

DRONACHARYA

College of Engineering

KHENTAWAS, FARRUKHNAGAR, GURGAON, HR

Department: Mechanical Engineering

Academic Session: 2017-18 (Jan-June 2018)

Lesson Plan for the Semester started w.e.f 08.01.2018

Subject with code- Fluid Mechanics (ME-208-F)

Name of Faculty with designation : Ms. Priyanka Singh (Assistant Professor)

S.No.	Month	Date & Day	Sem-Class	Section/Unit	Topic/Chapter covered	Academic activity	Test / assignment
1	January	08.01.2018 Monday	IV-ME	A	Introduction about self & students and DCE teaching methodology.	.....	Assignment of 02 Ques. given
2	January	09.01.2018 Thursday	IV-ME	A	Concept of fluid flow, Ideal-real fluids, Properties of fluids.	.....	Assignment of 02 Ques. given
3	January	12.01.2018 Friday	IV-ME	A	Pascal's law, Hydrostatic Equation, Hydrostatic Forces for plane surfaces	.....	Assignment of 02 Ques. given
4	January	15.01.2018 Monday	IV-ME	A	Hydrostatic forces for plane surfaces, Hydrostatic equation for curved surfaces	.....	Assignment of 02 Ques. given
5	January	16.01.2018 Thursday	IV-ME	A	Stability of floating and submerged bodies, Relative equilibrium	.....	Assignment of 02 Ques. given
6	January	19.01.2018 Friday	IV-ME	A	Eulerian & Lagrangian description of fluid flow, Stream ,Streak and Path lines	.....	Assignment of 02 Ques. given
7	January	23.01.2018 Tuesday	IV-ME	A	Types of flow, flow rate, Continuity Equation in cylindrical coordinates	.....	Assignment of 02 Ques. given
8	January	29.01.2018 Monday	IV-ME	A	Continuity equation in polar coordinates, Rotation, Vorticity, Circulation, Stream & Potential function, Flow net	.....	Assignment of 02 Ques. given
9	January	30.01.2018 Tuesday	IV-ME	A	Class Test 1		
10	February	2.02.2018 Friday	IV-ME	B	Concept of system, Control volume, Euler's equation	.....	Assignment of 02 Ques. given
11	February	5.02.2018 Monday	IV-ME	B	Bernoulli's equation, Correction factors,	Assignment of 02 Ques. given

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12	February	6.02.2018 Tuesday	IV-ME	B	Momentum-Impulse equation and its application, Orifice	Assignment of 02 Ques. given
13	February	9.02.2018 Friday	IV-ME	B	Mouthpiece, Venturimeter, Orificemeter	.....	Assignment of 02 Ques. given
14	February	19.02.2018 Monday	IV-ME	B	Potential flow- source, sink, uniform flow, Vortex flow, Source-Sink pair, Doublet Flow past a cylinder with and without circulation	.....	Assignment of 02 Ques. given
15	February	20.02.2018 Tuesday	IV-ME	B	Continuity equation, Propagation of elastic waves due to compression of fluid,	.....	Assignment of 02 Ques. given
16	February	23.02.2018 Friday	IV-ME	B	Propagation of elastic waves due to disturbance in fluid, stagnation Properties, Isentropic	.....	Assignment of 02 Ques. given
17	February	26.03.2018 Monday	IV-ME	B	Class Test 2		
18	February	27.03.2018 Tuesday	IV-ME	C	Viscous flow- laminar and turbulent flow regimes, Reynolds number,	.....	Assignment of 02 Ques. given
19	March	2.03.2018 Friday	IV-ME	C	Relationship between shear stress and pressure gradient	.....	Assignment of 02 Ques. given
20	March	5.03.2018 Monday	IV-ME	C	Unidirectional flow between parallel plates (stationary & having motion)	.....	Assignment of 02 Ques. given
21	March	6.03.2018 Tuesday	IV-ME	C	Movement of piston in a dashpot, Power absorbed in bush, collar, footstep bearing	.....	Assignment of 02 Ques. given
22	March	9.03.2018 Friday	IV-ME	C	Flow through pipes- major losses in pipes, Darcy- Weisbach Eq., Chezy Eq., hydraulic gradient and total energy lines	.....	Assignment of 02 Ques. given
23	March	12.03.2018 Monday	IV-ME	C	Minor losses in pipes, series and parallel connection of pipes branched	.....	Assignment of 02 Ques. given
24	March	13.03.2018 Tuesday	IV-ME	C	Equivalent pipe. Hagen- Poissuille law, Power transmitted Branched Pipes, Equivalent Pipes	.....	Assignment of 02 Ques. given
25	March	16.04.2018 Friday	IV-ME	C	Power transmission through pipes	.....	Assignment of 02 Ques. given
26	March	26.03.2018 Monday	IV-ME	C	Class Test 3		
27	March	27.03.2018 Tuesday	IV-ME	D	Boundary flow:- concept, displacement, momentum and energy thickness	Assignment of 02 Ques. given

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28	April	2.04.2018 Monday	IV-ME	D	Laminar and turbulent boundary layer flows, drag on a flat plate, boundary layer separation and control	Assignment of 02 Ques. given
29	April	3.04.2018 Tuesday	IV-ME	D	Streamlined and bluff bodies, lift and drag on a cylindrical and airfoil	.....	Assignment of 02 Ques. given
30	April	6.04.2018 Friday	IV-ME	D	Turbulent Flow- Shear stress in turbulent flow, Prandtl mixing length hypothesis	.....	Assignment of 02 Ques. given
31	April	9.04.2018 Monday	IV-ME	D	Hydraulically smooth and rough pipes, Velocity distribution and friction coefficients	Assignment of 02 Ques. given
32	April	10.04.2018 Tuesday	IV-ME	D	Class test 4		

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33	April	13.04.2018 Friday	IV-ME		Revision		
34	April	24.04.2018 Tuesday	IV-ME		Revision		