

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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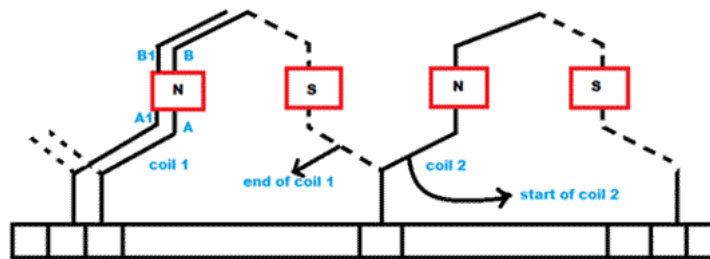
EE-306

Key Solution

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

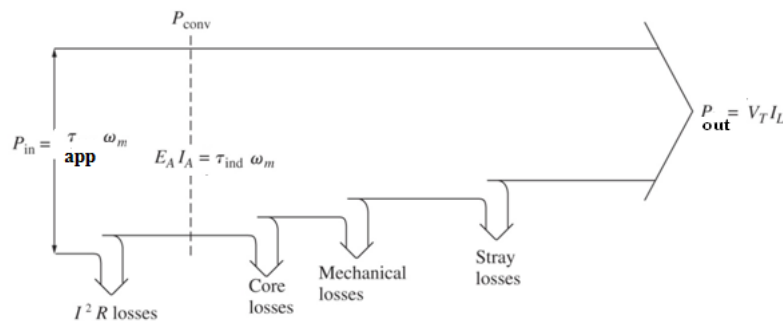
Circle the correct answer.

1) The armature winding connection shown below is for (3 Marks)



- a. Simplex wave winding.
- b. Simplex lap winding.
- c. Duplex wave winding.
- d. Duplex lap winding.

2) The power flow diagram below is for DC Generators. (2 Marks)



- a. True.
- b. False.

3) The terminal voltage of a series DC generator can be controlled as follows: (3 Marks)

- a. $n \uparrow \Rightarrow E_A \uparrow \Rightarrow V_T \uparrow$
- b. $R_F \downarrow \Rightarrow I_F \uparrow \Rightarrow E_A \downarrow \Rightarrow V_T \uparrow$
- c. $R_F \uparrow \Rightarrow I_F \downarrow \Rightarrow E_A \downarrow \Rightarrow V_T \downarrow$

4) A cumulative long-shunt DC motor can be operated as a differential motor if one of its shunt field current is reversed: (2 Marks)

- a. True.
- b. False.