

PS SR.SEC.SCHOOL MYLAPORE

WORK SHEET

Topic : Metallurgy Std: XII

1. Give one example of i) Acidic flux ii) Basic flux.
2. What happens when i) Cu_2O undergoes self reduction in a SiO_2 lined converter ii) Haemetite oxidises carbon to carbon monoxide
3. What is the role of cryollite in Hall Haroult's process?
4. How can Alumina be separated from silica in a Bauxite ore? Give equations also.
5. Describe how the following changes are brought about:
i) ZnO to Zn ii) pig iron to cast iron iii) Impure Ti to Pure Ti
6. Describe the i)role of NaCN in the extraction of Au from Gold ore. ii) Iodine in refining of Zr . iii) SiO_2 in the extraction of Cu from Copper matte.
7. What is the role of depressants in the froth floatation process.
8. What is the significance of leaching in the Extraction of Al ?
9. Name the method used for refining of the following metals: i) Ni ii) Ti
10. What type of metals are usually purified by the method of Zone refining?Give an example.
11. Which method is employed for extracting Cu from low grade ore and scraps?
12. What is the basic principle used in Zone refining of metals?
13. What is meant by the term Pyrometallurgy?

14. Outline the principle of vapour phase refining and name any 2 metals for which this process is used.
15. Explain the role of Graphite rod in the Electrometallurgy of Al.
16. What are froth stabilisers? Give an example
17. What is meant by chromatography?
18. Name the process of concentration of Zinc blende.
19. Name a stationary phase in chromatography.
20. Outline the principle of the method used for refining of Cu, Zn and Sn.
21. What is a flux? What is the role of flux in the metallurgy of Fe and Cu?
22. Why can't Aluminium oxide be reduced by C?
23. Out of C and CO which is the better reducing agent for FeO i) in the lower part of blast furnace ii) in the upper part of blast furnace
24. Write the difference between i) Mineral and ore ii) Calcination and Roasting
25. What type of ores can be concentrated by magnetic separation method?
26. Describe Electrolytic refining of metal and what is meant by anode mud?
27. Describe the recovery of Ag after silver ore was leached.
28. Mention the purest form of iron.
29. Mention the role of collectors in froth floatation process.
30. Explain the Extraction of Zn from Zinc blende.

31. What are the constituents of the following alloys a. brass b. bronze
c. German silver

32. What are the important uses of Nickel steel and chrome steel?

33. How zinc metal is purified?