

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
ELECTRICAL ENGINEERING DEPARTMENT
Dr. Ibrahim O. Habiballah
EE-360

Key Solution

Quiz # 1 Serial # Name: I.D.#

Circle the correct answer.

1) The ferromagnetic materials that are best suited for making the core of transformers and machines are those which have (...) permeability and (...) amount of eddy-current flows within the core.

- a. high, high
- b. low, high
- c. low, low

d. high, low

(3 Marks)

2) A magnetic circuit has hysteresis loss of 100 W at rated voltage and frequency. If the frequency is reduced by 25 % (assuming constant magnetic flux density), the hysteresis loss will be :

- a. 125 W
- b. 100 W
- c. 75 W**
- d. 50 W

(4 Marks)

3) When a ferromagnetic material is excited from a DC source, and the source is removed, the material will have some (...). This can be removed by applying (...) in the opposite direction of the original current direction.

- a. flux leakage, corecive force.
- b. flux leakage, magnetimotive force.
- c. flux residual, corecive force.**
- d. flux residual, magnetimotive force.

(3 Marks)