

**TILAK MAHARASHTRA VIDYAPEETH, PUNE**  
**MASTER OF COMPUTER APPLICATIONS**  
**EXAMINATION : MAY- 2024**  
**SEMESTER - III**

**Sub:Web Applications using Java (MCA- 303-22)**

**Date : 30/05/2024**

**Total Marks : 60**

**Time: 2.00 pm To 4.30 pm**

**Instruction:**

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

**Q.1. Answer the following in 2-3lines. (Any 5) (10)**

1. What methods are used for comparing strings?
2. What is JVM?
3. Give syntax of switch statement.
4. Define arrays.
5. Explain what is the use of executeUpdate().
6. Describe JSP scriptlet tag.
7. What is package?

**Q.2. Answer the following in short. (Any 4) (20)**

1. Distinguish between Abstract class and interface.
2. Explain loop statements with example.
3. What is type casting? Explain its types.
4. Write a program to accept number from the user and display factorial of it.
5. Write a short note on Constructors. Explain its types.
6. Explain lifecycle of JSP in details.

**Q. 3. Answer the following in detail. (Any 3) (30)**

1. Explain JDBC Architecture in detail.
2. Explain inheritance with its types.
3. Explain in detail, features of Java Programming.
4. Write a short note on lifecycle of beans with its properties and features.
5. Write a JSP program to create a employee registration form to collect information (employee id, name, email id, gender, designation, username, and password) and display the values entered by the user in another page.

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