**CHEMISTRY FORM TWO NECTA 2007**

Solutions from: Maktaba by TETEA

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1

| i | ii | iii | iv | v | vi | vii | viii | ix | x |
|---|---|---|---|---|---|---|---|---|---|
| D | B | D | D | C | B | B | A | A | B |

2.

| i | ii | iii | iv | v | vi | vii | viii | ix | x |
|---|---|---|---|---|---|---|---|---|---|
| K | M | I | A | C | E | G | O | Q | S |

3. (a)(i)don't entre in laboratory without permission

(ii) Don't make noisy in laboratory

(iii) Clean all instruments after every experiment

(iv) don't do any experiment without permission from the teacher.

(b) Uses of water

- Used for drinking
- Used for cooling engines
- Used for washing our bodies
- Used in agriculture

(c)(i)Hydrogen gas is used in filling balloons because it has less density than air, this make it to rise at higher levels.

(ii)The rust was formed due to presence of oxygen.

4. (a)(i)First aid is an immediately help given to a victim before taken to hospital.

(ii) First aid kit is the small box in which different instruments used to give first aid are kept.

(b)(i)$SO_4^{2-}$

This is a radical, hence total ion is -2 then,

$S + 4(-2) = -2$

$S = +6$

(ii)$SO_3^{2-}$

S + 3(-2) = 2-

S = 4+

(iii)$OH^-$

-2 + H = -1

H = 1-

(iv)$KclO_3$

+1 + Cl + (-2 x 3) = 0

Cl = 5+

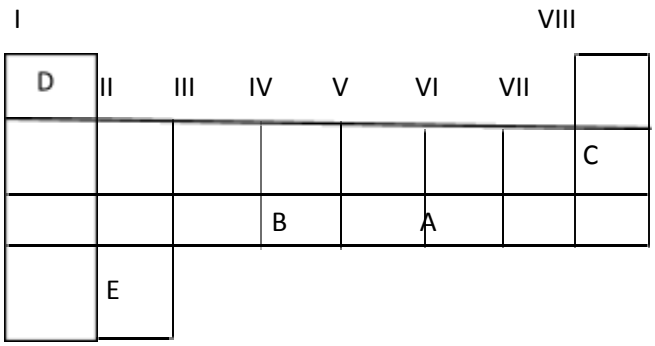
(c)(i)CaO

(ii)$Na(HCO_3)$

(iii)$H(PO_3)$

(iv)$Pb(NO_3)_2$

5. (a)




(b)(i) Element A

(ii) Element B

(iii) Element C

(iv) Element B

(v)Element D

(c)(i)$CaCO_3$

(ii)$CaCO_3 \longrightarrow CaO + CO_2$

6. (a)Molecular formula is the formula that shows the actual number of each atom present in the compound.

(b)Case 1. Divide each by its molar mass

Carbon 52.2/12 = 4.35, hydrogen 13/2 = 6.5, oxygen 34.8/16 = 2.175

Case 2.divide by smallest number,

Carbon 4.35/2.175 = 2, hydrogen 6.5/2.175 = 3, oxygen 2.175/2.175 = 1

(i)Empirical formula is $C_2H_3O$

(ii)Molecula formula

Let, $(C_2H_3O)_x = 46$

$12x + 3(2x) + 16x = 46$

X = 1.34

Molecular formula is $C_2H_3O$

8. (a)(i)$2KOH + H_2SO_4 \longrightarrow K_2SO_4 + 2H_2O$

(ii)$N_2 + 3H_2 \longrightarrow 2NH_3$

(iii) $2NaOH + CO_2 \longrightarrow Na_2CO_3 + H_2O$

(iv)$Mg(OH)_2 + H_2SO_4 \longrightarrow MgSO_4 + H_2O$

(b)(i) Copper (II) sulphate

(ii)Zinc oxide

9. (a) Matter is anything that has mass and occupy space.

(b)(i) a melting

(ii) b is freezing

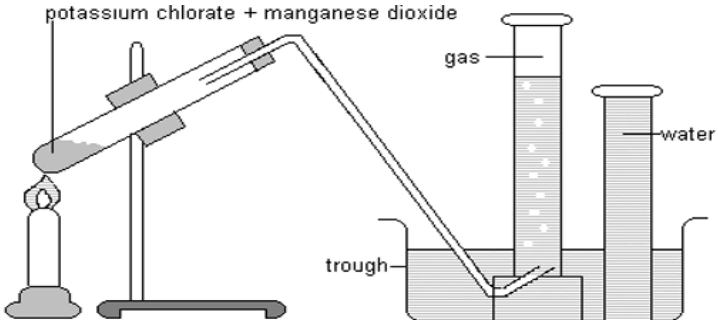
(iii)c is vaporization

(iv) d is condensation

(v) e is deposition

(vi) f is sublimation

10.(a)**preparation of oxygen gas in the laboratory by decomposition of potasium chrolate and manganese( iv) oxide.**




(b)$MnO_2$ acts as catalyst as it speeds up the rate of chemical reaction

(c) This is used because oxygen is less dense than water.