

**U.G. 3rd Semester Examination - 2020**

**MATHEMATICS**

**[HONOURS]**

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

**[PRACTICAL]**

**SET-3**

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 find a real root of the equation  $10^x + 5x - 10 = 0$  by Newton-Raphson method. Hence solve it.

2. Write a program in C to evaluate  $\int_{1.2}^{2.2} \left( x^3 - \frac{1}{x^3} \right) dx$  by

Simpson's  $\frac{1}{3}$ rd rule with ten sub-intervals. Hence find the integral value.

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