



C09-AEI-606 B

**3720**

**BOARD DIPLOMA EXAMINATION, (C-09)  
MARCH/APRIL—2013  
DAEI—SIXTH SEMESTER EXAMINATION**

POWER PLANT INSTRUMENTATION

*Time* : 3 hours ]

[ *Total Marks* : 80

---

**PART—A**

3×10=30

**Instructions** : (1) Answer **all** questions.

(2) Each question carries **three** marks.

1. Define material balance and energy balance.
2. List the types of mixers.
3. Define humidification.
4. List the variables of boiler process.
5. Describe turbine trip condition.
6. Define vibration.
7. Give the importance of compressors used in power plants.

8. Describe about steam heaters.
9. Explain the operation of soot blowers.
10. Write a short note on cooling towers.

**PART—B**

10×5=50

**Instructions** : (1) Answer *any five* questions.  
(2) Each question carries **ten** marks.

11. Explain the principle and working of nuclear power plant.
12. List the different types of evaporators and explain the working of single-effect evaporators.
13. Explain the working of humidification process with neat sketch.
14. Explain feedback regulation drum-level control.
15. Explain main steam temperature control.
16. Explain condenser vacuum control.
17. List different types of pumps and explain centrifugal pump used in power plant.
18. Explain about water treatment plant in power plant.

★ ★ ★