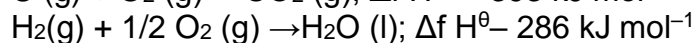
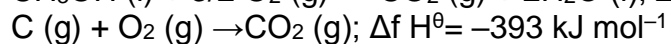
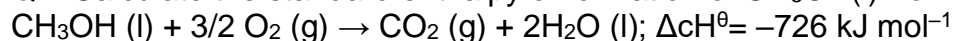


Delhi Private School Dubai

Grade 11

Subject: Chemistry

Q1. Calculate the standard enthalpy of formation of  $\text{CH}_3\text{OH}(\text{l})$  from the following data:



Q2. Why is Wurtz reaction not preferred for the preparation of alkanes containing odd number of carbon atoms? Illustrate your answer by taking one example.

Q3. A mixture of 1.57 mol of  $\text{N}_2$ , 1.92 mol of  $\text{H}_2$  and 8.13 mol of  $\text{NH}_3$  is introduced into a 20 L reaction vessel at 500 K. At this temperature, the equilibrium constant  $K_c$  for the reaction.

Q4. Calculate the energy and wavelength of the radiation emitted when an electron jumps from  $n=3$  to  $n=2$  in a hydrogen atom.

Q5. Draw the molecular orbital diagram of  $\text{N}_2$  and calculate the bond order.