C 1134 (Pages : 2) Name.....

Reg. No.....

SIXTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE EXAMINATION, APRIL 2016

AI 09 605—INDUSTRIAL INSTRUMENTATION

Time : Three Hours Maximum : 70 Marks

Part A

Answer **all** *questions.*
Each question carries 2 *marks.*

1. Define Calibration.
2. What are the different units of pressure ?
3. Define Orifice.
4. Mention any *two* flow characteristics.
5. What are the industrial applications of doppler ?

(5 × 2 = 10 marks)

Part B

Answer any **four** *questions.*
Each question carries 5 *marks.*

6. Explain the consideration of reference junction.
7. Explain about elaastic type pressure gauge with a neat diagram.
8. Explain about dead weight tester with a neat sketch.
9. Explain about installation of head flow meter.
10. Explain about electromagnetic flowmeter.
11. Explain about ultrasonic flowmeter.

(4 × 5 = 20 marks)

Part C

Answer **all** *questions.*
Each question carries 10 *marks.*

12. Explain quartz crystal thermometer with a neat sketch.

Or

13. Discuss about the working principle of digital thermometers and state their advantages.

Turn over

14. Differentiate McLeod gauge and Ionization gauge.

Or

15. Explain the working principle and construction of a differential pressure transmitter with a neat sketch.

16. Differentiate rotameter and piston type flow meter.

Or

17. Discuss about tapping and piping arrangements of flow meters.

18. Explain the working principle of hot wire anemometer with a neat sketch.

Or

19. Differentiate hydrostatic and displacer type of level measurement with neat sketch.

(4 × 10 = 40 marks)