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Reg. No....

Name.

## B.TECH. DEGREE EXAMINATION, MAY 2016

## Seventh Semester

Branch: Applied Electronics and Instrumentation Engineering

INDUSTRIAL INSTRUMENTATION—II (A)

(Old Scheme-Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time: Three Hours

Maximum: 100 Marks

## Part A

Answer all questions.

Each question carries 4 marks.

- 1. Differentiate viscosity and consistency.
- 2. What is a dielectric constant?
- 3. What is pH electron relation?
- 4. How are pH meters installed and maintained?
- 5. What is called conductivity? How is it/measured?
- 6. How is electrical conductivity of a solution measured?
- 7. What is a stroboscope?
- 8. What is the principle of mass spectrometer?
- 9. What are the different types of powerplants?
- 10. Draw the power plant process flow diagram and explain:

 $(10 \times 4 = 40 \text{ marks})$ 

## Part B

Answer all questions.

Each full question carries 12 marks.

11. What are techniques that are use to measure viscosity and density in power plants.

Or

- 12. With a neat sketch, explain the working principle of psychometer.
- 13. What is cell? What are the different types of cells? Explain any one in detail.

Or

14. What is pH? What is the significance of the pH value?

 $10 \times 4 = 40 \text{ marks}$ 

Turn over

15. Differentiate IR spectrometer and UV spectrometer.

Or

- 16. What is the basic principle of a Gas chromatography? Explain any one method in detail.
- 17. What are the electrical methods that are used for the measurement of acceleration?

Or

- 18. What are the various methods of calibrating accelerometer?
- 19. Explain with the help of a neat diagram and flow chart, the working of a nuclear reactor.

Or

20. What is the role of an engines in diesel electrical power plant?

 $(5 \times 12 = 60 \text{ marks})$ 

