

(Time: 3 Hours)

Total Marks: 80

**N.B.**

1. Question No. 1 is Compulsory.
2. Attempt any **Three** Questions from remaining **Five** Questions
3. Assume Suitable Data if needed and Justify the Same
4. Figures to the right indicate full marks.

**Que.1**

- a) What is corrosion and write consequences of corrosion [05]
- b) What is over potential? Explain activation polarization [05]
- c) Explain need for corrosion education [05]
- d) Explain corrosion in acids [05]

**Que.2**

- a) Why metals are corrode? Explain with reaction [10]
- b) Explain in detail Nernst Equation [10]

**Que.3**

- a) Write a short note on Ohmic drop [10]
- b) Explain in detail Corrosion Prevention [10]

**Que.4**

- a) Write short note on Anodic processes [10]
- b) Write functions and roles of corrosion engineer [10]

**Que.5**

- a) Explain Factors affecting atmospheric corrosion [10]
- b) Explain examples of corrosion cells [10]

**Que.6**

- Write short note on [20]
1. Uniform corrosion
  2. Pitting corrosion
  3. Galvanic corrosion
  4. Exfoliation corrosion

\*\*\*\*\*