CHEMISTRY FORM TWO NECTA 2013

Solutions from: Maktaba by TETEA

By Yohana Lazaro

1.

i	ii	iii	iv	٧	vi	vii	viii	ix	Х
В	Α	С	В	В	Α	Α	В	D	D

2.

i	ii	iii	iv	V	vi	vii	viii	ix	Х
С	1	0	В	N	Н	L	J	F	Α

3. (a)(i)Empirical formula is the simplest formula that expresses its composition by mass

(ii)Relative atomic mass is the 1/12th of carbon mass of asubstance

(b)

Carbon 15.8/12 = 1.32 sulphur 84.2/32 = 2.63

Then, carbon 1.32/1.32 = 1, sulphur 2.63/1.32 = 1.99 = 2

- (i)simplest formula is CS₂
- (ii)molecular formula

Let
$$(CS_2)_X = 76$$

$$12x + 32(2x) = 76$$

Molecular formula is CS₂

- 4.(a)(i)Flame is the burning of a substance that produces heat and light
 - (ii)Bunsen burner is the device used as source of heat in the laboratory
 - (iii)Laboratory is the special room where scientific experiments are conducted

Luminous flame	Non luminous flame
-produces soot	-no soot
-less heat	-more heat
-bright	-invisible flame

-not suitable for welding	-suitable for welding				
(c)(i)Na ₂ CO ₃					
(ii)Ca(NO ₃) ₂					
(iii)NH ₃ Cl					

- 5.(a) **REMARKS**; there is no any underlined element on the given compounds
 - (b)(i)Plaster is used to cover small wounds
 - (ii)Pair of scissors used to cut dressing materials
 - (iii)Cotton used to clean wounds
 - (iv)gloves used to cover hands from being touching wounds directly.
 - (c)(i)physical change
 - (ii)chemical change
 - (iii)chemical change
 - (iv)physical change
- 6. (a)(i)Chemistry is the branch of science that deals with the study of composition and decomposition of matter.

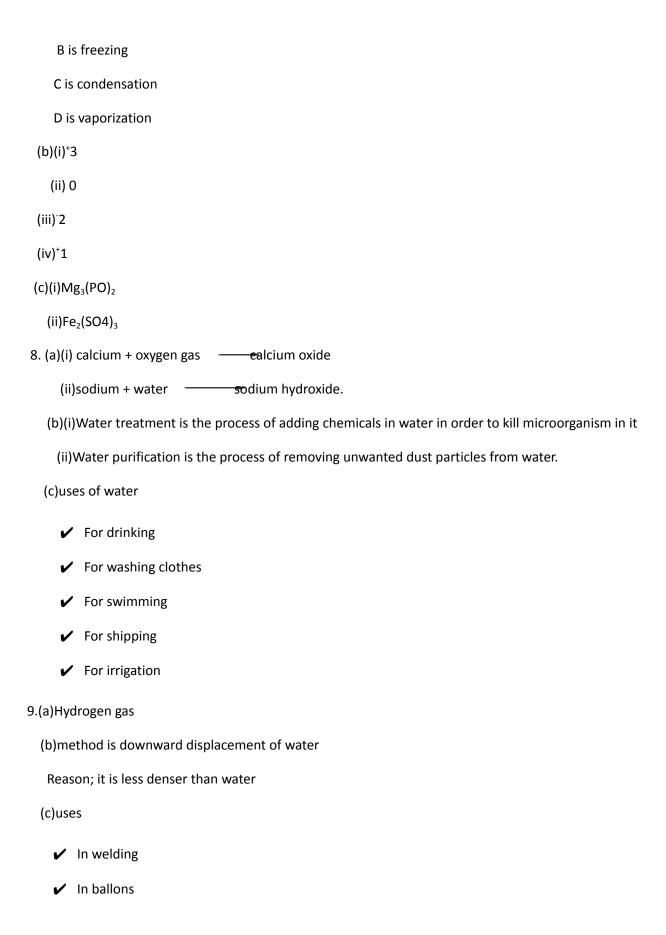
- (ii)Element is a pure subatance that cannot be splited into more simoler form
- (iii)Catalyst is any substance that can alter the rate of a chemical reaction
- (b)(i)compound vs mixture.

compound	mixture
-compounds are chemically bonded	-mixtures are not chemically bonded
-ratio of components is fixed	-ratios of components is not fixed
-energy is given out or absorbed	-no energy is given out or absorbed

(ii)Suspension vs solution

-suspension involve components that do not mixed completely, solution contains components that mixes compleyely.

7.(a) A is melting



- ✓ Used as fuel in rockets
- ✓ Used in margarine production

10. (a)chemical properties of oxygen

- ✔ Reacts with hydrogen to form water
- ✔ Reacts with free most reactive metals to form basic oxides
- ✔ Reacts with non metals to form acidic oxides
- ✓ Can form amphoteric oxides

(b)(i)KClO₃

$$+1 + CI + (-2 \times 3) = 0$$

$$CI = 5+$$

$$2Cr + 7(-2) = -2$$

$$Cr = 6+$$

- (c)(i)copper (II) oxide
 - (ii)Calcium Sulphate
 - (iii)nitric acid
- (iv)zinc chloride