

U.G. 3rd Semester Examination - 2020

MATHEMATICS

[HONOURS]

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

[PRACTICAL]

SET-12

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 compute the smallest positive root of the equation

$$(1 + x^2) \tan x - 3x = 0$$

by Newton-Raphson method, correct to 5-decimal places. 10

2. Write a program to find $f(8)$ from the following table by using Lagrange's interpolation formula: 10

x	3	7	9	10
$f(x)$	168	120	172	63
