

**IV B.Tech I Semester Supplementary Examinations, April/May 2005**  
**POWER PLANT INSTRUMENTATION**  
**(Electronics & Instrumentation Engineering)**

**Time: 3 hours**

**Max Marks: 70**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

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1. Describe a Wind power generation with the help of block diagram.
2. List the important parameters that are to be monitored in geothermal power plant
3. (a) Draw the circuit diagram of wien bridge and explain how it can be used for the measurement of frequency.  
(b) Design a wien bridge circuit for the measurement of frequency in the range 0-1500  $Hz$ . The bridge excitation is 0-5  $V.A.C.$  sinusoidal signal.
4. Describe in detail the salient features of radiation detectors with relevant diagrams.
5. Explain in detail with neat sketches pulverizer control system used in power plants?
6. What is reheater. Explain any one of them in detail.
7. Explain generator coolant controls and instruments.
8. Discuss in detail the method of monitoring  $CO_2$  and  $NO_2$  present in flue gases with neat sketches.

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