4708

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH /APRIL-2019

DAEIE-SIXTH SEMESTER EXAMINATION

INSTRUMENTATION IN PROCESS INDUSTRIES

Time: 3 Hours

Max. Marks: 80

PART-A

10X3=30M

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

- 2) Each question carries Three marks.
- 3) Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1) List any three power generation methods.
- 2) Mention the function of condenser in thermal power plant.
- 3) Define catalytic cracking.
- 4) List any three units in petrochemical plant.
- 5) Define alkalization.
- 6) List any three types of furnaces used in iron and steel plant.
- 7) Draw the diagram of electric furnace.
- 8) List any three physical properties of paper.
- 9) List any three raw materials used for making paper.
- 10) Draw the diagram of moisture analyser used in pulp and paper plant.

/4708

PART-B

Instructions: 1) Answer any five questions.

- 2) Each question carries ten marks.
- The answer should be comprehensive and the criteria for valuation is content but not the length of the answer.
- 11) a) Explain the measurement of level in a boiler.b) Explain the flow measurement of feed water.5M
- 12) Explain the building blocks of boiler process in thermal power plant.
- 13) Explain the measurement of speed and vibration of turbine.
- 14) Explain the measurement of flow and pressure in petrochemical industries.
- 15) Explain the working of blast furnace with a diagram.

16)	a) Draw the layout of iron and steel plant.	5M
	b) Explain the measurement of level of molten steel.	5M
17)	a) Draw the general layout of pulp and paper plant.	6M
	b) Explain pulp bleaching.	4M

18) Explain the wet end and dry end operations in making paper.



2

* * *