Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

	Dip	loma Engineering - SEMESTER–III • EXAMINATIO	N – WINTER 2013	
	•		Date: 30-11-2013	
Ti	me: 0	Attempt all questions. Make suitable assumptions wherever necessary.	Total Marks: 70	
Q.1	(a) (b)	Derive equation of pressure in static fluid for incompress Explain in briefly Reynolds experiment with its figure.	sible fluid.	07 07
Q.2	(a) (b)	Derive the Bernoulli equation for incompressible fluid. Derive Continuity equation for steady flow. OR		07 07
	(b)	Discuss.(1) Boundary layers (2) Boundary layer separati formation.	on and wake	07
Q.3	(a)	Explain Pneumatic conveying and Hydraulic conveying equation.	with industrial	07
	(b)	Write short note on head loss from sudden expansion. OR		07
Q.3	(a) (b)	Explain Fluidization and its industrial application. Explain Friction Factor charts.		07 07
Q.4	(a) (b)	Write (1) Cavitations (2) NPSH (3) Priming of pump. Compare centrifugal pump with reciprocating pump. OR		07 07
Q. 4	(a) (b)	Write construction and working of Gate valve and Globe Discuss the classification of pumps.	valve.	07 07
Q.5	(a) (b)	Write Difference between Variable Head meter and Variable Discuss and derive the flow equation for a venturimeter. OR	able Area meter.	07 07
Q.5	(a) (b)	Discuss and derive the flow equation for a Orifice meter. Draw a neat sketch of Pitot tube & explain its construction		07 07
