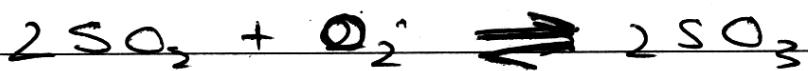
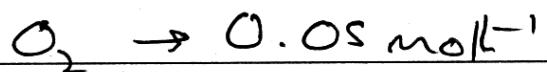
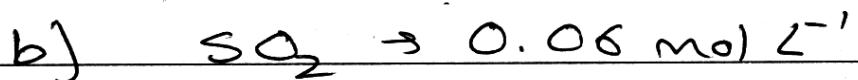
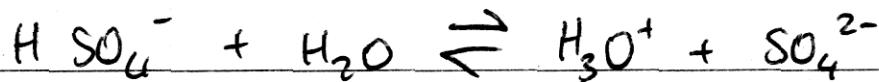


Question 28

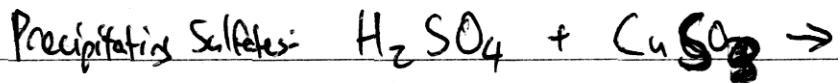
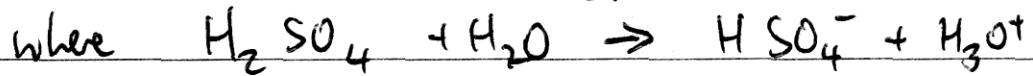
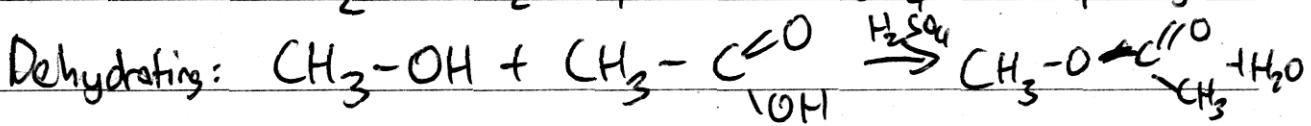
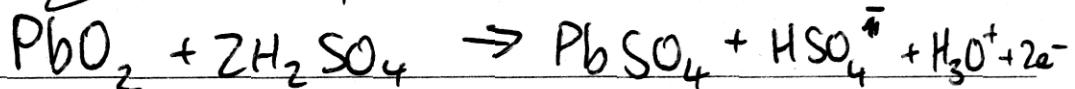
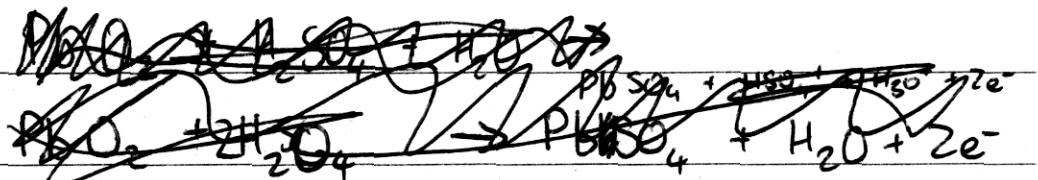
- a) i) Saponification is the process of making soap.
- ii) Soap molecules consist of a tail and a head. When a soap molecule comes into contact with dirt or grease in water, the tail sticks in to the grease, and pulls it away from the surface.
which has a negative charge



$$K = \frac{[\text{SO}_3]}{[\text{O}_2][\text{SO}_2]} = \frac{0.04}{0.05 + 0.06}$$
$$K = 0.36$$



ii) Oxidizing:



d.) i)

d. ii)

e) Sodium can be produced through a mercury cell, membrane cell and diaphragm cell.

The membrane cell is similar to a diaphragm cell only with changes in the industrial production methods.

Other industrial production methods for sodium hydroxide is:

