

Student Name: \_\_\_\_\_ Roll No: \_\_\_\_\_

1. What is the working condition of component during defrost cycle in frost free refrigerator?

- A) Thermostat cuts off      B) Compressor is not running  
C) Relay activated      D) Evaporator fan motor is running

2. What is the revolving part of induction motor?

- A) Rotor      B) Stator  
C) Winding      D) Relay

3. What is the melting temperature of silver brazing rod?

- A) 1120 Degree F      B) 1300 Degree F  
C) 1250 Degree F      D) 1200 Degree F

4. What is the effect of contamination in refrigeration system?

- A) Low humidity      B) Poor cooling  
C) Low pressure      D) High heating

5. Which component is replaced to prevent air entering the refrigerator cabinet?

- A) Door gasket      B) Door hinges  
C) Door paint      D) Thermostat

6. What is the physical condition of refrigerant in hermetic dome of rotary compressor?

- A) LP Liquid      B) HP Vapour  
C) HP Liquid      D) LP Vapour

7. Where the refrigerant vapour is compressed in scroll compressor?

- A) Eccentric and cylinder      B) Fixed and reciprocating scroll  
C) Between fixed and orbiting scrolls      D) Crank and connecting rod

8. What is the advantage of using flux in brazing?

- A) Over heating      B) Chemical reaction  
C) Melting tubes      D) Prevent Oxidation

9. Which is connected in series with start capacitor in motor

circuit?

- A) Starting winding      B) Common terminal  
C) Running winding      D) Running Terminal

10. What is the rate of doing work?

- A) Duty      B) Velocity  
C) Power      D) Force

11. Which valve is closed during compression stroke in reciprocating compressor?

- A) Suction valve      B) Discharge valve  
C) Service valve      D) Liquid line valve

12. What is the atmospheric pressure at sea level?

- A) 1.3 Kg/cm<sup>2</sup>      B) 1.033 kg/cm<sup>2</sup>  
C) 1.6 Kg/cm<sup>2</sup>      D) 1.5 Kg/cm<sup>2</sup>

13. Which winding is made of thin wire in single phase motor?

- A) Starting      B) Series  
C) Main      D) Running

14. What is the unit of heat in M.K.S system?

- A) K.W (Kilo Watt)      B) KV (Kilo Volt)  
C) K.Cal (Kilo Calorie)      D) B.T.U (British thermal unit)

15. What is bottom dead centre in reciprocating compressor cylinder?

- A) The piston stops in cylinder at top      B) The piston starts in cylinder at top  
C) The piston moves up from the point of cylinder      D) The piston moves down from the point of cylinder

16. Which component defrosts in frost free refrigerator?

- A) Bulb      B) Thermostat  
C) Capillary tube      D) Heater

17. Which components maintain the pressure difference in RAC system?

- A) Compressor and expansion device  
B) Evaporator and motor  
C) Condenser and filter  
D) Receiver and condenser

18. Which part connects the piston with small end of connecting rod in a reciprocating compressor?

- A) Piston rings  
B) Piston bolt  
C) Piston pin  
D) Piston sleeve

19. What is top dead centre in reciprocating compressor cylinder?

- A) The piston moves up from the point of cylinder  
B) The piston moves down from the point of cylinder  
C) The piston starts in cylinder at bottom  
D) The piston stops in cylinder at bottom

20. Which factors produce work?

- A) Time and distance  
B) Force and time  
C) Force and power  
D) Force and distance

21. What is the physical state of ammonia at condenser inlet in vapour absorption system?

- A) Liquid  
B) Vapour  
C) Semi solid  
D) Solid

22. What is the method of starting a 3 phase slip ring induction motor?

- A) Adding resistance to rotor winding  
B) With starting relay  
C) With running capacitor  
D) Using starting capacitor

23. What is the use of capacitor in PSC operated induction motor?

- A) Decrease the power factor  
B) Cancel the starting torque  
C) Improve the power factor  
D) Decrease the starting torque

