Atlas Copco Placement Paper Questions

Q1. Which of the following is not present in a CI engine?
a) Fuel injector
b) Carburetor
c) Fuel pump
ANS: b

Q2. Overall heat transfer co-efficient present in
a) Conduction
b) Convection
c) Conduction and convection
d) All modes of heat transfer.

Q3. If a block of ice floating in a tub of water and gets melted then what will be the level of water?
a) falls down
b) rises
c) remains the same

Q4. Compressed air coming out of a punctured football
a) Remains at the same temperature
b) Becomes hotter
c) Becomes cooler

Q5. Heat transfer takes place as per
a) Second law
b) First law
c) Zeroth law

Q6. Formation of frost in refrigerator

a) Can be prevented if design is proper

b) Heat transfer becomes more

c) Heat loss

d) Immaterial

ANS: d

Q7. How will you find the unburnt mixture in exhaust gas?

a) Analyzing CO

b) Analyzing Oxygen

Q8. To reduce moisture troubles the compressor main should be

a) Vertical

b) Horizontal

c) Slanting

Q9. Compression ratio is the ratio of

a) Delivery pointer to inlet pointer

b) Inlet pointer to delivery pointer

c) Stroke volume to clearance volume

Q10. Critical activity is

a) Zero float

b) High float

c) Low float

Q11. Which process is more effective for compression?

a) Isothermal

b) adiabatic
c) polytrophic

ANS: a

Q12. Cash discounts is based on
a) Sold on credit
b) Bargaining capacity of the seller
c) Payment of instant cash

Q13. In which device, the temperature of the refrigerant is the lowest?
a) Compressor
b) Condenser
c) Expansion valve
d) Evaporator

Q14. What is the use of the reverse flow of air in compressor?
a) Cleaning the dust particles settled
b) Velocity of the air flow increases
c) pressure increases

Q15. The intake of air in an air compressor can be had from
a) An area nearby coal yard
b) An area nearby a cooling tower
c) A room in which conditioned air is maintained at 20C
d) At air maintained at 1 C

Q16. Which of the following is not present in a SI engine?
a) Spark plug
b) Carburetor
c) Fuel injector

ANS: c

Q17. To avoid cavitation in a centrifugal pump

a) Inlet pressure should be high

b) Discharge pressure should be high

ANS: a

Q18. Hygrometry deals with ---?

ANS: moisture content in air

Q19. 1 kg-m = ----- J?

ANS: 9.81 J

Q20. Expand MIS.

ANS: Management Information System

Q21. Expand NTP.

ANS: Normal Temperature and Pressure.

Q22. CPM and PERT deals with ----- ?

ANS: Determining the status of the project

Q23. State Dalton's law of pressure.

ANS: Total pressure equals sum of partial pressures

Q24. What is the use of intercooler?

ANS: to reduce work input

Q25. Explain Avogadro's hypothesis.

ANS: Molecular weight of all gases occupy the same volume under same conditions of temperature and pressure.

Q26. What is the use of "after cooler"?

ANS: to reduce volume of receiver

Q27. Water hammer occurs due to---- ?

ANS: sudden obstruction in flow

Q28. What will be the efficiency of diesel engine as compared to petrol engine under same rated load?

ANS: high

Q29. Second law of thermodynamics deals with ----.

ANS: entropy

Q30. If Output = 9 kW, Input = 30 kW, Efficiency = ?

ANS: 30%

Q31. What is Break even point?

ANS: no profit and no loss

Q32. Choking in compressor means what?

ANS: fixed mass flow rate independent of the pressure ratio

Q33. Supercharging is the process of --- ?

ANS: increasing the density of the inlet charge

Q34. 1 kW-hr = ----- kJ?

ANS: 3600 kJ.

Q35. What happens if the refrigerator doors are kept open?

ANS: The room will be warmed up gradually.

Q36. In break even analysis, when does profit occurs?

ANS: sales revenue > total cost.

Q37. A body of sp.gr 7 is immersed in mercury of sp.gr 13.6. What percent of the body will be immersed in water?

ANS: 0.515

Q38. 1 tone of refrigeration is ---.

ANS: cooling effect produced when melting one tone of ice.

Q39. Why is the use of Rota meter?

ANS: Flow measurement

Q40. If we use petrol in diesel engine, what will happen?

ANS: lot of fuel will remain unburnt.

Q41. What is the unit of power?

ANS: Watt

Q42. An adiabatic compression is one in which -----.

ANS: no heat enters or leaves the system.

Q43. Pour point is

ANS: minimum temperature at which a liquid flows at set condition.

Q44. Main objective behind plant layout is ---.
a) To avoid back tracking.
b) To minimize the space occupied.

Q45. What is meant by Orifice?

ANS: Provision for flow of liquid with regulation.