S.B. Roll No..

UTILIZATION OF ELECTRICAL ENERGY
6th Exam/Electrical/5224/6921/2652/Nov'17

Duration: 3Hrs.   **M.Marks:75**

SECTION-A

Q1. Fill in the blanks.   **1.5x10=15**

    a. The luminous flux is measured in _____

    b. The staring torque of dc series motor is _____

    c. Solid angle is measured in _____

    d. The dielectric loss depends upon _____and frequency.

    e. The different mode by which heat is transferred is conduction, _____and radiation.

    f. The welding transformer must have a _____leakage reactance.

    g. TIG welding is _____welding.

    h. The solution which decomposes when electric current is passed through them is called _____.

    i. The size of refrigerator is rated in _____

    j. For traction work best suited motor is _____

SECTION-B

Q2. Attempt any five questions.   **5x6=30**

    i.   Explain with sketch the principle of working of sodium vapor lamp.

    ii.   Explain the application of dielectric heating.

    iii. What is resistance welding? Explain butt welding.

    iv.   Explain faraday law of electrolysis.

    v.   Explain the various parts of vapor compression refrigeration system.

    vi.   Draw the different characteristics' of DC motors.

    vii. Explain the breaking of traction motors.

    viii. Explain the factor affecting the schedule speed.

SECTION-C

Q3. Attempt any three questions.   **3x10=30**

    a. Explain the block diagram of electric locomotive.

    b. Explain sodium vapor lamp and mercury vapor lamp with neat sketch.

    c. Explain microwave heating and explain applications of microwave heating.

    d. Explain the principle of electrolysis. What are the different applications of electrolysis?

    e. Explain the electric circuit of domestic refrigerator.