

Duration: 60 Mins

Total Marks: 200

Q.ID: ITISKILL4524WI

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

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

Answer: C) High resistance

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

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

Answer: D) Fins and tube

3. Which flame is used for welding brass?

- A) Neutral flame B) Wide flame
C) Carburising flame D) Oxidising flame

Answer: D) Oxidising flame

4. How many terminals are there in a Silicon Controlled Rectifier (SCR)?

- A) Four B) One
C) Two D) Three

Answer: D) Three

5. What is the revolving part of induction motor?

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

Answer: B) Rotor

6. Which property is desirable for an ideal refrigerant?

- A) High freezing point B) High latent heat value
C) High specify volume D) High boiling point

Answer: B) High latent heat value

7. What is the cylinder colour code of R 22 refrigerant?

- A) White B) Green
C) Orchid D) Orange

Answer: B) Green

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

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

Answer: C) Defective compressor motor

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

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

Answer: D) Slip

10. Which thermodynamic process the temperature is kept constant?

- A) Isobaric process B) Constant pressure process
C) Isothermal process D) Constant volume process

Answer: C) Isothermal process

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

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

Answer: B) Dust accumulated in the condenser fins

12. Which material is used for making zener diode?

- A) Lead B) Silicon
C) Platinum D) Titanium

Answer: B) Silicon

13. What is the absolute zero temperature in degree centigrade?

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

Answer: C) -273 Degree Centigrade

14. What is the unit of electrical energy?

- A) Volt B) Watt
C) Kilo watt hour D) Ampere

Answer: B) Watt

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

- A) 4 KVA B) 3 KVA
C) 5 KVA D) 2 KVA

Answer: B) 3 KVA

16. What is the equivalent of one micron in millimeter?

- A) 0.1 mm
- B) 0.0001 mm
- C) 0.001 mm
- D) 0.01 mm

Answer: C) 0.001 mm

17. How many hydrogen atoms are present in R 134a?

- A) Four
- B) Two
- C) Three
- D) One

Answer: B) Two

18. Which tool is used for bending, seaming and forming of sheet metal?

- A) Shear
- B) Hand vice
- C) Bench vice
- D) Stakes

Answer: D) Stakes

19. What is the ampere setting for 3.5 mm diameter electrode in welding?

- A) 50 Ampere
- B) 60 Ampere
- C) 100 Ampere
- D) 110 Ampere

Answer: D) 110 Ampere

20. What is the purpose of operating the fan motor first and then the compressor motor in Air conditioners?

- A) Cool the coils first by fan
- B) Minimise the noise of motors
- C) Cool the compressor by fan
- D) Stop the high starting current by both motors

Answer: D) Stop the high starting current by both motors

21. Which extinguishes the fire on electrical equipment?

- A) Halon
- B) Oil
- C) Foam
- D) Water

Answer: A) Halon

22. 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
- D) Discharge and capillary tube

Answer: C) Capillary and suction tube

23. Which part of window AC removes dust particles from the room air?

- A) Dehydrator
- B) Filter drier
- C) Air filter
- D) Strainer

Answer: C) Air filter

24. Which capacity of fan motor is used in 1Ton window air conditioner?

- A) 1/5 HP
- B) 1/10 HP

C) 1/20 HP

D) 1/16 HP

Answer: D) 1/16 HP

25. How the cylinders of gas welding set are secured in trolley?

- A) Using chain
- B) Tightened with rope
- C) Tied up with belt
- D) By cable

Answer: A) Using chain

26. Which instrument is used for measuring heat?

- A) Thermometer
- B) Anemometer
- C) Ammeter
- D) Calorimeter

Answer: D) Calorimeter

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

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

Answer: D) Vapour

28. What is the weld test without destroying or breaking the joint?

- A) Destructive test
- B) Magnetic test
- C) Non destructive test
- D) Radio graphic test

Answer: C) Non destructive test

29. Which device maintains a constant DC output?

- A) Load regulators
- B) Current limiters
- C) Voltage regulators
- D) Rectifier circuits

Answer: C) Voltage regulators

30. Which is the effective method for refrigerant recovery?

- A) Condensing unit
- B) Push pull recovery
- C) Use of system's compressor
- D) Charge migration

