MCA 3rd Semester Examination, 2022

JAVA LAB

PAPER – MCA-396

(Practical)

Full Marks : 100

Time : 3 hours

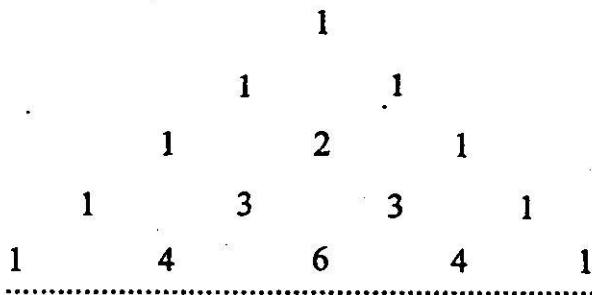*The figures in the right hand margin indicate marks*

Candidates are required to give their answers in their own words as far as practicable

Answer any **two** questions : 35×2

1. Write a program to check whether a given number is a prime number or not.

2. Print the *n*th Fibonacci number using a program.

3. Write a program to check whether a given number is a perfect square or not.

4. Calculate the average of numbers given through the command line using a Java program.

5. Print the following pyramid using a program. Give the number of rows as an input.

```
                  1
              1       1
          1       2       1
      1       3       3       1
  1       4       6       4       1
```
....

6. Write a program to calculate the GCD of two given numbers.

7. Print the following statistics from a given String using a Java program :

   (a) Number of lowercase characters

   (b) Number of spaces

   (c) Number of digits.

(*Continued*)

8. Write an applet program to display a rectangle and an ellipse. Write your name at the middle of the applet with any suitable colour.

9. Write a program that illustrates function over-riding.

10. Write a program that illustrates abstract class.

11. Write a program that illustrates JAVA servlet.

12. Write a program that illustrates multithreading.

[P.N.B — 10]
[Viva — 20]

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