

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
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EE-360

Key Solutions

Quiz # 3 Serial #

Name:

I.D.#

Circle the correct answer.

1) The terminal voltage of a series DC motor can be controlled as follows:

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- $R_S \downarrow \Rightarrow I_S \uparrow \Rightarrow E_A \uparrow \Rightarrow V_T \uparrow$

d- None of above

(5 Marks)

2) A 50 kW, 250 V DC shunt generator has an armature winding resistance of 0.1 ohm and a field resistance of 120 ohm. The voltage regulation of the generator when delivers rated current is (.....). The voltage regulation of the generator when delivers 50% of its rated current is (.....).

a- 8.08; 4.08

b- 7.92 ; 3.92

c- 9.19; 4.4

d- -8.1; -4.08

(5 Marks)