Seat No.:	Enrolment No.

		BE - SEMESTER-V (NEW) - EXAMINATION – SUMMER 2016	
S	ubje	ect Code:2152107 Date:09/05/2016	
S	ubje	ect Name:Extraction of Non Ferrous Metals	
		:02:30 PM to 05:00 PM Total Marks: 70	
I	nstruc	etions:	
		 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1	(a) (b)	Discuss Bayer process for alumina production and give the flow sheet. Briefly explain the process flow sheet of Cu extraction with all the important parameters involved in the process.	
Q.2	(a) (b)	What is anode slime? Explain the process of precious metal recovery from it. Explain Hall-Heroults process of Al extraction. OR	07 07
	(b)	Explain the cyanidation process for gold extraction.	07
Q.3	(a) (b)	Write a note on refining of magnesium. Discuss about the production and consumption of various non-ferrous metals in India.	07 07
		OR	
Q.3	(a) (b)	What is the Main purpose of roasting & Smelting in the extraction of cu? Explain extraction of tin with neat flow sheet & Discuss important parameters involved in it.	07 07
Q.4	(a) (b)	Write a note on refining of tin. Explain the Imperial Smelting process. OR	07 07
Q.4	(a)	Draw and explain the pyrometallurgical process flow sheet of zinc extraction with important parameters involved in the process.	07
	(b)	Explain extraction of lead by pyrometallurgical route.	07
Q.5	(a) (b)	Explain Mitsubishi process for Copper production with suitable sketch. Write a brief note on TOOTH & ALCAN process for Aluminum production. OR	07 07
Q.5	(a) (b)	Discuss pyrometallurgical extraction of Ni from its sulphide ore. Discuss the parke's process for silver recovery from lead.	07 07
