

Shantilal Shah Engineering College, Bhavnagar

Applied Mechanics Department

BE - CIVIL ENGINEERING (SEMESTER 5th,7th ODD-2021)

Syllabus of Mid Sem Test / Progressive Assessment Test (Online) (August-2021)

#	Semester	Subject Code	Name of Subject	Syllabus-Topic/Units
1	5th	3150610	Concrete Technology	1. General 2. Ingredients of Concrete: Cement 3. Fresh Concrete 4. Hardened Concrete 5. Test on cement : Standard Consistency, Initial and Final Setting time, Soundness, Compressive strength
2		3150612	Design of Structures	RCC: 1. Limit State Design Philosophy (RCC) 2. Design of Singly & Doubly RC Beam Steel: 1. Limit State Design Philosophy (Steel) 2. Design of Tension Member 3. Design of Compression Member (only theory)
3		3150614	Structural analysis-II (Elective)	1. Slope & Deflection Method 2. Energy Principles (upto castigliano's 2nd theorem)
1	7th	3170618	Design of Steel Structures	Unit-2: Design of Plate Girder; Unit-3: Design of foot-over bridge; Unit: 4 [Plastic Analysis (all theory)];
2		3170626	Design of Industrial Structures	Design of Gantry Girders; Design of Grid Slab; Design of Bunkers

PDDC - CIVIL ENGINEERING (SEMESTER 5th,7th ODD-2021)

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#	Semester	Subject code	Name of Subject	Syllabus-Topic/Units
1	5th	2950603	Design of Structures	RCC: Unit1: Introduction; Unit-2: Limit state of collapse & serviceability, partial safety factors for material & loading, Limit State of Flexure: Stress-strain characteristics of concrete & reinforcing steel, Type of section-under reinforced, over reinforced & balance section, Neutral Axis depth, Moment of Resistance for singly reinforced, Steel: 1. Limit State Design Philosophy (Steel) 2. Design of Tension Member
1	7th	2950602	Retrofitting of structures	1. Introduction 2. Deterioration of concrete structures, Visual deterioration of structures

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