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Score: 167/200 (83.50%)

Code: 5543

1. Which instrument is used to measure atmospheric pressure?

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

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

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

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

- A) 760 mm (Correct)**
C) 740 mm
B) 750 mm
D) 730 mm

4. Which instrument is used for measuring heat?

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

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

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

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

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

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

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

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

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

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

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

10. Which thermodynamic process the temperature is kept constant?

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

11. What is the equivalent absolute scale for centigrade?

- A) Kelvin (Correct)**
C) Rankine
B) Celsius
D) Fahrenheit

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

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

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

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

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

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

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

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

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

- A) Condenser and evaporator (Correct)**
C) Evaporator and suction line
B) Compressor and condenser
D) Compressor and evaporator

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

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

18. Which factors produce work?

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

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

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

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

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

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

- A) **Piston pin (Correct)** B) Piston bolt
C) Piston rings D) Piston sleeve

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

- A) Main B) Series
C) **Starting (Correct)** D) Running

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

- A) Ammeter B) Voltmeter
C) **Ohm meter (Correct)** D) Anemometer

24. Which motor has the least starting torque?

- A) CSIR B) CSR
C) **RSIR (Correct)** D) PSC

25. Which motor has the least starting torque?

- A) CSIR B) CSR
C) **RSIR** D) PSC (Incorrect)

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

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

27. What is the revolving part of induction motor?

- A) Stator B) **Rotor (Correct)**

- C) Relay D) Winding

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

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

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

- A) Air B) Oxygen
C) **Nitrogen (Correct)** D) Refrigerant

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

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

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

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

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

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

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

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

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

- A) Reciprocating B) Centrifugal
C) Rotating D) **Orbital (Correct)**

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

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

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

- A) Lead B) Lag

- C) Slip (Correct)** D) Trip
-
37. What is the use of capacitor in PSC operated induction motor?
- A) Decrease the starting torque
B) Cancel the starting torque
C) Improve the power factor (Correct)
D) Decrease the power factor
-
38. What is the use of suction baffle in a scroll compressor?
- A) Reduce noise of compressor (Correct)**
B) Increase noise of compressor
C) Reduce capacity of compressor
D) Allow liquid to enter into compressor
-
39. What is the reason for poor compression?
- A) Less clearance volume (Incorrect)
B) **Scratches on the piston surface**
C) Lapped valve plate and reed seat
D) Good lubrication on the moving parts
-
40. What is the effect of moist air present inside the hermetic system?
- A) Capacity of compressor will increase
B) Less wear and tear in compressor
C) Harmful to the compressor and motor (Correct)
D) Increase the life of compressor
-
41. What is the unit of electric current?
- A) Ampere (Correct)**
B) Farad
C) Ohm
D) Volt
-
42. What is the unit of capacitance?
- A) Volt
B) Ampere
C) Farad (Correct)
D) Coulomb
-
43. Which tool is used for skinning the insulation of cables and cleaning the wire surface?
- A) Hacksaw
B) Firmer chisel
C) Electrician's knife (Correct)
D) Combination pliers
-
44. Which power supply has the fixed polarity?
- A) Direct current**
B) Signal voltage
C) Signal ripples
D) Alternating current (Incorrect)
-
45. What is the unit of electrical energy?
- A) Volt (Incorrect)
B) **Watt**
C) Ampere
D) Kilo watt hour

