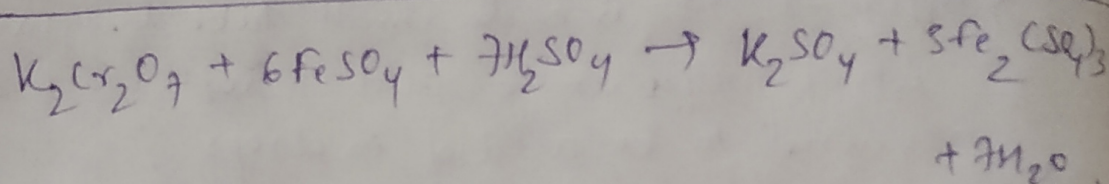
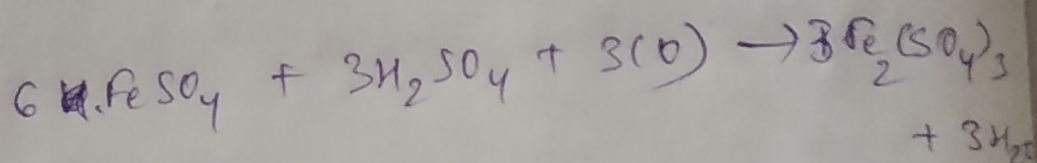
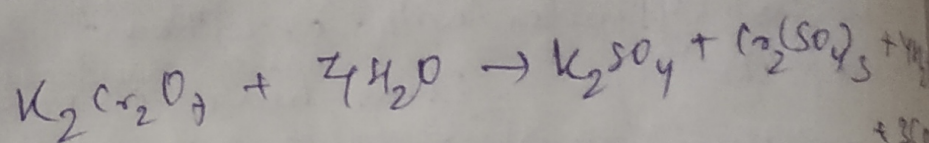


Explain in brief the determination of Chromium (VI) in the sample sol<sup>n</sup>

The reaction involved here is .



→ In the determination of chromium (VI) in sample sol<sup>n</sup> we react ferrous ammonium sulphate with it and undergo redox titration.

→ Diphenyl amine is used as an indicator. It gives violet color in oxidized form and colorless in reduced form.

→ The end point is bluish green to bluish violet.

→ Phosphoric acid is used to remove  $Fe^{3+}$  from the sol<sup>n</sup>.



~~In a beaker~~

Standard sol<sup>n</sup> of  $K_2Cr_2O_7$  is taken in a burette.

→ 30 ml of  $Fe(II)$  sol<sup>n</sup> is taken in a standard pipette and 40 ml of distilled water is taken in a conical flask.

→ ~~2-3 drops~~ of 5 ml of  $H_2SO_4$  and 3 ml of phosphoric acid is added.

→ 2 drops of Diphenyl amine is also added.

Now this is titrated until the violet green colour changes to violet colour. and the reading is recorded.