Mathematics

CC - 3 (Common Core Course - 3): Theory - "Real Analysis"

Block - I : Real Numbers and Sequences

Unit - 1 : Real Numbers System - Its Completeness
Unit - 2 : Limit Point of a Set , Open and Closed Sets in R
Unit - 3 : Real Sequences and their Convergence

Block - II : Infinite Series

Unit - 4 : Convergence of Infinite Series of Positive Terms
Unit - 5 : Tests of Convergence
Unit - 6 : Alternating Series

Block – III : Riemann Integration

Unit - 7 : Riemann Integrability - Conditions
Unit - 8 : Mean Value Theorems of Integral Calculus
Unit - 9 : Fundamental Theorem of Integral Calculus - Integration by Parts

Block - IV : Sequences and Series of Functions

Unit - 10 : Point Wise and Uniform Convergence
Unit - 11 : Series of Functions
Unit - 12 : Power Series

Core Course - 3: Practical - "Real Numbers and Sequences"

Block - I : Sequences and Series

Unit - 1 : Limit Point of a Set , Open and Closed Sets in R
Unit - 2 : Real Sequences and their Convergence
Unit - 3 : Convergence of Infinite Series of Positive Terms
Unit - 4 : Tests of Convergence and Alternating Series

Block – II : Riemann Integration and Sequences, Series of Functions

Unit - 5 : Riemann Integrability - Conditions
Unit - 6 : Mean Value Theorems and Fundamental Theorem of Integral Calculus
Unit - 7 : Point Wise and Uniform Convergence
Unit - 8 : Series of Functions and Power Series