## U.G. 3rd Semester Examination - 2020 MATHEMATICS

[HONOURS]

Course Code: MATH(H)-CC-P-07-P
[PRACTICAL]

**SET-10** 

Full Marks: 20 Time: 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions.

 $10 \times 2 = 20$ 

- 1. Write a program to evaluate  $\int_{0.2}^{1.5} e^{-x^2} dx$  by using three point Gauss quadrature formula.
- 2. Write a program to compute y(0.4), by Runge-Kutta method correct to five decimal places, from the equation  $\frac{dy}{dx} = xy$ , y(0)=2, taking h=0.1.

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