24. Which is used to connect the rotor bars in 3phase squirrel cage induction motor?

- A) End ring  
B) Screw  
C) Welded  
D) Nut and bolt

25. Which motor has the least starting torque?

- A) PSC  
B) CSIR  
C) RSIR  
D) CSR

26. Which type of compressor is used for domestic refrigerator?

- A) Open type compressor  
B) Centrifugal compressor  
C) Semi sealed compressor  
D) Hermetic compressor

27. Which is used to clean the condenser fins of a refrigerator?

- A) Diluted acid  
B) Fin comb  
C) Painting brush  
D) Soap solution

28. Which movement of plunger energises the start winding in relay operation?

- A) Vertically down  
B) Horizontally left  
C) Vertically up  
D) Bottom side

29. Why the top of dome is hot in a scroll compressor?

- A) Discharge plenum is at top  
B) Undercharged system  
C) Suction gas not cooled  
D) Suction super heat is less

30. Which component actuates the defrost cycle in frost free refrigerator?

- A) Relay  
B) Bimetal thermo  
C) Timer  
D) Defrost heater

31. What is the reason if refrigerator runs normally but no cooling effect?

- A) Filter block  
B) Condenser block  
C) Over charge  
D) Leakage of refrigerant

32. What is effect of compression process on refrigerant vapour?

- A) Heat the vapour below saturation  
B) Increase the pressure and temperature  
C) Decrease the pressure and temperature  
D) Cool the vapour above saturation

33. Which condition is maintained for refrigerant in high side of vapour compression system?

- A) Below its critical temperature  
B) Below its freezing temperature  
C) Above its critical temperature  
D) Above its freezing temperature

34. Which gas is used for pressure testing the compressor dome?

- A) Air  
B) Oxygen  
C) Refrigerant  
D) Nitrogen

35. What is the boiling point of pure water in centigrade scale?

- A) 0 Degree Centigrade  
B) 212 Degree Centigrade  
C) 32 Degree Centigrade  
D) 100 Degree Centigrade

36. Which component is turned off while defrost heater is energised?



**56.** Which component controls the thermostat and defrost heater in frost free refrigerator?

- A) OLP
- B) Relay
- C) Defrost timer
- D) Thermoheater

**57.** What is the absolute zero temperature in degree centigrade?

- A) -273 Degree Centigrade
- B) 0 Degree Centigrade
- C) 212 Degree Centigrade
- D) 100 Degree Centigrade

**58.** Which lubricant oil is used in swash plate of R 134a compressor?

- A) Servo 20
- B) SAE - 40
- C) POE
- D) Mineral oil

**59.** What is the purpose of accumulator in a refrigerator?

- A) Improves oil circulation
- B) Prevents liquid flood back to compressor
- C) Prevents surging of refrigerant
- D) Avoids hunting of refrigerant

**60.** Which is a positive displacement compressor?

- A) Water pump
- B) Oil pump
- C) Scroll compressor
- D) Centrifugal compressor

**61.** Which type of rotor is used in 3 Phase induction motor?

- A) Shaded pole rotor
- B) Laminated rotor
- C) Solid rotor
- D) Squirrel cage rotor

**62.** Which device protects the compressor motor from drawing more current?

- A) Door switch
- B) OLP
- C) Thermostat
- D) Relay

**63.** What is the effect of moist air present inside the hermetic system?

- A) Less wear and tear in compressor
- B) Harmful to the compressor and motor
- C) Increase the life of compressor
- D) Capacity of compressor will increase

**64.** What is the use of suction baffle in a scroll compressor?

- A) Increase noise of compressor
- B) Allow liquid to enter into compressor
- C) Reduce capacity of compressor
- D) Reduce noise of compressor

**65.** Which law is related to the constant PV at constant T?

- A) Renaults law
- B) Pascal s law
- C) Charles s law
- D) Boyles law

**66.** What is the advantage of a hermetically sealed compressor in refrigerator?

- A) Silent operation
- B) Cost is high
- C) Noise is more
- D) Easily serviceable

