

ITI Quiz - 10-Jun-2026

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Q. ID: ITISKILL3878QW

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Answer Key

Duration: 30 Mins

Total Marks: 78

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1. What is the reason for sweating of water on drier filter?

- A) More air flows through the evaporator
- B) Air filter blocked
- C) Partially choked drier filter
- D) Dust accumulated on condenser

Answer: C) Partially choked drier filter

2. What is the purpose of providing gas ballast in two stage rotary vacuum pump?

- A) Prevent condensation of nitrogen
- B) Avoid condensation of water vapour
- C) Prevent condensation of dry air
- D) Avoid condensation of refrigerant

Answer: B) Avoid condensation of water vapour

3. What is the cause for noise in indoor unit of a multi split air conditioner?

- A) Compressor not working
- B) Refrigerant leak
- C) Blower is loosened
- D) Running current is high

Answer: C) Blower is loosened

4. How the pressure drop of refrigerant flow is minimised during installation of indoor and outdoor units in ductable split AC?

- A) System pipes with minimum bends
- B) Install units as far as possible
- C) Pipe lines with more joints
- D) With more horizontal distance

Answer: A) System pipes with minimum bends

5. Which device equalizes the pressure between low and high side of split AC during ?OFF? cycle?

- A) Capillary tube
- B) Suction tube
- C) Copper tube
- D) Discharge tube

Answer: A) Capillary tube

6. What is the diameter of liquid line used with 5 TR if the suction line is 7/8 OD by up flow?

- A) 3/4 ?OD
- B) 1/2? OD
- C) 3/8 ? OD
- D) 5/16 ? OD

Answer: B) 1/2? OD

7. Which horizontal distance is preferred between indoor and outdoor units in ductable split AC installation?

- A) 25 meters
- B) 15 meters

- C) 12 meters
- D) 20 meters

Answer: C) 12 meters

8. Which refrigerant control is used in car AC?

- A) Automatic expansion valve
- B) Hand shut off valve
- C) Thermostatic expansion valve
- D) Thermal electric expansion valve

Answer: C) Thermostatic expansion valve

9. Where the refrigerant is stored in split AC during pump down operation?

- A) Compressor
- B) Evaporator
- C) Accumulator
- D) Condenser

Answer: D) Condenser

10. Which is the mounting location of evaporator in ductable split unit?

- A) Ceiling mounting
- B) Floor mounting
- C) Roof mounting
- D) Wall mounting

Answer: A) Ceiling mounting

11. What is the advantage of inverter split AC?

- A) Low energy efficiency
- B) High energy efficiency
- C) Eliminates compressor
- D) Current drawn is high

Answer: B) High energy efficiency

12. What is the use of anemometer?

- A) Check water flow
- B) Measure voltage
- C) Measure air flow
- D) Produce current

Answer: C) Measure air flow

13. What is the effect of longer suction and liquid piping in AC?

- A) More pressure drop
- B) Medium pressure rise
- C) Less pressure drop
- D) No pressure rise

Answer: A) More pressure drop

14. Which speed is recommended for checking optimum performance in car AC?

- A) 4600 rpm
- B) 3600 rpm
- C) 1600 rpm
- D) 2600 rpm

Answer: D) 2600 rpm

15. What is the cause of water leakage in indoor unit of multi split AC?

- A) Drain line not properly installed
- B) Over flow of water from cooling tower sump
- C) Efficient water pump
- D) Condenser water pump defective

Answer: A) Drain line not properly installed

16. What is the use of magnetic clutch in Car AC?

- A) Control ON/OFF for compressor
- B) Indicate liquid level in the compressor
- C) Indicate oil level in the compressor
- D) Add oil in the system

Answer: A) Control ON/OFF for compressor

17. Which valve helps to attend mechanical faults without wasting the gas in split AC?

- A) Gate valve
- B) Service valve
- C) Expansion valve
- D) Float valve

Answer: B) Service valve

18. What is the reason for air conditioner running continuously but no cooling effect ?

- A) Refrigerant is more
- B) Condensation poor
- C) Over charged oil
- D) Refrigerant leaked

