VELAGAPUDI RAMAKRISHNA SIDDHARTHA ENGINEERING COLLEGE (AUTONOMOUS) DEPARTMENT OF MATHEMATICS

VSAQ (UNIT-3,4) VR20

Branch:IT

SUB:CANM CODE:20BS3101B

1. Prove that ,-,(+),,

.=,, (

1. What is the value of (),+) where h=1
2. Define Interpolation
3. Write Newton’s forward formula ,backward formula, Gauss forward formula, Backward formula, Stirling’s formula, Bessel formula, Lagrange’s interpolation formula, Newton’s divided difference formula .
4. What is Numerical differentiation
5. Write Newton Cotes Quadrature formula
6. What is Numerical integration
7. Write Trapezoidal rule by taking five ordinates
8. Write simpson’s 1/3 rule for n=6 sub intervals
9. What is initial value problem
10. Write Euler’s Recursive formula
11. Explain Taylor series method
12. What is the order of convergence of N-R Method?
13. Write the condition for convergence of N-R Method
14. Write the Diagonal dominance condition of Gauss-Seidel iteration Method