## Online Assessment (Even Sem/Part-I/Part-IISpecial Examinations of Intermediate semester 2019 - 2020

Course Name - Electrical Machine II Course Code - DEE401

- \* You can submit the form ONLY ONCE.
- \* Fill the following information for further process.
- \* Required

| 1. | Email address *           |
|----|---------------------------|
| 2. | Name of the Student *     |
| 3. | Enter Full Student Code * |
| 4. | Enter Roll No *           |
| 5. | Enter Registration No *   |

| 6. | Enter Course Code * |
|----|---------------------|
| 7. | Enter Course Name * |

| 8. | Select Your Programme * |
|----|-------------------------|
|    | Mark only one oval.     |
|    | Diploma in Pharmacy     |
|    | Bachelor of Pharmacy    |
|    | B.TECH.(CSE)            |
|    | B.TECH.(ECE)            |
|    | BCA                     |
|    | B.SC.(CS)               |
|    | B.SC.(BT)               |
|    | B.SC.(ANCS)             |
|    | B.SC.(HN)               |
|    | B.Sc.(MM)               |
|    | B.A.(MW)                |
|    | BBA                     |
|    | B.COM                   |
|    | B.A.(JMC)               |
|    | BBA(HM)                 |
|    | BBA(LLB)                |
|    | B.OPTOMETRY             |
|    | B.SC.(MB)               |
|    | B.SC.(MLT)              |
|    | B.SC.(MRIT)             |
|    | B.SC.(PA)               |
|    | LLB                     |
|    | PGDHM                   |
|    | Dip.CSE                 |
|    | Dip.ECE                 |
|    | Dip.EE                  |
|    | Dip.CE                  |
|    | Dip.ME                  |
|    | MCA (28)                |
|    | ( ) M.SC.(CS)           |

| 2/1/2021 |     | Online Assessment (Even Sem/Part-I/Part-IISpecial Examinations of Intermediate semester 2019 - 2020 |
|----------|-----|---|
|          |     | M.SC.(ANCS)   |
|          |     | M.SC.(MM)   |
|          |     | MBA   |
|          |     | M.SC.(BT)   |
|          |     | M.TECH(CSE)   |
|          |     | LLM   |
|          |     | M.A.(JMC)   |
|          |     | M.A.(ENG)   |
|          |     | M.SC.(MATH)   |
|          |     | M.SC.(MB)   |
|          |     |   |
|          |     |   |
|          | Ar  | nswer all the questions. Each question carry one mark.  |
|          |     |   |
| Ġ        | 9.  | 1. The resultant flux in an induction motor is equal to the   |
|          |     | Mark only one oval.   |
|          |     | Maximum value of flux due to any phase  |
|          |     | Twice of the maximum value of flux due to any phase   |
|          |     | 0.5 times the maximum value of flux due to any phase  |
|          |     | 1.5 times the maximum value of flux due to any phase  |
|          |     |   |
|          |     |   |
|          | 10. | 2. Slip ring induction motor has  |
|          |     | Mark only one oval.   |
|          |     | Low starting torque   |
|          |     | Medium starting torque  |
|          |     | High starting torque  |
|          |     | None of these   |
|          |     |   |

| 11. | 3. In induction motor the unit of slip is                    |
|-----|--|
|     | Mark only one oval.  |
|     | Unit less  RPM  m/s  radian                                  |
| 12. | 4. In an induction motor, no-load the slip is generally      |
|     | Mark only one oval.  |
|     | Less than 1%   |
|     | 2%   |
|     | 4%   |
|     | <u> </u>   |
|     |  |
| 13. | 5. The starting torque of an induction motor is maximum when |
|     | Mark only one oval.  |
|     | Rotor resistance equals rotor reactance                      |
|     | Rotor resistance is twice the rotor reactance                |
|     | Rotor resistance is half the rotor reactance                 |
|     | None of these  |
|     |  |

| 14. | 6. With increase of load, the speed of induction motor  |
|-----|---|
|     | Mark only one oval.   |
|     | Remains constant  |
|     | Not related   |
|     | Increases   |
|     | Decreases   |
|     |   |
| 15. | 7. When the rotor of a three phase induction motor is blocked its rotor frequency will become |
|     | Mark only one oval.   |
|     | zero  |
|     | half of supply frequency  |
|     | equal to supply frequency   |
|     | very high   |
|     |   |
| 16. | 8. The basic operation of an induction motor is based on                                      |
| 10. |   |
|     | Mark only one oval.   |
|     | self induction  |
|     | mutual induction  |
|     | magnetic knocking   |
|     | Lorentz Force   |
|     |   |

| 17. | 9. When the supply frequency of a three phase induction motor is increased, then its synchronous speed is |
|-----|---|
|     | Mark only one oval.   |
|     | decreases   |
|     | increases   |
|     | remain same   |
|     | None of these   |
|     |   |
| 18. | 10. When the rotor of 3 phase induction motor run at synchronous speed, its rotor frequency will become   |
|     | Mark only one oval.   |
|     | zero  |
|     | half of supply frequency  |
|     | very high   |
|     | equal to supply frequency   |
|     |   |
| 19. | 11. Direct online starter(D.O.L starter) is used for motors having capacity                               |
|     | Mark only one oval.   |
|     | Less than 5 H.P   |
|     | Less than 10 H.P  |
|     | Greater than 10 H.P   |
|     | For any capacity motor  |
|     |   |

