



BSc Degree in Information Technology

Model Paper

IT 255 Advance Programing with Java II

Time: Two Hours

Answer **Only Three (3)** Questions.

(This paper contains 4 questions.)

1.

1.1. Briefly explain the following terms,

- a) Asynchronous Programing
- b) Multithreading
- c) Parallelism

1.2. Briefly explain the usage of “Multithreading” in Java programing.

1.3. Write a note on Thread life cycle, explain it with diagram.

1.4. Explain the term EJB with suitable sketch.

1.5. Explain stateless and stateful session beans.

(25 Marks)

2.

2.1. What are different types of Session Tracking methods? Explain with suitable examples.

2.2. Explain difference between forward () method and sendRedirect() method.

2.3. Explain how JSP files are executed by web server?

2.4. State and explain scopes of JSP object.

2.5. Write a JSP program to accept student roll no and marks of Science, History and Mathematics from index.html and calculate the average, if the average marks are more than 50.0, then display “PASS”, else display “FAIL”, along with the roll no.

(25 Marks)

3.

3.1. Write a JSP based application that servers the purpose of simple calculator.

The image shows a web-based calculator interface. It has two input fields at the top labeled 'First No' and 'Second No'. Below these are four buttons for arithmetic operations: '+', '-', '*', and '/'. To the right of these buttons is an input field labeled 'Answer'.

3.2. Write java program to insert one record of information into the database table named (user_table), by accepting the details from the user; using PreparedStatement.

User_table(userNo int primary key, userName varchar(10), userNic int(10), userAddress varchar(10))

3.3. Briefly explain the advantages of Java Spring Framework.

3.4. Explain the difference between AOP and OOP.

3.5. Write short note on JAVA CORBA architecture

(25 Marks)

4.

4.1. Write a program in java which creates a list containing at least 3 theatres name. On the click of any theatre, the movie name from theatre should be displayed in a Text field.

4.2. (Write java program to insert one record of information into the database table named (depttable), by accepting the details from the user; using PreparedStatement.

depttable(deptno int primary key, deptname varchar(10), deptloc varchar(10))

4.3. Explain the request life cycle of Struts 2.

4.4. Discuss the features of JFC.

4.5. Write a JSP based application that serves the purpose of simple calculator. (Ex – addition, division, subtraction, multiplication)

(25 Marks)