

Set No. 1

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

Objective Exam

Hall Ticket No.

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I. Choose the correct alternative:

- ## Cont....2

II Fill in the Blanks:

11. Flue gas recirculation can be used for suppressing the formation of nitrogen oxide and controlling _____ temperature.
12. _____ is also the primary source of spray water for the super heater and reheater for control of the main and reheat steam temperature.
13. In a steam pressure control, the trimming signal from the _____ flow and _____ flow sensors maintain the proper fuel-air ratio.
14. Condensers are classified as _____ and _____.
15. _____ gas is used for cooling of generators in power plants.
16. Paramagnetic analyzer based on the phenomenon of _____.
17. _____ analyzers are used for the determination of large number of components including carbon monoxide, carbon dioxide and sulphur dioxide and etc.
18. PH meters can be broadly classified as _____ and _____.
19. The _____ chromatographic technique has been applied for the detection and measurement of hydrocarbons, carbon monoxide and carbon dioxide in air.
20. Liquid chromatography is an analytical technique which is useful for the separation of _____ or that are dissolved in a solvent.

Set No. 2

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

Objective Exam

Hall Ticket No.

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I. Choose the correct alternative:

1. A ----- is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful energy []

a) Boiler b) Deaerator c) Turbine d) None of the above
2. In a hydro electric power plant surge tank is located near to ----- []

a) Reservoir b) Penstock c) Turbine d) None of the above
3. The ----- of a gas is defined as the quantity of heat transferred in unit time in a gas between two surfaces of 1cm apart []

a) Thermal conductivity b) Ion conductivity c) Liquid Conductivity d) None of the above
4. The chopping frequency in industrial analyzers is -----HZ []

a) 30-40 b) 20-30 c) 10-20 d) None of the above
5. Fourier transform can be accomplished by using ----- analyzer which shows only the absolute value of the XY component of magnetization []

a) Trim b) Spectrum c) Gas d) None of the above
6. ----- is a physical method of separation of the components of a mixture by distribution between two phases []

a) Chromatography b) Conductivity c) PH Meter d) None of the above
7. A conductivity cell comprises of ----- electrodes, which may be two parallel sheets of platinum fixed in position by sealing the connecting tubes into the sides of measuring cell []

a) Four b) Three c) Two d) None of the above
8. The pressure of the steam entering the ----- is maintained by simple controller whose measured value is obtained from a transmitter measuring steam pressure []

a) Boiler b) Deaerator c) Turbine d) None of the above
9. The function of the recirculated gas is to ----- furnace heat absorption by diluting the furnace gas and lowering the furnace zone temperature []

a) Reduce b) Increase c) Constant d) None of the above
10. In pulverizing, how many stages are involved in it ----- []

a) Two b) Three c) Four d) None of the above

Cont....2

II Fill in the Blanks:

11. Condensers are classified as _____ and _____.
12. _____ gas is used for cooling of generators in power plants.
13. Paramagnetic analyzer based on the phenomenon of _____.
14. _____ analyzers are used for the determination of large number of components including carbon monoxide, carbon dioxide and sulphur dioxide and etc.
15. PH meters can be broadly classified as _____ and _____.
16. The _____ chromatographic technique has been applied for the detection and measurement of hydrocarbons, carbon monoxide and carbon dioxide in air.
17. Liquid chromatography is an analytical technique which is useful for the separation of _____ or that are dissolved in a solvent.
18. Flue gas recirculation can be used for suppressing the formation of nitrogen oxide and controlling _____ temperature.
19. _____ is also the primary source of spray water for the super heater and reheater for control of the main and reheat steam temperature.
20. In a steam pressure control, the trimming signal from the _____ flow and _____ flow sensors maintain the proper fuel-air ratio.

Code No: 58053

Set No. 3

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

POWER PLANT INSTRUMENTATION

Objective Exam

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I. Choose the correct alternative:

