

Code: 9A10705

R09

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2015 POWER PLANT INSTRUMENTATION

(Common to E.Con.E & EIE)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

- 1 (a) What is cogeneration?
 - (b) Explain briefly the importance of instrumentation for power generation in thermal power plants.
- 2 (a) Explain with a neat sketch the trivector meter.
 - (b) Write short notes on frequency power factor.
- What are the methods used to measure smoke density? Explain briefly.
- 4 Write short notes on:
 - (a) Bypass damper.
 - (b) Exclusive air control.
- What is the use of computers in power plants?
- 6 (a) How to control the exhaust pressure?
 - (b) What are the different ways to maintain speed on the engine?
- 7 (a) Explain the working of oxygen analyzer with a neat sketch.
 - (b) Define thermal conductance. How would you analyze this?
- 8 Discuss about the survey of pollution monitoring and control equipment. What are its merits and demerits?
