



CHEMISTRY

NCERT - NCERT CHEMISTRY(TELUGU)

GENERAL PRINCIPLES AND PROCESSES OF ISOLATION OF ELEMENTS



1. Suggest a condition under which magnesium

could reduce alumina.



2. Although thermodynamically feasible , in practice , magnesium metal is not used for the reduction of alumina in the metallurgy of aluminium. Why

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3. Why is the reduction of a metal oxide if the metal formed is in liquid state at the temperature of reduction?

4. At a site, low grade copper ores are avilable and Zinc and iron scraps are also avilable . Which of the two scraps would be more suitable for reducing the leached copper ore and why?

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Intext Questions

1. Which of the ores mentioned in Table can be

concentrated by magnetic separation method ?









4. Is it true that under certain conditions, Mg can reduce SiO_2 and Si canreduce MgO? What are those conditions?

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1. Copper can be extracted by hydrometallurgy but

not Zinc -explain.



2. What is the role of depressant in froth floatation?

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3. Why is the extraction of copper form pyries more difficult then that from its oxide ore through reduction?

4. Explain Zone refining.



6. Name the common elements present in the anode mud in the eletrolytic refining of copper.

7. Write down the chemical reactions taking place in different zones in the blast furnace during the extraction of iron.

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8. Write down the chemical reactions taking place

in the extraction of zinc from zinc blende.



9. State the role of silica in the metallurgy of copper. Watch Video Solution **10.** What is meant by the term "chromatography"? Watch Video Solution

11. What criterion is followed for the selection of

the stationary phase in chromatography?

12. Decribe a method for the refining of nickel.



13. How is alumina separated from silica in the

bauxite ore associated with silica? Give equations?

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14. Explain roasting and calcination.



15. How is cast iron different from pig iron?



16. Differentiate between "minerals" and "ores".



17. Why copper matte is put in silica lined converter?

18. What is the role of cryolite in the metallurgy of

aluminium?

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19. How is leaching carried out in the case of low

grade copper ores?

20. Why is zinc not extracted from zinc oxide through reduction using CO? Watch Video Solution **21.** The value of $\Delta_f G^{\Theta}$ for formation of Cr_2O_3 is – 540 kJ mol^{-1} and that of Al_2O_3 is – 827 kJ $\mathrm{mol}^{\,-1}$. Is the reduction of Cr_2O_3 possible with Al

?

22. Out of C and CO, which is a better reducing agent for ZnO ?
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23. The choice of a reducing agent in a particular case depends on thermodynamic factor. How far do you agree with this statement? Support your opinion with two examples.



24. Name the processes from which chlorine is obtained as a by-product. What will happen if an aqueous solution of NaCl is subjected to electrolysis?

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25. What is the role of graphite rod in the

electromellurgy of aluminium?

26. Outline the principles of refining of metals by

the following methods.

(a)Zone refining (b) Electrolytic refining (c) poling

(d) Vapour phase refining.



27. Predict conditions under which Al might be

expected to reduce MgO.

