

Duration: 60 Mins

Total Marks: 25

ID: ITISKILL26648N

Student Name: _____ Roll No: _____

1. What is the reason for poor compression?

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

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

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

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

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

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

- | | |
|---------------------|-----------------------|
| A) Silent operation | B) Easily serviceable |
| C) Noise is more | D) Cost is high |

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

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

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

- | | |
|-------------|-----------|
| A) Starting | B) Series |
| C) Running | D) Main |

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

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

8. What is the use of suction baffle in a scroll compressor?

- | | |
|---------------------------------|----------------------------------|
| A) Increase noise of compressor | B) Reduce capacity of compressor |
|---------------------------------|----------------------------------|

- | | |
|------------------------------------------|-------------------------------|
| C) Allow liquid to enter into compressor | D) Reduce noise of compressor |
|------------------------------------------|-------------------------------|

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

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

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

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

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

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

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

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

13. What is the revolving part of induction motor?

- | | |
|-----------|------------|
| A) Rotor | B) Relay |
| C) Stator | D) Winding |

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

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

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

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

16. Which motor has the least starting torque?

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

17. What is the formula to find out the synchronous speed of induction motor?

- A) $N_s = (120f/P)$
C) $N_s = (120P/f)$
- B) $N_s = (150f/P)$
D) $N_s = (150P/f)$

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

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

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

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

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

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

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

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

22. Which motor has the least starting torque?

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

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

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

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

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

25. Which type of rotor is used in 3 Phase induction motor?

- A) Squirrel cage rotor
C) Laminated rotor
- B) Solid rotor
D) Shaded pole rotor