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Total No. of Questions : 09

B.Tech. (EE/EEE) (Sem.–4)

INSTRUMENTATION ENGINEERING

Subject Code : EE-206

Paper ID : [A0409]

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A

I. Answer briefly :

a. Can we use same current probe for AC and DC measurement? Give reasoning to your answer.

b. Briefly explain the principle of frequency meter.

c. What is 3 ½ display? Give its significance.

d. Draw the diagram of Venturi meter to measure flow.

e. Differentiate between X-Y recorder and Magnetic recorder.

f. Name the various components of Data Acquisition system.

g. How Ultrasonic transducer can be used to measure level?

h. What is Synchronization in CRO?

i. Why we use recorders?

j. Differentiate between LED and LCD displays.

SECTION-B

2. Draw the block diagram representation of instrume

3. In a CRT, distance between the vertical deflecti length of the plates is 4.5cm and the distance of of the plates is 13 inch. If the accelerating a calculate deflecting sensitivity of the tube.

4. Differentiate between Tuned type and Sampling ty

5. Write a short note on digital displays.

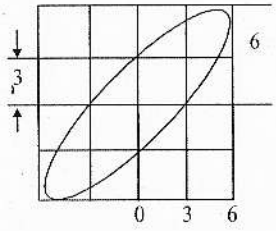
6. Explain one method to measure temperature using

SECTION-C

7. a) Explain the construction and working principle

b) Why we use Phosphorus in CRT tubes? Give

c) Calculate the phase difference between signals fo pattern.



8. Explain the construction and working principle with help of a neat diagram. Compare its merits types of recorders.

9. How can you measure pressure using Resistive, C transducer individually? Explain with help of diagra their merits and demerits of the transducers discu