

2020

MATHEMATICS

[HONOURS]

Paper : VIII

Group-'C/3'

[PRACTICAL]

Full Marks : 50

Time : 4 Hours

*The figures in the right-hand margin indicate marks.***Answer all the questions.**

SET-2

1. Write a C program to find the sum of the series

$$1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{n} \quad 10$$

2. Write a C program to find a root of the equation

$$x^3 - x - 3 = 0 \text{ by Newton-Raphson method, correct up to 4 decimal places.} \quad 15$$

3. Solve the following system of equations by Gauss elimination method, correct up to three-significant figures:

$$2x + 3y + z = 9$$

$$x + 2y + 3z = 6$$

$$3x + y + 2z = 8.$$

15

4. Evaluate the missing terms in the following table:

x	0	1	2	3	4	5
f(x)	0	-	8	15	-	35

10