Answer: B) Push pull recovery

31. What does the number 4 of R 134a indicate?

- A) Number of carbon atoms
- B) Number of chlorine atoms
- C) Number of hydrogen atoms
- D) Number of fluorine atoms

Answer: D) Number of fluorine atoms

32. Which extinguishes the fire of flammable liquids?

- A) Water
- B) Air
- C) Oil
- D) CO₂

Answer: D) CO₂

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

- A) 0 Degree Centigrade
- B) 32 Degree Centigrade

C) 212 Degree Centigrade D) 100 Degree Centigrade

Answer: D) 100 Degree Centigrade

34. What is the category of R 290 refrigerant?

- A) Hydrocarbons B) Halocarbons
C) Azeotropes D) Organic compounds

Answer: A) Hydrocarbons

35. Which instrument is used to measure atmospheric pressure?

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

Answer: C) Barometer

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

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

Answer: B) Adding resistance to rotor winding

37. What is the angle of the tip of centre punch?

- A) 120 Degree B) 60 Degree
C) 30 Degree D) 90 Degree

Answer: D) 90 Degree

38. What is the purpose of accumulator in a refrigerator?

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

Answer: D) Prevents liquid flood back to compressor

39. What is the area of room cooled by 1ton window air conditioner?

- A) 3000 sq.ft B) 2000 sq.ft
C) 1000 sq.ft D) 5000 sq.ft

Answer: C) 1000 sq.ft

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

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

Answer: C) Air filter blocked completely

41. Why the acetylene gas is avoided with copper pipe lines or fittings in oxy-acetylene welding set?

- A) Copper is expensive B) Copper and acetylene form explosive

C) Copper is not flexible hose D) Copper pipe consumes more acetylene

Answer: B) Copper and acetylene form explosive

42. What is the reason for poor compression?

- A) Less clearance volume B) Good lubrication on the moving parts
C) Lapped valve plate and reed seat D) Scratches on the piston surface

Answer: D) Scratches on the piston surface

43. Which tool is used for tightening the odd size bolts and nuts?

- A) Nose pliers B) Adjustable spanner
C) Ring spanner D) Socket set

Answer: B) Adjustable spanner

44. What is the name of active component used in electronic circuit?

- A) TRIAC B) DIAC
C) Transistor D) SCR

Answer: C) Transistor

45. What is the barometer reading at sea level in Hg column?

- A) 740 mm B) 730 mm
C) 760 mm D) 750 mm

Answer: C) 760 mm

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

- A) 13 cm B) 18 cm
C) 15 cm D) 22 cm

Answer: C) 15 cm

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

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

Answer: B) Capillary tube

48. What are the passive components used in electronic circuits?

- A) Transformers and semiconductors B) Semi conductors and transistors
C) Transistors, diodes and SCRs D) Resistors, capacitors and inductors

Answer: D) Resistors, capacitors and inductors

49. Where the normally closed contacts are internally connected in voltage relay?

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

Answer: C) Across 1 and 2

50. What is the unit of electric current?

- A) Ohm
C) Farad
- B) Ampere
D) Volt

Answer: B) Ampere

51. What is the value of running capacitor used for 1.5 TR window air conditioner?

- A) 80 MFD
C) 100 MFD
- B) 36 MFD
D) 40 MFD

Answer: B) 36 MFD

52. What is the effect of pouring water on electrodes resistance in earth pit?

- A) Increases
C) Remains same
- B) Equalises
D) Decreases

Answer: D) Decreases

53. Which material is used for making ICs?

- A) Carbon
C) Silicon
- B) Mild steel
D) Platinum

Answer: C) Silicon

54. What is the cooling capacity of 0.5 TR in BTU / hr?

- A) 12000
C) 24000
- B) 6000
D) 18000

Answer: B) 6000

55. What is starving in extinguishing the fire?

- A) Removal of fuel
C) Stop the supply of oxygen
- B) Clearing the hazards
D) Adding fuel

Answer: A) Removal of fuel

56. Which is the welding method if the filler rod only is fused?

- A) Pressure
C) Non fusion
- B) Forge
D) Fusion

Answer: C) Non fusion

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

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

Answer: C) Defective OLP

58. Which refrigeration system works on directly by the heat energy?

- A) Jet refrigeration
C) Mechanical refrigeration
- B) Vapour absorption refrigeration
D) Vapour compression refrigeration

