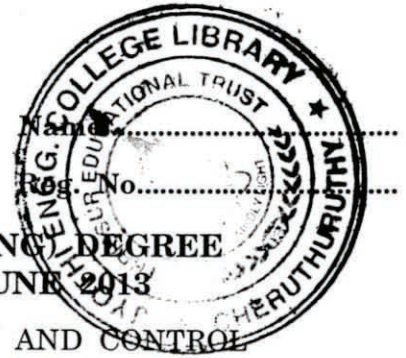


C 44830



**EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE
[SUPPLEMENTARY] EXAMINATION, JUNE 2013**

AI04 805 (F)—POWER PLANT INSTRUMENTATION AND CONTROL

(2004 Scheme)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

1. What are condensers ?
2. List out the non-renewable energy sources.
3. Explain the pollution monitoring instruments.
4. How will you measure dissolved oxygen content ?
5. What are superheaters ?
6. What do you mean by interlocks ?
7. Define the terms attenuation and dispersion.
8. List out the precautions to be taken care in a nuclear power plant.

(8 × 5 = 40 marks)

Part B

Answer one question from each module.

- I. (a) Explain in detail about the basic building blocks. Of a thermal power plant. (15 marks)
Or
(b) Explain the different types of boilers. (15 marks)
- II. (a) Explain the working of a flue gas analyzer in a power plant. (15 marks)
Or
(b) (i) Explain the principle of a working of a pH meter. (7 marks)
(ii) Write short notes on radiation detectors. (8 marks)
- III. (a) Discuss the merits of employed distributed control systems in power plants. (15 marks)
Or
(b) Explain in detail about various control loops in boilers. (15 marks)
- IV. (a) Explain the methods adopted to control the lubricant oil temperature. (15 marks)
Or
(b) Explain in detail the principle of hydro-electric power generation. (15 marks)

[4 × 15 = 60 marks]