

No. of Printed Pages : 4

Roll No.

120946

4th Sem. / Electrical

Subject : Instrumentation

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Define measurement?
- Q.2 List two Piezo electric materials?
- Q.3 Define Hellipot?
- Q.4 List formula for measuring torque?
- Q.5 Bourdon tube are made up of _____?
- Q.6 Electromagnetic flow meter is independent liquid density? (True/False)
- Q.7 A thermocouple is function of _____ metals?
- Q.8 PH value varies from _____ to _____?

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Q.9 Expand LDR?

Q.10 Give one example of passive transducer?

SECTION-B

Note: Very Short answer type questions. Attempt any ten questions out of twelve questions (10x2=20)

- Q.11 List two types of signal conditioning system?
- Q.12 State the main parts of transducer?
- Q.13 Define active transducer?
- Q.14 List two advantages of potentiometer?
- Q.15 Define hydro static pressure?
- Q.16 List two types of ultra sonic flow meter?
- Q.17 State see back effect?
- Q.18 Define relative humidity?
- Q.19 Draw symbol of LED?
- Q.20 List two types of recorder?
- Q.21 Define Hysteresis?

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Q.22 List of any two devices for speed measurement?

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)

Q.23 How torque is measured by brake dynamometer?

Q.24 Describe the signal conditioning?

Q.25 State one method to measure the humidity?

Q.26 Why PH measurement is required?

Q.27 Describe one force measurement method?

Q.28 Draw the block diagram of measurement system?

Q.29 Give the limitation of the mechanical instrument?

Q.30 Explain the importance of the measurement?

Q.31 Give two advantages and disadvantages of the piezo electro transducer?

Q.32 State principle of electromagnetic flow meter?

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SECTION-D
Note: Long answer type questions. Attempt any three questions out of four questions. (3x10=30)

Q.33 Explain the construction, principle and working of LVDT?

Q.34 With the help of need diagram explain the working of Piezo electric transducer?

Q.35 Explain how temperature is measured by thermocouple?

Q.36 Describe the load measurement by using elastic transducer and electrical strain gauge?

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