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AGNEL INSTITUTE OF TECHNOLOGY AND DESIGN
ASSAGAO, GOA-403 507

INTERNAL TEST – I

Sem – I **Chemistry** Max.Marks: 25

Date: 14/12/2020 Duration: 1 hour

Answer all Questions

1.	An electrochemical cell is formed from iron and silver electrodes having 0.03 M $FeSO_4$ and 0.07 M $AgNO_3$ electrolytes. The standard electrode potentials of Fe and Ag electrodes are -0.44 V and 0.80 V respectively. Write the cell scheme, cell reaction and calculate EMF of the cell at 298K.	(CO1) (5Marks)
2.	A concentration cell was constructed by immersing two copper electrodes in 0.05 M and 1 M $CuSO_4$ solutions. Write the cell reactions and calculate the emf of the concentration cell. Given E^o Cu= 0.34 V	(CO1) (5Marks)
3.	What is a Concentration cell? Discuss the construction and working of a concentration cell.	(CO1) (5Marks)
4.	What are reference electrodes. Explain the construction and working of Calomel electrode. Mention its advantages.	(CO1) (5Marks)
5.	Define Battery. Outline the construction and working of Zn-Air Battery. Mention its advantages and applications.	(CO1) (5Marks)

Faculty Name

Dr. Sanatkumar B S