CHEMISTRY FORM THREE ENTRANCE ZANZIBAR 2017

Solutions from: Maktaba by TETEA

By Yohana Lazaro

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

2.

i	ii	iii	iv	v	vi	vii	viii	ix	x
F	I	B	E	G	-	H	M	J	N

3

i. Group, period
ii. Transition, inert
iii. Oxygen,luminous fiame
iv. Homogeneous, non homogeneous
v. Neutral, universal

4. (a)

i. Hydrogen sulphide ion
ii. Hydrogen carbonate ion
iii. Nitride ion
iv. Oxide ion

b)

i. Calcium hydrogen sulphide
ii. Calcium hydrogen carbonate
iii. Calcium nitride
iv. Calcium oxide

c)(i) SO^{2-}_3

$S + (-2 \times 3) = -2$

$S = +4$

(ii)NO_2^-

$N + (-2 \times 2) = -1$

N = + 3

(iii)KNO_3

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

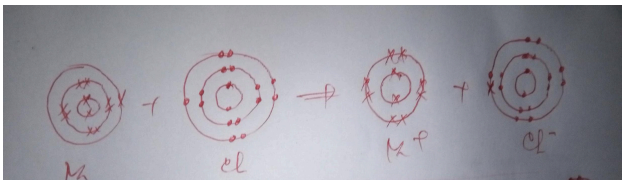
N = +5

(iv)H_2SO_4

(1 x 2) + S + (-2 x 4) = 0

S = +6

5. (a)Electrovalent bond is formed when there is complete lose and gain of electrons, while covalent bond is formed when there is sharing of electrons.

(b). 

6. (a)(i)Periodicity is the arrangement of elements in the order of increasing their atomic number.

(ii)Electronegativity is the tendency of an atom to attract electrons from another atom.

(iii)Ionization energy is the energy required to remove electrons from the outmost shell of an atom.

(b)

Element	symbol	Electronic configuration
magnesium	Mg	2:8:2
potasium	K	2:8:8:1
Fluorine	F	2:7
Beryllium	Be	2:2
Sodium	Na	2:8:1
Chlorine	Cl	2:8:7

7. (a)(i)elecrons

(ii)protons

(iii)neutrons

(b)-Atoms can be created and destroyeb, for example the use of binary fussion

8. (a)(i)to reduce pains

(ii)to handle dressing materials on the wound

(iii)to clean wound.

(b)(i)Oxidizing agent

(ii)Flammable substance

©Tripod stand has three legs, used to hold on position the beaker during boiling water or chemicals, while the retort stand is used to hold the burette during volumetric analysis.

9 (a)(**I)**

i. Dropper
ii. Thermometer
iii. Mortal and pestle
iv. Gas jar
v. Tongs

(**II)**To separate the muddy from water.

The sample is left to settle for sometime then the water is poured out slowly by filtration

10. (a)Combustion is the burning of substance which produce heat,light and energy

(b)(i)In industries, heat production

(ii) in ENGINES, power production

(c)

class	Burning material	extinguisher

-A	Firewoods, charcoal	Water,carbon dioxide
-B	Petrol, kerosene	Sand,dry powder

11. (a)Fuel is the material which can produce energy when ignited

(b)characteristics of good fuel

- ✔ Low cost
- ✔ Not produce waste materials
- ✔ Easy to store
- ✔ High calorific value

Renewable sources	Non-renewable sources
solar	oil
Wind energy	gas
	coal
	Nuclear energy
	Fossile fuels