**67.** What is the capacity of doing work?

- A) Power
- B) Work
- C) Energy
- D) Force

**68.** How the difference between the synchronous speed and the actual rotor speed is specified?

- A) Trip
- B) Lag
- C) Slip
- D) Lead

**69.** What is the absolute pressure of gas in a cylinder, if gauge reads 135.3 p.s.i?

- A) 140 p.s.i.a
- B) 150 p.s.i.a
- C) 160 p.s.i.a
- D) 130 p.s.i.a

**70.** Which movement of the scroll compresses the low pressure vapour in scroll compressor?

- A) Reciprocating
- B) Orbital
- C) Centrifugal
- D) Rotating

**71.** How to change the direction of rotation in 3 Phase induction motor?

- A) Change the winding only
- B) Change any two phase
- C) Change all phase
- D) Change neutral

**72.** What is the equivalent absolute scale for centigrade?

- A) Rankine
- B) Fahrenheit
- C) Celsius
- D) Kelvin

**73.** Which cooling medium is used to cool the motor of a hermetic reciprocating compressor in AC?

- A) Water
- B) Discharge vapour
- C) Suction vapour
- D) Liquid refrigerant

**74.** What is the temperature maintained in the refrigerator freezer?

- A) - 15 Degree Centigrade
- B) 0 Degree Centigrade
- C) - 65 Degree Centigrade
- D) - 45 Degree Centigrade

**75.** Which device equalizes the system pressure in frost free refrigerator?

- A) Capillary tube
- B) Evaporator
- C) Compressor
- D) Condenser

**76.** What is the effect of bimetal thermo sticks in ON position in frost free refrigerator?

- A) Accumulation of frost      B) Poor cooling  
C) More cooling                  D) No cooling

- A) Relay                              B) Timer  
C) Thermostat                      D) Bimetal thermo

77. What is the reason for swash plate compressor failure in car AC?

- A) Oil level is low                  B) Oil level is medium  
C) Thermostat not working      D) Refrigerant charge normal

86. How the capacity of refrigerator is expressed?

- A) Wattage                          B) Litres  
C) Weightage                      D) Tonnage

78. What is the advantage of sealed system compared to open type system?

- A) Any refrigerant can be used      B) Mechanical efficiency is greater  
C) Cylinder lubrication is easier      D) No shaft seal is required

87. What is the temperature set in thermostat that stops the compressor motor?

- A) Cut out                          B) Differential  
C) Cut in                              D) Range

79. Which sheet is used to check the tightness of door gasket of a refrigerator?

- A) Zinc                                B) Plastic  
C) Copper                              D) Rubber

88. Which instrument is used to measure atmospheric pressure?

- A) Manometer                      B) Hygrometer  
C) Barometer                        D) Hydrometer

80. Which component switches ON/OFF the starting winding in RSIR motor?

- A) Thermostat                      B) Relay  
C) Capacitor                         D) OLP

89. What is the result if discharge reed is broken in open type compressor?

- A) More pumping                  B) Poor pumping  
C) No pumping                      D) Oil pumping

81. How the level of heat in a substance is expressed?

- A) Humidity                         B) Micron  
C) Pressure                         D) Temperature

90. What is the cut out temperature of bimetal thermo in frost free refrigerator?

- A) 5 Degree Centigrade          B) 10 Degree Centigrade  
C) 25 Degree Centigrade        D) 20 Degree Centigrade

82. What is the cause for refrigerator door gap at closing position?

- A) Uneven condenser level      B) Either side gap more  
C) Either side gap less          D) Uneven floor level

91. Which instrument is used to identify the terminals of a compressor motor?

- A) Ohm meter                        B) Anemometer  
C) Ammeter                         D) Voltmeter

83. Which type of evaporator is used in frost free refrigerator?

- A) Wire mesh                        B) Plate type  
C) Shell and tube                  D) Finned tube

92. Which two components do the compressor function in vapour absorption system?

- A) Generator and absorber      B) Generator and separator  
C) Generator and condenser      D) Generator and evaporator

84. Which winding is made of thick wire in single phase induction motor?

- A) Starting                          B) Running  
C) Additional                        D) Auxiliary

93. Which component is used in frost free refrigerator?

- A) Oil separator                      B) Timer switch  
C) Liquid receiver                  D) Plate coil evaporator

85. Which electrical control cuts off heating element in frost free refrigerator?

- A) Decrease starting torque      B) Dis connect starting winding  
C) Improve power factor          D) Increase starting torque