# KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

## ELECTRICAL ENGINEERING DEPARTMENT

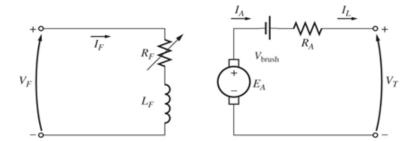
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## **EE-306**

# **Key Solution**

Quiz 4 Sec.: 3 I.D.: Ser#: Name:

Q.1 The equivalent circuit below is for separately excited DC generator. (3-points)



- a. True.
- b. False.
- Q.2 The following sequence of actions is TRUE for controlling terminal voltage of (4-points)

$$E_A \uparrow = K' \varphi n_m \uparrow \rightarrow V_T \uparrow = E_A \uparrow - R_A I_A$$

- a. only separately-excited and shunt self-excited DC generators.
- b. only series self-excited DC generators.
- c. only compound self-excited DC generators.
- d. any DC generator type.
- Q.3 In DC self-excited machines the slope of the field-winding resistance must be less than the slope of magnetization curve of their cores. (3-points)

a.True.

b. False.