Q.28 Write a short note on strain guage.

Q.29 Explain construction and working principle of capacitive microphone.

Q.30 Write down the five application of seismic pick-up.

Q.31 Write short note on characteristics of transducer.

Q.32 Explain construction and working principle of Capacitive pickup.

Q.33 Explain working and construction of Piezoelectric transducer.

Q.34 Write down the advantage and disadvantages of potentiometer.

Q.35 Describe working of carbon microphone.

SECTION-D

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

Q.36 Explain construction, working principle, advantages, disadvantages and application of inductive microphone with neat and clean diagram.

Q.37 Explain construction and working of RVDT in detail.

Q.38 Explain construction, working principle, advantages, disadvantages and application of Hot wire anemometer with neat and clean diagram.

No. of Printed Pages : 4 181536

Roll No. .....

3rd Sem / IC

Subject:- Transducer and Signal Conditioning

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Piezoelectric transducer is_____

a) Passive transducer b) Active transducer

c) Inverse transducer d) Both B and C

Q.2 Hot wire Anemometer is used to measure_____

a) Pressure b) Current

c) Voltage d) Flow

Q.3 Microphone is used to measure _____ signal.

a) Electric b) Magnetic

c) Acoustic d) Light

Q.4 Shaft encoder is a _____ type of transducer.

a) Electrical b) Analog

c) Digital d) None of these

Q.5 Thermocouple is based on_____ effect.

a) Tindal effect b) Thomson effect

c) Peltier effect d) Seeback effect

Q.6 Inductive transduction involves_____.

a) Change in capacitance

b) Change in resistance

c) Change in inductance

d) None of these

Q.7 Expand RVDT

a) Remote Variable Differential Transducer

b) Rotary Variable Differential Transformer

c) Remote Voltage Differential Transducer

d) Rotary Voltage Differential Transducer

Q.8 Sesmic Pickup is used to measure_____ signal.

a) Volt b) Current

c) Vibration d) Flow

Q.9 Which of the following is resistive transducer.

a) Stain gauge b) Pirani gauge

c) Photo emissive cell d) None of these

Q.10 RTD is used to measure _____.

a) Pressure b) Temperature

c) Level d) Flow

SECTION-B

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

Q.11 Define transducer.

Q.12 Expand RTD.

Q.13 Define active transducer.

Q.14 Name any two materials used in piezoelectric transducers.

Q.15 Linearization

Q.16 Pickup

Q.17 Define digital transducer

Q.18 Write down the one application of inductive microphone.

Q.19 Define Gauge factor.

Q.20 Define sensitivity.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Write a short note on classification of Transducer.

Q.22 Write a short note on V to I converter.

Q.23 Write a short note on RTD.

Q.24 Describe linearization and conversion A.C. signal conditioning.

Q.25 Write down advantage and disadvantages of differential Capacitor pick up.

Q.26 Write a short note on characteristics of transducer.

Q.27 Explain construction and working of shaft encoder.