46. How electrons flow in a battery circuit?
- A) Phase to earth
B) Phase to neutral
C) Positive to negative polarity
D) Negative polarity to positive polarity (Correct)
-
47. Which material is used for making disc in energy meter?
- A) Aluminium (Correct)**
B) Copper
C) Brass
D) Zinc
-
48. Which property limits the flow of electrons in an electrical circuit?
- A) Voltage**
B) Current
C) Resistance (Incorrect)
D) Conductance
-
49. Which joint is made in either single or multi - strand conductors?
- A) Rat tail joint (Correct)**
B) Scarfed joint
C) Britannia joint
D) Western union joint
-
50. Which type of 1-? motor has high starting torque?
- A) Permanent capacitor
B) Resistance start induction run
C) Capacitor start and capacitor run (Correct)
D) Induction start and induction run
-
51. Which winding has more inductance in refrigerator compressor motor?
- A) Run**
B) Start (Incorrect)
C) Common
D) Start and common
-
52. Which meter indicates the true power directly in an electrical circuit?
- A) Ammeter
B) Ohm meter
C) Watt meter (Correct)
D) Volt meter
-
53. What is the supply voltage if a current of 2 ampere flows through 10 Ohm resistor in a circuit?
- A) 20 Volt (Correct)**
B) 45 Volt
C) 55 Volt
D) 65 Volt
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54. Which law relates to voltage, current and resistance in an electrical circuit?
- A) Ohm s law (Correct)**
B) Lenz s law
C) Newton s law
D) Faraday s law
-
55. What is the rotor speed with respect to stator field speed in an induction motor?
- A) Less than the stator speed (Correct)**
B) More than the stator speed
C) Equal to the stator speed
D) More than the fly wheel

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

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

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

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

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

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

59. What is the total resistance if two resistors R_1 and R_2 are connected in series?

- A) $(R_1 - R_2)$ Ohms
B) $(R_1 + R_2)$ Ohms (Correct)
C) $(R_1 \times R_2)$ Ohms
D) (R_1 / R_2) Ohms

60. 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 A (Correct)
B) Terminal B
C) Terminal C
D) Earth Terminal

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

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

62. What is the unit of inductance?

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

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

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

64. Which material is used for making ICs?

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

65. What is the name of electronic circuit?

- A) Bridge rectifier (Correct)
B) Half wave rectifier

- C) Full wave rectifier
D) Quarter wave rectifier

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

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

67. Which semiconductor material is used to make diodes?

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

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

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

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

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

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

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

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

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

72. Which device maintains a constant DC output?

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

73. Which electronic component is the voltage regulator?

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

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

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

75. Which material is used for making zener diode?

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

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

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

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

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

78. Which application uses the digital ICs?

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

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

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

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

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

81. Which extinguishes the fire of flammable liquids?

- A) Water
B) Air
C) **CO₂**
D) Oil (Incorrect)

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

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

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

- A) Iron
B) **Copper (Correct)**
C) Bronze
D) Aluminium

84. Which materials are used to make mallets?

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

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

- A) 90 Degree
B) 100 Degree
C) **118 Degree (Correct)**
D) 125 Degree

86. Which extinguishes the fire on electrical equipment?

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

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

- A) Bench vice
B) Hand vice
C) **Stakes (Correct)**
D) Shear

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

- A) 0.0001 mm
B) **0.001 mm (Correct)**
C) 0.01 mm
D) 0.1 mm

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

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

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

- A) 30 Degree
B) 60 Degree
C) **90 Degree (Correct)**
D) 120 Degree

91. Which file is used for filing wood?

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

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

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

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

- A) CO₂
B) Foam
C) **Water (Correct)**
D) Dry powder

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

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

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

- A) Straight snips
B) **Bent snips (Correct)**
C) Tube cutter
D) Scissors

96. What is smothering in fire extinguishing?

- A) Pouring of CTC
B) Flashing with dry powder (Incorrect)

C) Use water to lower temperature

D) Cutting off oxygen supply to fire

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

A) Pipe manifold (Incorrect)

B) Gauge manifold

C) Pressure manifold

D) Instrument manifold

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

A) Jenny Caliper (Correct)

B) Inside Caliper

C) Outside caliper

D) Spring joint caliper

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

A) 0.1 mm

B) 0.01 mm (Correct)

C) 0.001 mm

D) 000.1 mm

100. What is starving in extinguishing the fire?

A) Adding fuel

B) Removal of fuel (Correct)

C) Clearing the hazards

D) Stop the supply of oxygen

101. Which property is desirable for an ideal refrigerant?

A) High boiling point

B) High freezing point

C) High specific volume

D) High latent heat value (Correct)

102. What is the category of R 290 refrigerant?

A) Halocarbons (Incorrect)

