Date Planned : __ / __ / __	Daily Tutorial Sheet-2	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration :_____

16. Which one of the following is not a method of concentration of metals ?

(A) Gravity separation **(B)** Froth flotation process

(C) Electromagnetic separation **(D)** Smelting

17. Froth floatation process used for the concentration of sulphide ore :

(A) is based on the difference in wettability of different minerals

(B) uses sodium ethyl xanthate, $C_2H_5OCS_2Na$ as collector

(C) uses NaCN as depressant in the mixture of ZnS and PbS when ZnS forms soluble complex and PbS forms froth

(D) all of the above are correct

18. Gravity separation process is used for the concentration of :

(A) calamine **(B)** haematite **(C)** chalcopyrites **(D)** bauxite

19. Froth floatation process for the concentration of sulphide ores is an illustration of the practical application of

(A) Adsorption **(B)** Absorption **(C)** Sedimentation **(D)** Coagulation

20. Froth floatation process is used for the concentration of the ore of :

(A) Fe **(B)** Al **(C)** Cr **(D)** Cu

21. Haematite ore is concentrated by :

(A) Gravity separation method **(B)** Froth floatation process

(C) Amalgamation **(D)** Hand picking

22. Electromagnetic separation is used in the concentration of :

(A) Copper pyrite **(B)** Bauxite **(C)** Cassiterite **(D)** Cinnabar

23. Which one of the following is not a method of concentration of ore ?

(A) Electromagnetic separation **(B)** Smelting

(C) Gravity separation **(D)** Froth floatation process

24. Chemical leaching is useful in the concentration of :

(A) Copper pyrite **(B)** Bauxite **(C)** Cassiterite **(D)** Galena

25. The ore which is concentrated wetting by oil is :

(A) oxide ore **(B)** sulphate ore **(C)** carbonate ore **(D)** sulphide ore

26. Magnetite is separated from chlorapatite by :

(A) Froth floatation method **(B)** Levigation

(C) Magnetic separation method **(D)** Electrostatic separation method

27. Which of the following pair is incorrectly matched ?

(A Van Arkel method – Zirconium **(B)** Kroll's process – Titanium

(C) Froth Floatation – Cerussite **(D)** Distillation – Zinc

28. In the extraction of copper from its sulphide ore, the metal is formed by reduction of Cu_2O with :

(A) FeS **(B)** CO **(C)** Cu_2S **(D)** SO_2

29. Out of the following reduction processes

I. $Fe_2O_3 + C \longrightarrow Fe$ **II.** $ZnO + C \longrightarrow Zn$

III. $Ca_3(PO_4)_2 + C \longrightarrow P$ **IV.** $PbO + C \longrightarrow Pb$

Correct processes are :

(A) All of these **(B)** all but III **(C)** all but IV **(D)** II and IV

30. Consider the following steps $CuS \xrightarrow{\text{roast in air}} (A) \xrightarrow{\text{roast without air}} (B)$

Which is not the correct statement ?

(A) It is self-reduction

(B) It involves disproportionation $Cu_2S \longrightarrow Cu + CuS$

(C) (A) is a mixture of CuO and CuS and (B) is a mixture of Cu and SO_2

(D) All are incorrect statements