	1	abstarct class to read the character stream	used to read from file	abstarct class to input the character stream	used to take input from standard input stream

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
321	8	What value does readLine( ) return when it has reached the end of a file?	D	1	NULL	-1	0	null
322	8	Which of the following are true? i) The InputStream and OutputStream classes are byte-oriented. li) The ObjectInputStream and ObjectOutputStream do not support serialized object input and output. li) The Reader and Writer classes are character-oriented. iv) The Reader and Writer classes are the preferred solution to serialized object output.	B	1	i only	ii only	i and ii	none of these
323	8	What is the output of the following code? import java.io.*; import java.lang.String; class test { public static void main(String[] args) throws IOException { // Object of RandomAccessFile RandomAccessFile raf = new RandomAccessFile("input.txt","r"); // Suppose, the input.txt file contains the following text // This is a line of text inside the file. // array to store the content of the file byte[] bytes = new byte[12];  // offset is 8 and length is 3 raf.read(bytes, 8, 3); raf.close(); System.out.println(new String(bytes)); } }	B	1	is	Thi	is	Thi
324	8	"What is the output of the Java code snippet? Consider, the "input.txt" file contains the following text in first line: This_is_a_line_of_text_inside_the_file. import java.io.*; import java.lang.String; class NewMCQ { public static void main(String[] args) throws IOException { RandomAccessFile raf = new RandomAccessFile("input.txt","r"); byte[] bytes = new byte[12]; raf.read(bytes, 8, 6); raf.close(); System.out.println(new String(bytes)); } }"	D	1	null	This_i	This_is_a_l	Runtime Exception
325	8	Write a JAVA program to read student.txt file and display the content.		4				
326	8	Write a program to read the content of a file into a character array and write it into another file. Get names of the files from command line.		4				
327	8	Write a java program to search the file named the word entered as a filename from command line; if it exists in the system then program should print the content of a file on console.		5				
328	8	Write a java program that read employee details and store into emp.txt text file using file handling.		4				
329	8	Write a program that counts number of characters, words, and lines ina text file.		5				



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
330	8	Create a class called Student. Write a student manager program to manipulate the student information from files by using the BufferedReader and BufferedWriter.		5				
331	8	Write a java program to search the file named the word entered as a filename from commandline: If it exists in the system the program should print the contents of the file on console		5				
332	8	Write a Java program to copy content of file1.txt to file2.txt using Java file handling		4				
333	8	Write an application that reads a file and counts the number of occurrences of digit 5. Supply the file name as a command-line argument		5				
334	8	Write a program to replace all "word1" by "word2" to a file without using temporary file and display the no. of replacement.		5				
335	8	Write a program to count the total no. of chars, words, lines, alphabets, digits, white spaces in a given file.		5				
336	8	Write a program to display the bytes of a file in reverse sequence. Provide the name of the file as a command line argument.		4				
337	8	Write a program to sort the one file numbers to another. for example one file contain the unsorted number separated by line and write the another file with sorted number.		5				
338	8	Write a java program which read numbers from number.txt file and store even number to even.txt and odd number into odd.txt file.		4				
339	9	What are the major components of the JDBC?	A	1	DriverManager, Driver, Connection, Statement, and ResultSet	DriverManager, Driver, Connection, and Statement	DriverManager, Statement, and ResultSet	DriverManager, Connection, Statement, and ResultSet
340	9	Select the packages in which JDBC classes are defined?	D	1	jdbc and javax.jdbc	rdb and javax.rdb	jdbc and java.jdbc.sql	sql and javax.sql
341	9	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.	A	1	i, iii, ii, v, iv, vii, vi, viii	i, ii, iii, v, iv, vii, viii, vi	ii, i, iii, iv, viii, vii, v, vi	i, iii, ii, iv, v, vi, vii, viii
342	9	Which of the following method is used to perform DML statements in JDBC?	C	1	executeResult()	executeQuery()	executeUpdate()	execute()
343	9	Which of the following method is static and synchronized in JDBC API?	C	1	prepareCall()	executeUpdate()	getConnection()	executeQuery()
344	9	Which methods are required to load a database driver in JDBC?	D	1	getConnection()	registerDriver()	forName()	Both b and c
345	9	Parameterized queries can be executed by?	B	1	PreparedStatement	PreparedStatement	CallableStatement and Parameterized Statement	All kinds of Statements
346	9	Which of the following is not a valid statement in JDBC?	C	1	Statement	PreparedStatement	QueryStatement	CallableStatement

