Date: 14/10/2019

Shantilal Shah Engineering College,

Bhavnagar

PDDC SEM-1(CIVIL & MECHANICAL)

Mid Sem Exam Schedule and Syllabus for

Subject: Complex Variable and Partial differential Equations.

Date of Mid Semester Exam: 22/10/2019, Time: 6:45pm to 8:15 pm at LRC-208

Syllabus of CVPDE PDDC Sem-1

- 1. Polar Form of Complex Numbers, Powers and Roots, Complex Variable Differentiation: Differentiation, Cauchy-Riemann equations, analytic functions, harmonic functions, finding harmonic conjugate; elementary analytic functions (exponential, trigonometric, logarithm) and their properties; Conformal mappings, Mobius transformations and their properties.
- 2. Laurent's series; Zeros of analytic functions, singularities, Residues, Cauchy Residue theorem (without proof), Residue Integration Method, Residue Integration of Real Integrals.
- 3. First order partial differential equations, solutions of first order linear and nonlinear PDEs.