



2. BATTERY CHEMISTRY & CORROSION

Sl.No		Question	Marks	CO	PO	BTL
1.	a.	Write differences between primary and secondary batteries.	[1M]	3	1-8, 11-12	I
	b.	Explain reserve batteries with examples.	[1M]	3	1-8, 11-12	II
	c.	Describe construction and functioning of Lithium ion cell (Secondary Cell).	[10M]	3	1-8, 11-12	V
2.	a.	What are the applications of Li-ion battery to electrical vehicles?	[1M]	3	1-8, 11-12	I
	b.	What are the basic requirements for commercial batteries?	[1M]	3	1-8, 11-12	IV
	c.	Describe Construction, working and applications of Zn-air battery.	[10M]	3	1-8, 11-12	I
3.	a.	Differences between battery and a fuel cell.	[1M]	3	1-8, 11-12	II
	b.	What are the applications of Solar cells?	[1M]	3	1-8, 11-12	V
	c.	Describe Construction and applications of Methanol Oxygen fuel cell.	[10M]	3	1-8, 11-12	I
4.	a.	What is meant by rusting of Iron?	[1M]	3	1-8, 11-12	IV
	b.	What is galvanic corrosion?	[1M]	3	1-8, 11-12	I
	c.	Describe Construction and applications of Solid oxide fuel cell.	[10M]	3	1-8, 11-12	II
5.	a.	What is the effect of humidity on the corrosion?	[1M]	3	1-8, 11-12	V
	b.	What is pitting corrosion?	[1M]	3	1-8, 11-12	I
	c.	Explain the chemical reactions involved in electrochemical corrosion (Wet Corrosion).	[10M]	3	1-8, 11-12	IV
6.	a.	What is the effect of P^H on the corrosion?	[1M]	3	1-8, 11-12	I
	b.	What is waterline corrosion?	[1M]	3	1-8, 11-12	I
	c.	Explain how corrosion control can be brought about by the following methods. (a) Cathodic protection (b) Sacrificial anode.	[10M]	3	1-8, 11-12	II