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
347	9	Stored procedure can be called by using the ?	B	1	CallStatement	Statement	CalledStatement	PreparableStatement
348	9	What should be the correct order to close the database resource?What should be the correct order to close the database resource?	D	1	Connection, Statements, and then ResultSet	ResultSet, Connection, and then Statements	Statements, ResultSet, and then Connection	ResultSet, Statements, and then Connection
349	9	Which method is used to establish the connection with the specified url in a Driver Manager class?	D	1	public static void registerDriver(Driver driver)	public static void deregisterDriver(Driver driver)	public static Connection getConnection(String url)	public static Connection getConnection(String url,String userName,String password)
350	9	Which method is used for an SQL statement that is executed frequently?	A	1	prepareStatement	prepareCall	createStatement	None of the above
351	9	JDBC stands for?	A	1	Java database connectivity	Java database connection	java Data and Bios Connectivity	java database communication
352	9	Which of the following statements is true about PreparedStatement in Java?	D	1	It is used for executing dynamic SQL statements.	It is used for executing static SQL statements.	It is used for executing stored procedures.	It is used for executing both static and dynamic SQL statements.
353	9	Which of the following is true about CallableStatement in Java?	C	1	It is used for executing static SQL statements.	It is used for executing dynamic SQL statements.	It is used for executing stored procedures.	It is used for executing both static and dynamic SQL statements.
354	9	Which of the following is an advantage of using PreparedStatement over Statement in Java?	B	1	Better performance for complex queries	Increased security against SQL injection attacks	Ability to execute DDL statements	All of the above
355	9	_____ method can be used for any SQL statements(Select and Update both).	C	1	executeQuery	executeUpdate	execute	All of the above

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
356	9	<p>What is the output of the following Java code that uses Statement to execute a SQL query?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         Statement stmt = conn.createStatement();         ResultSet rs = stmt.executeQuery("SELECT * FROM customers");         while (rs.next()) {             System.out.println(rs.getString("name"));         }         conn.close();     } }</pre>	D	1	The code will throw an SQLException because the SQL query is invalid.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The code will throw a NullPointerException because the ResultSet is not initialized.	The names of all customers in the "customers" table will be printed to the console.
357	9	<p>What is the output of the following Java code that uses PreparedStatement to execute a SQL query with a parameter?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         String sql = "SELECT * FROM customers WHERE country = ?";         PreparedStatement pstmt = conn.prepareStatement(sql);         pstmt.setString(1, "USA");         ResultSet rs = pstmt.executeQuery();         while (rs.next()) {             System.out.println(rs.getString("name"));         }         conn.close();     } }</pre>	A	1	. The names of all customers in the "customers" table whose country is "USA" will be printed to the console.	The code will throw an SQLException because the SQL query is invalid.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The code will throw a NullPointerException because the ResultSet is not initialized.

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
358	9	<p>What is the output of the following Java code that uses CallableStatement to execute a stored procedure?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         CallableStatement cstmt = conn.prepareCall("{call myprocedure(?, ?)}");         cstmt.setString(1, "John");         boolean hasResults = cstmt.execute();         if (hasResults) {             ResultSet rs = cstmt.getResultSet();             while (rs.next()) {                 System.out.println(rs.getString("result"));             }         }         conn.close();     } }</pre>	B	1	The code will throw an SQLException because the stored procedure is not found.	The code will throw an Missing Parameter Exception because the parameters are missing	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The value of the "result" column for the "John" input parameters will be printed to the console.
359	9	<p>What is the output of the following Java code that uses PreparedStatement to execute an insert SQL query with multiple parameters?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         String sql = "INSERT INTO customers (name, address, city, country) VALUES (?, ?, ?, ?)";         PreparedStatement pstmt = conn.prepareStatement(sql);         pstmt.setString(1, "John Doe");         pstmt.setString(2, "123 Main St");         pstmt.setString(3, "New York");         pstmt.setString(4, "USA");         int rowsInserted = pstmt.executeUpdate();         System.out.println(rowsInserted + " rows inserted");         conn.close();     } } // Assume that the "customers" table has columns "name", "address", "city", and "country".</pre>	A	1	One row with the specified values will be inserted into the "customers" table and the number of rows inserted will be printed to the console.	The code will throw an SQLException because the SQL query is invalid.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The code will throw a NullPointerException because the ResultSet is not initialized.