Answer: D) Refrigerant leaked

19. What is the function of starting capacitor in CSIR motor?

- A) Gives running torque
- B) Gives initial torque
- C) Improves energy efficiency
- D) Corrects power factor

Answer: B) Gives initial torque

20. What is ensured before starting a vacuum pump?

- A) Correct oil level
- B) Available ac power supply
- C) Weight of vacuum pump
- D) Capacity of the pump

Answer: A) Correct oil level

21. Which insulating material is used in duct work?

- A) Wood
- B) Rubber
- C) Glass wool
- D) Plastic

Answer: C) Glass wool

22. Which type fan blade is used with out door unit of split AC?

- A) Vane
- B) Propeller
- C) Centrifugal
- D) Guide vane

Answer: B) Propeller

23. What is indicated by the bubbles in car AC's sight glass?

- A) Shortage of refrigerant
- B) Poor compression

- C) Excess of refrigerant
- D) Pressure of air

Answer: A) Shortage of refrigerant

24. Which causes the clogged orifice in TEV of car AC system?

- A) Nitrogen
- B) Non condensable gases
- C) Moisture
- D) Oxygen

Answer: C) Moisture

25. Which safety control is electrically connected in series with magnetic clutch of compressor in car AC?

- A) EEV
- B) HPC
- C) AEV
- D) TEV

Answer: B) HPC

26. Which material is used for making service valve?

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

Answer: B) Brass

27. What is the test pressure of cooling coils during manufacture?

- A) 350 psig
- B) 250 psig
- C) 450 psig
- D) 150 psig

Answer: A) 350 psig

28. What is the cause of reduction in fan's air flow?

- A) Refrigerant under charge
- B) Supply voltage is normal
- C) Fan capacitor is weak
- D) Leak in the system

Answer: C) Fan capacitor is weak

29. Which device switches ON/OFF the car AC compressor?

- A) Blower unit
- B) Crank shaft
- C) Magnetic clutch
- D) Rotor winding

Answer: C) Magnetic clutch

30. How long the filter drier unit is used in car AC?

- A) 2 years
- B) 1 year
- C) 4 years
- D) 3 years

Answer: D) 3 years

31. What is the reason for poor cooling effect in multi split air conditioner?

- A) Dirty air filter
- B) Efficient compressor
- C) Good insulation
- D) Proper condensation

Answer: A) Dirty air filter

32. What is the cooling capacity for 1.5 Ton of ductable split air conditioner?

- A) 5000 Kcal/hr
- B) 3500 Kcal/hr

C) 4500 Kcal/hr D) 4000 Kcal/hr

Answer: C) 4500 Kcal/hr

33. Which motor is used to drive the condenser fan of outdoor unit in ductable split air conditioner?

- A) Capacitor start capacitor run motor B) Permanent split motor (PSC)
C) Three phase induction motor D) Shaded pole motor

Answer: B) Permanent split motor (PSC)

34. Which motor is used to drive the blower of indoor unit in ductable split air conditioners?

- A) Permanent split capacitor motor B) Capacitor start capacitor run motor
C) Three phase induction motor D) Shaded pole motor

Answer: A) Permanent split capacitor motor

35. Which device engages the compressor shaft in car AC?

- A) Electro magnetic clutch B) Thermo switch
C) Over load protector D) Car engine pulley

Answer: A) Electro magnetic clutch

36. Which material is used to make ducts in split AC?

- A) GI sheet B) Fibre
C) Thermocole D) Wood

Answer: A) GI sheet

37. Where the filter drier is installed in a car AC system?

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

Answer: C) Liquid line

38. Which is the source of drive for compressor shaft in car AC?

- A) Engine shaft B) Condenser fan
C) Blower fan D) Magnetic clutch

Answer: A) Engine shaft

39. What is the effect on defective thermostat sensor in split AC?

- A) Unit consumes less power B) Increases super heat
C) Relay malfunctions D) AC unit runs continuously

