

U.G. 3rd Semester Examination - 2020

MATHEMATICS

[HONOURS]

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

[PRACTICAL]

SET-9

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 evaluate $\int_0^{\pi/10} \frac{dx}{\sqrt{1-0.5\cos^2 x}}$ by Simpson's one-third rule, taking 13 ordinates. 10
2. Write a program to find the least squares parabola for the data: 10

| | | | | | | |
|-----|---|---|----|----|----|----|
| x | 0 | 2 | 4 | 6 | 8 | 10 |
| y | 1 | 3 | 13 | 31 | 57 | 91 |
