602204

August/September 2022
MCA II SEMESTER
JAVA Programming (MCA-20-108)

Time : 3 Hours]   [Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*

2. *Answer any four questions from Part-B in detail.*

3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART-A

1. (a) Write the syntax of try-catch-finally block.   (1.5)

    (b) Name the wrapper class methods for the following :

        (i) To convert string objects to primitive int.

        (ii) To convert primitive int to string objects.   (1.5)

    (c) State use of finalize( ) method with its syntax. (1.5)

    (d) Give the syntax of < param > tag to pass parameters to an applet.   (1.5)

    (e) Briefly discuss the applet life cycle.   (1.5)

(f) Differentiate Abstract Base Class and Interface. (1.5)

(g) Briefly explain URL Class and URL Connection Class. (1.5)

(h) What is function destroy()? (1.5)

(i) Why do threads block on I/O? (1.5)

(j) What is the purpose of the wait(), notify(), and notifyAll() methods? (1.5)

PART-B

2. (a) Write a program to create a new Database using JDBC application. (10)

(b) Define a class student with int id and string name as data members and a method void SetData ( ). Accept and display the data for five students. (5)

3. (a) Explain dynamic method dispatch in Java with suitable example. (5)

(b) Write a program using AWT in which a user's form GUI is to be created with three fields, i.e., first name, last name, and date of birth. (10)

4. (a) Define type casting. Explain its types with syntax and example. (5)

(b) Write a JSP Program to count number of visitors on website. (10)

5. (a) Write a program to copy content of one file to another file. (5)

(b) Explain in detail the architecture of RMI Application. (10)

6. (a) Write a program to create two threads. One thread will display the numbers from 1 to 50 (ascending order) and other thread will display numbers from 50 to 1 (descending order). (10)

(b) Explain the use of super keyword in Java. (5)

7. (a) Distinguish between method overloading and method overriding in Java with the help of example. (7)

(b) Write short notes on :

(i) Bean Development Kit.

(ii) Enterprise Java Bean. (8)

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