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
360	9	<p>What is the output of the following Java code that uses CallableStatement to execute a stored procedure with OUT parameters?</p> <pre>import java.sql.*; public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         CallableStatement cstmt = conn.prepareCall("{call myprocedure(?, ?, ?)}");         cstmt.setString(1, "John");         cstmt.setString(2, "Doe");         cstmt.registerOutParameter(3, Types.INTEGER);         cstmt.execute();         System.out.println(cstmt.getInt(3));         conn.close();     } }</pre> <p>Assume that the "myprocedure" stored procedure takes two IN parameters "firstname" and "lastname" and one OUT parameter "result" of type INTEGER.</p>	A	1	The value of the "result" OUT parameter for the "John Doe" input parameters will be printed to the console.	The code will throw an SQLException because the stored procedure is not found.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The code will throw a NullPointerException because the ResultSet is not initialized.
361	9	Which statement is the correct one for MySQL jdbc connection?	D	1	getConnection("jdbc:mysql://localhost:3306/dbName", "root", "");	getConnection("mysql.jdbc://localhost:3306/dbName", "root", "");	getConnection("jdbc:MySQL://localhost:3306/dbName", "root", "");	getConnection("jdbc:mysql://localhost:3306/dbName", "root", "");
362	9	<p>Which line contains an ERROR? [Assume all the necessary lines before line 1 is already there in the code]</p> <ol style="list-style-type: none"> <li>String sql = "insert into table values(?, ?, ?)";</li> <li>PreparedStatement pst = con.prepareStatement(sql);</li> <li>pst.setInt(1, 1324);</li> <li>pst.setString(2, "1324");</li> <li>pst.setString(3, "1324");</li> <li>pst.executeQuery();</li> </ol>	D	1	1,2,5	2,5,6	2,4,5,6	2, 6
363	9	<p>Which lines are correct? [Assume all the necessary lines before line 1 is already there in the code &amp; table have 4 columns – facId(int), facName(String), salary(float), number(String)]</p> <ol style="list-style-type: none"> <li>String sql = "insert into faculty (facName, salary, number ) values(?, ?, ?)";</li> <li>PreparedStatement pst = con.prepareCall(sql);</li> <li>pst.setString(1, "JKJKJKJKJKJ");</li> <li>pst.setFloat(2, 789);</li> <li>pst.setString(3, "888");</li> <li>pst.execute();</li> </ol>	B	1	1,3,4,5,6	1,2,3,4,5,6	2,3,4,5,6	4,5,6
364	9	<p>What is the correct syntax to store data of .java file to database. Consider the default PreparedStatement and FileReader is there.</p>	C	1	pst.getCharacterStream(collIndex, fileReaderObj, file.length());	pst.getByteStream(collIndex, fileReaderObj, file.length());	pst.setCharacterStream(collIndex, fileReaderObj, file.length());	pst.setByteStream(collIndex, fileInputStreamObj, file.length());

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
365	9	What will be the output of the following? [Assume all the methods and necessary code is written there]  DatabaseMetaData dbmd = con.getMetaData(); System.out.println(dbmd.getDatabaseProductName());	C	1	jdbc	MySQL Connector/J	MySQL	root
366	9	What is the output of the following Java code? /* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)". */ import java.sql.*; class Managment { public static void main(String[] args) throws Exception { Class.forName("com.mysql.cj.jdbc.Driver"); Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", ""); String sql = "insert into faculty values('Patel',2500,9999)"; PreparedStatement pst = con.prepareStatement(sql); int r = pst.executeUpdate(); if (r >= 0) { System.out.print(r + " Sucessessful "); } else { System.out.print(r + " Fail ");    } } } }	C	1	1 Sucessessful	Sucessessful 1	Exception in thread "main" java.sql.SQLException	Compile Time Error
367	9	What is the correct sequence to insert Data in a database by using PreparedStstement? i. Import JDBC packages. ii. Create connection to the database. iii. Load and register the JDBC driver. iv. Execute Sql Query v. Create a PreparedStatement object & pass sql query. vi. Write Sql Query (Insert into table name.....).	A	1	i , iii, ii, vi, v, iv	i , iii, ii, v, vi, iv	i , iv, ii, vi, v, iii	i , iii, ii, vi, iv, v

