

SECTION-D

No. of Printed Pages : 4

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Roll No.

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Discuss the chromatography and pollution monitoring instruments.

Q.24 Explain one method of smoke density and dust monitoring.

Q.25 Discuss the different elements of hydro power plant.

**4th Sem / Instrumentation & control
Subject : Power Plant Instrumentation**

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which of these is an output of a Furnace?

- a) Fuel gas
- b) Air
- c) Flue gases
- d) Water Vapor

Q.2 What is the neutral value of PH scale

- a) Less than 5
- b) Equal to 7
- c) Less than 8
- d) Greater than 10

Q.3 Which of the following bridges are used in dissolved oxygen analyzer?

- a) Kelvin's bridge
- b) Wheatstone bridge
- c) Schering's bridge
- d) Anderson's bridge

Q.4 What is a hydro power plant?

- a) Mechanical energy from the stagnant water currents
- b) Electrical energy from the moving water currents
- c) Potential energy from the water currents
- d) Electrical energy from the moving water currents

Q.5 Temperature is measure by

- a) Thermocouple b) RTD
- c) Thermistor d) All of above

Q.6 Unit of frequency

- a) Hz b) 1/sec
- c) Both a & b d) None of these.

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

Q.7 Energy source of thermal power plant is _____.

Q.8 Seismic transducer is used for vibration measurement
(Yes/No)

Q.9 Steam flow is measure by _____.

Q.10 What is Economizer _____.

Q.11 PH value for strong acid _____.

Q.12 Principle of solar power plant is _____.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. $(8 \times 4 = 32)$

Q.13 Explain the Different element of thermal power plant.

Q.14 What is the importance of instrument in power generation?

Q.15 Draw the five ISA & SAMA Symbol.

Q.16 Explain the method to measurement in feed water flow

Q.17 Explain the method of voltage and current measurement in power generation

Q.18 Write a Short note in (a) Wind power plant (b) solar power plant.

Q.19 Discuss the one method of steam measurement in power plant.

Q.20 Explain the method of PH measurement of a solution.

Q.21 Discuss the steam pressure control.

Q.22 Explain the one method of flow of feed water measurement.