U.G. 3rd Semester Examination - 2020

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: 10×2=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.

_____