ABSTRACT

The determination of iron(III) was established by UV Visible spectrofotometric. In this method, iron(III) must be reduced to iron(II) before, by using ascorbic acid then complexed with 1,10-phenanthroline. The colour of complex solution that formed is red to orange with maximum wavelength 506 nm. From variation of pH acetic buffer, the best acetic buffer for this method is pH 4.5 with % recovery is 103.4800%. From variation of ascorbic acid concentration, the best ascorbic acid for reduce iron(III) to iron(II) is 0.6 ppm with % recovery is 103.9400%. Ascorbic acid is effective to reduce iron(III) to iron(II), this is can be show, the small concentration of ascorbic acid, 0.1 ppm, can reduce the iron(III). This method have good accuracy because the value % recovery is 97.6320%.