Experiment No. 6

Title: Implementation of transfer function of armature controlled DC motor.

Objectives:

1. To find the transfer function for armature controlled DC motor.
2. To design the SIMULINK model to control the speed of DC motor.

SIMULINK:

1. Design the block diagram in SIMULINK to control the speed of armature controlled DC motor from its transfer function $\theta(s)/E(s)$. (Hint: use SIMULINK blocks `Step, TransferFcn, Gain,` and `Scope)`

MATLAB:

2. Simulate the SIMULINK model of DC motor designed in Q.1 for L=0.5 H, R=1 Ohm, K_T=K_b=0.01, B=0.1 N.m.s, J=0.01 Kg.m^2/s^2. (Hint: use MATLAB function `Sim)` .

Conclusion: (Hint: write a brief note of tasks performed in this experiment)