KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

EE 306 – Term 172

HW # 2: Magnetic Circuits
ST Classes Due:February 18th ; MW Classes February 19th, 2018

From Text Book: (2-points each)
1.2,
1.3,
1.4,
1.5

Problem: (2-points)

The total core loss for a specimen of magnetic sheet steel is found to be 1800 W at 60 Hz. If the flux density is kept constant and the frequency of the supply increases 50%, the total core loss is found to be 3000 W. Compute the separate hysteresis and eddy-current losses at both frequencies.