	Lesson Plan	Page1-3

Prepared: Name/Sign/Date MR/ /	Reviewed: Name/Sign/Date RG/ /	Approved: Name/Sign/Date CM/ /	
Doc.Type Procedure	Doc.No. FM-TL-07	Revision 00	Revision Date
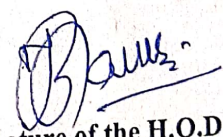
Name of the Institute:	CV Raman Polytechnic
Department:	Mechanical Engineering
Semester/Division/Branch:	4th Sem/ME
Subject Name with code:	Fluid Mechanics (Th3)
Total No. of Class (Required):	60
Faculty Name:	Mrs. Soumya Dash

Class No.	Brief description of the Topic/Chapter to be taught	Remarks
1	Define fluid	
2	Define fluid	
3	Description of fluid properties like Density, Specific weight, specific gravity, specific volume	
4	Description of fluid properties like Density, Specific weight, specific gravity, specific volume	
5	Description of fluid properties like Density, Specific weight, specific gravity, specific volume	
6	solve simple problems.	
7	solve simple problems.	
8	Definitions and Units of Dynamic viscosity, kinematic viscosity, surface tension Capillary phenomenon	
9	Definitions and Units of Dynamic viscosity, kinematic viscosity, surface tension Capillary phenomenon	
10	Definitions and units of fluid pressure, pressure intensity and pressure head.	
11	Definitions and units of fluid pressure, pressure intensity and pressure head.	
12	Statement of Pascal's Law.	
13	Concept of atmospheric pressure, gauge pressure, vacuum pressure and absolute pressure	

14	Concept of atmospheric pressure, gauge pressure, vacuum pressure and absolute pressure	
15	Pressure measuring instruments Manometers (Simple and Differential)	
16	Bourdon tube pressure gauge(Simple Numerical)	
17	Solve simple problem	
18	Solve simple problems on Manometer.	
19	Definition of hydrostatic pressure	
20	Total pressure and centre of pressure on immersed bodies(Horizontal and Vertical Bodies)	
21	Total pressure and centre of pressure on immersed bodies(Horizontal and Vertical Bodies)	
22	Solve Simple problems.	
23	Solve Simple problems.	
24	Archimedes 'principle, concept of buoyancy, meta center and meta centric height (Definition only)	
25	Concept of floatation	
26	Types of fluid flow	
27	Types of fluid flow	
28	Continuity equation(Statement and proof for one dimensional flow)	
29	Continuity equation(Statement and proof for one dimensional flow)	
30	Bernoulli's theorem(Statement and proof)	
31	Applications and limitations of Bernoulli's theorem (Venturimeter, pitot tube)	
32	Applications and limitations of Bernoulli's theorem (Venturimeter, pitot tube)	
33	Solve simple problems	
34	Solve simple problems	
35	Define orifice	
36	Flow through orifice	
37	Flow through orifice	
38	Orifices coefficient & the relation between the orifice coefficients	
39	Classifications of notches & weirs	
40	Discharge over a rectangular notch or weir	
41	Discharge over a rectangular notch or weir	

42	Discharge over a triangular notch or weir	
43	Discharge over a triangular notch or weir	
44	Simple problems on above	
45	Simple problems on above	
46	Definition of pipe.	
47	Loss of energy in pipes.	
48	Loss of energy in pipes.	
49	Head loss due to friction: Darcy's and Chezy's formula (Expression only)	
50	Head loss due to friction: Darcy's and Chezy's formula (Expression only)	
51	Solve Problems using Darcy's and Chezy's formula.	
52	Solve Problems using Darcy's and Chezy's formula.	
53	Solve Problems using Darcy's and Chezy's formula.	
54	Impact of jet on fixed and moving vertical flat plates	
55	Impact of jet on fixed and moving vertical flat plates	
56	Derivation of work done on series of vanes and condition for maximum efficiency.	
57	Derivation of work done on series of vanes and condition for maximum efficiency.	
58	Impact of jet on moving curved vanes	
59	Illustration using velocity triangles	
60	Derivation of work done, efficiency	

Signature of the H.O.D

Signature of the Faculty