

R09

Code: 9A10705

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

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) Predict the role of instruments in solar and wind power generation system.
(b) List the applications of cogeneration in power plant and label the PI diagram of cogeneration plant.
- 2 (a) What are the parameters involved in measuring electrical measurements in power plant?
(b) How to measure frequency of the electrical signal?
- 3 (a) Explain briefly about dust measurement with clear diagram.
(b) How is feed water flow measured in power plants?
- 4 Discuss various combustion control systems used in power plants.
- 5 (a) Explain about the BFP recirculation control method.
(b) How computers are useful in power plants?
- 6 (a) What is hydrogen-cooled turbo generator?
(b) What are the monitoring parameters in vibration measurement?
- 7 (a) Mention the principles used in oxygen analyzer and explain.
(b) What are the advantages and disadvantages of dissolved oxygen analyzer?
- 8 Why do we need the pollution monitoring instruments? Classify them.