Answer: B) Vapour absorption refrigeration

59. What is the process involved for converting AC to DC power supply?

- A) Convection
C) Regulation
- B) Inversion
D) Rectification

Answer: D) Rectification

60. Which metal is alloyed with zinc to make brass?

- A) Bronze
C) Copper
- B) Aluminium
D) Iron

Answer: C) Copper

61. What is the rotor speed with respect to stator field speed in an induction motor?

- A) More than the stator speed
C) More than the fly wheel
- B) Equal to the stator speed
D) Less than the stator speed

Answer: D) Less than the stator speed

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

- A) Aluminium
C) Stainless steel
- B) Brass
D) Galvanised iron

Answer: A) Aluminium

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

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

Answer: D) Fins and tube

64. What is the material composition of a Tin man s solder?

- A) 50% Zinc 50% lead
C) 50% Tin 50% Bronze
- B) 50% Tin 50% Zinc
D) 50% Tin 50% lead

Answer: D) 50% Tin 50% lead

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

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

Answer: C) 80 to 100 MFD

66. Why universal numbering system is adopted for different refrigerants?

- A) Identify the systems
- B) Mixing the lubricant combination

- C) Identifying the refrigerant's names
D) Fixing the drier combination

Answer: C) Identifying the refrigerant's names

67. Which application uses the digital ICs?

- A) Logic gates
B) Voltage regulator
C) Tuned circuits
D) Amplifier

Answer: A) Logic gates

68. Which refrigerant blend is highly flammable?

- A) HC
B) CFC
C) HCFC
D) HFC

Answer: A) HC

69. Which safety device is used for compressor motor in window air conditioner?

- A) Relay
B) Starting capacitor
C) Running capacitor
D) Over load protector

Answer: D) Over load protector

70. Which law relates to voltage, current and resistance in an electrical circuit?

- A) Ohm s law
B) Lenz s law
C) Newton s law
D) Faraday s law

Answer: A) Ohm s law

71. Which valve is closed first while extinguishing flame in gas welding process?

- A) Oxygen
B) Acetylene
C) Hydrogen
D) Air

Answer: B) Acetylene

72. What is the reverse break down voltage range of zener diode?

- A) 0.5 to 1 volt
B) 0.1 to 0.5 volt
C) 3 to 18 volt
D) 1 to 3 volt

Answer: C) 3 to 18 volt

73. How many diodes are required for making a bridge rectifier circuit?

- A) One
B) Four
C) Three
D) Two

Answer: B) Four

74. What is the condition of compressor motor if Ohm meter reads infinity across common and start terminals?

- A) Starting winding shorted
B) Running winding shorted
C) Starting winding open
D) Running winding open

Answer: C) Starting winding open

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

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

Answer: D) Defective OLP

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

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

Answer: D) Moisture in the system

77. What is the colour of acetylene hose pipe in oxy - acetylene welding set?

- A) Black
B) Maroon
C) Green
D) Red

Answer: B) Maroon

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

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

Answer: C) Electronic leak detector

79. Which refrigerant is used in vapour compression cycle?

- A) Primary refrigerant
B) Water
C) Secondary refrigerant
D) Brine solution

Answer: A) Primary refrigerant

80. What is the least count of a metric micrometer?

- A) 0.1 mm
B) 0.01 mm
C) 0.001 mm
D) 000.1 mm

Answer: B) 0.01 mm

81. What is done after gas charging and pinching the process tube in refrigerator?

- A) Swaging
B) Charging
C) Flaring
D) Brazing

Answer: D) Brazing

82. What type of heat is absorbed by primary refrigerant?

- A) Sensible heat
B) Latent heat
C) Total heat
D) Specific heat

Answer: B) Latent heat

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

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

Answer: D) Suction valve

84. What is the supply voltage if a current of 2 ampere flows through 10 Ohm resistor in a circuit?

- A) 55 Volt
C) 45 Volt

- B) 20 Volt
D) 65 Volt

Answer: B) 20 Volt

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

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

Answer: C) Increase the pressure and temperature

86. Which method of welding process is suitable to nonferrous dissimilar metals?

- A) Brazing and bronze welding
C) Ultrasonic method of welding
- B) Explosion welding
D) Cold welding

