Seat No.:	Enrolment No.

Subject Code: 3342303

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## DIPLOMA ENGINEERING - SEMESTER - IV • EXAMINATION - SUMMER- 2016

	•	Name: Hydraulic and Pneumatic System  0:30 AM TO 01:00 PM	Total Marks: 70
In	struction	ns:	
	2. N 3. F 4. U 5. U	Attempt all questions.  Make Suitable assumptions wherever necessary.  Figures to the right indicate full marks.  Use of programmable & Communication aids are strictly prohibit  Use of only simple calculator is permitted in Mathematics.  English version is authentic.	ted.
Q.1		Answer any seven out of ten.	14
	1. 2. 3. 4. 5. 6. 7. 8. 9.	Define Hydraulic System. Define Pascal's law. Draw the symbol of 1.chek valve 2.single acting piston cylin Draw the symbol of 1.pump 2.filter. Define pneumatic system. Name any two connector of Hydraulic System. Name any two type of directional control valve. Name any two type of accumulator. Name any two type of pressure control valve. Write any two disadvantages of Hydraulic System.	der.
Q.2	(a)	Explain the ideal characteristics of Hydraulic oil. OR	07
	(a)	Draw and explain the Hydraulic filter.	07
	(b)	Explain the flow control valve with neat sketch.  OR	07
	(b)	List the type of pump and explain any one.	07
Q.3	(a)	Write the advantages of Hydraulic System. OR	07
	(a)	Explain the pressure intensifier with neat sketch.	07
	(b)	Describe the vane motor with neat sketch.  OR	07
	(b)	Draw and explain the oil filtration circuit.	07
Q.4	(a)	Draw the clamp control circuit.  OR	07
	(a)	Draw and explain the deceleration circuit.	07
	(b)	List the type of air compressor and explain any one with nea OR	t sketch. 07
	(b)	Write the difference between Hydraulic and pneumatic syste	m. <b>07</b>
Q.5	(a)	Explain the Pascal's law with neat sketch.	07
-	(b)	Describe the two way valve with neat sketch.	07

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Date: 20-05 - 2016