

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII • EXAMINATION – SUMMER • 2014****Subject Code: 171703****Date: 05-06-2014****Subject Name: Industrial Data Communication****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss connections between DTE and DCE using DB 25. **07**
(b) Write a short note on OSI Model. **07**
- Q.2** (a) Explain Impedance coupling and Electrostatic coupling of noise. **07**
(b) List and explain the main features of the EIA-232 standard. **07**
- OR**
- (b) Draw the DB-9 connector and explain each pin briefly. **07**
- Q.3** (a) Discuss the troubleshooting of TCP/IP **07**
(b) Describe EIA-232/EIA-485 interface converters. **07**
- OR**
- Q.3** (a) Brief explanation of basic Cable types of Fiber optic. **07**
(b) Write a note on Function codes of Modbus Protocol. **07**
- Q.4** (a) Explain the Data-link Layer of HART Protocol. **07**
(b) Give brief explanation about troubleshooting of AS-I. **07**
- OR**
- Q.4** (a) Explain the DeviceNet topology. **07**
(b) Explain the Profibus protocol stack. **07**
- Q.5** (a) Draw and Explain Physical layer and wiring rules of Foundation Field Bus. **07**
(b) Explain Gigabit Ethernet. **07**
- OR**
- Q.5** (a) Draw and explain IPV-4 header. **07**
(b) Explain in detail various steps in implementing a radio link and explain the First step. **07**
