

U.G. 3rd Semester Examination - 2020

MATHEMATICS

[HONOURS]

Course Code : MATH(H)-CC-P-07

[PRACTICAL]

SET-8

Full Marks : 20

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions.

10×2=20

1. Write a program to evaluate $\int_{2.1}^{2.2} \frac{dx}{x + \log_{10}(7x^2 + 2x + 7)}$
by Trapezoidal rule, taking 12 equal intervals. 10

2. Write a program to solve the following equations:

$$27x + 6y - z = 85$$

$$x + y + 54z = 110$$

$$6x + 15y + 2z = 72$$

by Gauss-Seidel method, correct to 5-decimal places.

10
