108E

Second Mid Term Evaluation

KP(G) Std. 10

CHEMISTRY

Time:45 Mts. Score:20

Instructions:

- · The first 7 minutes are cool-off time.
- · Time is spent for reading the question paper you are not Time is spent for reason of question paper you are suppose to write any thing during cool-off time.
 Read the instructions carefully and attempt this questions.

Questions 1-3 carry 1 score each. Answer any 2. In an electrolytic cell. Positive electrode is called

[anode, cathode]

Haematite is the ore of

3. Fill up suitably.

Mercury: Distillation

Tin:

Ouestions 4-6 carry 2 scores each. Answer any 2.

4.a. Which is the ore of aluminium?

- b. Why is electricity used as the reducing agent in the manufacture of aluminium?
- 5,a. Sodium chloride in solid state is not a conductor of electricity. Why?
 - b. Which are the products formed at the anode and cathode when molten sodium chloride (NaCl) is electrolysed.

[P.T.O]

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- 6. Consider the cell Zn-Cu
 - a. Identify the anode and cathode.
- b. Complete the chemical equation of the reaction taking place at the zinc electrode. (Zn)

 $Zn \rightarrow so4 +$

Questions 7-9 carry 3 scores each. Answer any 2.

- 7.a. What is meant by electrolysis?
 - b. Which are the products formed at the anode and cathode when sodium chloride solution is electrolysed?
- Match columns A, B and C suitably.

A	/ B	C
Impurities are higher and ore particles are heavier	Magnetic Separation	Sulphide ores
Either the ore or the impurity is magnetic	Froth P floatation	Ores of gold
Impurities are heavier and ore particles are lighter	Levigation	Magnetite

- 9.a. How does calcination differ from roasting?
 - b. Which one of these methods is used to convert Cu₂S ore to Cu₂O?

108E Page 3 KP(G)/Std.10/Second Mid Term/Chemistry Question 10-12 carry 4 scores each. Answer any 2.

- Silver is electroplated on an iron bangle.
 - a. Which metal is connected to the positive terminal of the battery?
- b. Which metal is connected to the negative terminal of the battery?
- c. Which solution is used as the electrolyte?
- d. Which solution is used as electrolyte when copper is used for electroplating instead of silver?
- The chemical equations of the reactions taking place inside 11. the blast furnace during the manufacture of iron are given below.
 - $C+O, \rightarrow CO, +heat$ (i)
- (ii) CO₂+C + heat \rightarrow 2CO
- c (iii) Fe₂O₃+3CO \rightarrow 2Fe+3CO₂
- $_{3}$ (iv) CaCO₃ \rightarrow CaO+CO₂
- a (v) CaO+SiO, \rightarrow CaSiO,

a.

b.

C.

d.

- Which is the reducing agent used here? Which is the flux used in this process? Which reaction represents the reduction of ore?

 - Which is the slag formed here?

Page 4 KP(G)/Std.10/Second Mid Term/Chemistry 108E 12.a.Name the process in which impure copper is refined by electrolysis.

- b. Identify the cathode and anode in this process.
- c. Which is the electrolyte used here?