

Code No: 54012

Set No. 1

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

II B.Tech. II Sem., II Mid-Term Examinations, April – 2014

ELECTRICAL MACHINES-II

Objective Exam

Name: _____ **Hall Ticket No.**

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I Choose the correct alternative:

1. In a 3- phase induction motor, the rotor speed is _____ the synchronous speed []
A) smaller than B) greater than C) equal to D) none of the above
2. The full load slip of the 3 – phase induction motor ranges from []
A) 10 % to 20 % B) 20% to 30% C) 2% to 5% D) none of the above
3. The torque characteristics of the 3 – phase induction motor is similar to that of []
A) d.c series motor B) d.c shunt motor
C) d.c differential compound motor D) d.c cumulative compound motor
4. In an Induction Motor if the number of stator teeth = number of rotor teeth , then which of the phenomenon occurs: []
A) Cogging B) Locking C) Crawling D) Skewing
5. Which of the following supply is given to the rotor winding of 3-Phase Induction Motor: []
A) AC supply B) Pulsating supply C) DC supply D) No Supply
6. The conditions of induction motor at standstill resemble those of a transformer whose secondary is []
A) Open circuited B) short circuited C) supplying a variable resistive load D) none of the above
7. Which of the following starting method is not preferred for starting large Induction Motors []
A) Line Resistance Starting B) Auto-Transformer Starting C) Star-Delta Starting D) DOL starter
8. Induction Motor if runs above Synchronous Speed runs as []
A) Synchronous Motor B) Induction Reactor C) Induction Generator D) Synchronous Generator
9. The complete circle diagram of induction motor can be drawn with the help of data found from []
A) No load test B) Blocked rotor test C) stator resistance test D) all the above
10. The reactance of the rotor circuit of the 3 – phase induction motor is maximum at []
A) starting B) no load C) half full load D) full load

Cont.....2

II Fill in the blanks:

11. At no load the rotor core losses of a 3 – phase induction motor is _____
12. If the slip of a 3 – phase induction motor is increased, the p.f of the rotor circuit _____.
13. If a 4 pole induction motor has a synchronous speed of 1500 rpm then supply frequency is _____
14. For _____ type of 3-Phase induction Motor external resistor circuit is required in rotor during starting of the motor
15. If the supply voltage of a 3-Phase induction Motor is increased 2 times, then torque is _____
16. The relation among the synchronous speed (N_s), rotor speed (N) and slip (s) is _____
17. When a 3 – phase induction motor is blocked, the slip is _____
18. If the 3 – phase induction motor is running at slip s , then rotor copper losses is equal to _____ X rotor input
19. Crawling occurs in Induction Motor due to _____
20. If the frequency of 3-phase supply to the stator of 3-phase induction motor is increased, then synchronous speed is _____

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Set No. 2

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Objective Exam

Name: _____ **Hall Ticket No.**

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I Choose the correct alternative:

1. In an Induction Motor if the number of stator teeth = number of rotor teeth , then which of the phenomenon occurs: []
A) Cogging B) Locking C) Crawling D) Skewing
2. Which of the following supply is given to the rotor winding of 3-Phase Induction Motor: []
A) AC supply B) Pulsating supply C) DC supply D) No Supply
3. The conditions of induction motor at standstill resemble those of a transformer whose secondary is []
A) Open circuited B) short circuited C) supplying a variable resistive load D) none of the above
4. Which of the following starting method is not preferred for starting large Induction Motors []
A) Line Resistance Starting B) Auto-Transformer Starting C) Star-Delta Starting D) DOL starter
5. Induction Motor if runs above Synchronous Speed runs as []
A) Synchronous Motor B) Induction Reactor C) Induction Generator D) Synchronous Generator
6. The complete circle diagram of induction motor can be drawn with the help of data found from []
A) No load test B) Blocked rotor test C) stator resistance test D) all the above
7. The reactance of the rotor circuit of the 3 – phase induction motor is maximum at []
A) starting B) no load C) half full load D) full load
8. In a 3- phase induction motor, the rotor speed is _____ the synchronous speed []
A) smaller than B) greater than C) equal to D) none of the above
9. The full load slip of the 3 – phase induction motor ranges from []
A) 10 % to 20 % B) 20% to 30% C) 2% to 5% D) none of the above
10. The torque characteristics of the 3 – phase induction motor is similar to that of []
A) d.c series motor B) d.c shunt motor
C) d.c differential compound motor D) d.c cumulative compound motor

Cont.....2

II Fill in the blanks:

11. For _____ type of 3-Phase induction Motor external resistor circuit is required in rotor during starting of the motor
12. If the supply voltage of a 3-Phase induction Motor is increased 2 times, then torque is _____
13. The relation among the synchronous speed (N_s), rotor speed (N) and slip (s) is _____
14. When a 3 – phase induction motor is blocked, the slip is _____
15. If the 3 – phase induction motor is running at slip s , then rotor copper losses is equal to _____ X rotor input
16. Crawling occurs in Induction Motor due to _____
17. If the frequency of 3-phase supply to the stator of 3-phase induction motor is increased, then synchronous speed is _____
18. At no load the rotor core losses of a 3 – phase induction motor is _____
19. If the slip of a 3 – phase induction motor is increased, the p.f of the rotor circuit _____.
20. If a 4 pole induction motor has a synchronous speed of 1500 rpm then supply frequency is _____

