ECEG-3205- Electrical Engineering Lab IV **2016/17 Final exam (50%)**

Time allowed 2:00 hours

Write your answer neatly.

1. Describe briefly about hysteresis and normal B-H curve. And also what are the difference and similarity b/n Hysteresis loss and eddy current loss? **(5 Point)**

2. Draw the circuit of open and short circuit test of transformer you work on the lab and describe how we measured? **(6 point)**

3. How to determine the transformer ratio for different types of connection. And describe how to performing no load ,short-circuit testes and load test for resistive load? **(6 point)**

4. Describe briefly all about how to measure the winding resistance of Induction motor and determine the terminal of stator and rotor winding? **(6 point)**

5. Describe the different methods we can use to start induction machine, these:

   a. Using Direct On line starting. **(4 point)**
   b. Starting at reduced voltage. **(4 point)**
   c. Using Star-Delta Switches. **(4 point)**

6. a) what are the different methods of DC motor starting ? **(5 point)**

   b) How to perform no load test on a DC motor? **(5 point)**

7. What is the difference b/n Induction motor and Synchronous motor? **(5 point)**