

ITI Quiz - 21-Apr-2026

03:16 PM

Q. ID: ITISKILL355085

April 2026

Answer Key

Duration: 30 Mins

Total Marks: 34

Q.ID: ITISKILL355085

1. What is the physical condition of refrigerant in hermetic dome of rotary compressor?

- A) LP Vapour
- B) LP Liquid
- C) HP Vapour
- D) HP Liquid

Answer: C) HP Vapour

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

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

Answer: D) Starting capacitor

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

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

Answer: B) Suction vapour

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

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

Answer: A) $N_s = (120f/P)$

5. What is the use of a starting capacitor in single phase induction motor?

- A) Increase starting torque
- B) Dis connect starting winding
- C) Decrease starting torque
- D) Improve power factor

Answer: A) Increase starting torque

6. Which is a positive displacement compressor?

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

Answer: D) Scroll compressor

7. Which motor has the least starting torque?

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

Answer: D) RSIR

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

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

Answer: D) Ohm meter

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

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

Answer: D) Nitrogen

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

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

Answer: C) Between fixed and orbiting scrolls

11. How to change the direction of rotation in 3 Phase induction motor?

- A) Change the winding only
- B) Change neutral
- C) Change any two phase
- D) Change all phase

Answer: C) Change any two phase

12. 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

Answer: D) Reduce noise of compressor

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

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

Answer: B) Oil level is low

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

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

Answer: B) Orbital

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

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

Answer: C) Starting

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

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

Answer: C) Running

17. Which motor has the least starting torque?

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

Answer: B) RSIR

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

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

Answer: C) Suction valve

19. What is the method of starting a 3 phase slip ring induction motor?

- A) With starting relay
C) Adding resistance to rotor winding
B) With running capacitor
D) Using starting capacitor

Answer: C) Adding resistance to rotor winding

20. What is the cause for frequent tripping of circuit breaker while starting a single phase motor?

- A) Motor belt removed
C) No load on the motor
B) Winding open
D) Winding short

Answer: D) Winding short

21. What is the revolving part of induction motor?

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

Answer: D) Rotor

22. What is the reason for poor compression?

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

Answer: A) Scratches on the piston surface

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

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

Answer: B) Discharge plenum is at top

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

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

Answer: B) Hermetic compressor

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

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

Answer: D) Harmful to the compressor and motor

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

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

Answer: D) Slip

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

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

Answer: A) POE

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

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

Answer: B) Improve the power factor

29. Which is used to connect the rotor bars in 3phase squirrel cage induction motor?

- A) Welded
C) Nut and bolt
B) Screw
D) End ring

Answer: D) End ring

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

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

Answer: C) Silent operation

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

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

Answer: B) Piston pin

32. Which is disconnected by centrifugal switch is RSIR

motor?

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

Answer: C) Starting winding

33. What is the temperature set in thermostat that stops the compressor motor?

- A) Cut out
- B) Differential

C) Cut in

D) Range

Answer: A) Cut out

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

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

Answer: A) Squirrel cage rotor