



**University of Engineering & Management, Kolkata**

**EndSemester Examination, February 2021**

**Course: B. Tech (All) Semester: 1<sup>st</sup>**

**Paper Name: Chemistry Laboratory**

**Paper Code: BSC192**

**Full Marks: 100**

**Time: 3 hours**

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1. Determination of the concentration of the strong acid (HCl) by standardized NaOH solution. 80

- (a) Theory of the experiment
- (b) Observation Table
- (c) Calculation of unknown strength

OR

2. Determination of the total water hardness present in the given sample of water. 80

- (a) Theory of the experiment
- (b) Observation Table
- (c) Calculation of water hardness.

OR

3. Determination of the pH of different types of water by digital pH. 80

- (a) Theory of the experiment
- (b) Observation Table
- (c) Utility of pH.

OR

4. Determination of electrical conductivity of a given sample of water by digital conductivitymeter. 80

- (a) Theory of the experiment.
- (b) Observation Table

(c) Utility of electrical conductivity

OR

5. Determination of the total alkalinity present in the given sample of water. 80

(a) Theory of the experiment

(b) Observation Table

(c) Calculation of total alkalinity.

OR

6. Determination of the Chemical Oxygen Demand (COD) present in the given sample of water. 80

(a) Theory of the experiment

(b) Observation Table

(c) Calculation of total COD.

OR

7. Determination of viscosity coefficient for different organic liquid samples. 80

(a) Theory of the experiment

(b) Observation Table

(c) Calculation of viscosity coefficient

**8. Viva 20**