Answer: A) Brazing and bronze welding

87. What is the capacity of compressor motor used in 1Ton window air conditioner?

- A) 1.00 HP
C) 0.95 HP
- B) 0.75 HP
D) 0.50 HP

Answer: B) 0.75 HP

88. Which relay is used in capacitor start, capacitor run (CSR) compressor motor?

- A) Current relay
C) Amperage relay
- B) Thermal relay
D) Voltage relay

Answer: D) Voltage relay

89. Which semiconductor material is used to make diodes?

- A) Silicon
C) Steel
- B) Aluminium
D) Copper

Answer: A) Silicon

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

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

Answer: C) Boyles law

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

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

Answer: A) Resistance decreases

92. Which tool is used for trimming the edges of a sheet metal cylinder?

- A) Scissors
B) Tube cutter

- C) Bent snips

- D) Straight snips

Answer: C) Bent snips

93. What is the value of starting capacitor used for 1TR window air conditioner?

- A) 100 MFD
C) 40 MFD
- B) 60 MFD
D) 80 MFD

Answer: D) 80 MFD

94. What is the percentage range of silver in copper to copper pipes brazing rod?

- A) 60 to 100%
C) 45 to 60%
- B) 35 to 45%
D) 20 to 35%

Answer: B) 35 to 45%

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

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

Answer: B) Liquid line

96. Which is the common terminal while Ohm meter reads AB = 10 Ohm, AC = 15 Ohm and BC = 25 Ohm if the motor terminals are A, B and C?

- A) Terminal C
C) Earth Terminal
- B) Terminal B
D) Terminal A

Answer: D) Terminal A

97. Which type of insulating material is used for making ice box to cool beverages?

- A) Tar felt
C) Glass wool
- B) Fibre glass
D) Thermocole

Answer: D) Thermocole

98. Which winding has more inductance in refrigerator compressor motor?

- A) Run
C) Common
- B) Start
D) Start and common

Answer: A) Run

99. Which substance absorbs heat and directly changes its state from solid to vapour?

- A) Ice
C) Secondary refrigerants
- B) Dry ice
D) Primary refrigerants

Answer: B) Dry ice

100. Which joint is made in either single or multi - strand conductors?

- A) Scarfed joint
C) Britannia joint
- B) Rat tail joint
D) Western union joint

Answer: B) Rat tail joint

101. What is the unit of inductance?

- A) Farad
- B) Ampere
- C) Ohm
- D) Henry

Answer: D) Henry

102. What is applied to find the leakage on acetylene gas connection?

- A) By smell
- B) Halide torch
- C) LPG torch
- D) Soap bubbles

Answer: D) Soap bubbles

103. Which type of 1-? motor has high starting torque?

- A) Induction start and induction run
- B) Capacitor start and capacitor run
- C) Resistance start induction run
- D) Permanent capacitor run

Answer: B) Capacitor start and capacitor run

104. What is the tool used for holding hot metals?

- A) Spanner
- B) Bench vice
- C) Pipe vice
- D) Tongs

Answer: D) Tongs

105. Which component secures the hose with regulator union in gas welding set?

- A) Fibre clip
- B) Iron chain
- C) Steel wire
- D) Hose clamp

Answer: D) Hose clamp

106. Which group the acetylene gas belongs?

- A) HC
- B) HFC
- C) HCFC
- D) CFC

Answer: A) HC

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

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

Answer: D) Nitrogen

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

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

Answer: A) Removal of the thermostat sensor

109. What is the effect of releasing HFC refrigerants to the atmosphere?

- A) Improve water pollution
- B) Decrease green house effect

- C) Increase ozone depleting potential
- D) Increase global warming potential

Answer: D) Increase global warming potential

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

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

Answer: B) Grounded compressor motor

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

- A) Push drive
- B) Belt drive
- C) Direct drive
- D) Gear drive

Answer: C) Direct drive

112. What is the colour of oxygen hose pipe in oxy - acetylene welding set?

- A) Green
- B) Black
- C) Maroon
- D) Red

Answer: B) Black

113. Which refrigerant is used in domestic refrigerator?

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

Answer: C) R 134 a

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

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

Answer: A) Ohm meter

115. Which is the green house gas?

- A) Chlorofluoro carbon in air
- B) Oxygen of atmospheric air
- C) Helium of atmospheric air
- D) Neon of atmospheric air

Answer: A) Chlorofluoro carbon in air

116. What is the safety device used during arc welding?

- A) Lugs for welding
- B) Screw clamp
- C) Electrode holder
- D) Hand screen

Answer: D) Hand screen

117. Which method is used to connect the swaged joint in copper tubes?

- A) Silver brazing
- B) Fusion welding
- C) TIG welding
- D) Lead soldering

Answer: A) Silver brazing

118. Which component absorbs the maximum heat from the

cabinet materials in frost free refrigerator?

