

CITY COLLEGE

B.Sc. Semester V Practical Examination 2020-21

CHEMISTRY GENERAL

Paper: DSE-A2

Time: 3 Hours

Full Marks: 30

1. Estimate the percentage of iron as ferric oxide present in a given sample of Ordinary Portland Cement using titrimetric method.

Supplied Sample: 1g OPC

Supplied Solutions: 1] N/50 KMNO_4 solution as self-indicating titrant.

2] Zimmerman-Reinhardt solution.

3] Concentrated HCl solution.

Assume Titre Values as – 10.2mL (1st reading), 10.3mL (2nd Reading)

For Calculation- 1mL N KMNO_4 solution \equiv 79.846mg Fe_2O_3

- Write down the Principle involved
- Write down the ionic equations involved
- Tabulate data
- Show calculations with final value correct to two places of decimal
- Write down the final result as:

*The supplied sample of the OPC contained
.....% of Fe_2O_3 by mass.*