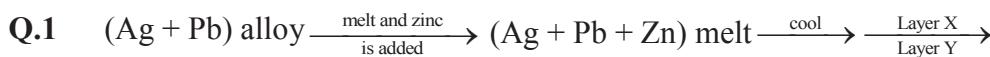


**Only One Correct**

Select correct statement based on above scheme :

- (A) Layer X contains zinc and silver
- (B) Layer Y contains lead and silver but amount of silver in this layer is smaller than in the layer X.
- (C) X and Y are immiscible layers
- (D) All are correct statements

Q.2 Give the correct order of initials **T** or **F** for following statements. Use **T** if statement is true and **F** if it is false.

- (i) Cu metal is extracted from its sulphide ore by reduction of Cu_2O with FeS.
- (ii) An ore of Tin containing FeWO_4 is concentrated by magnetic separation method.
- (iii) Auto reduction process is used in the extraction of Cu & Hg.
- (iv) Cassiterite and Rutile are oxide ores of the metals.

- (A) TFTT (B) TTFT (C) FTTT (D) FFTF

Q.3 Electrolytic reduction of alumina to aluminium by Hall-Heroult process is carried out:

- (A) In the presence of NaCl
- (B) In the presence of BaF_2
- (C) In the presence of cryolite which forms a melt with lower melting temperature
- (D) In the presence of cryolite which forms a melt with higher melting temperature

Q.4 During the process of electrorefining of copper some metals present as impurity settle as anode mud.

These are:

- (A) Sn and Ag (B) Pb and Zn (C) Ag and Au (D) Fe and Ni

Q.5 Reduction of a metal oxide by excess carbon at high temperature is a method for the commercial preparation of some metals. This method can be successfully applied in the case of

- (A) BeO and Al_2O_3 (B) ZnO and Fe_2O_3 (C) CaO and Cr_2O_3 (D) BaO and U_3O_8

Q.6 Electric furnaces are lined with magnesia because:

- (A) It is not affected by acids
- (B) It liberates oxygen on heating
- (C) It melts at very high temperature
- (D) It has no effect of electricity



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METALLURGY

Q.7 On heating a mixture of Cu_2O and Cu_2S , we get:

- (A) $\text{Cu} + \text{SO}_2$ (B) $\text{Cu} + \text{SO}_3$ (C) $\text{CuO} + \text{CuS}$ (D) Cu_2SO_3

Q.8 Select **incorrect** statement regarding silver extraction process.

- (A) When the lead-silver alloy is rich in silver, lead is removed by the cupellation process.
 (B) When the lead-silver alloy is rich in lead, silver is removed by parke's or pattinson's process.
 (C) Zinc forms an alloy with lead, from which lead is separated by distillation.
 (D) Zinc forms an alloy with silver, from which zinc is separated by distillation.

Q.9 $\boxed{\text{Sulphide}} \rightarrow \boxed{\text{A}} \rightarrow \boxed{\text{Oxide}} \rightarrow \boxed{\text{B}} \rightarrow \boxed{\text{Impure metal}} \rightarrow \boxed{\text{C}} \rightarrow \boxed{\text{Pure metal}}$

Step C (refining) involved in purification of Pb metal is

- | | |
|------------------|---------------------------|
| (A) Distillation | (B) Bessemerization |
| (C) Cupellation | (D) Electrolytic refining |

Match the Column

Q.10 **Column-I (Ore)** **Column-II (Metal in Ore)**

- | | |
|---------------|---------------|
| (A) Ilmenite | (P) Iron |
| (B) Dolomite | (Q) Magnesium |
| (C) Carnalite | (R) Potassium |
| (D) Chromite | (S) Titanium |



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- | | | | | | | | | | | | | | |
|----|-----|----|-----|-----|--|----|-----|----|-----|----|-----|----|-----|
| 1. | (D) | 2. | (C) | 3. | (C) | 4. | (C) | 5. | (B) | 6. | (C) | 7. | (A) |
| 8. | (C) | 9. | (D) | 10. | (A) P,S ; (B) - Q ; (C) - Q, R (D) - P | | | | | | | | |