

Student: Pavan

Score: 55/90 (61.11%)

Code: 5233

1. Which component defrosts in frost free refrigerator?

- A) Bulb **B) Heater**
C) Thermostat D) Capillary tube (Incorrect)

2. Where the thermal bulb is fixed in frost free refrigerator?

- A) Liquid line B) Discharge line
C) Last coil of condenser **D) Last coil of evaporator (Correct)**

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

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

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

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

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

- A) Rubber **B) Plastic (Correct)**
C) Copper D) Zinc

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

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

7. What is the temperature maintained in the refrigerator freezer?

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

8. Where the manually defrosted water is stored in refrigerator?

- A) Tray on top of the compressor (Correct)** B) Bottom of the evaporator
C) Bottom of the condenser D) Top of the freezer

9. Which component is used in frost free refrigerator?

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

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

- A) OLP (Correct)** B) Relay
C) Thermostat D) Door switch

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

- A) Capillary tube (Correct)** B) Compressor
C) Condenser D) Evaporator

12. Which method of refrigeration system is adopted in frost free refrigerator?

- A) Vapour compression** B) Vapour absorption
C) Water vapour (Incorrect) D) Evacuating

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

- A) Bimetal thermo** B) Thermostat
C) Relay (Incorrect) D) Timer

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

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

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

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

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

- A) Cabinet bulb **B) Evaporator fan**
C) Thermostat sensor D) Over load protector (Incorrect)

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

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

18. Which is connected in series with start capacitor in motor circuit?

A) Starting winding (Correct)

B) Common terminal

C) Running Terminal

D) Running winding

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

A) Mechanical efficiency is greater

B) Cylinder lubrication is easier

C) Any refrigerant can be used

D) No shaft seal is required (Correct)

20. Why frost free model refrigerator takes less freezing time of products?

A) Forced air circulation (Correct)

B) Natural air circulation

C) Low temperature setting

D) High temperature setting

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

A) Leakage of refrigerant (Correct)

B) Condenser block

C) Filter block

D) Over charge

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

A) Accumulation of frost (Incorrect)

B) More cooling

C) Poor cooling

D) No cooling

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

A) High heating

B) Poor cooling (Correct)

C) Low pressure

D) Low humidity

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

A) Uneven floor level (Correct)

B) Either side gap more

C) Either side gap less

D) Uneven condenser level

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

A) Thermostat

B) Door gasket (Correct)

C) Door paint

D) Door hinges

26. Which is the hydrocarbon refrigerant?

A) R 12

B) R123

C) R 500

D) R 600a (Correct)

27. Which type of compressor is used as a vacuum pump?

A) Reciprocating

B) Centrifugal

C) Rotary (Correct)

D) Scroll

28. What is the full form of the relay - PTC?

A) Positive temperature coefficient (Correct)

B) Permanent temperature control

C) Polar terminal checking

D) Positive terminal circuit

29. Which refrigerant blend is highly flammable?

A) HCFC (Incorrect)

B) HFC

C) CFC

D) HC

30. Which part of the refrigerator cools the liquid refrigerant in capillary tube?

A) Discharge line

B) Suction line

C) Condenser (Incorrect)

D) Evaporator

31. Which type of motor drive is used in hermetic compressor in refrigerator?

A) Belt drive (Incorrect)

B) Gear drive

C) Direct drive

D) Push drive

32. What is the minimum distance to be maintained between the wall and refrigerator condenser?

A) 13 cm

B) 15 cm (Correct)

C) 18 cm

D) 22 cm

33. Which material is used to make the evaporator of refrigerator?

A) Galvanised iron

B) Stainless steel

C) Aluminium (Correct)

D) Brass

34. Which two tubes act as heat exchanger in a refrigerator?

A) Suction and charging tube

B) Discharge and suction tube

C) Capillary and suction tube (Correct)

D) Discharge and capillary tube

35. What is the name of heat carrying medium in vapour compression system?

A) Air

B) Water (Incorrect)

C) Liquid

D) Refrigerant

36. Which refrigerant is highly flammable?

A) HC - Hydro carbon (Correct)

B) HFC - Hydro fluoro carbon

C) CFC - Chloro fluoro carbon

D) HCFC - Hydro chloro fluoro carbon

37. Which component rejects the maximum heat to ambient air in refrigerator?

- A) Expansion valve
C) Condenser (Correct)
B) Compressor
D) Evaporator

38. What is the function of refrigerant fluid in a refrigerator?

- A) Releases heat inside the cabinet
C) Absorbs heat from outside the cabinet
B) Absorbs heat from inside the cabinet (Correct)
D) Absorbs heat from bottom side cabinet

39. What is the resistance level of start winding in a refrigerator's compressor motor?

- A) Medium resistance
C) Zero resistance
B) High resistance (Correct)
D) Low resistance

