

**Department of Electrical Engineering**  
**Sessional Assignment**  
**Course Details**

**Course Title:** DC Machines & Transformers

**Module:** 2<sup>nd</sup> (BTech)

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**Student Details**

**Name:** \_\_\_\_\_

**Student ID:** \_\_\_\_\_

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**Q1:** A transformer, when operated at 100V in the primary, the current in the primary is 4A. Find the current in the secondary winding if the voltage is stepped up to 600V.

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**Q2:** A 3300/250V, 50Hz, single phase transformer is built on an iron core having an effective cross sectional area of  $125\text{cm}^2$  and 70 turns low voltage winding. Calculate:

- a) The value of maximum flux density
  - b) The number of turns on the high voltage winding
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**Q3:** A transformer with 800 primary turns and 200 secondary turns is supplied from a 100V AC supply. Calculate the secondary voltage and the volts per turn.