



**BHARATIYA VIDYA BHAVAN'S**  
**SARDAR PATEL INSTITUTE OF TECHNOLOGY**

MUNSHI NAGAR, ANDHERI (WEST), MUMBAI – 400 058, India  
(Autonomous College Affiliated to University of Mumbai)

End Semester Examination

Max. Marks: 100

Class: FY MCA

Course Code: MC506

Subject: JAVA Programming

Semester: II

Date: / /2024

Time: 180 minutes

Instructions: (1) All questions are compulsory.

(2) Assume any necessary data but justify the same.

Q. No.	Questions	Marks	CO	BL
Q. 1	Attempt any Four	20		
A.	Java is a platform neutral language, so why? Explain importance of JAVA Class		CO1	L4
B.	Difference between scanner and buffer-reader		CO1	L4
C.	Write a Java Program for the interface Area with method Compute. Show Class Circle, Triangle, Rectangle implementing this interface		CO1	L4
D.	What is a constructor in Java?		CO1	L2
E.	A single try block and multiple catch blocks can co-exist in a Java Program. Explain.		CO1	L2
F.	What is polymorphism? Write with an example?		CO1	L3
Q. 2 A	Write the working of following function w.r.t. Servlet Life cycle a. init() b. service() c. destroy() d. put() e. delete()	05	CO3	L3
Q. 2 B	Compare between Context Init parameters Servlet Init parameter used in servlet	05	CO3	L3
Q. 2 C	In implementing dynamic web pages, compare the Generic servlet and Web servlet	05	CO3	L3
Q. 2 D	Illustrate how the information will be forwarded from one page to another page. Write the difference between sendRedirect() and Request Dispatcher.	05	CO3	L3
Q. 3	Attempt any Four	20		
A	Differentiate between callable and prepared statements used in JAVA for database connectivity		CO 2	L4
B	Write a java program with Java SequenceInputStream class used to read data from multiple streams. It reads data sequentially (one by one). It reads the data from two files and writes into another file		CO 2	L4
C	write advantages and disadvantages of types of JDBC drivers used in JAVA		CO 2	L2
D	Why use custom exceptions in java? Write a User-Defined Exception for Validating Login Credentials. Assume appropriate data. Should we make our exceptions checked or unchecked?		CO 2	L2



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E	Differentiate between callable and prepared statements used in JAVA for database connectivity		CO 2	L3
F	To execute a query, what are the different ways to call an execute method in java?		CO 2	L2
Q. 4 A	Write different methods for maintaining Session Between Web Client And Server in JSP OR Write different methods for Deleting Session Data options in JSP	05	CO4	L2
Q. 4 B	Write an example on Classification of The JSTL Tags	05	CO4	L2
Q. 4 C	Write a JSP page to display today's date using the JSP page.	05	CO4	L3
Q. 4 D	Write a JSP page to display days of the weekdays based on the input from the user in the number. E.g if the user presses 1 then it will display Monday and so on.	05	CO4	L3
Q. 5 A	Comment on "POJO is an object which encapsulates Business Logic" Write the benefits of POJO. List the properties of POJO Class	10	CO4	L3
Q. 5 B	Write the importance of <ul style="list-style-type: none"> <li>JNDI Registry</li> <li>Inversion of Control</li> <li>Dependency Injection</li> </ul> OR Write different ways to implement the life cycle of a bean	10	CO4	L2