

U.G. 3rd Semester Examination - 2020

MATHEMATICS

[HONOURS]

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

[PRACTICAL]

SET-5

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 in C to evaluate $\int_{1.2}^{3.6} e^x \tan^{-1} x \, dx$ by Trapezoidal rule with 14 sub-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 $\frac{dy}{dx} = x - y^2$, $y(0)=1$. Write the output result.
