


SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)
Subject with Code : POWER PLANT INSTRUMENTATION (16EE7514)
Course & Branch:
M.Tech – CS Year & Sem: I-M.Tech & II-Sem
Regulation: R16
UNIT –I

1. (a) With neat diagram explain about Trivector meter [L3][5M]
 (b) what is the importance of instrumentation for power generation [L2][5M]
2. Briefly explain about survey of methods of power generation in hydel, nuclear and wind power plant [L3][10M]
3. Explain about thermal power plants building blocks [L2][10M]
4. Explain PI diagram of boiler [L2][10M]
5. Briefly explain about details of the boiler process ? [L2][10M]
6. Briefly explain importance of instrumentation for power generation? [L2][10M]
7. With neat diagrams briefly explain building blocks of thermal power plants [L2][10M]
8. (a) Explain about cogeneration? [L3][5M]
 (b) give some details of the boiler process? [L2][5M]
9. Briefly explain about survey of methods of power generation in hydel, nuclear and wind power plant [L1][10M]
10. Briefly explain about details of the boiler process with examples [L2][10M]

UNIT –II

1. How we can measure current,voltage and power explain with diagrams? [L2][10M]
2. How the air flow is measured Briefly explain ? [L3][10M]
3. What is the use of dust monitor Explain it's working [L2][10M]
4. Explain about radiation detectors and smoke density measurements ? [L1][10M]
5. Briefly explain about working of trivector meter? [L2][10M]
6. How we are going to measure non electrical parameters explain with some examples [L1][10M]
- 7.Explain about flow of feed water measurement with clear explanation [L2][10M]
8. Explain about radiation detectors and smoke density measurements? [L2][10M]
9. How we can measure current,voltage and power explain with diagrams? [L3][10M]
10. How we are going to measure non electrical parameters explain with some examples [L2][10M]

UNIT –III

1. Explain about condenser vacuum control [L2][10M]
2. Explain about air fuel ratio control and also explain how it control combustion [L1][10M]
3. Explain about bypass damper and super heater? [L2][10M]
4. What is the main role of computers in power plants as controlling purpose of combustion [L1][10M]
- 5.Explain about burnertilting up process with clear explanation [L3][10M]

6. Briefly explain about bypass damper and super heater [L1][10M]
7. Explain about BFP recirculation control [L2][10M]
8. What is the main role of computers in power plants as controlling purpose of combustion [L2][10M]
9. . Explain about air fuel ratio control and also explain how it control combustion [L2][10M]
10. Write a short note on the following [L1] [10M]
 - (a) Hot well and deaerator level
 - (b) pulverizer control

UNIT –IV

1. Explain about condenser vacuum control with briefly explanation [L2] [10M]
2. What are the main features of gland steam exhaust pressure control? [L1] [10M]
3. How we can monitor and control temperature briefly explain [L3] [10M]
4. Explain about lubricating oil temperature control and cooling system? [L3] [10M]
5. Briefly explain cooling system in turbine monitoring ? [L2] [10M]
6. Explain about gland steam exhaust pressure control [L1] [10M]
7. Explain about condenser vacuum control with briefly explanation [L1] [10M]
8. Explain about lubricating oil temperature control and cooling system? [L1] [10M]
9. Write a short note on the following [L2] [10M]
 - a) pressure control
 - b) speed vibration
10. How we can monitor and control temperature briefly explain? [L2] [10M]

UNIT –V

1. Explain working of thermal conductive type analyzer [L2] [10M]
2. Write a short note on the following [L1] [10M]
 - a) Hydrogen purity meter

- b) Chromatography
 - c) spectrum analyzer
3. Write state notes on the following [L1] [10M]
(a) fuel analyzer
(b) conductivity cell
4. (a) Explain about thermal conductivity ? [L2] [5M]
(b) Explain about fuel analyzer [L2] [5M]
5. Write state notes on the following [L2] [10M]
(a) paramagnetic type
(b) oxygen analyzer
6. Explain the function of spectrum analyzer [L2] [10M]
7. What is the main importance of Brief survey of pollution monitoring [L1] [10M]
8. Explain working of thermal conductive type analyzer [L1] [10M]
9. Briefly explain about infrared type and spectrum analyzer [L2] [10M]
10. Write a short note on the following [L1] [10M]
a) conductivity cell
b) fuel analyzer
c) purity me

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