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D												
368	9	<div><div>Server: 127.0.0.1 » Database: lju » Table: faculty</div><div><div>facID</div><div>facName</div><div>salary</div><div>number</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>1</div><div>DBP</div><div>121212</div><div>123456</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>2</div><div>VVP</div><div>25000</div><div>989898</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>3</div><div>MCD</div><div>145263</div><div>212121</div></div></div> <p>What is the output of the following Java code? /* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)".*/</p> <pre>import java.sql.*; class Managment {     public static void main(String[] args) throws Exception {         Class.forName("com.mysql.cj.jdbc.Driver");         Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", "");         String sql = "select * from faculty where facid = 1";         PreparedStatement pst = con.prepareStatement(sql);         ResultSet rs = pst.executeQuery();         System.out.print(rs.getInt(1));         System.out.print(rs.getString(2));         System.out.print(rs.getFloat(3));         System.out.print(rs.getString(4));    } }</pre>	D	1	1DBP121212123456	2VVP25000989898	1121212123456DBP	Run time Exception												
369	9	<div><div>Server: 127.0.0.1 » Database: lju » Table: faculty</div><div><div>facID</div><div>facName</div><div>salary</div><div>number</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>1</div><div>DBP</div><div>121212</div><div>123456</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>2</div><div>VVP</div><div>25000</div><div>989898</div></div><div><div><div></div><div>Edit</div><div>Copy</div><div>Delete</div></div><div>3</div><div>MCD</div><div>145263</div><div>212121</div></div></div> <p>What is the output of the following Java code? /* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)".*/</p> <table><tr><th>Direction</th><th>Name</th><th>Type</th><th>Length/Values</th></tr><tr><td>IN</td><td>FAC_ID</td><td>INT</td><td>10</td></tr><tr><td>OUT</td><td>FAC_NAME</td><td>VARCHAR</td><td>50</td></tr></table>	Direction	Name	Type	Length/Values	IN	FAC_ID	INT	10	OUT	FAC_NAME	VARCHAR	50	B	1	DBP	MCD	VVP	Exception in thread "main" java.sql.SQLException
Direction	Name	Type	Length/Values																	
IN	FAC_ID	INT	10																	
OUT	FAC_NAME	VARCHAR	50																	

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
		7. Routine name: getFacId      Type: Procedure  BEGIN SELECT facName INTO FAC_NAME FROM faculty WHERE facId = FAC_ID; END */ import java.sql.*; class Managnment { public static void main(String[] args) throws Exception { Class.forName("com.mysql.cj.jdbc.Driver"); Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", ""); String sql = "{call getFacId(?,?)}"; CallableStatement cst = con.prepareCall(sql); cst.setInt(1, 3); cst.executeQuery(); System.out.println(cst.getString(2));    }}						
370	9	Consider a table with name – student and database as admission. The student table have fields like stdId, stdName, stdMarks(float). Write a java program that adds 2 records using PreparedStatement. [have to write connection code here.]		4				
371	9	Write the java program that do connection with database		3				
372	9	Write a java program to insert book_id, book_name, book_price in the book table with LJU database. Do this using Statement		4				
373	9	Write a java program to insert book_name, book_price in the book table with LJU database. Do this using Statement. Here, Book id is auto incremented. So do accordingly.		4				
374	9	Write a java program to insert brochure_id brochure_name, brochure_pages in the brochure table with LJU database. Do this using Statement Interface. Take necessary data from user for inserting atleast 5 records.		4				
375	9	Write a java program to update book_price by book_name in the book table with LJU database. Do this using Statement. Here, Book id is auto incremented. So do accordingly.		4				
376	9	Write a java program to update book_price and book_name in the book table with LJU database. Do this using Statement. To do this, First ask user to enter book_id. And then ask new book name and price to be updated.		4				
377	9	Write a java program to delete books from the book table book_name in the book table with LJU database. Do this using Statement.		4				



