



# MASTER TUTORIALS

Topic Name: Metals and Non Metals

## Assignment 2

No Of Questions:20

1. Which of the following is/are oxide ore(s) ?
  - (a) Bauxite
  - (b) Cuprite
  - (c) Haematite
  - (d) All of these
2. Horn silver is a/an -
  - (a) Sulphate ore
  - (b) Halide ore
  - (c) Sulphide ore
  - (d) Oxide ore
3. Carnallite is -
  - (a)  $KCl, MgCl_2$
  - (b)  $KCl \cdot MgCl_2 \cdot 3H_2O$
  - (c)  $KCl \cdot MgCl_2 \cdot 6H_2O$
  - (d)  $KCl, MgCl_2, H_2O$
4. Match column A with column B and select the correct option -

Column A	Column B
(Ore)	(Nature of ore)
(a) Copper glance	(i) Sulphate ore
(b) Calamine	(ii) Halide ore
(c) Rock salt	(iii) Sulphide ore
(d) Epsom salt	(iv) Carbonate ore

(a) a (i), b (ii), c (iii), d (iv)  
(b) a (iv), b (ii), c (iii), d (i)  
(c) a (iii), b (iv), c (ii), d (i)  
(d) a (iv), b (i), c (ii), d (iii)
5. Removal of impurities from ore is known as -
  - (a) Crushing and grinding
  - (b) Concentration of ore
  - (c) Minerals
  - (d) Gangue
6. Which of the following methods is used in the concentration of haematite ore ?
  - (a) Hydraulic washing
  - (b) Magnetic separation
  - (c) Froth floatation process
  - (d) None of these
7. Froth floatation method is used for the concentration of -
  - (a) Oxide ores
  - (b) Sulphide ores
  - (c) Sulphate ores
  - (d) Halide ores
8. Which of the following methods is based on the principle of the difference in the wetting properties of the ore and gangue particles with water and oil ?
  - (a) Magnetic separation
  - (b) Froth floatation process
  - (c) Hydraulic washing
  - (d) None of these
9. Which of the following is most abundant metal on the earth's crust ?
  - (a) Iron
  - (b) Aluminium
  - (c) Calcium
  - (d) Oxygen
10. Which of the following metal is found in native state ?
  - (a) Sodium
  - (b) Zinc
  - (c) Gold
  - (d) Iron
11. Heating of concentrated ore in absence of air for conversion in oxide ore in known as -
  - (a) Roasting
  - (b) Calcinations
  - (c) Reduction
  - (d) None of these
12. Process of roasting and calcination takes place in -
  - (a) Bessemer converter
  - (b) Blast furnace.
  - (c) Reverberatory furnace
  - (d) Electrolytic cell.
13. Which reducing agent is used in chemical reduction ?
  - (a) C
  - (b) CO
  - (c) Al
  - (d) All of these
14. Which of the following is used in reduction of alumina ?
  - (a) Coke
  - (b) Carbon monoxide
  - (c) Aluminium
  - (d) Electricity
15. For purification of which metal, liquation method is used ?
  - (a) Tin
  - (b) Lead
  - (c) Bismuth
  - (d) All of these
16. Which method is used in purification of mercury ?
  - (a) Liquation
  - (b) Distillation
  - (c) Electrolytic refining
  - (d) Chemical reduction
17. Which of the following methods is used for obtaining metals of very high purity ?
  - (a) Distillation

