

Duration: 60 Mins

Total Marks: 25

ID: ITISKILL26648N

Student Name: _____ Roll No: _____

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

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

C) Starting

D) Running

2. Where the refrigerant vapour is compressed in scroll compressor?

- | | |
|-----------------------------------|---------------------------------------|
| A) Fixed and reciprocating scroll | B) Eccentric and cylinder |
| C) Crank and connecting rod | D) Between fixed and orbiting scrolls |

9. Why the top of dome is hot in a scroll compressor?

- | | |
|-------------------------------|---------------------------|
| A) Discharge plenum is at top | B) Suction gas not cooled |
| C) Suction super heat is less | D) Undercharged system |

3. Which motor has the least starting torque?

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

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

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

4. What is the reason for swash plate compressor failure in car AC?

- | | |
|------------------------|------------------------------|
| A) Oil level is medium | B) Refrigerant charge normal |
| C) Oil level is low | D) Thermostat not working |

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

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

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

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

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

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

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

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

13. Which winding is made of thick wire in single phase induction motor?

- | | |
|--------------|---------------|
| A) Auxiliary | B) Running |
| C) Starting | D) Additional |

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

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

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

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

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

- | | |
|-----------|---------|
| A) Series | B) Main |
|-----------|---------|

15. Which capacitor is disconnected by relay in capacitor start and induction run motor?

- | | |
|-----------------------|--------------------------------------|
| A) Boosting capacitor | B) Starting capacitor |
| C) Running capacitor | D) Power factor correction capacitor |

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

- A) Easily serviceable B) Noise is more
C) Cost is high D) Silent operation
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17. Which instrument is used to identify the terminals of a compressor motor?

- A) Ammeter B) Voltmeter
C) Ohm meter D) Anemometer
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18. What is the reason for poor compression?

- A) Scratches on the piston surface B) Lapped valve plate and reed seat
C) Good lubrication on the moving parts D) Less clearance volume
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19. Which movement of the scroll compresses the low pressure vapour in scroll compressor?

- A) Orbital B) Centrifugal
C) Reciprocating D) Rotating
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20. Which motor has the least starting torque?

- A) PSC B) CSR
C) CSIR D) RSIR
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21. What is the formula to find out the synchronous speed of induction motor?

- A) $N_s = (120P/f)$ B) $N_s = (150P/f)$
C) $N_s = (120f/P)$ D) $N_s = (150f/P)$
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22. Which type of rotor is used in 3 Phase induction motor?

- A) Solid rotor B) Laminated rotor
C) Squirrel cage rotor D) Shaded pole rotor
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23. What is the use of suction baffle in a scroll compressor?

- A) Allow liquid to enter into compressor B) Reduce capacity of compressor
C) Increase noise of compressor D) Reduce noise of compressor
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24. What is the revolving part of induction motor?

- A) Rotor B) Stator
C) Relay D) Winding
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25. Which valve is closed during compression stroke in reciprocating compressor?

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