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
378	9	Write a java program to display all brochures from the brochure table where table contains columns like : brochure_id, brochure_name, brochure_pages.		4				
379	9	Write a java program that inserts record of employees like emp_id, emp_name, emp_designation, emp_salary. Here emp_id is primary key and auto incremented. Table name is employee. And Database is : LJU. Now, insert one record using PreparedStatement		4				
380	9	Write a java program that inserts record of employees like emp_id, emp_name, emp_designation, emp_salary. Here emp_id is primary key and auto incremented. Table name is employee. And Database is : LJU. Now, insert one record using PreparedStatement. Ask User how many records you want to enter. And insert n - records using prepared statement		5				
381	9	Write a java program for the above same employee table - to do upate emp designation and salary BY emp_name. Take all details from user and update this by using PreparedStatement		4				
382	9	Write a java program for the above same employee table - to do delete employee those having salary more than salary entered by user. from the table. Take all details from user and update this by using PreparedStatement. - Take salary from user.		4				
383	9	Write a java program that fetch all details of employees from employee table. Table name is employee. And Database is : LJU. Now, fetch record using CallableStatement. - Create procedure with name : getEmployees() Emp id is auto incremented.		5				
384	9	Write a java program that inserts record of employees like emp_id, emp_name, emp_designation, emp_salary. Here emp_id is primary key and auto incremented. Table name is employee. And Database is : LJU. Now, insert one record using CallableStatement. - Create procedure with name : insertEmployee(?,?,?) Emp id is auto incremented. Consider all parameters as IN parameter		5				
385	9	Write a java program that update record of emp_designation, and emp_salary where emp_name is rahul. Here emp_id is primary key and auto incremented. Table name is employee. And Database is : LJU. Now, update record using CallableStatement. - Create procedure with name : updateEmployeeByName(?,?,?) Emp id is auto incremented. Consider all parameters as IN parameter.		5				
386	9	Consider Bank table with attributes AccountNo, CustomerName, Balance, Phone and Address. Write a database application which allows insertion, updation and deletion of records in Bank table. Print values of all customers whose balance is greater than 20,000.		5				
387	9	Write a program using JDBC for getting personal information – name, birthdate, sex, address, phone no, email-id & store it in database. Also provide list of all records, all male, all female & all minors (age below 18).		5				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
388	9	Write Java application program to change the basic = basic + 500 of all the employees whose age is greater then 40 from employee table then display how many record updated.		5				
389	9	Write a java code that used to insert Products in the product table and update product price by product name.		5				
390	9	Write a stroed procedure with name multiProduct(?,?,?) This do the follwong. - update product price by product id - return the product name which is updated by us in previous query. - So here write both queries in a single procedure call. Use 3 - IN and OUT parameter as per your understanding.		3				
391	9	Write a java code for the below tasks. - Table Name : student : std_id, std_roll_no, std_name, std_marks, std_div - DB Name : LJU - Write tow callable stored procedure with below names. A) getMakrs(): this procedure will give you marks of students from name. B) updateRollNo() : this procedure will update the roll no by giving the name of the student.		6				
392	9	Write a java code to fetch all student's marks from the table and do addition of all marks.		3				
393	9	Write a java code to update student's marks in the follwing manner. Students having makrs > 50 add + 5 in total marks > 60 add + 10 marks > 80 add + 15 in the marks and update the table in it.		4				
394	9	Management of the LJ wants to do compilation of total marks of the students. For this they do the following process. 1. Table - mse_marks with columns - roll_no, t1, t2, bonus. 2. Table – final_marks with roll_no, total ( where total = (t1+t2)/2 + bonus ) Process 1: Need to fetch all the details from the table mse_marks using CallableStatement. Write SQL code an Java code for the same. Procedure name is getMarks().  Process 2: Need to insert same roll_no fetched from the mse_marks to final_marks table and total after calculating it perfectly from the table mse_marks. This insertion query you have to write using PreparedStatement.		6				
395	9	Ask User to do the following taks in book table. All the details of table are given in above examples. 1 - for insertion 2 - for deletion by book name 3 - for update book name and price both BY book id. 4. for show all books from the table. Do above program using switch case and untill user press - 5 - ask them again do the above operations.		6				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
396	9	Write a java program that select record emp_designation, and emp_salary where emp_name is rahul. Here emp_id is primary key and auto incremented. Table name is employee. And Database is : LJU. Now, update record using CallableStatement. - Create procedure with name : selectEmployeeByName(?,?,?) Emp id is auto incremented. Here : emp_name is IN parameter. emp_designation and emp_salary are OUT parameter.		5				
397	9	Write a Java code for the following task. - Table Name : student : std_id, std_roll_no, std_name, std_marks, std_div - DB : LJU - Insert 5 Records using prepared statement. - Update Div of students having marks > 50 - To - Div B - Use callable statement for this		6				
398	9	Assume you are building an online bookstore application that allows customers to purchase books. You have decided to use JDBC to handle database operations. The application should have the following functionality:  Add books to the database Retrieve a list of books from the database Update book information in the database Delete a book from the database Requirements:  The program should establish a connection to the database using JDBC. The program should allow users to enter book information such as title, author, publisher, and price. The program should use PreparedStatement to insert, update and delete data from the database. The program should use Statement to retrieve data from the database. The program should display the list of books retrieved from the database. The program should handle exceptions such as SQLException and ClassNotFoundException. Functionality:  The program should provide a menu to the user to perform CRUD operations on the book database. The program should handle input validation for book information such as non-null values, valid prices, and book title length. The program should display a success or failure message after each CRUD operation.		6				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
399	9	<p>Suppose you are working on a project for a banking system that requires you to implement JDBC CRUD operations. You need to create a Java application that allows users to add, view, update, and delete customer accounts from the database. The program should establish a connection to the database using JDBC and use PreparedStatement to execute SQL statements.</p> <p>Requirements:  The program should establish a connection to the database using JDBC.  The program should allow users to add, view, update, and delete customer accounts from the database.  The program should use PreparedStatement to execute SQL statements.  The program should display appropriate messages to the user indicating the success or failure of the operation.  Functionality:    The program should provide a menu to the user to add, view, update, and delete customer accounts.  The program should handle exceptions such as SQLException and ClassNotFoundException.</p>		6				
400	10	What is the correct syntax to fetch image content data from database table?	C	1	ImageContent ic = rs.getImageContent("file Content");	Clob cb = rs.getClob("fileContent");	Blob bb = rs.getBlob("fileContent");	BlobContent bc = rs.getBlobContent("file");
401	10	What does the setAutoCommit(false) ?	D	1	Never commit the transactions.	Transaction is explicitly committed.	Transactions will not be committed automatically	B & C
402	10	Which of the following methods is used to get the data type of a column in a ResultSet using ResultSetMetaData in Java?	A	1	getColumnTypeName()	getColumnType()	getColumnTypeNameData()	getColumnName()
403	10	Which of the following methods is used to determine the size of a Blob in Java?	A	1	length()	size()	getSize()	getLength()
404	10	Which of the following methods is used to retrieve a file as a byte array from a database using JDBC in Java?	C	1	executeUpdate()	executeQuery()	getBytes()	getBinaryStream()
405	10	Which of the following data types is used to store binary data in a database using JDBC in Java?	D	1	DATE	VARCHAR	CLOB	BLOB
406	10	Which of the following methods is used to insert a file into a database as a CLOB using JDBC in Java?	C	1	setBlob()	setBinaryStream()	setClob()	setCharacterStream()
407	10	Which of the following methods is used to retrieve a file stored as a BLOB from a database using JDBC in Java?	A	1	getBlob()	getBinaryStream()	getBytes()	getCharacterStream()
408	10	Which of the following methods is used to insert a file into a database as a BLOB using JDBC in Java?	A	1	setBlob()	setBinaryStream()	setBytes()	setCharacterStream()
409	10	Which of the following interfaces provides methods for retrieving metadata about a ResultSet object?	A	1	ResultSetMetaData	DatabaseMetaData	StatementMetaData	DBMetaData
410	10	Which of the following interfaces provides methods for retrieving metadata about a database?	B	1	ResultSetMetaData	DatabaseMetaData	StatementMetaData	DBMetaData

