

**KING FAHD UNIVERSITY OF PETROLEUM & MINERALS**  
**ELECTRICAL ENGINEERING DEPARTMENT**

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**EE-360 (152)**

**Key Solutions**

Quiz # 3

Sec.

Serial #

Name:

I.D.#

**Circle the correct answer.**

1) Wave winding DC machines are suitable for (.....) voltage, (.....) current applications. (2 Marks)

**a- higher, lower**

b- lower, lower

c- lower, higher

d- higher, higher

2) The terminal voltage of a shunt DC generator can be controlled as follows: (2 Marks)

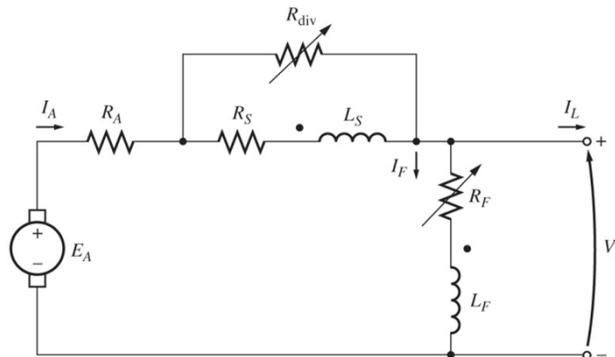
a-  $n \uparrow \Rightarrow E_A \downarrow \Rightarrow V_T \uparrow$

**b-  $R_F \downarrow \Rightarrow I_F \uparrow \Rightarrow E_A \uparrow \Rightarrow V_T \uparrow$**

c-  $R_F \uparrow \Rightarrow I_F \uparrow \Rightarrow E_A \downarrow \Rightarrow V_T \downarrow$

d- None of above

3) The equivalent circuit below is for (3 Marks)



a- short-shunt cumulatively compounded DC generators.

b- short-shunt differentially compounded DC generators.

**c- long-shunt cumulatively compounded DC generators.**

d- long-shunt differentially compounded DC generators.

4) The series field of a short-shunt compounded DC machine is excited by (.....) current. (3 Marks)

a- shunt field

**b- load**

c- armature

d- external