Seat No.: _		Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVER BE- VII <sup>th</sup> SEMESTER-EXAMINATION – MAY/JUNI	RSITY E- 2012	
Subject code: 171703		ode: 171703	Date: 09/06/2012	
Subje	ect N	Name: Industrial data communication		
Time: 02:30 pm – 05:00 pm			<b>Total Marks: 70</b>	
Instr	ucti	ons:		
1.	Atte	empt all questions.		
2.	Mal	ke suitable assumptions wherever necessary.		
3.	Figu	ures to the right indicate full marks.		
Q.1	(a)	Explain the industrial data communication with representation.	graphical (	07
	<b>(b)</b>	(1) Explain Magnetic Coupling of Noise		04
	()	(2) Discuss the requirement of Earthing and Grounding		03
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Q.2	(a)	1 1		07 07
	<b>(b)</b>	Discuss the trouble shooting of EIA- 485  OR	'	07
	<b>(b)</b>	Explain with diagram serial interface converter	(	07
Q.3	(a)	Discuss the troubleshooting of Fiber optic		07
	<b>(b)</b>			04
		(2) Discuss the troubleshooting of Hart protocol		03
		OR		
Q.3	(a)	Explain the Profibus protocol stack		0 <b>7</b>
	<b>(b)</b>	Discuss the OSI layers used in Foundation field bus		07
Q.4	(a)	Explain the Industrial Ethernet		07
	(b)	Discuss the troubleshooting of Ethernet		07
	` /	OR		
Q.4	(a)	(1) Explain ARP (Address resolution protocol)		04
	<b>4</b>	(2) Explain briefly Hart protocol		03
	<b>(b)</b>	Discuss the troubleshooting of TCP/IP		07
Q.5	(a)	Explain the Radio Modems		07
	(b)	(1) Explain the Read holding register (function code 03) of		04
	( )	(2) Explain the Null Modem connections		03
		OR		
Q.5	(a)	Explain the Half duplex operation of the EIA-232 interface		07
	<b>(b)</b>	Explain the Device net		07

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