## TE/VI/CBGS/INST/Indl. Data Comm'QP Code: 5086 03-06-15 [Total Marks: 80 [3 Hours] N.B. :(1) Question No. 1 is compulsory (2) Attempt any three from remaining questions. 20 Answer any four:-What is PROFIBUS? Explain the different types of PROFIBUS 1. (a) Explain the following networking components (b) (ii) Hub (iii) Switch (iv) Router (v) Gateway (i) Bridge What is HART? What are three types of HART commands? (c) (d) Which standard is used for (i) Wireless LAN (ii) Wi Max (iii) Bluetooth (iv) Zigbee Compare RS232 and EIA485 (e) Answer the following :-20 What is open network MODBUS and proprietory network MODBUS plus? (a) Explain the architecture of sensor level CANBUS (b) Answer the following:-20 Draw and explain OSI model (a) What is foundation field bus? Explain H1 and HSE (b) 4. Answer the following:-20 What are buses? What are components of field bus? (b) What is satellite communication? What is uplink and downlink frequency? Answer the following:-20 What is BURST mode in HART communication? What is manchester coding? (b) What are three transmission impairment in communication? (c) What is TCP/IP medel? (d) 20 6. Write short notes on (any two):-IEEE standards and TOKEN BUS (a)

Physical addressing, network addressing and port addressing.

Wireless I.AN architecture

OPC Architecture

(b)

(c)

(d)