

**TILAK MAHARASHTRA VIDYAPEETH, PUNE**  
**MASTER OF COMPUTER APPLICATIONS**  
**EXAMINATION :DECEMBER - 2023**  
**SEMESTER - III**

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

**Date :14/12/2023**

**Total Marks : 60**

**Time: 10.00 am To 12.30 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 are the datatypes supported by java?
2. Write in details about comments in java.
3. Explain what is the use of executeQuery().
4. Explain Logical operators supported by Java.
5. Explain break statement.
6. Explain what is the use of this keyword.
7. What is API?

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

1. What is package? Explain in details with its types.
2. Write a short note on Constructors. Explain its types.
3. Explain conditional/Decision Making statements in details.
4. Distinguish between Abstract class and interface.
5. Explain arrays and its types in details with example.
6. Write a program to accept number from the user and display factorial of it.

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

1. Write in detail features of java.
2. Write a short note on servlet lifecycle. Explain types of it.
3. Explain JDBC Architecture in detail.
4. 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.
5. Explain following string methods in details
 

1) toLowerCase()	4) concat()	7) charAt()	10) replace()
2) equals()	5) isEmpty()	8) indexOf()	
3) length()	6) toUpperCase()	9) contains()	

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