

Duration: 60 Mins

Total Marks: 50

ID: ITISKILL06900E

Student Name: _____	Roll No: _____
---------------------	----------------

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

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

- A) Wire mesh B) Plate type
C) Finned tube D) Shell and tube

2. Which cooling medium is used to cool the motor of a hermetic reciprocating compressor in AC?

- A) Liquid refrigerant B) Water
C) Discharge vapour D) Suction vapour

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

- A) Evaporator B) Capillary tube
C) Condenser D) Compressor

3. 1 Which control device is used to maintain the room air temperature?

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

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

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

4. Which lubricant oil is used in swash plate of R 134a compressor?

- A) SAE - 40 B) Mineral oil
C) POE D) Servo 20

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8. What is the unit of heat in M.K.S system?

- A) K.W (Kilo Watt) B) K.Cal (Kilo Calorie)
C) B.T.U (British thermal unit) D) KV (Kilo Volt)

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

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

9. Which type of evaporator is used in frost free refrigerator?

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

- A) 80 MFD
- C) 40 MFD

- B) 100 MFD
- D) 36 MFD

18. What is the reason for poor compression?

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

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

- A) Thermostat
- C) Door hinges
- B) Door gasket
- D) Door paint

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

- A) Either side gap less
- C) Either side gap more
- B) Uneven floor level
- D) Uneven condenser level

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

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

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

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

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

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

24. Which factors produce work?

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

25. Which motor has the least starting torque?

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

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

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

27. What is bottom dead centre in reciprocating compressor cylinder?

- A) The piston stops in cylinder at top
- C) The piston moves up from the point of cylinder

- B) The piston starts in cylinder at top
- D) The piston moves down from the point of cylinder

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

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

29. Which instrument is used for measuring heat?

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

30. Which is a positive displacement compressor?

- A) Water pump
- C) Centrifugal compressor
- B) Scroll compressor
- D) Oil pump

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

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

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

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

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

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

34. What is the melting temperature of silver brazing rod?

- A) 1120 Degree F
- C) 1200 Degree F
- B) 1250 Degree F
- D) 1300 Degree F

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

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

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

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

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

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

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

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

39. Which component is used in frost free refrigerator?

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

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

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

41. What is the rate of doing work?

- A) Velocity
- B) Duty
- C) Force
- D) Power

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

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

43. What is the atmospheric pressure at sea level?

- A) 1.3 Kg/cm^2
- B) 1.6 Kg/cm^2
- C) 1.5 Kg/cm^2
- D) 1.033 kg/cm^2

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

- A) Vane
- B) Centrifugal

C) Propeller

D) Guide vane

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

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

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

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

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

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

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

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

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

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

50. Which is disconnected by centrifugal switch is RSIR motor?

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