CHEMISTRY FORM TWO NECTA 2020

Solutions from: Maktaba by TETEA

By Yohana Lazaro

1.

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

2. (a)

i	ii	iii	iv	v
E	G	H	A	B

(b)(i)Experiment

(ii)temperature

(iii)quantity of the mixture

(iv)atoms

(v)electrons

3. (a)(i)do not produce large heat

(ii)produce soot.

(b)

Luminous flame	**Non-luminous flame**
-very bright	-not bright
-produce soot	-no soot produced
-less heat	-very hotter
-has four zones	-has three zones

4. (a)Ideas of Daltons atomic theory

- Matter is made up of very small indivisible particles called atoms
- Atom cannot be created or destroyed
- Atoms of the same elements are identical and have the same mass

- Atoms of different elements are different and have different mass

(b)

S/N	**element**	**group**	**period**
(i)	calcium	II	2
(ii)	hydrogen	I	1
(iii)	chlorine	VII	3
(iv)	boron	III	2
(v)	Aluminium	III	3

5 (a)(i)in hospitals to do research on diseases

(ii)in industries

(b)(i)controlled variables

(ii)dependent variables

(iii)independent variables

6. (a)(i)Charcoal produces carbon monoxide that can destroy the ozone layer

(ii)Because it is cheap,costless and reliable.

(b)Let change of temperature be **t**

-Mass of water = density x volume

$= 2.5 \times 10^3 \times 1000$

$= 2500000$ kg

-heat gained by water, Q = mct

$= 2500000 \times 4.18 \times t$

$= 10450000t$ J

-heat lost by petrol, Q = M X C

$= 0.02 \times 43640000$

$= 872800$ J

Since heat gained = heat lost,

$10450000t\ J = 872800\ J$

$t = 0.08\ ^0C$

7. (a)Because it is volatile and catch fire easily, so can cause fire in laboratory.

(b)(i)gas stove

(ii)spirit stove

(iii)charcoal stove

(c)

step	1	2	3	4	5	6
letter	C	B	D	F	E	A

9. (a)(i)H_2O_2

(ii)Mn_2O_4

(b)physical properties of oxygen gas

-it is less dense than air

-it is colourless

-has no smell

(c)(i)used for respiration

(ii)supports combustion

(iii)used for seed germination

(iv)used by divers

(v)used in hospitals

10Accidents common in laboratory.

- Cutting by sharp tools
- Spilled with acids
- Knocked on sharp edges
- Slipping
- Explosion during experiments

- Fainting due to smells of chemicals