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VELAGAPUDI RAMAKRISHNA

SIDDHARTHA ENGINEERING COLLEGE

(AUTONOMOUS)

II/IV B.Tech. DEGREE EXAMINATION, JULY, 2022

Fourth Semester

INFORMATION TECHNOLOGY

20IT4302 JAVA PROGRAMMING

Time: 3 hours   *Max. Marks: 70*

Part-A is compulsory

Answer One Question from each Unit of Part - B

Answer to any single question or its part shall be written at one place only

PART-A

10 x 1 = 10M

1. a. Define variable.

    b. What is explicit type conversion?

    c. Give the general form of a class.

    d. Give the general form of a class declaration that inherits a super class.

    e. When to use abstract class?

    f. What are thread priorities?

    g. What are generics?

    h. What is a collection framework?

    i. Define lambda expression.

    j. What are the two ways to obtain a parallel stream?

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PART-B

4 x 15 = 60M

UNIT-I

2. a. Discuss in detail about the three object oriented programming principles.

    7M

    b. What is one-dimensional array? Write a Java program to demonstrate the creation of it.

    8M

(or)

3. a. Illustrate method overloading with example.

    8M

    b. Explain the use of 'this' keyword with an example.

    7M

UNIT-II

4. a. List the two uses of super keyword. Discuss with an example program.

    7M

    b. Give the general form of an interface and discuss how to implement interfaces.

    8M

(or)

5. a. Illustrate dynamic method dispatch with an example.

    7M

    b. In which situation, two or more catch clauses are used? Demonstrate with a sample program.

    8M

UNIT-III

6.   a.   What is the purpose of assert keyword? Discuss with an example.

                                                            7M

   b.   Write a Java program to demonstrate ArrayList class.   **8M**

(or)

7.   a.   Write a Java program to create a thread by implementing Runnable interface.   **8M**

   b.   Summarize the methods defined by List interface.   **7M**

UNIT-IV

8.   a.   Give examples that illustrate the basic lambda expression concepts.

                                                            8M

   b.   Write detailed notes on the number of ways to obtain the stream. **7M**

(or)

9.   a.   How to pass lambda expression as arguments? Write a Java program to demonstrate the process.   **8M**

   b.   Describe how reduction perations are performed using streams.

                                                              7M

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