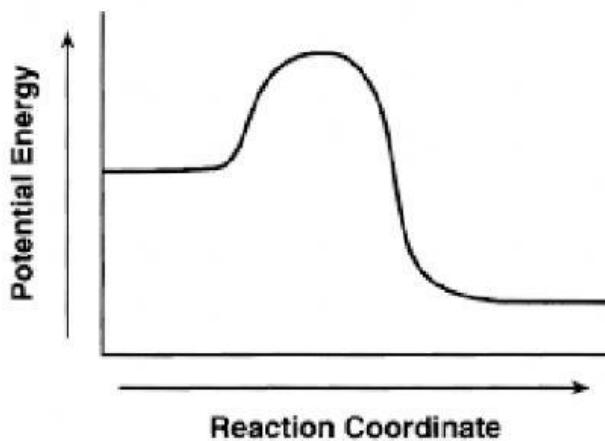


Q1 : Classify the following statements to endothermic reactions or exothermic reactions .

- a. The reaction absorbs heat .
- b. The amount of enthalpy change is 140 Kj
- c.  $H_2 + N_2 \rightarrow NH_3 \quad \Delta H = +20Kj$
- d. The energy of reactants is less than the energy of the products .

Q2: study the following graphs and answer the questions .



- A. Label the previous graph .
- B. Which type of reaction does it represent it . explain your answer .
- C. Does it release or absorb energy ?

Q3 : hydrogen gas reacts with oxygen gas to produce water and  $\Delta H = -800 Kj$  write the equation of the chemical reaction