2018

CBCS

3rd Semester

CHEMISTRY

PAPER—C6P

(Honours)

(Practical)

Full Marks : 20

Time : 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Inorganic Chemistry–II Lab.

1. Estimate the total amount of Iron in the supplied portland cement. 15

2. Laboratory Note Book 2

3. Viva-Voce. 3

Procedure

1. (a) Preparation of 250 ml standard $\left(\frac{N}{20}\right)K_2Cr_2O_7$ solution :

Weight out accurately 0.6125 gm of $K_2Cr_2O_7$ (AR grade) and dissolve it by distilled water in a 250 ml volumetric flask.

(b) Estimation of Fe_2O_3 in Portland Cement:

Transfer the supplied Cement Sample quantitatively into a 500 ml beaker and dissolve it in 50 ml (1:1) HCl. Then heat the solution with stiring by glass rod for 15 minutes. Add additional 25 ml (1:1) HCl and reduce iron by slow addition of Al-foil at near to boiling condition. Cool the solution and dilute to 150 ml by distilled water. Add 5 ml of syrupy H_3PO_4 followed by 3-4 drops BaDs indicator. Then titrate it with a standards and $\left(\frac{N}{20}\right)K_2Cr_2O_7$ Solution until first red-violet colour appears. Note the titre value to calculate the amount of Fe_2O_3 in supplied portland cement sample.

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