



C14-AEI-604

4708

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2017

DAEIE—SIXTH SEMESTER EXAMINATION

INSTRUMENTATION IN PROCESS INDUSTRIES

Time : 3 hours]

[Total Marks : 80

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. Give the principle of power generation in thermal power plant.
2. State the importance of measurement and instrumentation in power plant.
3. List any three units in petrochemical plant.
4. Mention any three by-products of crude oil.
5. Define alkalization.
6. List any three physical parameters to be measured in iron and steel plant.
7. Mention the raw materials used in raw iron making.
8. List any three grades of paper.
9. Write any three control system units in pulp and paper plant.
10. Write any three physical properties of paper.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the method of measurement of feed water.
12. (a) Give the building blocks of boiler process in thermal power plant.
(b) Explain the turbine speed measurement.
13. Explain the working of turbine unit with a diagram.
14. Draw and explain the working of distillation column.
15. Explain the working of oxygen furnace with diagram.
16. (a) Draw the general layout of iron and steel plant.
(b) Explain the measurement of temperature in blast furnace.
17. Explain the process of making paper based on the layout.
18. Explain the consistency sensor and moisture analyzer.
