U.G. 3rd Semester Examination - 2020

MATHEMATICS

[HONOURS]

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

[PRACTICAL]

SET-1

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 programme in C to find the root of $2x^2 - \log_{10} x + 7 = 0$, using the method of iteration, correct upto four decimal places. Hence find the root.

2. Write a program in C to evaluate integral I by Simpson's $\frac{1}{3}$ rd rule with 25 ordinates:

$$I = \int_{0}^{\frac{\pi}{6}} \sqrt{\sin^3 x - \tan x} \ dx \ .$$

Hence find the integral value.

_____