

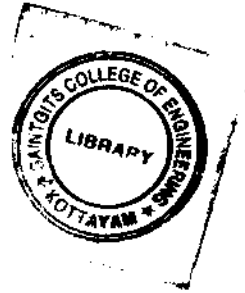
B.TECH. DEGREE EXAMINATION, MAY 2014**Seventh Semester**

Branch : Applied Electronics and Instrumentation

INDUSTRIAL INSTRUMENTATION – II (A)

(Old Scheme – Prior to 2010 Admissions)

[Supplementary]



Time : Three Hours

Maximum : 100 Marks

Part A*All questions are compulsory.**Each question carries 4 marks.*

1. How capacitive transducers are used to measure moisture?
2. Describe some of the specific gravity scales used in Petroleum Industries.
3. List the need for pH measurement.
4. Describe the conductivity cell construction.
5. Explain Gas chromatography.
6. Describe Proportional Counters.
7. Describe Eddy-Current Tachometer.
8. Explain Calibration of Accelerometer.
9. Explain Gas and Steam Turbines combined cycles.
10. Describe Nuclear Reactors.

(10 × 4 = 40 marks)

Part B*Answer all questions.**Each full question carries 12 marks.*

11. Describe the measurement of moisture content of solid bodies by measuring Electrical conductivity.

Or

12. Explain Automatic Electronic Psychrometer with neat diagram.

Turn over

13. Discuss in detail on construction, installation and working of pH meters.

Or

14. Describe the principle and components of conductivity meter with neat diagrams.

15. (a) Explain Scintillation counter.

(b) Explain Thermal Conductivity Analysers.

(6 + 6 = 12 marks)

Or

16. (a) Explain Geiger-Müller Counter.

(b) Explain Gas Analysis by Chemical Absorption and Magnetic type method.

(6 + 6 = 12 marks)

17. Explain various types of Electric Tachometers.

Or

18. Explain various methods for measurement of Acceleration.

19. Explain Gas Turbine Power Plants.

Or

20. Explain Gas and Steam Turbines combined cycles and fluctuating loads on power plants.

[5 × 12 = 60 marks]