40. How the potential relay coil is connected internally to the relay terminals?

- A) 5 and 1
C) 5 and 2 (Correct)
B) 5 and 4
D) 2 and 4

41. Which refrigerant is used in domestic refrigerator?

- A) R 22 (Incorrect)
C) R 134 a
B) R 32
D) R 407 c

42. How the zeotropic refrigerant is taken from the cylinder for charging it into RAC system?

- A) Liquid state**
C) Vapour and liquid
B) Vapour state (Incorrect)
D) Super heated vapour

43. Which two terminals read the highest resistance while testing refrigerator compressor motor?

- A) Start and run (Correct)**
C) Start and common
B) Common and run
D) Start and compressor body

44. Which method is used to check the leakage of hydro fluoro carbon refrigerants?

- A) Electric torch
C) Sulphur candles (Incorrect)
B) Litmus paper
D) Electronic leak detector

45. Which gas is used for pressurising and testing leakage of RAC system?

- A) O₂
C) O₃
B) N₂ (Correct)
D) SO₂

46. Which process absorbs heat from the cabinet in refrigerator?

- A) Expansion
C) Evaporation (Correct)
B) Compression
D) Condensation

47. What is ensured before removing a leaky evaporator in a refrigerator?

- A) Recharge refrigerant to the system
C) Removal of the thermostat sensor
B) Check the drain tray of evaporator (Incorrect)
D) Pressurize the system with refrigerant

48. What is the fault in compressor motor if there is electrical continuity between the dome and motor terminal?

- A) Shorted run winding
C) Shorted start winding
B) Open common terminal
D) Grounded compressor motor (Correct)

49. How does the evaporator frost affect the sub zero temperature thermally in refrigerator?

- A) As conductor (Incorrect)
C) As convector
B) As insulator
D) As radiator

50. What is the reason for filter drier sweating in refrigerator?

- A) Nitrogen in the system
C) Oxygen in the system
B) Moisture in the system (Correct)
D) Oil in the system

51. Which type of compressor is used in window air conditioner?

- A) Belt drive (Incorrect)
C) Sealed type
B) Open type
D) Swash plate

52. Which type of condenser is used in window air conditioner?

- A) Fins and tube**
C) Plate and coil
B) Plate and tube
D) Bare tube (Incorrect)

53. What is the cooling capacity of 1 TR in K Cal / hr?

- A) 3000**
C) 5000
B) 4000 (Incorrect)
D) 6000

54. Which type of expansion valve is used in window air conditioner?

- A) Capillary tube (Correct)**
C) Automatic expansion valve
B) Low side float valve
D) Thermostatic expansion valve

55. Which type of evaporator is used in window air conditioner?

- A) Bare tube
C) Fins and plate
B) Plate and tube
D) Fins and tube (Correct)

56. Which material is used for making fins of condenser in a window air conditioner?

- A) Brass
B) Copper

C) Cast iron	D) Aluminium (Correct)
57. What is the cooling capacity of 0.5 TR in BTU / hr?	
A) 6000 (Correct)	B) 12000
C) 18000	D) 24000
58. 1 Which control device is used to maintain the room air temperature?	
A) OLP	B) Relay
C) Thermostat	<u>D) Selector switch (Incorrect)</u>
59. Which relay is used in capacitor start, capacitor run (CSR) compressor motor?	
A) Voltage relay	B) Current relay
C) Thermal relay	<u>D) Amperage relay (Incorrect)</u>
60. Which safety device is used for compressor motor in window air conditioner?	
A) Relay	B) Starting capacitor
C) Running capacitor	D) Over load protector (Correct)
61. Which part of window AC removes dust particles from the room air?	
A) Strainer	B) Air filter
<u>C) Filter drier (Incorrect)</u>	D) Dehydrator
62. Which capacity of fan motor is used in 1Ton window air conditioner?	
<u>A) 1/5 HP (Incorrect)</u>	B) 1/10 HP
C) 1/16 HP	D) 1/20 HP
63. Which capacitor is connected in series with starting winding of CSR motor during operation?	
A) Fan capacitor	B) Run capacitor (Correct)
C) Start capacitor	D) No capacitor is connected
64. What is the value of running capacitor used for 1.5 TR window air conditioner?	
A) 36 MFD (Correct)	B) 40 MFD
C) 80 MFD	D) 100 MFD
65. What is the value of starting capacitor used for 1TR window air conditioner?	
A) 40 MFD	B) 60 MFD
C) 80 MFD	<u>D) 100 MFD (Incorrect)</u>
66. What is the purpose of relay used in window air conditioner?	

