

6613

BOARD DIPLOMA EXAMINATIONS

OCT/NOV-2019

DAEI – FIFTH SEMESTER

INSTRUMENTAION IN PROCESS INDUSTRIES

Time: 3 hours

Max. Marks: 80

PART – A

3 X 10 = 30

- Instructions:*
1. Answer **all** questions.
 2. Each question carries **Three** Marks.
 3. Answer should be brief and straight to the point and should not exceed five simple sentences.

1. Draw the block diagram of Nuclear power plant.
2. What are the Turbine shaft vibrations?
3. Write any three measuring locations/points of flow in a thermal power plant.
4. List any three types of sensors/instruments used for measuring of level in a thermal power plant.
5. Define Catalytic Cracking.
6. Define the term distillation column.
7. Draw the flow scheme of pig iron production.
8. List the raw materials in Iron Steel Plant.
9. List any three types of pulping processes.
10. List any three raw materials for making paper.

PART – B

5 X 10 = 50

- Instructions:*
1. Answer any **Five** questions
 2. Each question carries **TEN** Marks.
 3. Answer should be comprehensive and Criteria for Valuation is the content but not the length of the answer.

11. Explain the Hydroelectric power plant with block diagram.
12. Explain single element drum level control of boiler with a diagram.
13. Explain Steam temperature control Single-Stage diagram.
14. Explain the general layout of petro chemical plant with diagrams.
15. a) Draw the batch distillation column.
b) Explain the measurement of molten metal level.
16. Explain the working of electric furnace with diagram.
17. Explain the block diagram of Mechanical Pulping process.
18. Explain the controlling of paper thickness with diagram.

A.A.N.M & V.V.R.S.R POLYTECHNIC / GUDLAVALLERU , KRISHNA