Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

BE - SEMESTER-VII • EXAMINATION – SUMMER • 2014

Su	bject	Code: 171703 Date: 05-0	6-2014
Tir	•	Name: Industrial Data Communication 2:30 pm - 05:00 pm Total Mans:	rks: 70
	1. 2. 3.	Attempt all questions.  Make suitable assumptions wherever necessary.  Figures to the right indicate full marks.	
Q.1	(a) (b)	Discuss connections between DTE and DCE using DB 25. Write a short note on OSI Model.	07 07
Q.2	(a) (b)	Explain Impedance coupling and Electrostatic coupling of noise.  List and explain the main features of the EIA-232 standard.  OR	07 07
	<b>(b)</b>	Draw the DB-9 connector and explain each pin briefly.	07
Q.3	(a) (b)	Discuss the troubleshooting of TCP/IP Describe EIA-232/EIA-485 interface converters.  OR	07 07
Q.3	(a) (b)	Brief explanation of basic Cable types of Fiber optic. Write a note on Function codes of Modbus Protocol.	07 07
Q.4	(a) (b)	Explain the Data-link Layer of HART Protocol.  Give brief explanation about troubleshooting of AS-I.  OR	07 07
Q.4	(a) (b)	Explain the DeviceNet topology. Explain the Profibus protocol stack.	07 07
Q.5	(a) (b)	Draw and Explain Physical layer and wiring rules of Foundation Field Bus. Explain Gigabit Ethernet.	. 07 07
		OR	0=
Q.5	(a) (b)	Draw and explain IPV-4 header. Explain in detail various steps in implementing a radio link and explain the First step.	07 07

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