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
411	10	<p>What is the output of the following Java code that uses DatabaseMetaData to retrieve the database product name?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         DatabaseMetaData metadata = conn.getMetaData();         System.out.println(metadata.getDatabaseProductName());         conn.close();     } }</pre> <p>Assume that the JDBC driver is for a MySQL database.</p>	D	1	"Java Database Connectivity" will be printed to the console.	The code will throw an SQLException because the JDBC driver is not compatible with MySQL.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	"MySQL" will be printed to the console.
412	10	<p>What is the output of the following Java code that uses ResultSetMetaData to retrieve the column names of a ResultSet?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         Statement stmt = conn.createStatement();         ResultSet rs = stmt.executeQuery("SELECT * FROM customers");         ResultSetMetaData rsmd = rs.getMetaData();         for (int i = 1; i &lt;= rsmd.getColumnCount(); i++) {             System.out.println(rsmd.getColumnName(i));         }         conn.close();     } }</pre> <p>Assume that the "customers" table has columns "id", "name", "address", "city", and "country".</p>	A	1	The column names "id", "name", "address", "city", and "country" will be printed to the console.	The code will throw an SQLException because the SQL query is invalid.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.	The code will throw a NullPointerException because the ResultSet is not initialized.

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
413	10	<p>What is the output of the following Java code that uses ResultSetMetaData to retrieve the number of columns in a ResultSet?</p> <pre>import java.sql.*;  public class Main {     public static void main(String[] args) throws SQLException {         Connection conn =         DriverManager.getConnection("jdbc:mysql://localhost:3306/mydatabase", "root",         "password");         Statement stmt = conn.createStatement();         ResultSet rs = stmt.executeQuery("SELECT * FROM customers");         ResultSetMetaData rsmd = rs.getMetaData();         System.out.println(rsmd.getColumnCount());         conn.close();     } }</pre> <p>Assume that the "customers" table has columns "id", "name", "address", "city", and "country".</p>	A	1	5 will be printed to the console.	4 will be printed to the console.	The code will throw an SQLException because the SQL query is invalid.	The code will throw a ClassNotFoundException because the MySQL JDBC driver is not found.
414	10	DatabaseMetaData interface is used to get?	A	1	Comprehensive information about the database as a whole.	Comprehensive information about the table as a whole.	Comprehensive information about the column as a whole.	Both b and c
415	10	<p>What is the output of the following Java code?</p> <pre>/* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)". */ import java.sql.*; class TransactionManagnment {     public static void main(String[] args) throws Exception {         Class.forName("com.mysql.cj.jdbc.Driver");         Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju",         "root", "");         con.setAutoCommit(false);         String sql = "insert into faculty(facName, salary, number) values('deep',2500,9999)";         PreparedStatement pst = con.prepareStatement(sql);         int r = pst.executeUpdate();         con.commit();         con.rollback();         if (r &gt;= 0) {             System.out.print(r+ " Sucessessful ");         } else {             System.out.print(r+ " Fail ");         }         con.close(); } }</pre>	A	1	1 Sucessessful	0 Sucessessful	1 Fail	0 Fail
416	10	Which data type is used to store files in the database table?	B	1	BLOB	CLOB	File	Both a and b

