• Explain the following terms or concepts.

Marks

a) Lewis base

A Lewis base is a species that donates an electron pair.

b) Le Châtelier's principle

When a chemical system in a state of equilibrium is disturbed, it reattains equilibrium by undergoing a net reaction that reduces the effect of the disturbance.

c) Heterogeneous catalysis

The acceleration of a reaction by the addition of a substance (the catalyst) which is in a different phase state from the reactants. Typically the catalyst is a solid which interacts with liquid or gaseous reactants and products. The solid's surface provides a different reaction pathway and increases the rate at which the reaction attains equilibrium.