



SNS COLLEGE OF ENGINEERING

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AN AUTONOMOUS INSTITUTION



Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

Topic: 4.12 – Tutorial 12

1. Evaluate $\int_0^6 \frac{dx}{1+x^2}$ by (i) Trapezoidal rule (ii) Simpson's rule. Also check up the results by actual integration. (16)
2. By dividing the range into ten equal parts, evaluate $\int_0^{\pi} \sin x dx$ by trapezoidal & Simpson's rule. Verify your answer with actual integration. (16)
3. Evaluate $\int_0^{\pi/2} \sin x dx$ by using (i) Trapezoidal rule (ii) Simpson's rule taking 10 ordinates