


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2022			
Course: Java Programming Program: MCA Course Code: CSEG7014		Semester: 2 Time : 03 hrs. Max. Marks: 100	
Instructions: Answer all the questions			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	State the difference between Function Overriding and Function Overloading.	4	CO1
Q 2	Write a Java Program to find the simple interest with the following specifications a. No input from the user b. Assign length=12 and breadth=15.4 c. class name is AreaOfRectangle d. class to have only void main function	4	CO1
Q 3	Specify and state the purpose of all the exception handlers in Java.	4	CO3
Q 4	What are Collection? List the various collection interface and its applications.	4	CO3
Q 5	Draw the life cycle of a servlet.	4	CO5
SECTION B (4Qx10M= 40 Marks)			
Q 6	Justify when static class and static method has advantage with a suitable example? Also discuss the use of static initializers.	10	CO1
Q 7	Write a java program to throw an exception for an employee details. <ul style="list-style-type: none"> • If an employee name is a number, a name exception must be thrown. • If an employee age is greater than 50, an age exception must be thrown. • Or else an object must be created for the entered employee details 	10	CO3
Q 8	Write a program to implement the concept of threading by implementing the Runnable interface and create the two Thread object	10	CO5

	and sleep for 300 milli seconds after printing the i value followed with your name.		
Q 9	<p>Create a web application which takes 2 variable as input gives the added result as output using servlets.</p> <p>OR</p> <p>Discuss the lifecycle of Servlet and the various ways a servlet can be implemented.</p>	10	CO5
<p>SECTION-C (2Qx20M=40 Marks)</p>			
Q 10	<p>a) Do Java have explicit destructors? Justify your answer.(5 Marks)</p> <p>b) Write the java code to get the below given pattern.(5 Marks)</p> <pre>***** **** *** ** *</pre> <p>c) Explain the various decision statements in Java with its structure and suitable examples.(10 Marks)</p>	20	CO2
Q 11	<p>a) List any 4 popular SQL databases in the Market.(2 Marks)</p> <p>b) State the steps to connect to the database and Java program. (8 Marks).</p> <p>c) Write a JDBC Java Program using the below given JDBC Connection.(10 Marks)</p> <ul style="list-style-type: none"> - Host string = jdbc:derby://localhost:1527/SalesDB - Username=<sapid> - Password=<sapid> <p>Assume the StudentDB has a table Marks with the data as given below. Write the program to display the employee details like Name, Roll No and Average marks by taking the user input Roll No. Execute SQL query against the database to display the details of all the students in the table.</p> <p>OR</p> <p>a) State the purpose of PreparedStatement over executeQuery object with an example. (10 Marks)</p> <p>b) Discuss the various steps in connecting the database with a java program with an example. Also discuss the advantages of Derby Database over other databases.(10 Marks)</p>	20	CO4