

1.

[a]matter is anything that has mass and occupies space

[b]Copper-solid

Water – liquid

Oxygen – gas

2[a] Weighing balances

{b} 100ml measuring cylinder

{c} 1000cm³ volumetric flask

3[a].Simple distillation

[b]R-water

Sharp boiling point of 100⁰C

[C]Round bottomed flask

[d]To fastern the rate of condensation of liquid R

[e]Ice cold water

4[a]A-melting

D-evaporation

E-sublimation

F-depostion

[b]A-heat/high temperatures

C-low temperature

[c]

- ✓ Iodine
- ✓ Benzoic acid
- ✓ Dry ice
- ✓ Ammonium chloride
- ✓ Iron III chlorine

5.[a]A substance natural or manufactured that when taken alters the normal functioning of the body

[b]

- ✓ Bhang
- ✓ Alcohol

- ✓ Cigarette
- ✓ Tobacco

6[a]

- ✓ Iron nails turns brown
- ✓ Water rose on the gas jar

[b]Rusting

[c]iron + oxygen + water \longrightarrow hydrated iron{III} oxide

[d]-Air [oxygen]

-moisture

7.[a]

[i]Q

{ii}R

{iii}T

{iv}U

[b]i)S

{ii}P

{iii}V

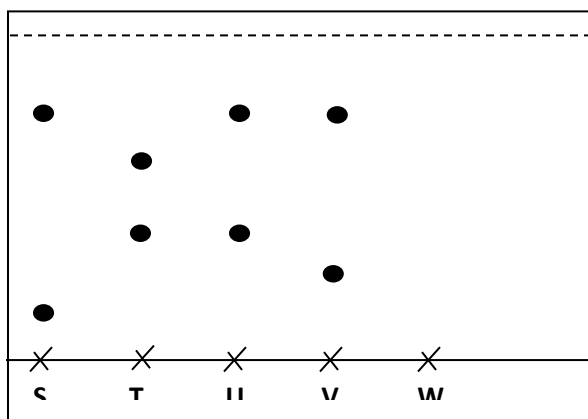
{iv}Q

8.

- a) P-pale blue zone
- b) R- almost colourless zone
- c) Non-luminous flame
- d) P-is the hottest
 - it consist of completely burnt carbon particles

[e]Luminous flame

9.



Solvent front

Base line

[b]

- ✓ Ethanol
- ✓ Propanone
- ✓ [c]Diagram

{d}

- ✓ In pharmaceutical industry to test purity of drugs
- ✓ In sports to identify banned substance of steroids
- ✓ In food industry to identify harmful substances
- ✓ In cosmetics to identify harmful substances

10.[a] –use of thistle funnel with no tap

[b]i}Manganese {IV} oxide

[ii]Catalyst

[c]Hydrogen peroxide $\xrightarrow{\text{MnO}_2}$ Water + oxygen gas

[e]It relights/rekindles a glowing splint

[f]

- ✓ Used to burn fuel propelling rockets
- ✓ Mixture of oxygen and acetylene is used to produce hot flame used in welding
- ✓ Used to remove iron impurities during steel making
- ✓ Used as reactant in fuel cell

11.

- ✓ Add water to the mixture
- ✓ Stir and filter to obtain copper {II} oxide as a residue
- ✓ Evaporate to dryness to recover sodium chloride