A) Disconnect the starting capacitor (Correct)	B) Disconnect the running capacitor
C) Disconnect the fan capacitor	D) Disconnect the winding capacitor
67. Which is increased by the fins of condenser tubes in window air conditioner?	
A) Heat transfer rate (Correct)	B) Power consumption
C) Discharge pressure	D) Refrigerant flow rate
68. What is the purpose of operating the fan motor first and then the compressor motor in Air conditioners?	
<u>A) Cool the coils first by fan (Incorrect)</u>	B) Cool the compressor by fan
C) Minimise the noise of motors	D) Stop the high starting current by both motors
69. Which type of fan motor is used in window air conditioner?	
A) Three phase single shaft motor	B) Single phase single shaft motor
C) Three phase double end shaft motor	D) Single phase double end shaft motor (Correct)
70. Which winding of compressor motor is directly connected across voltage relay coil?	
A) Main winding	B) Starting winding (Correct)
C) Running winding	D) Auxiliary winding
71. Where the normally closed contacts are internally connected in voltage relay?	
A) Across 1 and 5	<u>B) Across 2 and 5 (Incorrect)</u>
C) Across 1 and 2	D) Across 2 and 4
72. Which is indicated by the arrow mark on filter drier component?	
A) Flow direction of air	B) Position of capillary tube
C) Flow direction of refrigerant	<u>D) Arrangement of desiccant and filter (Incorrect)</u>
73. What is the area of room cooled by 1ton window air conditioner?	
A) 5000 sq.ft	B) 2000 sq.ft
C) 1000 sq.ft (Correct)	D) 3000 sq.ft
74. What is the capacity of compressor motor used in 1Ton window air conditioner?	
A) 0.50 HP	B) 0.75 HP
C) 0.95 HP	<u>D) 1.00 HP (Incorrect)</u>

75. Which device is used to exhaust the room air in window AC?

- A) **Damper (Correct)**
- B) Air filter
- C) Filter drier
- D) Air washer

76. Where the filter drier is installed in window AC refrigerant circuit?

- A) Discharge line
- B) Suction line
- C) Service line
- D) **Liquid line (Correct)**

77. Which winding has high inductance value in CSR compressor motor?

- A) Common winding
- B) **Running winding (Correct)**
- C) Starting winding
- D) Auxiliary winding

78. Where the relay coil is internally connected in voltage relay?

- A) Across 1 and 2 (Incorrect)
- B) Across 5 and 1
- C) **Across 5 and 2**
- D) Across 2 and 4

79. What is the value of starting capacitor used for 1.5TR capacity window air conditioner?

- A) 40 to 60 MFD
- B) **80 to 100 MFD**
- C) 130 to 150 MFD (Incorrect)
- D) 150 to 160 MFD

80. Which stabilizer capacity is used for 1 Ton window air conditioner?

- A) 2 KVA (Incorrect)
- B) **3 KVA**
- C) 4 KVA
- D) 5 KVA

81. What is the reason for Compressor does not start ?

- A) Defective fresh air damper
- B) Defective oscillation motor
- C) Defective fan motor
- D) **Defective OLP (Correct)**

82. How to neutralise the concentration of leaked ammonia from air

- A) Recover ammonia from air
- B) **Spraying a lot of water (Correct)**
- C) Shut down the plant
- D) Spray Hydrochloric acid

83. What is the reason for excessive frost on evaporator coil in window AC?

- A) Evaporator fins not blocked by dust
- B) Blower rotating at higher speed
- C) **Air filter blocked completely (Correct)**
- D) More air circulation in evaporator

84. What is the reason for Very high condenser temperature in a window air conditioner?

- A) Water splashes condenser
- B) More air flows into the condenser
- C) Fan motor working in good condition (Incorrect)
- D) **Dust accumulated in the condenser fins**

85. What is the reason for the compressor motor burn out in a window air conditioner?

- A) Defective fan capacitor (Incorrect)
- B) Defective fan motor
- C) Defective blower
- D) **Defective OLP**

86. What is the remedy for the defective OLP in a window air conditioner?

- A) Repair the OLP (Incorrect)
- B) **Replace the OLP**
- C) Remove the parts
- D) Repair the heater element

87. What is the reason for the compressor does not start but the fan motor works normally in window AC?

- A) Defective blower
- B) Defective fan motor
- C) Defective fan capacitor
- D) **Defective compressor motor (Correct)**

88. What is the remedy to remove moisture from the window AC system?

- A) Over gas charge in the system (Incorrect)
- B) **Evacuate the system deeply**
- C) Clean the evaporator fins
- D) Clean the condenser fins

89. What is the cause of reduced supply air throw though air filter is clean in window AC?

- A) No frost in the evaporator
- B) **Frost accumulated in the evaporator (Correct)**
- C) Dust accumulated in the condenser
- D) No dust accumulated in the evaporator

90. What is the effect of sensing higher temperature by thermistor NTC?

- A) Resistance increases
- B) **Resistance decreases (Correct)**
- C) Resistance becomes zero
- D) Resistance becomes infinity