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Roll No.

221561

6th Sem.
Branch : Instrumentation & Control
Sub. : Industrial Communication Technologies

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

- Q.1 _____ is the practice of providing health care services remotely.
a) Telemetry b) Telemedicine
c) Modulation d) Demodulation
- Q.2 Which of the following is the basic elements of general telemetry system?
a) Time Multiplex b) Transmitter
c) Receiver d) All the above
- Q.3 APDPT diaphragm is a
a) Pneumatic transmitter b) Hydraulic transmitter
c) Electric transmitter d) Inductive transmitter
- Q.4 _____ is a family of wired computer network technology commonly use in LAN
a) Hart b) Wan
c) Ethernet d) None of the above

Q.5 A dead zero in 4-20 mA current transmitter 18a situation where the loop current becomes

- a) 4 ma
- b) 20 ma
- c) 16 ma
- d) 0 ma

Q.6 PAM refers to

- a) Pulse analog modulation
- b) Pulse armature modulation
- c) Pulse amplitude modulation
- d) Both (b) & (c)

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

Q.7 Define telemetry.

Q.8 Explain PCM.

Q.9 Give any one example of Hydraulic transmitter.

Q.10 Expand TDM.

Q.11 Define GPIB.

Q.12 In fiber - optic communication. _____ is used for transmitting information from one place to another.

SECTION-C

Note: Short answer type Questions. Attempt any eight questions out of ten Questions. $(8 \times 4 = 32)$

Q.13 Write any four applications of telemetry.

Q.14 What is land line telemetry? Write the types of land line telemetry.

Q.15 Define modulation and demodulation with example.

Q.16 Explain the working of pulse code modulation with diagram.

Q.17 Draw and explain the PDPT bellow type pneumatic transmitter.

Q.18 What are the advantages of digital data transmission over analog transmission?

Q.19 Explain HART communication protocol.

Q.20 What is Ethernet? Write any two applications of it.

Q.21 Explain why multiplier is needed in data transmission?

Q.22 Define telemedicine. Write two application of it.

SECTION-D

Note: Long answer questions. Attempt any two questions out of three Questions. $(2 \times 8 = 16)$

Q.23 Draw and explain block diagram of general telemetry system. Explain about the transmitter and receiver used in telemetry system.

Q.24 Discuss about the following:

- a) PAM
- b) PCM
- c) TDM
- d) FDM

Q.25 What is inter bus and profibus? Explain the fiber optic communication. Write any four applications of it.