| 20. | 12. When rotor resistance of a three phase induction motor become equal to its rotor reactance, its starting torque will be |
|-----|---|
|     | Mark only one oval.   |
|     | zero  |
|     | maximum   |
|     | minimum   |
|     | none of these   |
|     |   |
| 21. | 13. The reactance of the rotor circuit of three phase induction motor is maximum at   |
|     | Mark only one oval.   |
|     | synchronous speed   |
|     | full-load   |
|     | no-load   |
|     | stand-still condition   |
|     |   |
| 22. | 14. If the slip of 3 phase induction motor is increases, the current in its stator winding                                  |
|     | Mark only one oval.   |
|     | increases   |
|     | decreases   |
|     | remain same   |
|     | None of these   |
|     |   |

| 23. | 15. Which starting method cannot be used for starting 3 phase squirrel cage induction motor? |
|-----|--|
|     | Mark only one oval.  |
|     | Star-Delta   |
|     | Rotor resistance   |
|     | Line resistance  |
|     | Auto-transformer   |
|     |  |
|     |  |
| 24. | 16. Starters are used in induction motor because   |
|     | Mark only one oval.  |
|     | starting torque is high  |
|     | It cannot run in reverse direction   |
|     | Its starting current is five times or more than its rated current                            |
|     | It is run against heavy load   |
|     |  |
| 25. | 17. Winding of star - delta starter while starting and running are connected in              |
|     | Mark only one oval.  |
|     | Star , Delta   |
|     | Delta , Delta  |
|     | Star , Star  |
|     | Delta , Star   |
|     |  |

| 26. | 18. Cogging in an induction motor is caused   |
|-----|---|
|     | Mark only one oval.   |
|     | <ul> <li>If the motor is running at fraction of its rated speed</li> <li>If the number of stator slots are integral multiple of rotor slots</li> <li>Due to fifth harmonic</li> <li>All of these</li> </ul> |
| 27. | 19. For the purpose of starting an induction motor, star-delta switch is an equivalent to auto transformer of ratio   |
|     | Mark only one oval.   |
|     | 33.3% 57.7% 50% 66.3%   |
| 28. | 20. Crawling is a phenomena mainly associated with  |
|     | Mark only one oval.   |
|     | 2nd Harmonic  |
|     | 3rd Harmonic  |
|     | 7th Harmonic  |
|     | 5th Harmonic  |

| 29. | 21. Which of the following methods is easily applicable to control the speed of the squirrel cage induction motor? |
|-----|--|
|     | Mark only one oval.  |
|     | Rotor rheostat control   |
|     | By changing the number of stator pole  |
|     | By injecting emf into the rotor circuit  |
|     | By operating two motors in cascade   |
|     |  |
| 30. | 22. If the field of a synchronous motor is under excited, the power factor will be                                 |
|     | Mark only one oval.  |
|     | Lagging  |
|     | Leading  |
|     | Unity  |
|     | More than unity  |
|     |  |
| 31. | 23. In case the air gap in an induction motor is increased   |
|     | Mark only one oval.  |
|     | The power factor will decrease   |
|     | The magnetizing current of the rotor will decrease   |
|     | Speed of motor will increase   |
|     | The windage losses will increase   |
|     |  |

| 32. | 24. In huge alternators, the moving part is                       |
|-----|---|
|     | Mark only one oval.   |
|     | Poles   |
|     | Brushes   |
|     | Armature  |
|     | None of the these   |
|     |   |
| 33. | 25. Synchronous motor always runs at                              |
|     | Mark only one oval.   |
|     | The synchronous speed   |
|     | Less than synchronous speed                                       |
|     | More than synchronous speed                                       |
|     | None of these   |
|     |   |
| 34. | 26. The V-curves of a synchronous motor show relationship between |
| 34. | 20. The v-curves of a synchronous motor show relationship between |
|     | Mark only one oval.   |
|     | Excitation current and back e.m.f                                 |
|     | Field current and p.f   |
|     | D.C. field current and A.C. armature current                      |
|     | Armature current and supply voltage                               |
|     |   |

| 35. | 27. If starting winding of a single-phase induction motor is left in the circuit, it will                                       |
|-----|---|
|     | Mark only one oval.   |
|     | Damage the starting winding   |
|     | Run Faster  |
|     | Run slower  |
|     | Spark at light load   |
| 36. | 28. In a split phase motor  |
|     | Mark only one oval.   |
|     | Both starting and running windings are connected through a centrifugal switch   |
|     | Centrifugal switch is used to control supply voltage  |
|     | The running winding is connected through a centrifugal switch   |
|     | The starting winding is connected through a centrifugal switch  |
| 37. | 29. If a particular application needs high-speed and high starting torque, then which of the following motor will be preferred? |
|     | Mark only one oval.   |
|     | Shaded pole motor   |
|     | Capacitor start motor   |
|     | Capacitor run motor   |
|     | Universal Motor   |

| 38. | 30. How many poles will be required if an alternator runs at 1500 rpm and given frequency of 50 Hz? |
|-----|---|
|     | Mark only one oval.   |
|     | 6 pole  |
|     | 8 Pole  |
|     | 4 Pole  |
|     | 2 Pole  |
|     |   |
|     |   |
|     |   |

This content is neither created nor endorsed by Google.

Google Forms