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MEEM-302(A)

M.E./M.Tech., III Semester Examination, June 2020 Energy Efficiency in Electrical Utility

(Elective-II)

Time: Three Hours

Maximum Marks: 70

Note: i) Attempt any five questions.

- ii) All questions carry equal marks.
- 1. a) Discuss losses in induction motors.
 - b) Enlist factors affecting motor performance.
- 2. What is two part tariff structure of electricity billing? Explain its components.
- 3. Explain the impact of condensing and evaporation temperatures on compressor power consumption.
- 4. What are cooling towers? How they work? Give a neat sketch of cooling tower and enlist its applications.
- 5. Explain the principle of indiction motor and derive the torque equation to find the efficiency.
- 6. a) Describe the factor affecting for the selection of Diesel Generating System.
 - b) Describe Flow Control Strategies of Fan and Blowers.
- 7. a) What should be the criteria for selection of DG set?
 - b) Write check list for energy efficiency of electrical system.
- 8. a) Explain leakage test of air compressors.
 - b) Write down types of pumps.
