What is the ΔHo of the equation 4NH3 (g) + 5O2 (g) → 4NO (g) + 6H2O (g)? Given: ΔHfo NH3 = −45.9 kJ/mol, ΔHfo NO = 90.3 kJ/mol, ΔHfo H2O = −242 kJ/mol.

A. ΔHo = 90.7 kJ
B. ΔHo = −90.7 kJ
C. ΔHo = 907 kJ
D. ΔHo = −907 kJ
E. None of the Above

$\Delta H^{\circ} = (n_{NO} * \Delta Hf^{\circ} (NO) + n_{H2O} * \Delta Hf^{\circ} (H_2O)) - n_{NH3} * \Delta Hf^{\circ} (NH_3) = (4*(+90.3) + 6*(-242)) - 4*(-45.9)=$

= - 907.2

Answer : D