Answer: D) AC unit runs continuously

40. How many fan motors are used in split AC?

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

Answer: D) Two

41. Which component belongs to outdoor unit of split AC?

- A) Compressor B) Air filter
C) Evaporator coil D) Blower

Answer: A) Compressor

42. What is the maximum TR capacity operated with Single phase AC supply?

- A) 1.00 TR B) 2.0 TR
C) 1.5 TR D) 5 TR

Answer: B) 2.0 TR

43. Why CFC 12 system is replaced by HFC 134a system in car AC?

- A) GWP becomes zero B) ODP becomes zero
C) Increase ODP D) Increase GWP

Answer: B) ODP becomes zero

44. What is the cause for noisy fan motor in outdoor unit of split AC?

- A) Motor Burnt B) Bearing worn out
C) Blade bent D) Shaft struck

Answer: B) Bearing worn out

45. Which bearing is used in condenser motor of outdoor unit in ductable multi split air conditioner?

- A) Open ball bearing B) Thrust bearing
C) Sleeve bearing D) Ball bearing

Answer: C) Sleeve bearing

46. What is the velocity range of air circulated in car AC?

- A) 9 - 10 m / sec B) 5 - 7 m / sec
C) 7 - 9 m / sec D) 2 - 3 m / sec

Answer: D) 2 - 3 m / sec

47. Which type of fan blade is used with indoor unit?

- A) Guide vane B) Vane|
C) Blower D) Axial

Answer: C) Blower

48. Which bearing is used in blower motor of indoor unit in ductable split air conditioner?

- A) Sleeve bearing B) Open ball bearing
C) Thrust bearing D) Ball bearing

Answer: A) Sleeve bearing

49. What is the effect of operating the compressor under 5 of Hg vacuum during pump down process?

- A) Prevent motor damage in dome B) Prevent piston damage
C) Prevent leakage in service valve D) Pumps oil to condenser

Answer: D) Pumps oil to condenser

50. What are the multi speed of blower motor used in indoor unit of ductable split air conditioner?

- A) Low - 900 rpm, medium - 950rpm, high - 1100 rpm B) Low - 800 rpm, medium - 850rpm, high - 920 rpm
C) Low -1000 rpm, medium -1200rpm, high -1350 rpm D) Low - 500 rpm, medium - 550rpm, high - 720 rpm

Answer: B) Low - 800 rpm, medium - 850rpm, high - 920 rpm

51. What is the differential of control switch if it cuts in at 29 kg/cm² and cuts out at 34 kg/cm²?

- A) 10 kg / cm² B) 5 kg / cm²
C) 20 kg / cm² D) 15 kg / cm²

Answer: B) 5 kg / cm²

52. Which control opens the compressor motor circuit in the event of continuous overload?

- A) Fusible plug B) Bimetal strip
C) Spring loaded relief valve D) Thermostat

Answer: B) Bimetal strip

53. Which is sensed by TEV in response to heat load variation?

- A) Evaporating temperature B) Super heat in suction line
C) Sub cool in liquid line D) Discharge temperature

Answer: B) Super heat in suction line

54. Which fan motor speed is used with outdoor unit in split AC?

- A) Single speed B) Triple speed
C) Double speed D) Five speed

Answer: A) Single speed

55. What is the effect of increased out door temperature in car AC?

- A) Compressor runs less time B) Performance remains the same
C) Compressor runs more time D) Performance increases

Answer: C) Compressor runs more time

56. What type of compressor motor is used in inverter split AC?

- A) Variable speed motor B) Centrifugal compressor motor
C) Open type compressor motor D) Constant speed compressor motor

Answer: A) Variable speed motor

57. What is the function of remote control in split AC?

- A) Drain water control B) Transmits signal to operate AC
C) Pressure setting D) Humidity setting

Answer: B) Transmits signal to operate AC

58. What is ensured before mounting condenser in car AC?

- A) Condenser bottom line to discharge line B) Accessibility for future service
C) Condenser top line to TEV inlet D) Condenser in line with car radiator

