Q.31 E	31 Explain the working of potentiometer.		No. of Printed Pages : 4 Roll No	101010100111	
Q.32 E	Explain how pH of Liquid is measu	red.	1.011 1.01	121043/62444	
SECTION-D			4th Sem. / Electronics & communication Engg.		
Note:Long answer type questions. Attempt any three			Subject : Instrumentation		
	questions out of four questions.	(3x10=30)	Time: 3 Hrs.	M.M. : 100	
Q.33 V	Write the basic principle and working of LVD Also explain how it is used to measured displacement.	king of LVDT.	SECTION-A		
		to measure	Note: Objective type questions. All compulsory.	questions are (10x1=10)	
Q.34 E	Explain how level of liquid is measured using direct and indirect method.	asured using	Q.1 Give unit of Strain.		
d			Q.2 Expand LVDT.		
	What is pressure? Explain how it is measured by Bourdon's Tube.		Q.3 Bourdons tube is used to measure density		
Q.36 V	What is atmospheric humidity how it i measured by Hygrometer.	y how it is	Q.4is presence of wate	r vapour in air.	
n			Q.5 SI Unit of pressure is		
			Q.6 Thermocouple is based on	Effect.	
			Q.7 Piezoelectric Crystal can ac Traducer (True/False).	ct as passive	
			Q.8 Strain gauge is aTran	sducer.	
(780)	(4) 1	21043/62444	(1)	121043/62444	

- Q.9 Thermopile is used to measure Torque (True/False).
- Q.10 Freezing point of water is _____degree celcius.

SECTION-B

- **Note:** Very Short answer type questions. Attempt any ten questions out of twelve questions, .10x2=20
- Q.11 What is an active transducer.
- Q.12 Define Measurand.
- Q.13 Define speed.
- Q.14 Write two examples of display devices.
- Q.15 Define Humidity.
- Q.16 What is secondary transducer.
- Q.17 Draw Symbol of LED.
- Q.18 Define gauge factor.
- Q.19 State 2 application of Ultrasonic transducer.
- Q.20 Name two methods to measure flow.
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- Q.21 What is an inverse transducer.
- Q.22 State Piezoelectric effect.

SECTION-C

- **Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)
- Q.23 Explain how transducer are classified
- Q.24 Explain the working principle of Inductive transducer.
- Q.25 Explain the working of carbon microphone.
- Q.26 Differentiate between Primary and Secondary transducer
- Q.27 Write principle and working of piezoelectric transducer.
- Q.28 Explain the working of thermistors.
- Q.29 Explain torque measurement by Brake Dynamometer.
- Q.30 Explain the working of pyrometers.
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