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

Answer: B) Evaporator

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

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

Answer: D) Replace the OLP

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

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

Answer: C) Across 5 and 2

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

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

Answer: C) Spraying a lot of water

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

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

Answer: D) Harmful to the compressor and motor

123. What is the fault if excess deposit of tiny metal globules formed on the job surface along weld?

- A) Incomplete penetration
- B) Spatters
- C) Slag inclusion
- D) Blow hole

Answer: B) Spatters

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

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

Answer: A) Reduce noise of compressor

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

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

Answer: A) Change any two phase

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

- A) Scroll
- B) Centrifugal

- C) Reciprocating
- D) Rotary

Answer: D) Rotary

127. How to prevent the small pieces of glass wool affecting the eyes?

- A) Wearing goggles
- B) Using mask
- C) Wearing gloves
- D) Using shoes

Answer: A) Wearing goggles

128. Which refrigerant property is desirable for V.C system?

- A) Low Dielectric strength
- B) Low boiling point
- C) Corrosive to metals
- D) Low latent heat valve

Answer: B) Low boiling point

129. What is the energy of a body by virtue of its position?

- A) Electrical energy
- B) Potential energy
- C) Wind energy
- D) Kinetic energy

Answer: B) Potential energy

130. Which is indicated by the arrow mark on filter drier component?

- A) Flow direction of refrigerant
- B) Arrangement of desiccant and filter
- C) Flow direction of air
- D) Position of capillary tube

Answer: A) Flow direction of refrigerant

131. Why the filler metal does not melt and flow into the joint in bronze welding of copper?

- A) Due to excess of polished surface
- B) Excessive heating of metal surface
- C) Surface coated with oxides or oily material
- D) Excess use of flux

Answer: C) Surface coated with oxides or oily material

132. Which factors produce work?

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

Answer: C) Force and distance

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

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

Answer: D) Hermetic compressor

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

- A) Cast iron
- B) Brass
- C) Aluminium
- D) Copper

Answer: C) Aluminium

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

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

Answer: D) Compressor and expansion device

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

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

Answer: C) Silent operation

137. Which is the point angle of a twist drill used for zinc alloy?

- A) 90 Degree
- B) 125 Degree
- C) 118 Degree
- D) 100 Degree

Answer: C) 118 Degree

138. What is the use of a starting capacitor in single phase induction motor?

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

Answer: A) Increase starting torque

139. Which type of diode is used for communication circuits?

- A) Switching diode
- B) Zener diode
- C) Signal diode
- D) Rectifier diode

Answer: C) Signal diode

140. Which file is used for filing wood?

- A) Single cut file
- B) Smooth file
- C) Double cut file
- D) Rasp cut file

Answer: D) Rasp cut file

141. 1 Which control device is used to maintain the room air temperature?

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

Answer: A) Thermostat

142. What is the name of electronic circuit?

- A) Full wave rectifier
- B) Quarter wave rectifier
- C) Half wave rectifier
- D) Bridge rectifier

Answer: D) Bridge rectifier

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

- A) Releases heat inside the cabinet
- B) Absorbs heat from outside the cabinet

C) Absorbs heat from bottom side cabinet

D) Absorbs heat from inside the cabinet

Answer: D) Absorbs heat from inside the cabinet

144. What is the equivalent absolute scale for centigrade?

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

Answer: D) Kelvin

145. Which motor has the least starting torque?

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

Answer: A) RSIR

146. Which gas is universally taken as the basic reference for GWP?

- A) AIR
- B) NH₃
- C) CO₂
- D) SO₂

Answer: C) CO₂

147. What is the unit of capacitance?

- A) Ampere
- B) Coulomb
- C) Farad
- D) Volt

Answer: C) Farad

148. Which instrument is used to measure pressure on both high and low side of the system?

- A) Gauge manifold
- B) Instrument manifold
- C) Pipe manifold
- D) Pressure manifold

