R20 SET - 1

II B. Tech I Semester Supplementary Examinations, July - 2023
OBJECT ORIENTED PROGRAMMING WITH JAVA
(Common to CSE (AI), AI&DS, AI & ML, CSE (AI & DS), CSE (AI & ML), CSE-DS)

Time: 3 hours   Max. Marks: 70

Answer any **FIVE** Questions, each Question from each unit
All Questions carry **Equal** Marks
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UNIT-I

1 a) Explain the various access specifiers are used in java. [7M]

   b) Write a java program to find the factorial of a number 4. Describe the iterative structures used in it. [7M]

Or

2 a) What is the usage of enumerated data type? Give examples. [3M]

   b) Explain the use of 'this' keyword. [4M]

   c) Discuss Java jump statements. [7M]

UNIT-II

3 a) Explain the different types of constructors with an example. [7M]

   b) What is a nested class? Differentiate between static nested classes and non-static nested classes. [7M]
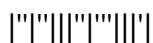
Or

4 a) Explain the different parameter passing mechanisms used in Java with an example. [7M]

   b) How to pass objects as parameters in methods? Write about recursive methods and overriding methods. [7M]

UNIT-III

5 a) What is inheritance? Explain different forms of inheritance with suitable program segments and real-world example classes. [7M]

   b) Write a runtime polymorphism program in Java by using interface reference variable. [7M]

Or

6 a) Illustrate usage of arrays two–dimensional and three - dimensional with an example program. [7M]

   b) What is meant by dynamic method dispatch? Explain with a program. [7M]

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UNIT-IV

7 a) Write a program for user defined exception that checks the internal and external marks if the internal marks are greater than 40 it raise the exception "internal marks are exceed" if the external marks are greater than 60 exception is raised and display the message "external marks are exceed".   [7M]

   b) What is a java package? What is CLASSPATH? Explain how to create and access a java package with an example.   [7M]

Or

8 a) Explain java built in exceptions, exception handling and Hierarchy of standard exceptions.   [7M]

   b) How to define a package? How to access, import a package? Explain with examples.   [7M]

UNIT-V

9 a) Explain about the adapter class with an example, java program.   [7M]

   b) Write a program to implement producer and consumer problem by using Multithreading.   [7M]

Or

10 a) Define multithreading. Give an example of an application that needs multithreading.   [7M]

    b) Write a JDBC program to search for an attribute in a table and display the entire tuple to the user. For example, display all the details of the student given his/her roll number.   [7M]