

**SILVER OAK COLLEGE OF ENGINEERING & TECHNOLOGY**  
**CIVIL ENGINEERING DEPARTMENT**  
**Mid Semester Exam 1 Syllabus**

Date: 22/01/2018

Name of Subject      **Numerical & Statistical Methods**  
Subject Code            2140606  
Semester & Division    4<sup>th</sup> CL (Div. A, B, C)

Sr. No.	Topics
1	<b>Roots of Algebraic and Transcendental Equation</b> Bisection, false position, Secant methods, Newton – Raphson methods
2	<b>Numerical Integration</b> Newton-Cotes formula and Trapezoidal formula, Simpson's formulae, Gaussian quadrature formulae
3	<b>Finite Differences and interpolation</b>
	Finite Differences
	Forward, Backward differences
	Central operators
	Interpolation by polynomials
	Newton's forward, Backward interpolation
	Gauss and Stirling's central difference formulae
	Newton's divided formulae
	Lagrange's formulae for unequal intervals