CLASS XII

General Principles and Processes of Isolation of Elements

ONE MARK QUESTIONS

1. Out of C and CO, which is a better reducing agent at 673 K? (2013)

TWO MARK QUESTIONS

1. Describe the role of
   a) Iodine in the refining of titanium. (2010)
   b) Collector in the froth floatation process. (2012)
2. Describe how the following changes are brought out:
   a) Pig iron into steel
   b) Zinc oxide into zinc metal. (2010)

THREE MARK QUESTIONS

1. Differentiate between
   a) Calcination and roasting
   b) Electrolytic reduction and electrolytic refining
   c) Flux and slag
2. Write the chemical reactions which take place in the following operations:
   a) Electrolytic reduction of Al_2O_3.
   b) Isolation of Zn from zinc blende.
   c) Mond's process for refining of Ni.
3. Give reasons:
   a) Copper matte is put in silica lined convertor.
   b) Cryolite is added to alumina during electrolytic reduction.
   c) Pine oil is used in the froth floatation process
4. a) Name the method used for the refining of titanium.
   b) What is the role of Zn in the extraction of silver?
   c) Reduction of metal oxide to metal becomes easier if the metalobtained is in liquid state. Why?(2015)

VALUE BASED QUESTION

1. Sam owns sites from where copper with other metals are mined. At sites he found the low grade copper ores are available with zinc and iron scraps.

   a) Which of the two scraps should Sam use for the reduction of leached copper and why?
   b) Mention the value in Sam's choice.
   c) What do you mean by blister copper?
   d) Why is extraction of copper from copper pyrite more difficult than that from its oxide ore through reduction?

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