B) Azeotropes

C) Hydrocarbons

D) Organic compounds

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

A) Total heat

B) Latent heat

C) Specific heat

D) Sensible heat (Incorrect)

104. Which is the green house gas?

A) Oxygen of atmospheric air

B) Chlorofluoro carbon in air (Correct)

C) Helium of atmospheric air

D) Neon of atmospheric air

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

A) SO_2

B) CO_2 (Correct)

C) NH_3

D) AIR

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

A) White

B) Green (Correct)

C) Orchid

D) Orange

107. Where does the ozone layer exist in atmosphere?

A) Mesosphere

B) Stratosphere (Correct)

C) Ionosphere

D) Exosphere

108. Which is the inorganic refrigerant?

A) R 170

B) R 500

C) R 630

D) R 717 (Correct)

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

A) Primary and secondary (Correct)

B) Organic and inorganic

C) Zeotropic and azeotropic

D) Halocarbons and hydrocarbons

110. Which is the numerical designation of ammonia refrigerant?

A) $700 + (\text{Molecular mass of } NH_3) = 717$ (Correct)

B) $700 + (\text{Molecular mass of } NH_3) = 718$

C) $700 + (\text{Molecular mass of } NH_3) = 719$

D) $700 + (\text{Molecular mass of } NH_3) = 720$

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

A) Number of hydrogen atoms

B) Number of chlorine atoms

C) Number of carbon atoms

D) Number of fluorine atoms (Correct)

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

A) Ice

B) Dry ice (Correct)

C) Primary refrigerants

D) Secondary refrigerants

113. Which is the effective method for refrigerant recovery?

A) Condensing unit

B) Charge migration

C) Push pull recovery (Correct)

D) Use of system's compressor

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

A) One

B) Two (Correct)

C) Four

D) Three

115. Which refrigerant is used in vapour compression cycle?

A) Secondary refrigerant

B) Primary refrigerant (Correct)

C) Brine solution

D) Water

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

A) Wearing goggles (Correct)

B) Wearing gloves

C) Using mask

D) Using shoes

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

A) Recover

B) Recycle

C) Reclaim (Correct)

D) Manufacture

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

A) Tar felt

B) Glass wool

C) Fibre glass

D) Thermocole (Correct)

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

A) Identifying the refrigerant's names (Correct)

B) Mixing the lubricant combination

C) Fixing the drier combination

D) Identify the systems

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

A) Increase global warming potential (Correct)

B) Increase ozone depleting potential

C) Decrease green house effect

D) Improve water pollution

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

A) Low boiling point (Correct)

B) Corrosive to metals

C) Low latent heat valve

D) Low Dielectric strength

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

A) Reciprocating

B) Centrifugal

C) Rotary (Correct)

D) Scroll

123. Which refrigerant blend is highly flammable?

A) HCFC

B) HFC

C) CFC

D) HC (Correct)

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

A) Discharge line

B) Suction line

C) Condenser (Incorrect)

D) Evaporator

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

A) Belt drive

B) Gear drive

C) Direct drive (Correct)

D) Push drive

126. What is the minimum distance to be maintained

between the wall and refrigerator condenser?

A) 13 cm (Incorrect)

B) 15 cm

C) 18 cm

D) 22 cm

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

A) Galvanised iron

B) Stainless steel

C) Aluminium (Correct)

D) Brass

128. 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

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

A) Air

B) Water

C) Liquid

D) Refrigerant (Correct)

130. Which refrigerant is highly flammable?

A) HC - Hydro carbon

B) HFC - Hydro fluoro carbon (Incorrect)

C) CFC - Chloro fluoro carbon

D) HCFC - Hydro chloro fluoro carbon

131. Which component absorbs the maximum heat from the cabinet materials in frost free refrigerator?

A) Condenser (Incorrect)

B) Evaporator

C) Compressor

D) Expansion valve

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

A) Releases heat inside the cabinet

B) Absorbs heat from inside the cabinet (Correct)

C) Absorbs heat from outside the cabinet

D) Absorbs heat from bottom side cabinet

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

A) Medium resistance

B) High resistance (Correct)

