



	in pipes	
7	<b>Compressible Fluid Flow:</b> Thermodynamic concept, Speed of a sound wave, Mach number, Mach cone and Mach angle, Flow with friction through pipes, Adiabatic and isothermal flow, Jet propulsion flow through variable area, Flow through nozzle, Back pressure variation.	6
8	<b>Dimensional Analysis:</b> Fundamental dimension, Dimensional homogeneity, Rayleigh's method and Buckingham's theorem for dimensional analysis, Dimensionless force ratios, and Hydraulic similitude, Model testing.	7
9	<b>Flow Measurement:</b> Measurement of flow with Venturimeter, Orifice plate, Notch, Nozzles, Bend meter, Flow meter and Rota meter.	5
<b>Practical content</b>		
<ul style="list-style-type: none"> <li>The practical work shall be based on experimental and analytical work on the topics mentioned above and will be defended by the candidates.</li> </ul>		
<b>Text Books</b>		
1	Dr. R.K. Bansal, "Fluid Mechanics and Hydraulic Machines", Laxmi Publications.	
2	Dr. D.S Kumar, "Fluid Mechanics and Fluid Power Engineering ", S.K Katariya and Sons	
3	R.K. Rajput, "Fluid Mechanics and Hydraulic Machines", S. Chand Publications.	
<b>Reference Books</b>		
1	K.L. Kumar, "Engineering Fluid mechanics", S. Chand & Company Ltd.8th Edition	
2	P.M. Modi and S.M. Seth, "Hydraulics and Fluid Mechanics", Standard Book House	
3	A.K. Jain , "Fluid Mechanics", Khanna Publishers.4th edition.	