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D												
417	10	What is blob in the following statement? create table profilepic(photo blob);	C	1	Variable	Object	Data type	Keyword												
418	10	Which statement(s) is/ are true about transactions? i. A transaction is a set of one or more SQL statements that make up a logical unit of work.  ii. A transaction ends with either a commit or a rollback, depending on whether there are any problems with data consistency or data concurrency.  iii. A lock is a mechanism that allows two transactions from manipulating the same data at the same time.  iv. To avoid conflicts during a transaction, a DBMS uses locks, mechanisms for blocking access by others to the data that is being accessed by the transaction.	C	1	Only i and ii	Only i and iii	Only i, ii, and iv	All the above												
419	10	Which method Drops all changes made since the previous commit/rollback?	A	1	public void rollback()	public void commit()	public void close()	public Statement												
420	10	Which methods returns a stream that simply provides the raw bytes from the database without any conversion?	B	1	getCharacterStream	getBinaryStream	getAsciiStream	getUnicodeStream												
421	10	What is the output of the following Java code? /* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)".* <table><thead><tr><th>facID</th><th>facName</th><th>salary</th><th>number</th></tr></thead><tbody><tr><td>1</td><td>DBP</td><td>70000</td><td>98989898</td></tr><tr><td>2</td><td>VVP</td><td>75000</td><td>999999</td></tr></tbody></table> import java.sql.*; class RSMD { public static void main(String[] args) throws Exception { Class.forName("com.mysql.cj.jdbc.Driver"); Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", ""); String sql = "select * from faculty"; PreparedStatement pst = con.prepareStatement(sql); ResultSet rs = pst.executeQuery(); ResultSetMetaData rsmd = rs.getMetaData(); while (rs.next()) { System.out.print( rsmd.getColumnCount()+" "); System.out.print( rsmd.getColumnName(1)+" "); System.out.print( rsmd.getColumnTypeName(1)+" "); System.out.print( rsmd.getTableName(2)+" "); } } }	facID	facName	salary	number	1	DBP	70000	98989898	2	VVP	75000	999999	D	1	4,facID,INT,faculty,	5,facID,INT,faculty,	1,DBP,70000,98989898,	None of the Above
facID	facName	salary	number																	
1	DBP	70000	98989898																	
2	VVP	75000	999999																	

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
422	10	<p>What is the output of the following Java code?</p> <p>/* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)". */</p> <pre>import java.sql.*; class TransactionManagment {     public static void main(String[] args) throws Exception {         Class.forName("com.mysql.cj.jdbc.Driver");         Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", "");         con.setAutoCommit(true);         String sql = "insert into faculty(facName, salary, number) values('abc',2500,9999)";         PreparedStatement pst = con.prepareStatement(sql);         int r = pst.executeUpdate();         if (r &gt; 0) {             System.out.print("Sucessessful ");         } else {             System.out.print("Fail ");         }         con.commit();         con.close(); } }</pre>	C	1	Sucessessful	Fail	Sucessessful Exception in thread "main" java.sql.SQLException	Fail Exception in thread "main" java.sql.SQLException
423	10	<p>What is the output of the following Java code?</p> <p>/* Assume that the "faculty" table has columns "facid(INT)(AUTO_INCREMENT)", "facName(VARCHAR)", "salary(FLOAT)", and "number(VARCHAR)". */</p> <pre>import java.sql.*; class Transaction {     public static void main(String[] args) throws Exception {         Class.forName("com.mysql.cj.jdbc.Driver");         Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/lju", "root", "");         String sql = "insert into faculty(facName, salary, number) values('abc',2500,9999)";         PreparedStatement pst = con.prepareStatement(sql);         int i = pst.executeUpdate();         con.rollback();         con.close(); } }</pre>	D	1	Exception in thread "main" java.io.FileNotFoundException	Exception in thread "main" java.lang.ArrayIndexOutOfBoundsException	Exception in thread "main" java.lang.StringIndexOutOfBoundsException	Exception in thread "main" java.sql.SQLNonTransientConnectionException
424	10	Write a java code snippet that checks weather the database connection is established or not? If the connection is established perfectly then it should give us the version of the driver which I have used for the connection.		4				
425	10	Write database application that prints different records from a table. Find out the name of table, no. of columns, no. of records and type of the columns. Here DB name is LJU and Table is employee with emp_id, emp_name, emp_designation, emp_salary		4				
426	10	Write a java code to insert image in table with name img_table where columns are img_id, img_name, img_size, img_content.		4				



