**Java-II Practical Exam Question Bank**

* **Collections**

1. Write a java program to accept ‘n’ integers from the user & store them in an ArrayList collection. Display the elements of the ArrayList collection in reverse order.
2. Write a java program to construct a Linked List containing names: OS, Java, ST, DA, CC, STT, and WT Then extend your program to do the following:

i. Display the contents of the List using an iterator

ii. Display the contents of the List in reverse order using a ListIterator.

1. Write a java program to create a TreeMap containing Employee name and Salary. Display the details of the TreeMap. Also, search for a specific Employee and display the salary of that employee.
2. Write a java program to create a hashtable containing city name & STD code. Display the details of the hashtable. Also search for a specific City and display STD code of that city.
3. Write a java program to construct a Linked List containing names: Pune, Mumbai, Delhi and Chennai. Then extend your program to do the following:
   1. Display the contents of the List using an iterator.
   2. Display the contents of the List in reverse order using a ListIterator.
   3. Create another list containing Hydrabad & Banglore. Insert the elements of this list between Delhi & Chennai.
4. Write a java program to accept names of ‘n’ Countries, insert same into array list collection and display the contents of same array list, also remove the second and fourth element from ArrayList and display it again.
5. Write a java program to read ‘n’ the names of your friends, store it into a linked list, and also display contents of the same. Do the following

i. Add element at the first position

ii. Delete the last element

iii. Display the size of the link list

1. Write a program to create a first tree set containing 5 uppercase alphabets and a second tree set containing 5 lowercase alphabets. Merge these treesets and print the final tree set.
2. Accept ‘n’ integers from the user. Store and display integers in sorted order having proper collection class. The collection should not accept duplicate elements and also display even integers from the collection.
3. Write a program to create HashMap having Roll No and Student Nam. Sort it by key(Roll No) and display the details before sorting and after sorting.

* **Multithreading**

1. Write a java program to display the name of the currently executing Thread in multithreading.
2. Write a Multithreading program in java to display the number’s between 1 to 100 continuously (use Runnable Interface).
3. Write a java program to display an alternate alphabet after 1 second between ‘A’ to ‘Z’.
4. Write a java program to accept a string from the user and display each vowel from a String after 3 seconds.
5. Write a java program to calculate the factorial of a number. (Use sleep () method).
6. Write a java program to display the name and priority of a Thread.
7. Write a java program using multithreading for the following: 1. Display all the odd numbers between 1 to n. 2. Display all the prime numbers between 1 to n
8. Write a program in which the thread sleeps for 2 sec in the loop in reverse order from 50 to 1 and change the name of the thread.
9. Write a program that implements a multi-thread application that has three threads. The first thread generates a random integer every 1 second and if the value is even, the second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of the cube of the number.
10. Program to define a thread for printing text on the output screen for ‘n’ number of times. Create 3 threads and run them. Pass the text ‘n’ parameters to the thread constructor.

Example: i. First thread prints “HELLO” 10 times.

ii. Second thread prints “GOOD MORNING” 20 times

iii. Third thread prints “GOOD NIGHT” 30 times

* **JDBC**

1. Write a Java Program to create an Emp (En, EName, Sal) table and insert a record into it. (Use PreparedStatement Interface)
2. Write a Java program to accept the details of the Student (RNo, SName, Per, Gender, Class) and store them in the database.
3. Write a Java program to accept the details of Student (Rno, Sname, Per) at least 5 Records, store them in the database and display the details of students having highest percentage. (Use PreparedStatement Interface)
4. Write a JDBC program to delete the details of the given Employee (ENo EName Salary). Accept employee ID through the command line.
5. Write a menu-driven program in Java for the following: Assume Emp table with attributes ( Eno, EName, Salary, Desg ) is already created.
6. Insert
7. Display
8. Exit
9. Write a Java Program to display the First, Third, and Last record of the Teacher(TID, TName, Salary, Subject) table. (Use Scrollable ResultSet)
10. Write a program to display information about the database and list all the tables in the database. (Use DatabaseMetaData).
11. Write a program to display information about all columns in the DONAR(Did, Dname, Address, Bgrp) table using ResultSetMetaData.

* **Servlet**

1. Write a SERVLET program in java to accept details of student (SeatNo, Stud\_Name, Class, Total\_Marks). Calculate percentage and grade obtained and display details on the page.
2. Write a SERVLET program in java to accept two integers and display their Addition, and Subtraction.
3. Write a SERVLET program that counts how many times a user has visited a web page. If the user is visiting the page for the first time, display a welcome message. If the user is revisiting the page, display the number of times visited. (Use Cookie)
4. Write a SERVLET program to display the details of Product (ProdCode, PName, Price) on the browser in tabular format. (Use database).

* **JSP**

1. Write a JSP program to display the details of the College (CID, CName, City) in tabular form on the browser.
2. Write a JSP program to check whether a given number is Perfect or not. (Use Include directive).
3. Write a JSP program to calculate the sum of the first and last digit of a given number. Display sum in Blue Color with font size 24.
4. Write a JSP program to accept the Name and Age of the Voter and check whether he is eligible for voting or not.
5. Create a JSP page to accept a number from a user and display it in words: Example: 123 – One Two Three. The output should be in Green color.