B.E / B.Tech (Full Time) DEGREE END SEMSESTER EXAMINATIONS, APRIL / MAY 2011

ELECTRONICS AND COMMUNICATION ENGINEERING BRANCH

THIRD SEMESTER

EE 9215 ELECTRICAL ENGINEERING

(REGULATIONS 2008)

Time: 3 Hours Max. Marks: 100

Answer ALL Questions

PART -A (10 x 2 = 20)

1. What are the various parts of a DC machine?
2. What do you meant by back emf?
3. What useful information is obtained from open-circuit test?
4. Compare the voltages in star and delta connected 3 phase system.
5. Draw the equivalent circuit of a 3 phase induction motor.
6. Describe the construction of shaded pole induction motor.
7. What do you meant by voltage regulation?
8. What is the purpose of synchronous condenser?
9. What are the merits of interconnected grid systems?
10. What are the various types of tariff system available?

PART -B (5 x 16 = 80)

11. Write short notes on
    (i) Characteristics of DC separately excited generator (8)
    (ii) Armature speed control of DC Shunt motor (8)

12. (a) Explain the operation of single phase transformer with no-load and load conditions with relevant phasor diagrams.

(OR)

(b) (i) Derive the current relationships in Delta connected three phase systems. (8)