Answer: B) Accessibility for future service

59. Which part of the compressor converts rotary into reciprocating motion of piston in car AC?

- A) Connecting rod B) Magnetic clutch
C) Crank shaft D) Swash plate

Answer: D) Swash plate

60. What is the reason for no cooling effect in car AC?

- A) Air in the system B) Moisture in the system
C) Refrigerant leaked D) Excess of refrigerant

Answer: C) Refrigerant leaked

61. What is the reason for poor condensation in split AC?

- A) Blower motor failure B) High ambient temperature
C) Condenser tube leaky D) Low ambient temperature

Answer: B) High ambient temperature

62. What is the advantage of multi split air conditioners?

- A) two outdoor units for one indoor unit B) Several outdoor units for one indoor unit
C) One outdoor unit for several indoor units D) One outdoor unit for one indoor unit

Answer: C) One outdoor unit for several indoor units

63. Which fan is used in condensing unit of ductable split air conditioner?

- A) Centrifugal fan B) Radial fan
C) Forward curved fan D) Propeller fan

Answer: D) Propeller fan

64. How many speed selection is used with indoor air blower in ductable multi split AC?

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

Answer: C) Three - speed

65. What tonnage capacity of split AC unit uses 150/200 MFD starting capacitor?

- A) 1 TR B) 1.5 TR
C) 2.5 TR D) 2.0 TR

Answer: D) 2.0 TR

66. Which process is done first in split AC for shifting from one place to another?

- A) Evacuation
- B) Flushing
- C) Pump down
- D) Vacuumisation

Answer: C) Pump down

67. What type of material is used to support the tubes on both sides of air cooled condenser?

- A) Copper sheets
- B) Aluminium sheets
- C) Galvanised iron sheets
- D) Mild steel sheet

Answer: C) Galvanised iron sheets

68. Which level of vacuum is required before charging HFC 134a in car AC?

- A) 500 micron
- B) 200 micron
- C) 400 micron
- D) 300 micron

Answer: B) 200 micron

69. What is the advantage of periodical cleaning of air filter?

- A) Decrease the cooling capacity
- B) Increase the speed of fan motor
- C) Decrease the volume of air handling
- D) Increase the cooling capacity

Answer: D) Increase the cooling capacity

70. Which control switch is connected in series with magnetic clutch in Car AC wiring?

- A) Thermostat control
- B) Automatic expansion valve
- C) Piston pin
- D) Thermostatic expansion valve

Answer: A) Thermostat control

71. Which part of car AC compressor actuates the piston directly?

- A) Blower unit
- B) Swash plate
- C) Rotor and stator
- D) Crank shaft and connecting rod

Answer: B) Swash plate

72. Which is the accurate method of refrigerant charging in

car AC?

- A) Weighing method
- B) Sight glass bubbles method
- C) Suction pressure method
- D) Dial a charge method

Answer: A) Weighing method

73. Which type of switch is used to control the room air temperature in split AC?

- A) Thermal relay
- B) Thermostat switch
- C) Manual switch
- D) Over load protector

Answer: B) Thermostat switch

74. What is the test pressure of condenser coils during manufacture?

- A) 250 psig
- B) 350 psig
- C) 450 psig
- D) 150 psig

Answer: B) 350 psig

75. Why the idler pulley is used in belt driven car AC?

- A) Increase the belt tension
- B) Decrease the belt vibration
- C) Increase the feathering
- D) Decrease the belt tension

Answer: B) Decrease the belt vibration

76. Which component belongs to indoor unit of split AC?

- A) Compressor
- B) Evaporator
- C) Drier
- D) Condenser

Answer: B) Evaporator

77. Where the liquid refrigerant is stored in multi split Air-conditioner during pump down operation?

- A) Condenser
- B) Evaporator
- C) Liquid receiver
- D) Accumulator

Answer: A) Condenser

78. What is the advantage of ductable air conditioner over window air conditioner?

- A) Noisy operation
- B) Needs more space
- C) Silent operation
- D) Higher cost

Answer: C) Silent operation