Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(EIE) (2011 & Onwards E-II)   (Sem.–6)
INDUSTRIAL DATA COMMUNICATIONS
Subject Code : DE-2.1
M.Code : 58031

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Answer briefly :**

   a. How many layers are there in OSI?

   b. What is the function of a bus in data communication?

   c. What is the difference between serial and parallel communication?

   d. What do you understand from topologies?

   e. What is the function of router in between two computers connected?

   f. Can a printer be shared by more than two computers connected in LAN?

   g. What are the types of fibre optic cables?

   h. What is PLC?

   i. What is DCOM?

   j. What is the function of data link layer?

SECTION-B

2. What do you understand from field bus system? How profibus and interbus work function? Explain

3. What are virtual private networks? How do they work?

4. What do you understand from master slave procedures?

5. Discuss the networking of PLC for communicating the data.

6. Explain

    a) CAN

    b) Active-X

SECTION-C

7. What do you understand from communication protocols and reference models? Explain the functioning of each layer of OSI and TCP/IP?

8. What is the role of information technology in data communication these days? How the RIP and OSPF router technologies work?

9. What is the difference between RS-232, RS- 422 and RS-485? Explain in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.