

ITI Quiz - 10-Jun-2026

09:01 AM

Q. ID: ITISKILL0350BE

June 2026

Answer Key

Duration: 30 Mins

Total Marks: 78

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

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

Answer: D) Dirty air filter

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

- A) Poor compression
- B) Shortage of refrigerant
- C) Excess of refrigerant
- D) Pressure of air

Answer: B) Shortage of refrigerant

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

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

Answer: C) Gives initial torque

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

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

Answer: A) Avoid condensation of water vapour

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

- A) 4500 Kcal/hr
- B) 4000 Kcal/hr
- C) 3500 Kcal/hr
- D) 5000 Kcal/hr

Answer: A) 4500 Kcal/hr

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

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

Answer: C) Two

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

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

Answer: C) Compressor

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

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

Answer: D) Permanent split motor (PSC)

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

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

Answer: B) 5 kg / cm²

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

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

Answer: A) Engine shaft

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

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

Answer: A) Pump down

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

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

Answer: C) Thermostat control

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

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

Answer: A) Moisture

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

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

Answer: A) Electro magnetic clutch

15. What is the effect of longer suction and liquid piping in

AC?

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

Answer: D) More pressure drop

16. What is ensured before starting a vacuum pump?

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

Answer: B) Correct oil level

17. 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) ow - 500 rpm, medium - 550rpm, high - 720 rpm
- C) Low -1000 rpm, medium -1200rpm, high -1350 rpm
- D) Low - 800 rpm, medium - 850rpm, high - 920 rpm

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

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

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

Answer: D) Evaporator

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

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

Answer: D) Increase the cooling capacity

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

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

Answer: A) Ceiling mounting

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

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

Answer: A) 350 psig

22. Which insulating material is used in duct work?

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

Answer: D) Glass wool

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

- A) Over flow of water from cooling tower sump
- B) Condenser water pump defective

- C) Drain line not properly installed
- D) Efficient water pump

Answer: C) Drain line not properly installed

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

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

Answer: D) Swash plate

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

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

Answer: C) 350 psig

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

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

Answer: D) Liquid line

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

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

Answer: A) 1/2? OD

28. What is the use of anemometer?

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

Answer: C) Measure air flow

29. Which refrigerant control is used in car AC?

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

Answer: A) Thermostatic expansion valve

30. Which is the accurate method of refrigerant charging in car AC?

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

Answer: B) Weighing method

31. 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 leakage in service valve
- C) Pumps oil to condenser
- D) Prevent piston damage

Answer: C) Pumps oil to condenser

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

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

Answer: D) AC unit runs continuously

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

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

Answer: A) Sleeve bearing

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

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

Answer: B) Permanent split capacitor motor

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

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

Answer: C) 200 micron

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

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

Answer: D) 2.0 TR

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

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

Answer: B) High ambient temperature

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

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

Answer: C) Condenser

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

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

Answer: B) Blower

40. 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

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

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

Answer: A) 3 years

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

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

Answer: A) Three - speed

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

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

Answer: C) Partially choked drier filter

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

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

Answer: D) 2.0 TR

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

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

Answer: D) Refrigerant leaked

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

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

Answer: D) One outdoor unit for several indoor units

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

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

Answer: D) Galvanised iron sheets

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

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

Answer: B) 2600 rpm

49. What is the advantage of inverter split AC?

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

Answer: D) High energy efficiency

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

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

Answer: B) Service valve

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

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

Answer: C) Compressor runs more time

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

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

Answer: C) Propeller fan

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

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

Answer: B) Sleeve bearing

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

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

Answer: B) Swash plate

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

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

Answer: C) Control ON/OFF for compressor

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

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

Answer: A) Decrease the belt vibration

57. Which horizontal distance is preferred between indoor

and outdoor units in ductable split AC installation?

- A) 20 meters B) 15 meters
- C) 25 meters D) 12 meters

Answer: D) 12 meters

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

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

Answer: B) Magnetic clutch

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

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

Answer: D) Accessibility for future service

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

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

Answer: B) Refrigerant leaked

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

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

Answer: B) Capillary tube

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

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

Answer: A) 2 - 3 m / sec

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

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

Answer: B) Bearing worn out

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

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

Answer: A) Single speed

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

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

Answer: C) Condenser

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

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

Answer: A) Blower is loosened

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

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

Answer: A) Transmits signal to operate AC

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

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

Answer: B) System pipes with minimum bends

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

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

Answer: D) Thermostat switch

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

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

Answer: A) GI sheet

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

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

Answer: B) HPC

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

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

Answer: D) Variable speed motor

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

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

Answer: A) Super heat in suction line

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

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

Answer: B) Propeller

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

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

Answer: D) Fan capacitor is weak

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

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

Answer: B) Bimetal strip

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

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

Answer: B) Silent operation

78. Which material is used for making service valve?

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

Answer: D) Brass