Answer: A) Gauge manifold

149. Which type of fan motor is used in window air conditioner?

- A) Three phase double end shaft motor
- B) Single phase double end shaft motor
- C) Three phase single shaft motor
- D) Single phase single shaft motor

Answer: B) Single phase double end shaft motor

150. Which power supply has the fixed polarity?

- A) Signal voltage
- B) Alternating current
- C) Direct current
- D) Signal ripples

Answer: C) Direct current

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

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

Answer: A) Sealed type

152. Which movement of the scroll compresses the low

pressure vapour in scroll compressor?

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

Answer: B) Orbital

153. Which property limits the flow of electrons in an electrical circuit?

- A) Voltage
- B) Current
- C) Resistance
- D) Conductance

Answer: A) Voltage

154. Which material is used for making disc in energy meter?

- A) Zinc
- B) Brass
- C) Aluminium
- D) Copper

Answer: C) Aluminium

155. What is the load resistance in an electrical circuit, if current, $I = 2$ amp and supply, $V = 10$ volt?

- A) 5 Ohms
- B) 2 Ohms
- C) 3 Ohms
- D) 4 Ohms

Answer: A) 5 Ohms

156. Which tool is used for skinning the insulation of cables and cleaning the wire surface?

- A) Electrician's knife
- B) Hacksaw
- C) Firmer chisel
- D) Combination pliers

Answer: A) Electrician's knife

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

- A) SO₂
- B) N₂
- C) O₃
- D) O₂

Answer: B) N₂

158. Which medium is used to extinguish Class - A fire?

- A) Foam
- B) Dry powder
- C) Water
- D) CO₂

Answer: C) Water

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

- A) Starting winding
- B) Auxiliary winding
- C) Running winding
- D) Common winding

Answer: C) Running winding

160. How electrons flow in a battery circuit?

- A) Negative polarity to positive polarity
- B) Positive to negative polarity
- C) Phase to earth
- D) Phase to neutral

Answer: A) Negative polarity to positive polarity

161. How the maximum reverse voltage across the diode is termed in reverse biased condition?

- A) Ripple frequency
- B) Peak inverse voltage
- C) Diode voltage
- D) Peak rectification voltage

Answer: B) Peak inverse voltage

162. What are the active components used in electronic circuits?

- A) Resistors, capacitors and inductors
- B) Transistors, diodes and SCRs
- C) Semi conductors and transformers
- D) Transformers and inductors

Answer: B) Transistors, diodes and SCRs

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

- A) Water
- B) Air
- C) Liquid
- D) Refrigerant

Answer: D) Refrigerant

164. Which tool is used for bending long sheet metal?

- A) Hand vice
- B) Shear
- C) Bench vice
- D) Folding bar

Answer: D) Folding bar

165. Which materials are used to make mallets?

- A) Wood, brass
- B) Rubber, brass
- C) Wood, cast iron
- D) Wood, rubber

Answer: D) Wood, rubber

166. Which electronic component is the voltage regulator?

- A) Diac
- B) Transistor
- C) Zener diode
- D) Triac

Answer: C) Zener diode

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

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

Answer: C) Prevent Oxidation

168. Which is increased by the fins of condenser tubes in window air conditioner?

- A) Refrigerant flow rate
- B) Power consumption
- C) Heat transfer rate
- D) Discharge pressure

Answer: C) Heat transfer rate

169. What is the cause of reduced supply air through air filter is clean in window AC?

- A) No dust accumulated in the evaporator
- B) Frost accumulated in the evaporator

- C) Dust accumulated in the condenser
D) No frost in the evaporator

Answer: B) Frost accumulated in the evaporator

170. What is smothering in fire extinguishing?

- A) Pouring of CTC
B) Use water to lower temperature
C) Flashing with dry powder
D) Cutting off oxygen supply to fire

Answer: D) Cutting off oxygen supply to fire

171. Which refrigerant is highly flammable?

- A) CFC - Chloro fluoro carbon
B) HFC - Hydro fluoro carbon
C) HCFC - Hydro chloro fluoro carbon
D) HC - Hydro carbon

