## B.Sc. DEGREE EXAMINATION,ODD SEMESTER 2020 III Year V Semester Analytical Chemistry – I

## Max.marks :25

Answer any **FIVE** questions  $(5 \times 5 = 25)$  Marks

- 1. Define diffusion current and half-wave potential. Mention their significance.
- 2. Discuss the factors affecting TGA curves.
- 3. a. What are the disadvantages of dropping mercury electrode?b. Write the equation for calculating optical purity of a sample. (3+2)
- 4. a. What is TMS? Why is it used as a reference in proton NMR spectroscopy?b. State Nitrogen rule. (3+2)
- 5. Sketch the block diagram and Mention the components of NMR spectrometer.
- 6. Write the principle of mass spectrometry.
- 7. Describe the block diagram of digital computer.