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| **S NO** | **QUESTION** | **KNOWLEDGE**  **LEVEL** | **CO** |
| **UNIT I** | | | |
| **1** | Explain what is load equalization and its importance with an example . | K2 | CO1 |
| **2** | Explain the different factors that govern the selection of motors for various applications | K2 | CO1 |
| **3** | List the difference between resistance welding and arc welding ? | K3 | CO1 |
| **4** | Explain luminous efficiency and solid angle | K2 | CO2 |
| **UNIT 2** | | | |
| 1 | Show the expression for intermittent and variable loads? | K2 | CO1 |
| 2 | Explain about Seam welding and Butt welding. | K2 | CO1 |
| 3 | Explain the various factors that are govern the choice of a motor for a given service ? | K1 | CO2 |
| 4 | Explain what is load equalization and its importance with an example . | K2 | CO2 |
| **UNIT 3** | | | |
| **1** | Describe the expression for continuous loads? | K1 | CO1 |
| **2** | Identify the advantages and methods of electric heating? | K1 | CO1 |
| **3** | The full load voltage starting current of a 400 V , 50 Hz delta connected induction motor is 4 times the full-load line current and the starting torque is 2 times the full-load torque . determine the starting torque when the motor is started by an autotransformer with 60% tapping. | K3 | CO2 |
| **4** | A piece of an insulating material is to be heated by dielectric heating. The side of the piece is 10×10×3 cm3. A frequency of 20 MHz is used and power absorbed is 400 watts. Show the voltage necessary for heating and current that flows in the material. The material has a permittivity of 5 and a p.f of 0.05. | K2 | CO2 |
| **UNIT 4** | | | |
| **1** | Compare the merits and demerits of D.C system of electrification | K5 | CO3 |
| **2** | Describe a brief note on 1-phase track electrifications. | K1 | CO3 |
| **3** | Generalize What is the necessity of simplifying the speed-time curve. | K2 | Co3 |
| **UNIT 5** | | | |
| **1** | Solve the expression for specific energy consumption? | **K3** | **CO3** |
| **2** | Describe the factors effecting specific energy consumption? | **K1** | **CO3** |
| **4** | Explain the protection and testing of UPS System? | **K2** | **CO4** |
| **UNIT 6** | | | |
| **1** | Explain the design and selection of UPS System? | **K2** | **CO4** |
| **2** | Compare the merits and demerits of D.C system of electrification | K5 | CO3 |
| **3** | Describe a brief note on 1-phase track electrifications. | K1 | CO3 |
| **4** | Generalize What is the necessity of simplifying the speed-time curve. | K2 | Co3 |