C) Zero resistance

D) Low resistance

134. Which refrigerant is used in domestic refrigerator?

A) R 22

B) R 32

C) R 134 a (Correct)

D) R 407 c

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

A) Electric torch

B) Litmus paper

C) Sulphur candles

D) Electronic leak detector (Correct)

C) Black

D) Red

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

A) O₂

B) N₂ (Correct)

C) O₃

D) SO₂

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

A) Recharge refrigerant to the system

B) Check the drain tray of evaporator

C) Removal of the thermostat sensor (Correct)

D) Pressurize the system with refrigerant

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

A) Shorted run winding

B) Open common terminal

C) Shorted start winding

D) Grounded compressor motor (Correct)

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

A) As conductor

B) As insulator (Correct)

C) As convector

D) As radiator

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

A) Nitrogen in the system

B) Moisture in the system (Correct)

C) Oxygen in the system

D) Oil in the system

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

A) Tongs (Correct)

B) Spanner

C) Pipe vice

D) Bench vice

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

A) Screw clamp

B) Hand screen

C) Electrode holder

D) Lugs for welding (Incorrect)

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

A) 20 to 35%

B) 35 to 45% (Correct)

C) 45 to 60%

D) 60 to 100%

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

A) Maroon (Correct)

B) Green

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

A) Maroon

B) Green

C) Black (Correct)

D) Red

146. 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 (Correct)

147. Which group the acetylene gas belongs?

A) HC (Correct)

B) HFC

C) CFC

D) HCFC

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

A) Non fusion (Correct)

B) Pressure

C) Fusion

D) Forge

149. Which flame is used for welding brass?

A) Wide flame

B) Neutral flame

C) Oxidising flame (Correct)

D) Carburising flame

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

A) Acetylene (Correct)

B) Hydrogen

C) Oxygen

D) Air

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

A) Soap bubbles

B) Halide torch (Incorrect)

C) LPG torch

D) By smell

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

A) Steel wire

B) Hose clamp (Correct)

C) Fibre clip

D) Iron chain

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

A) By cable

B) Using chain (Correct)

C) Tightened with rope

D) Tied up with belt

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

A) Flaring

B) Charging

C) Swaging (Incorrect)

D) Brazing

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

- A) Cold welding
- B) Explosion welding
- C) Brazing and bronze welding (Correct)**
- D) Ultrasonic method of welding (Incorrect)

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

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

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

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

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

- A) Copper is expensive
- B) Copper is not flexible hose
- C) Copper and acetylene form explosive (Correct)**
- D) Copper pipe consumes more acetylene

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

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

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

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

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

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

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

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

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

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

164. Which type of expansion valve is used in window air

conditioner?

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

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

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

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

- A) Brass
- B) Copper
- C) Cast iron
- D) Aluminium (Correct)**

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

- A) 6000 (Correct)**
- B) 12000
- C) 18000
- D) 24000

168. 1 Which control device is used to maintain the room air temperature?

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

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

- A) Voltage relay (Correct)**
- B) Current relay
- C) Thermal relay
- D) Amperage relay

170. 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)**

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

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

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

- A) 1/5 HP
- B) 1/10 HP (Incorrect)
- C) 1/16 HP**
- D) 1/20 HP

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

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

174. 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

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

- A) 40 MFD B) 60 MFD
C) **80 MFD** D) 100 MFD (Incorrect)

176. 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

177. 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

178. 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) Cool the compressor by fan
C) Minimise the noise of motors D) **Stop the high starting current by both motors (Correct)**

179. 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)**

180. 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

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

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

182. 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 (Correct)**

D) Arrangement of desiccant and filter

183. 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

184. 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 D) 1.00 HP (Incorrect)

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

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

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

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

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

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

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

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

189. 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 (Correct)**
C) 130 to 150 MFD D) 150 to 160 MFD

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

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

191. 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)**

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

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

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

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

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

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

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

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

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

- A) Repair the OLP
- B) Replace the OLP (Correct)**

- C) Remove the parts
D) Repair the heater element

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

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

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

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

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

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

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

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