

CLASS-10
PHYSICAL SCIENCE
UNIT PLAN
CHAPTER: 13 – PRINCIPLES OF METALLURGY

PERIOD NUMBER	CONCEPTS / TEACHING POINTS	PAGES IN TEXT BOOK		REMARKS
		FROM	TO	
1.	Metals – properties Mineral – Ores Some ores and their formulas Ores – metals present in the ores Reactivity of metals	286	288	
2.	Steps involved in extraction of metal from ore Concentration of ore – methods (Hand picking, washing, froth floatation, magnetic separation)	288	290	
3.	Reactivity of metals Reaction with oxygen, cold water, water vapour, strong dilute acids and chlorine	291	291	
4.	Extraction of crude metal from the ore Reduction of the ore to the purified metal as per the reactivity of the metal	292	294	
5.	Purification of crude metal – methods Distillation, poling, liquation, electrolytic refining	294	295	
6.	Corrosion Experiment – corrosion of iron Preventive methods of corrosion Alloys	296	297	
7.	Important methods used in metallurgy Smelting – blast furnace Roasting – calcinations Reverbaratory furnace – retort furnace	298	299	