UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2021

Course: Object Oriented Programming	**Semester: IV**
Program: B.Tech CSE+ALL IBM Course	**Time: 03 hrs.**
Course Code: CSEG2016	**Max. Marks: 100**

SECTION A

1. Each Question will carry 5 Marks
2. Instruction: Complete the statement / answer the correct answer(s)

S. No	Questions	CO

Q 1	**Fill in the blank with appropriate words / words in the following code. (Line number 5 and 7)**
	1. import java.sql.*;
	2. public class Demo {
	3. public static void main(String[] args) {
	4. try{
	5. Class. ----------(com.mysql.jdbc.Driver);
	6. Connection conn ;
	7. conn = -----------------.getConnection(("jdbc:mysql://localhost:3306/jdbc ","root","1234");
	8. System.out.println("Connection Successful");
		CO4

Q 2	**Fill in the blank.** 1. --------- function returns a character at a specified location in the string. 2. Java byte code output from the JDK compiler will be placed into a file with ---------- extension.	**CO1**
Q 3	**State whether True or False:** 1. The object created by the string class can be modified. (True/False) 2. It is possible to overload two functions which have the same parameter list but different return values. (True/False)	**CO2**

Q 4	**What will be the output of the following Java program?**
	import java.util.*;
	public class Test{
	 public static void main(String args[]){
	 TreeSet<String> al=new TreeSet<String>();
	 al.add("Programming");
	 al.add("Object");
	 al.add("Oriented");
	 al.add("Object");
	 Iterator<String> itr=al.iterator();
	 while(itr.hasNext()){
	 System.out.println(itr.next()); } } }
		CO4

Q 5	**Which Java exception will be thrown when the following code is executed?**
	public class MultiStart extends Thread{
	   public void run(){
	   System.out.println("thread is running..."); }
	   public static void main(String args[]){
	   MultiStart t1=new MultiStart();
	        t1.start();
	        t1.start(); } }
		CO3

Q 6	**What will be the output of the following java program:**
	public class Test {
	  public static void main(String args[]){
	    String s1= "Advanced";
	    String s2= s1+ "Programming";
	    s1 ="Java"+"Language";
	    s2.concat(s1);
	    System.out.println(s1);
	    System.out.println(s2);}}
		CO2

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SECTION B

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1. Each question will carry 10 marks
2. Instruction: Write short / brief notes

S. No	**Questions**	**CO**
Q 7	What are the differences between final, finally, and finalize in java? Explain the logic with example.	**CO1**
Q 8	"We use abstract class & interface interchangeably as per program's requirement." Justify this statement with example to show pros & cons of using abstract class & interface in different scenarios.	**CO3**
Q 9	What is a package in java, show techniques how to import one package into another through java program.	**CO2**
Q 10	With the help of example, explain the creation of thread using different approach and implement synchronization in the method.	**CO4**
Q 11	Explain the use of JDBC with suitable example. Write a JAVA program to update a record of a table named employee, which is developed in mysql database. Increase the salary of each employee by 10%. Schema of employee table is as: (Populate the table and show the result after updation.) | Empid	Ename	Salary	Edepartment	eaddress | |---|---|---|---|---|	**CO4**

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SECTION-C

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1. Each Question carries 20 Marks.
2. Instruction: Write long answer
3. Attempt any one question from section C.

S. No	**Question**	**CO**
Q12	(a) Write any four advantages of JSP over servlets. (6) (b) Draw and explain the lifecycle of a JSP page. (6) (c) Differentiate between JSP Sciptlet & JSP Expression tag. Give example. (8) **OR** Write a JSP login page to enter the username and password entered by the user and display a welcome page upon successful login otherwise display an incorrect authentication page.	**CO5**