

C 40949

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Name

Reg. No.



**FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, APRIL 2013**

**EE 09 406/PT EE 09 405—ELECTRICAL MEASUREMENTS AND
INSTRUMENTATION SYSTEM**

(2009 Scheme)

[Regular/Supplementary/Improvement]

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all the questions.

1. State the types of damping system widely used in indicating instruments.
2. Which type of compensation leads to creep in an Energy meter ? State the remedy.
3. Define magnetizing force and permeability.
4. Classify the Transducers.
5. List the different types of recorders.

(5 × 2 = 10 marks)

Part B

Answer any four questions.

6. State the common errors found in a moving-iron instrument. Briefly discuss its causes.
7. What compensations are to be provided in a LPF Electrodynamometer wattmeter ?
8. Write a short note on Hibbert's magnetic standard.
9. State the working of Hall effect transducer. Give one application.
10. Give an account of different methods of data transmission.
11. Briefly enumerate on different display methods.

(4 × 5 = 20 marks)

Part C

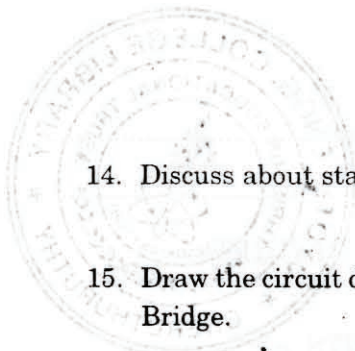
Answer all the questions.

12. With a neat diagram, explain the construction and working of Electrodynamometer instrument.

Or

13. Describe about the construction and working of moving-iron type instrument.

Turn over



14. Discuss about static energy meter, with necessary diagrams.

Or

15. Draw the circuit diagram, phasor diagram and derive the equations, under balance for Anderson's Bridge.

16. Explain a scheme to measure, pressure and humidity.

Or

17. Draw the circuit diagram to differential amplifier. Obtain an expression for the output voltage.

18. Explain about different Digital recording techniques.

Or

19. Explain the working of magnetic recorders.

(4 × 10 = 40 marks)