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C16-AEI-505

**6613**

**BOARD DIPLOMA EXAMINATION, (C-16)**  
**OCT/NOV—2018**  
**DAEI—FIFTH SEMESTER EXAMINATION**  
**INSTRUMENTATION 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. List various power generation methods.
2. State the importance of measurement and instrumentation in power plant.
3. List types of sensors used in thermal power plant.
4. Mention the turbine shaft vibration.
5. Define petroleum refinery.
6. List basic steps in refinery process.
7. List raw materials in iron steel plant(ISP).
8. Draw flow scheme of steel production.
9. Define the term pulp.
10. List the types of pulping process.

**PART-B**

10×5=50

- \* **Instructions :** (1) Answer *any five* questions.  
(2) Each questions 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 general layout of Thermal power plant with diagram.
12. Draw the block diagram of boiler process in thermal power plant and explain each block.
13. Explain a typical combustion system of a boiler with diagram.
14. Draw the general layout of a petro chemical plant and explain each block.
15. (a) Explain Alkalization unit operation.  
(b) Explain measurement of molten metal level.
16. Explain the working of blast furnace with diagram.
17. Explain the block diagram of chemical pulping process.
18. Explain the graphic displays and alarms in PPP.

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