

CHEMISTRY FORM TWO NECTA 2019

Solutions from: [Maktaba by TETEA](https://maktaba.tetea.org)

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1.

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

2. (a)

I	ii	iii	iv	v
C	G	A	H	B

(b)(i)electrons(negative charge)

(ii) chromatograph

(iii) chemical bond

(iv)physical change

(v)filtrate

3. (a)(i)soap used to wash hands afer giving first aid

(ii)Bandage is used to cover large wounds

(iii) used to prevent infections on the wound

(iv)used to clean the wound and also prevent infections

(v)petrolleum jelly used to apply on the wound to make it soft.

(b)(i)used for crystalline materials

(ii)used to collect gas during gas preparations

(iii) used to cool vapour to liquid

(iv)usd for grinding solid materials into powder

(v)used to prevent direct contact of a beaker on flame during heating or boiling

4. (a)(i)in order to make the reaction to take place faster

(ii)they use oxygen in solution form that is dissolved in water

(b)(i)it is light, i.e. it less dense than air

(ii)it is flammable

(c)uses of oxygen

-used for breathing

-used by divers

-used for seed germination

5. (a)tests for water

- It turns copper (II)sulphate from blue to white
- It does not affect the colour of litmus papers as it is neutral

(b)(i)Water treatment is the process of adding chemical substances like chlorine in water in order to kill the microorganisms in water.

Water purification is the process of removing solid dust materials from water which contaminate it.

(ii)-to prevent eruption of diseases like cholera

-to make it be clean

(iii)-by adding chlorine

-by boiling

-by filtration

6. (a)Hypothesis is the suggestion on thing that is going to be done an experiment, while analysis is the checking up of many solutions obtained after experiment.

(b)(i)eyes used to see the results after experiment

(ii)Ears used to sense the sound

(iii) skin used to sense the touch if any.

(iv)nose used to smell.

7. (a)(i)handle it firmly

(b)Avoid places with fire

(c) Avoid it from foods

(d) avoid touching it with bare hands

(e) avoid places having fire.

8. Classes of fire

Class A, solid combustible materials like papers, woods, textile.

-water can be used to extinguish it.

Class B, Flammable liquids like petrol, diesel, oil

-sand can be used to extinguish it.

Class C, Flammable gases like natural gases, propane

-sand and carbon dioxide

Class D, having combustible metals, like sodium, potassium, lithium

-sand can be used

Class E, fire caused by electricity

-sand and carbon dioxide

Class F, having cooking oils/fats

-sand can be used

9.

Stage	Nitrogen	Oxygen
-divide each by its molar mass	$30.4/14 = 2.17$	$69.6/16 = 4.35$
-divide by smallest value,	$2.17/2.17 = 1$	$4.35/2.17 = 2.00$
-Ratio obtained,	1	2

Empirical formula is NO_2

-for molecular formula, let $(\text{NO}_2)_x = 92$

$$14x + (16 \times 2x) = 92$$

$$x = 2$$

hence, molecular formula is $(\text{NO}_2)_2$

10. Characteristics of good fuel

- a) Should be affordable by any person
- b) Should have high calorific value
- c) Should not produce much waste materials
- d) Should be easily stored
- e) Should be easily transported