**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
427	10	Write a java code to retrieve image in table with name img_table where columns are img_id, img_name, img_size, img_content.		4				
428	10	Write a java code to insert text file or java file in table with name file_table where columns are file_id, file_name, file_size, file_content, file_extension		5				
429	10	Write a java code to retrieval text file or java file in table with name file_table where columns are file_id, file_name, file_size, file_content, file_extension		5				
430	10	Table name: product Columns: pId, pName, pPrice, pCategory  Create a java program through which user can ask for the following. Enter 1 to know Number of Column Enter 2 to know the Table Name Enter 3 to know Column Name & Ask for Index of column Enter 4 to know the type of column of Index given by user		5				
431	10	DB Name : LJU Create a java program through which user can ask for the following. Enter 1 to know Driver Name Enter 2 to know the User Name Enter 3 to know Database Product Name Enter 4 to know the Driver Version		5				
432	10	Write a java code that stores .java file in the file table		4				
433	10	Write a java code that retrieves file with .java extension only from the table and create a new file.		4				
		Project Definition: You are developing a Java program for a small business that requires storing and retrieving employee data and their profile images using JDBC. The program should allow authorized HR staff to add, retrieve, and delete employee data from the database. Additionally, the program should store and retrieve profile images for each employee.  Requirements:  The program should establish a connection to the database using JDBC. The program should create a table if it doesn't exist and use the table for storing and		7				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
434	10	<p>retrieving employee data.  The program should allow authorized HR staff to add employee data to the table.  The program should allow authorized HR staff to retrieve employee data from the table based on a specified employee ID.  The program should allow authorized HR staff to delete employee data from the table based on a specified employee ID.  The program should store and retrieve profile images using the Blob data type in JDBC.  The program should handle exceptions such as SQLException and IOException.  Functionalities:    Add employee data (employee ID, name, department, designation, and profile image)  Retrieve employee data (employee ID, name, department, designation, and profile image)  Delete employee data (employee ID)  Exit the program</p>						
435	10	<p>Write a java program for the following tasks  The program should establish a connection to the database using JDBC.  The program should allow users to enter the source account number, destination account number, and the amount to be transferred.  The program should begin a transaction and deduct the amount from the source account and add the amount to the destination account.  The program should commit the transaction if the transaction is successful.  The program should rollback the transaction if any exception occurs during the transaction.  Functionality:  The program should provide a menu to the user to perform the transfer of funds.  The program should handle exceptions such as SQLException and ClassNotFoundException.  Create Two Tables:  account : acc_no &amp; acc_balance  transaction : trans_id, src_acc_no, dest_acc_no, trans_amt  OUTPUT  Welcome to the Fund Transfer System.  1. Transfer Funds  2. Exit  Enter your choice: 1  Enter source account number: 123456</p>		5				

**L.J Institute of Engineering and Technology, Ahmedabad.**  
**Computer Programming using Java-II PRACTICE BOOK (SEM-II-2023 CE/IT/CSD/AIIML/AIDS/RAI/CS&IT/CSE/CST/CEA Engineering)**

**Note : This PRACTICE BOOK is only for reference purpose. LJU Test question paper may not be completely set from this PRACTICE BOOK.**

Sr No	Unit Number	Question_Text	MCQ Answer	Marks	Option A	Option B	Option C	Option D
		Enter source account number: 123456 Enter destination account number: 987654 Enter amount to be transferred: 5000 Transaction successful.  1. Transfer Funds 2. Exit Enter your choice: 2 Exiting program...						
436	10	Create a Transaction Management System that uses Thread, Where one thread is used to deposit in account and other thread is used to withdraw from the account. You need to run both thread on the wishes of user in database. Try to use synchronized keyword to avoid deadlock.		5				
437	10	Write a java code that is retrieve file that contains .txt file from table and convert new file in d:/java location with same name stored in table but extension with .java		5				
438	10	I try to hack the system of Adhar card. For this somehow, I got the access of the database – “aadhar” and it’s table – “aadharDetails”. Now can you help me with the following? 1 – To find the total number of columns in this table 2 – To find the name of the column 1 and 2 3 – To find the name of the column type of column 3 and 4. Write the java code for the above mentioned tasks. [No need to write code for connection]		4				