Q.26 Write a short note on instrumentation buses.

Q.27 Describe telemetry systems.

Q.28 Discuss voltage telemetry system with diagram.

Q.29 Describe any one hydraulic transmitter.

Q.30 Mention various transmission channels.

Q.31 Explain block diagram of data communication.

Q.32 Write a short note on fibre optic communications.

Q.33 Discuss advantages & disadvantages of F.M. over A.M.

Q.34 Discuss GPIB with its diagram.

Q.35 Explain Radio channels with its advantages

SECTION-D

Note: Long answer type questions. Attempt any Two question out of three questions. (2x10=20)

Q.36 Draw and explain block diagram of PCM in detail.

Q.37 Describe PDPT bellow type Pneumatic Transmitter.

Q.38 Explain HART communication protocol with is its advantages.

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Roll No.....

4th Sem / Instrumentation & Control
Subject : Ind. Communication/Principles of Telemetry

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note : Multiple choice types questions. All questions are compulsory. (10x1=10)

Q.1 A voltage telemetering systems transmits the measured variable as a function of-

a) Current b) A.C. Voltage

c) D.C. Voltage d) Both B & C

Q.2 Which of the following item is not used in LANS.

a) Cable b) Modem

c) Interface card d) Computer modem

Q.3 Which Band is used by U.S. Government for manned vehicle tests

a) "L" b) "S"

c) "P" d) None of these

Q.4 PDPT bellow type transmitter is a _____.

a) Pneumatic Transmitter

b) Hydraulic Transmitter

c) Electric Transmitter

d) None of these

Q.5 FM systems_____ as compared to A.M. Systems.

a) Are more effected by noise.

b) Are less effected by noise

c) Are equally effected by noise

d) None of these

Q.6 F.D.M. utilizes_____ technique.

a) Frequency sharing b) Demodulation

c) Time Sharing d) None of these

Q.7 GPIB has _____ Signals.

a) 20 b) 10

c) 24 d) 16

Q.8 How many devices may be connected to one continuous bus (GPIB).

a) 10 devices b) 20 devices

c) 15 devices d) 5 devices

Q.9 The value of modulation index (m) for A.M. lies between.

a) 0 and 1 b) o and 1

c) 0-100 d) None of these

Q.10 Which modulation converts the sampled voltage into a coded message.

a) PAM b) PCM

c) A.M. d) F.M.

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Current Telemetry system is a R.F. Telemetry system T/F.

Q.12 Expand PCM.

Q.13 High speed Ethernet works on _____.

Q.14 HART protocol communicates at 1200 bps T/F.

Q.15 Wi-Fi uses radio waves T/F.

Q.16 LAN can use client and server architecture. T/F

Q.17 Message is the component of data communication T/F.

Q.18 Resistive transmitter is an electric transmitter. T/F

Q.19 Expand T.D.M.

Q.20 The amplitude of the frequency modulated wave is constant T/F.

SECTION-C

Note: Short answer type questions. Attempt any Twelve question put of fifteen questions. (12x5=60)

Q.21 Discuss various methods of data transmissions.

Q.22 Define R.F. telemetry and its types.

Q.23 Explain inductive transmitter with diagram

Q.24 Discuss F.D.M. Technique.

Q.25 Describe frequency shift keying.