Answer: D) HC - Hydro carbon

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

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

Answer: A) Piston pin

173. Which capacitor is connected in series with starting winding of CSR motor during operation?

- A) Fan capacitor
B) Start capacitor
C) Run capacitor
D) No capacitor is connected

Answer: C) Run capacitor

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

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

Answer: B) Improve the power factor

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

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

Answer: D) Evacuate the system deeply

176. Which component is used as a switching device in electronic circuit?

- A) Capacitor
B) Zener diode
C) Diode
D) SCR

Answer: D) SCR

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

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

Answer: D) Below its critical temperature

178. Which meter indicates the true power directly in an electrical circuit?

- A) Ammeter
B) Watt meter
C) Volt meter
D) Ohm meter

Answer: B) Watt meter

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

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

Answer: C) As insulator

180. What is the name of process that changes the used refrigerant to new product?

- A) Recycle
B) Reclaim
C) Recover
D) Manufacture

Answer: B) Reclaim

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

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

Answer: A) Damper

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

- A) Discharge line
B) Suction line
C) Condenser
D) Evaporator

Answer: B) Suction line

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

- A) 4000
B) 6000
C) 3000
D) 5000

Answer: C) 3000

184. What is the unit of capacitance used with single phase induction motors in domestic RAC system?

- A) Kilo ohm
B) Microfarad
C) Milli henry
D) Milli ampere

Answer: B) Microfarad

185. What is the total resistance if two resistors R1 and R2 are connected in series?

- A) $(R1 + R2)$ Ohms
B) $(R1 \times R2)$ Ohms
C) $(R1 / R2)$ Ohms
D) $(R1 - R2)$ Ohms

Answer: A) (R1 + R2) Ohms

186. Which is the inorganic refrigerant?

- A) R 630
- B) R 170
- C) R 500
- D) R 717

Answer: D) R 717

187. What is the name of joint between pieces located at right angle to each other?

- A) Grooved joint
- B) T - Joint
- C) Lap joint
- D) Butt joint

Answer: B) T - Joint

188. Which winding of compressor motor is directly connected across voltage relay coil?

- A) Main winding
- B) Auxiliary winding
- C) Starting winding
- D) Running winding

Answer: C) Starting winding

189. Which material is used to clean oil and grease on the floor?

- A) Cotton waste
- B) Air
- C) Water
- D) Saw dust

Answer: D) Saw dust

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

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

Answer: C) 150 p.s.i.a

191. What is the method of converting AC to DC power supply with two diodes and a step down transformer?

- A) Medium wave rectifier
- B) Bridge rectifier
- C) Half wave rectifier
- D) Full wave rectifier

Answer: D) Full wave rectifier

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

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

Answer: B) End ring

193. Which components are connected by metering device in vapour compression cycle?

- A) Condenser and evaporator
- B) Evaporator and suction line

C) Compressor and condenser

D) Compressor and evaporator

Answer: A) Condenser and evaporator

194. Which motor has the least starting torque?

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

Answer: B) RSIR

195. What is the purpose of relay used in window air conditioner?

- A) Disconnect the starting capacitor
- B) Disconnect the running capacitor
- C) Disconnect the winding
- D) Disconnect the fan capacitor

Answer: A) Disconnect the starting capacitor

196. What is the name of the caliper having one leg with an adjustable divider point and other leg is bent?

- A) Inside Caliper
- B) Outside caliper
- C) Spring joint caliper
- D) Jenny Caliper

Answer: D) Jenny Caliper

197. Where does the ozone layer exist in atmosphere?

- A) Exosphere
- B) Stratosphere
- C) Mesosphere
- D) Ionosphere

Answer: B) Stratosphere

198. Which is the numerical designation of ammonia refrigerant?

- A) 700 + (Molecular mass of NH₃) = 718
- B) 700 + (Molecular mass of NH₃) = 717
- C) 700 + (Molecular mass of NH₃) = 720
- D) 700 + (Molecular mass of NH₃) = 719

Answer: B) 700 + (Molecular mass of NH₃) = 717

199. How the refrigerants are classified based on heat absorption by latent and sensible heat?

- A) Primary and secondary
- B) Organic and inorganic
- C) Zeotropic and azeotropic
- D) Halocarbons and hydrocarbons

Answer: A) Primary and secondary

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

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

Answer: A) Starting