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INTERNAL ASSESSMENT 6TH SEM 2020
SUB: MATH (P) COURSE TITLE : NUMERICAL ANALYSIS
PAPER - SP/MTH/604/SEC-4 F.M.-10

Answer any two question (5×2=10 marks)

1. Solve $x^3 - \sin x - 1 = 0$ correct to two significant figures by fixed point iteration method correct up to 2 decimal places.

2 . Using following data find the Newton's interpolating polynomial and also find the value of y at x=5

x	0	10	20	30	40
y	7	18	32	48	85

3 . Using Trapezoidal and Simpsons rule evaluate the following integral with number of subintervals n =6

$$\int_0^6 e^{-x^2} dx$$

4. Using following data find the value of first and second derivatives of y at x=12

x	0	10	20	30	40
y	7	18	32	48	85

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