<p>(b) Zone refining (c) Liquation (d) Electrolytic refining</p> <p>18. Which of the following methods is not used in purification of metals ? (a) Calcination (b) Liquation (c) Distillation (d) None of these</p>	<p>(b) Magnetic separation (c) Froth floatation process (d) None of these</p> <p>27. Froth floatation method is used for the concentration of - (a) Oxide ores (b) Sulphide ores (c) Sulphate ores (d) Halide ores</p>												
<p>19. Anode mud is obtained in which process? (a) Roasting (b) Zone refining (c) Electrolytic refining (d) Calcination</p> <p>20. In thermite process reducing agent is - (a) C (b) CO (c) Al (d) None of these</p>	<p>28. Which of the following methods is based on the principle of the difference in the wetting properties of the ore and gangue particles with water and oil ? (a) Magnetic separation (b) Froth floatation process (c) Hydraulic washing (d) None of these</p> <p>29. Which of the following is most abundant metal on the earth's crust ? (a) Iron (b) Aluminium (c) Calcium (d) Oxygen</p>												
<p>21. Which of the following is/are oxide ore(s) ? (a) Bauxite (b) Cuprite (c) Haematite (d) All of these</p> <p>22. Horn silver is a/an - (a) Sulphate ore (b) Halide ore (c) Sulphide ore (d) Oxide ore</p>	<p>30. Which of the following metal is found in native state ? (a) Sodium (b) Zinc (c) Gold (d) Iron</p> <p>31. Heating of concentrated ore in absence of air for conversion in oxide ore is known as - (a) Roasting (b) Calcinations (c) Reduction (d) None of these</p>												
<p>23. Carnallite is - (a) <math>KCl, MgCl_2</math> (b) <math>KCl \cdot MgCl_2 \cdot 3H_2O</math> (c) <math>KCl \cdot MgCl_2 \cdot 6H_2O</math> (d) <math>KCl, MgCl_2, H_2O</math></p> <p>24. Match column A with column B and select the correct option -</p> <table border="1" data-bbox="58 1347 790 1638"> <thead> <tr> <th>Column A</th> <th>Column B</th> </tr> </thead> <tbody> <tr> <td>(Ore)</td> <td>(Nature of ore)</td> </tr> <tr> <td>(a) Copper glance</td> <td>(i) Sulpahite ore</td> </tr> <tr> <td>(b) Calamine</td> <td>(ii) Halide ore</td> </tr> <tr> <td>(c) Rock salt</td> <td>(iii) Sulphide ore</td> </tr> <tr> <td>(d) Epsom salt</td> <td>(iv) Carbonate ore</td> </tr> </tbody> </table> <p>(a) a (i), b (ii), c (iii), d (iv) (b) a (iv), b (ii), c (iii), d (i) (c) a (iii), b (iv), c (ii), d (i) (d) a (iv), b (i), c (ii), d (iii)</p>	Column A	Column B	(Ore)	(Nature of ore)	(a) Copper glance	(i) Sulpahite ore	(b) Calamine	(ii) Halide ore	(c) Rock salt	(iii) Sulphide ore	(d) Epsom salt	(iv) Carbonate ore	<p>32. Process of roasting and calcination takes place in- (a) Bessemer converter (b) Blast furnace. (c) Reverberatory furnace (d) Electrolytic cell.</p> <p>33. Which reducing agent is used in chemical reduction ? (a) C (b) CO (c) Al (d) All of these</p>
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<p>25. Removal of impurities from ore is known as - (a) Crushing and grinding (b) Concentration of ore (c) Minerals (d) Gangue</p> <p>26. Which of the following methods is used in the concentration of haematite ore ? (a) Hydraulic washing</p>	<p>34. Which of the following is used in reduction of alumina ? (a) Coke (b) Carbon monoxide (c) Aluminium (d) Electricity</p> <p>35. For purification of which metal, liquation method is used ? (a) Tin (b) Lead (c) Bismuth (d) All of these</p> <p>36. Which method is used in purification of mercury ? (a) Liquation (b) Distillation (c) Electrolytic refining (d) Chemical reduction</p>												

37. Which of the following methods is used for obtaining metals of very high purity ?

- (a) Distillation
- (b) Zone refining
- (c) Liquation
- (d) Electrolytic refining

38. Which of the following methods is not used in purification of metals ?

- (a) Calcination
- (b) Liquation
- (c) Distillation
- (d) None of these

39. Anode mud is obtained in which process?

- (a) Roasting
- (b) Zone refining
- (c) Electrolytic refining
- (d) Calcination

40. In thermite process reducing agent is -

- (a) C
- (b) CO
- (c) AI
- (d) None of these