U.G. 3rd Semester Examination - 2021 MATHEMATICS

[HONOURS]

Course Code: MATH-H-CC-P-07
[PRACTICAL]

SET-2

Full Marks: 20 Time: 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions:

 $10 \times 2 = 20$

- 1. Write a program in C to evaluate $\int_{2.2}^{4.4} e^{3x} \tan^{-1}x \, dx$ by Trapezoidal rule with 14sub-intervals. Hence find the integral value.
- 2. Write a program in C to find y(0.4) using Euler method with h=0.1 from $\frac{dy}{dx} = x^2 y^2$, y(0)=1. Write the output result.
