

EVEN SEMESTER EXAMINATION, 2023 – 24
2nd Year/ 4th Semester B.Tech. – Computer Science & Engineering
JAVA PROGRAMMING

Duration: 3:00 hrs

Max Marks: 100

Note: - Attempt all questions. All Questions carry equal marks. In case of any ambiguity or missing data, the same may be assumed and state the assumption made in the answer.

Q 1.	<p>Answer any four parts of the following.</p> <p>a) Explain the following terms using an example with respect to exception handling. i) try ii) catch iii) throw iv) finally</p> <p>b) Describe the concept of object and a class with a suitable Java program?</p> <p>c) Define class Student with suitable data members create two objects using two different constructors of the class?</p> <p>d) Explain the concept of method overriding with an example? How does it facilitate polymorphism?</p> <p>e) Write a program to count number of words from a text file using stream classes?</p> <p>f) Give use of 'this' keyword in Java with suitable example?</p>	5x4=20
Q 2.	<p>Answer any four parts of the following.</p> <p>a) Describe the uses of final and super keywords with respect to inheritance?</p> <p>b) Write a program to copy content of one file into another file?</p> <p>c) Write a program to define class Employee with members as id and salary? Accept data for five employees and display details of employees getting highest salary?</p> <p>d) Differentiate between method overloading and method overriding?</p> <p>e) Explain multithreaded programming in Java. Discuss the thread life cycle and the steps involved in creating threads?</p> <p>f) Describe Applet life cycle with diagram?</p>	5x4=20
Q 3.	<p>Answer any two parts of the following.</p> <p>a) Write a Java program to demonstrate event handling using ActionListener and MouseEvent in AWT?</p> <p>b) What is the purpose of constructors and destructors. Explain in detail with example?</p> <p>c) Write a Java program to implement a simple calculator using classes and methods?</p>	10x2= 20
Q 4.	<p>Answer any two parts of the following.</p> <p>a) Describe the architecture of JDBC (Java Database Connectivity) in Java. How can you execute SQL queries using JDBC? Discuss with example?</p> <p>b) What are the type of lists in XHTML? Create a nested list in XHTML? Modify the XHTML document to make different levels of list in different colors using document style sheet?</p> <p>c) Write a Java program to implement a simple RMI-based client/server application for remote method invocation?</p>	10x2= 20
Q 5.	<p>Answer any two parts of the following.</p> <p>a) How do servlets handle HTTP requests and responses? Provide examples of request and response handling in servlets?</p> <p>b) Write a Java program to create a menu-driven GUI application using AWT?</p> <p>c) Describe in detail three OOPs principles? Illustrate with suitable examples?</p>	10x2= 20