

II B. Tech II Semester Supplementary Examinations, December - 2023

JAVA PROGRAMMING

(Common to CSE,IT,CSE(CSBS),&CS)

Time: 3 hours

Max. Marks: 70

Answer any **FIVE** Questions each Question from each unitAll Questions carry **Equal** Marks

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## UNIT-I

- 1 a) Explain about Java Tokens with examples. [7M]  
b) Explain about static variables and methods in detail. [7M]

**Or**

- 2 a) Write the structure of java program. Explain in detail. [7M]  
b) Write a java program to simulate the operation of numerical calculator to perform the functions Addition (+), Subtraction (-), Multiplication (\*) and Division (/). [7M]

## UNIT-II

- 3 a) Illustrate on constructor overloading. Explain with a suitable example. [7M]  
b) Differentiate method overloading with method overriding with a suitable example. [7M]

**Or**

- 4 a) What is a constructor? What is its requirement in programming? Explain with a sample program. [7M]  
b) Illustrate the use of static nested classes in detail. [7M]

## UNIT-III

- 5 a) List and explain any four methods of Object class. [7M]  
b) Define an interface. What is its role in multiple inheritance? [7M]

**Or**

- 6 a) Write a differences between Abstract class and Interface. [7M]  
b) Write a Java program to find the area and perimeter of square and circle using interface. [7M]

## UNIT-IV

- 7 a) Discuss 'throw' and 'throws' keywords for exception handling. [7M]  
b) Explain nested try statements and multiple catch blocks with a suitable program. [7M]

**Or**

- 8 a) Write a note on dialog box usage in user interfaces. [7M]  
b) Write a simple applet program to display a string “India won by 1 wickets”. [7M]

**UNIT-V**

- 9 a) With a neat sketch, describe the thread life cycle. [7M]  
b) Write a JDBC program to update the amount balance in an account after every withdrawal. Assume the necessary database table. [7M]

**Or**

- 10 a) Write a Java program to demonstrate multithreading operation. [7M]  
b) What is synchronization? Give its types and explain. [7M]