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Set No. 3

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ELECTRICAL MACHINES-II

Objective Exam

Name: _____ **Hall Ticket No.**

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I Choose the correct alternative:

1. The conditions of induction motor at standstill resemble those of a transformer whose secondary is []
A) Open circuited B) short circuited C) supplying a variable resistive load D) none of the above
2. Which of the following starting method is not preferred for starting large Induction Motors []
A) Line Resistance Starting B) Auto-Transformer Starting C) Star-Delta Starting D) DOL starter
3. Induction Motor if runs above Synchronous Speed runs as []
A) Synchronous Motor B) Induction Reactor C) Induction Generator D) Synchronous Generator
4. The complete circle diagram of induction motor can be drawn with the help of data found from []
A) No load test B) Blocked rotor test C) stator resistance test D) all the above
5. The reactance of the rotor circuit of the 3 – phase induction motor is maximum at []
A) starting B) no load C) half full load D) full load
6. In a 3- phase induction motor, the rotor speed is _____ the synchronous speed []
A) smaller than B) greater than C) equal to D) none of the above
7. The full load slip of the 3 – phase induction motor ranges from []
A) 10 % to 20 % B) 20% to 30% C) 2% to 5% D) none of the above
8. The torque characteristics of the 3 – phase induction motor is similar to that of []
A) d.c series motor B) d.c shunt motor
C) d.c differential compound motor D) d.c cumulative compound motor
9. In an Induction Motor if the number of stator teeth = number of rotor teeth , then which of the phenomenon occurs: []
A) Cogging B) Locking C) Crawling D) Skewing
10. Which of the following supply is given to the rotor winding of 3-Phase Induction Motor: []
A) AC supply B) Pulsating supply C) DC supply D) No Supply

Cont.....2

II Fill in the blanks:

11. The relation among the synchronous speed (N_s), rotor speed (N) and slip (s) is _____
12. When a 3 – phase induction motor is blocked, the slip is _____
13. If the 3 – phase induction motor is running at slip s , then rotor copper losses is equal to _____ X rotor input
14. Crawling occurs in Induction Motor due to _____
15. If the frequency of 3-phase supply to the stator of 3-phase induction motor is increased, then synchronous speed is _____
16. At no load the rotor core losses of a 3 – phase induction motor is _____
17. If the slip of a 3 – phase induction motor is increased, the p.f of the rotor circuit _____.
18. If a 4 pole induction motor has a synchronous speed of 1500 rpm then supply frequency is _____
19. For _____ type of 3-Phase induction Motor external resistor circuit is required in rotor during starting of the motor
20. If the supply voltage of a 3-Phase induction Motor is increased 2 times, then torque is _____

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Set No. 4

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

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ELECTRICAL MACHINES-II

Objective Exam

Name: _____ Hall Ticket No.

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Answer All Questions. All Questions Carry Equal Marks. Time: 20 Min. Marks: 10.

I Choose the correct alternative:

1. Induction Motor if runs above Synchronous Speed runs as []
A) Synchronous Motor B) Induction Reactor C) Induction Generator D) Synchronous Generator
2. The complete circle diagram of induction motor can be drawn with the help of data found from []
A) No load test B) Blocked rotor test C) stator resistance test D) all the above
3. The reactance of the rotor circuit of the 3 – phase induction motor is maximum at []
A) starting B) no load C) half full load D) full load
4. In a 3- phase induction motor, the rotor speed is _____ the synchronous speed []
A) smaller than B) greater than C) equal to D) none of the above
5. The full load slip of the 3 – phase induction motor ranges from []
A) 10 % to 20 % B) 20% to 30% C) 2% to 5% D) none of the above
6. The torque characteristics of the 3 – phase induction motor is similar to that of []
A) d.c series motor B) d.c shunt motor
C) d.c differential compound motor D) d.c cumulative compound motor
7. In an Induction Motor if the number of stator teeth = number of rotor teeth , then which of the phenomenon occurs: []
A) Cogging B) Locking C) Crawling D) Skewing
8. Which of the following supply is given to the rotor winding of 3-Phase Induction Motor: []
A) AC supply B) Pulsating supply C) DC supply D) No Supply
9. The conditions of induction motor at standstill resemble those of a transformer whose secondary is []
A) Open circuited B) short circuited C) supplying a variable resistive load D) none of the above
10. Which of the following starting method is not preferred for starting large Induction Motors []
A) Line Resistance Starting B) Auto-Transformer Starting C) Star-Delta Starting D) DOL starter

Cont.....2

II Fill in the blanks:

11. If the 3 – phase induction motor is running at slip s , then rotor copper losses is equal to _____ X rotor input
12. Crawling occurs in Induction Motor due to _____
13. If the frequency of 3-phase supply to the stator of 3-phase induction motor is increased, then synchronous speed is _____
14. At no load the rotor core losses of a 3 – phase induction motor is _____
15. If the slip of a 3 – phase induction motor is increased, the p.f of the rotor circuit _____.
16. If a 4 pole induction motor has a synchronous speed of 1500 rpm then supply frequency is _____
17. For _____ type of 3-Phase induction Motor external resistor circuit is required in rotor during starting of the motor
18. If the supply voltage of a 3-Phase induction Motor is increased 2 times, then torque is _____
19. The relation among the synchronous speed (N_s), rotor speed (N) and slip (s) is _____
20. When a 3 – phase induction motor is blocked, the slip is _____