



C14-AEI-604

**4708**

**BOARD DIPLOMA EXAMINATION, (C-14)**  
**SEPTEMBER/OCTOBER - 2020**  
**DAEIE—SIXTH SEMESTER EXAMINATION**  
**INSTRUMENTATION IN PROCESS INDUSTRIES**

*Time* : 3 hours ]

[ *Total Marks* : 80

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**PART—A**

3×10=30

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

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

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the principle of power generation in thermal power plant.
2. State the importance of measurement and instrumentation in power plant.
3. List any three by-products of crude oil.
4. Define thermal cracking.
5. List any three various physical parameters to be measured in petrochemical plant.
6. Mention any three various units in iron and steel plant.
7. Draw the diagram of measurement of weight of steel.
8. List any three raw materials used for making paper.

- \* 9. List any three various grades of paper.
10. Mention any three various control systems units in pulp and paper plant.

**PART—B**

10×5=50

**Instructions :** (1) Answer *any five* questions.

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

(3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.

11. Explain the measurement of level of the boiler with diagram.
12. Explain the measurement of temperature of the boiler with diagram.
13. Explain the measurement of vibration of turbine with diagram.
14. Explain the measurement of pressure in petrochemical plant with diagram.
15. Explain the manufacturing process of iron and steel based on the layout with neat sketch.
16. Explain the measurement of temperature of furnace in iron and steel plant with diagram.
17. Explain the measurement of moisture analyzer in pulp and paper plant with diagram.
18. Explain the graphic displays and alarms in paper and pulp plant.

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