1. The ----- of a gas is defined as the quantity of heat transferred in unit time in a gas between two surfaces of 1cm apart []
a) Thermal conductivity b) Ion conductivity c) Liquid Conductivity d) None of the above
2. The chopping frequency in industrial analyzers is -----HZ []
a) 30-40 b) 20-30 c) 10-20 d) None of the above
3. Fourier transform can be accomplished by using ----- analyzer which shows only the absolute value of the XY component of magnetization []
a) Trim b) Spectrum c) Gas d) None of the above
4. ----- is a physical method of separation of the components of a mixture by distribution between two phases []
a) Chromatography b) Conductivity c) PH Meter d) None of the above
5. A conductivity cell comprises of ----- electrodes, which may be two parallel sheets of platinum fixed in position by sealing the connecting tubes into the sides of measuring cell []
a) Four b) Three c) Two d) None of the above
6. The pressure of the steam entering the ----- is maintained by simple controller whose measured value is obtained from a transmitter measuring steam pressure []
a) Boiler b) Deaerator c) Turbine d) None of the above
7. The function of the recirculated gas is to ----- furnace heat absorption by diluting the furnace gas and lowering the furnace zone temperature []
a) Reduce b) Increase c) Constant d) None of the above
8. In pulverizing, how many stages are involved in it ----- []
a) Two b) Three c) Four d) None of the above
9. A ----- is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful energy []
a) Boiler b) Deaerator c) Turbine d) None of the above
10. In a hydro electric power plant surge tank is located near to ----- []
a) Reservoir b) Penstock c) Turbine d) None of the above

Cont.....2

II Fill in the Blanks:

11. Paramagnetic analyzer based on the phenomenon of _____.
12. _____ analyzers are used for the determination of large number of components including carbon monoxide, carbon dioxide and sulphur dioxide and etc.
13. PH meters can be broadly classified as _____ and _____.
14. The _____ chromatographic technique has been applied for the detection and measurement of hydrocarbons, carbon monoxide and carbon dioxide in air.
15. Liquid chromatography is an analytical technique which is useful for the separation of _____ or that are dissolved in a solvent.
16. Flue gas recirculation can be used for suppressing the formation of nitrogen oxide and controlling _____ temperature.
17. _____ is also the primary source of spray water for the super heater and reheater for control of the main and reheat steam temperature.
18. In a steam pressure control, the trimming signal from the _____ flow and _____ flow sensors maintain the proper fuel-air ratio.
19. Condensers are classified as _____ and _____.
20. _____ gas is used for cooling of generators in power plants.

Set No. 4

IV B.Tech. II Sem., II Mid-Term Examinations, April-2014

Objective Exam

Hall Ticket No.

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I. Choose the correct alternative:

- Fourier transform can be accomplished by using ----- analyzer which shows only the absolute value of the XY component of magnetization []
a) Trim b) Spectrum c) Gas d) None of the above
- is a physical method of separation of the components of a mixture by distribution between two phases []
a) Chromatography b) Conductivity c) PH Meter d) None of the above
- A conductivity cell comprises of ----- electrodes, which may be two parallel sheets of platinum fixed in position by sealing the connecting tubes into the sides of measuring cell []
a) Four b) Three c) Two d) None of the above
- The pressure of the steam entering the ----- is maintained by simple controller whose measured value is obtained from a transmitter measuring steam pressure []
a) Boiler b) Deaerator c) Turbine d) None of the above
- The function of the recirculated gas is to ----- furnace heat absorption by diluting the furnace gas and lowering the furnace zone temperature []
a) Reduce b) Increase c) Constant d) None of the above
- In pulverizing, how many stages are involved in it ----- []
a) Two b) Three c) Four d) None of the above
- A ----- is a rotary mechanical device that extracts energy from a fluid flow and converts it into useful energy []
a) Boiler b) Deaerator c) Turbine d) None of the above
- In a hydro electric power plant surge tank is located near to ----- []
a) Reservoir b) Penstock c) Turbine d) None of the above
- The ----- of a gas is defined as the quantity of heat transferred in unit time in a gas between two surfaces of 1cm apart []
a) Thermal conductivity b) Ion conductivity c) Liquid Conductivity d) None of the above
- The chopping frequency in industrial analyzers is -----HZ []
a) 30-40 b) 20-30 c) 10-20 d) None of the above

Cont....2

II Fill in the Blanks:

11. PH meters can be broadly classified as _____ and _____
12. The _____ chromatographic technique has been applied for the detection and measurement of hydrocarbons, carbon monoxide and carbon dioxide in air.
13. Liquid chromatography is an analytical technique which is useful for the separation of _____ or that are dissolved in a solvent.
14. Flue gas recirculation can be used for suppressing the formation of nitrogen oxide and controlling _____ temperature.
15. _____ is also the primary source of spray water for the super heater and reheater for control of the main and reheat steam temperature.
16. In a steam pressure control, the trimming signal from the _____ flow and _____ flow sensors maintain the proper fuel-air ratio.
17. Condensers are classified as _____ and _____.
18. _____ gas is used for cooling of generators in power plants.
19. Paramagnetic analyzer based on the phenomenon of _____.
20. _____ analyzers are used for the determination of large number of components including carbon monoxide, carbon dioxide and sulphur dioxide and etc.