STUDY PLAN

Fluid Mechanics		SOM		Theory of Machines		Hydraulic Machines	
Title	**Timing**	**Title**	**Timing**	**Title**	**Timing**	**Title**	**Timing**
Introduction	Recording-1	Bending in Beam-1	Recording-1	Basic Introduction	Recording-1	Impact of jet	Recording-1
Fluid Properties - Part 1	Recording-2	Bending in Beam-2	Recording-2	Kinematic Pair & Classification-1	Recording-2	Turbine basic , classification	Recording-2
Fluid Properties - Part 2	Recording-3	Bending in Beam-3	Recording-3	Kinematic Pair & Classification-2	Recording-3	Pelton wheel , francis , kaplan turbine	Recording-3
Newton's Law of Viscosity	Recording-4	Torsion in Shaft-1	Recording-4	Degree of Freedom (DOF)	Recording-4	Pump-1	Recording-4
Fluid Classification	Recording-5	Torsion in Shaft-2	Recording-5	DOF Numericals-1	Recording-5	Pump-2	Recording-5
MCQ Practice (Basics)	Recording-6	Combined Stresses-1	Recording-6	DOF Numericals-2	Recording-6	Live doubt and miscellaneous-1	Recording-6
Surface Tension & Capillarity - 1	Recording-7	Combined Stresses-2	Recording-7	Grashof's Law	Recording-7	Live doubt and miscellaneous-2	Recording-7
Surface Tension & Capillarity - 2	Recording-8	Combined Stresses-3	Recording-8	Inversions (Four Bar & Slider)-1	Recording-8	Live doubt and miscellaneous-3	Recording-8
Pressure Measurement - Basics	Recording-9	Mohr Circle-1	Recording-9	Inversions (Four Bar & Slider)-2	Recording-9		
Pressure Laws	Recording-10	Mohr Circle-2	Recording-10	Instantaneous Center	Recording-10		
Pressure Measuring Devices	Recording-11	SFD & BMD-1	Recording-11	Flywheel-1	Recording-11		
Pressure MCQ	Recording-12	SFD & BMD-2	Recording-12	Flywheel-2	Recording-12		
Buoyancy & Floatation - 1	Recording-13	SFD & BMD-3	Recording-13	Governor Intro	Recording-13		
Buoyancy & Floatation - 2	Recording-14	SFD & BMD-4	Recording-14	Governor Classification	Recording-14		
Buoyancy & Floatation - 3	Recording-15	Slope & Deflection-1	Recording-15	Governor Performance	Recording-15		
Hydrostatic Forces - Plane Surface	Recording-16	Slope & Deflection-2	Recording-16	Gears Intro & Classification-1	Recording-16		
Hydrostatic Forces - Curved Surface	Recording-17	Columns & Struts	Recording-17	Gears Intro & Classification-2	Recording-17		
Kinematics Intro + Types + Continuity	Recording-18	Thin & Thick Cylinder	Recording-18	Gear Terminology	Recording-18		
Velocity Potential & Stream Function - 1	Recording-19	Theory of Failure-1	Recording-19	Gear Analysis	Recording-19		

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Velocity Potential & Stream Function - 2	Recording-20	Theory of Failure-2	Recording-20	Gear Interference	Recording-20		
Velocity Potential & Stream Function - 3	Recording-21	Springs	Recording-21	Balancing-1	Recording-21		
Fluid Dynamics Intro + Bernoulli	Recording-22	Basic Introduction	Recording-22	Balancing-2	Recording-22		
Bernoulli Applications	Recording-23	Types of Loads & Classification-1	Recording-23	Vibrations-1	Recording-23		
Orifice Meter & Pitot Tube	Recording-24	Types of Loads & Classification-2	Recording-24	Vibrations-2	Recording-24		
Laminar Flow - 1	Recording-25	Stress & Strain (Basics)-1	Recording-25	Vibrations-3	Recording-25		
Laminar Flow - 2	Recording-26	Stress & Strain (Basics)-2	Recording-26	Cam & Follower-1	Recording-26		
Laminar Flow - 3	Recording-27	Stress & Strain (Basics)-3	Recording-27	Cam & Follower-2	Recording-27		
Laminar vs Turbulent - 1	Recording-28	Stress-Strain Curve	Recording-28				
Laminar vs Turbulent - 2	Recording-29	Failure under Different Loading	Recording-29				
Laminar vs Turbulent - 3	Recording-30	Elastic Constants	Recording-30				
Boundary Layer Theory	Recording-31	Deformation (Series & Parallel)-1	Recording-31				
Vortex Flow (Free & Forced)	Recording-32	Deformation (Series & Parallel)-2	Recording-32				
Flow Through Pipes - 1	Recording-33	Strain Energy due to Self Weight	Recording-33				
Flow Through Pipes - 2	Recording-34	Strain Energy-1	Recording-34				
Flow Through Pipes - 3	Recording-35	Strain Energy-2	Recording-35				
Dimensional Analysis & Modelling	Recording-36	Moment of Inertia-1	Recording-36				
OCF - 1	Recording-37	Moment of Inertia-2	Recording-37				
OCF - 2	Recording-38	Thermal Stress-1	Recording-38				
OCF - 3	Recording-39	Thermal Stress-2	Recording-39				
Impact of Jets - 1	Recording-40	Beams (CRM)-1	Recording-40				

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Impact of Jets - 2	Recording-41	Beams (CRM)-2	Recording-41				
Hydraulic Turbine Intro & Classification - 1	Recording-42	Beams (CRM)-3	Recording-42				
Hydraulic Turbine Intro & Classification - 2	Recording-43						
Types of Turbines - 1	Recording-44						
Types of Turbines - 2	Recording-45						
Modeling & Similitude MCQ	Recording-46						
Pumps - 1	Recording-47						
Pumps - 2	Recording-48						
Pumps - 3	Recording-49						