

**CHEMISTRY PAPER**  
**FORM 1**  
**TERM 3 2017**  
**2017**

**MARKING SCHEME**

1. (a) To circle the 2 dots to the right.  
(b) Line above – solvent front  
Line below – base line
2.
  - Add water to the mixture, warm, stir
  - Filter the mixture, the residue is copper(II)oxide
  - Evaporate water and sodium chloride remains
3.
  - (a)  
P – sublimation  
Q – condensation  
R – melting  
S – deposition
  - (b)
    - Dry ice
    - Iodine
4.
  - (a) Increase, zinc react with air to form zinc oxide.
  - (b) Decrease – carbonate decompose to zinc oxide and carbon(IV)oxide which escapes into the air.
5.
  - i)
  - ii) Measure the temperature of the distillate coming out.
  - iii) C , it has the least boiling point, hence it boils faster.
6. To draw dropper.
7.
  - a) Sodium bromine
  - b) Zinc and sulphur
  - c) Lead and oxygen
  - d) Magnesium and nitrogen
  - e) Potassium and iodine
- 8.

Element	Symbol
Carbon	<b>C</b>
<b>Nitrogen</b>	N
Oxygen	<b>O</b>
<b>Hydrogen</b>	H
Copper	<b>Cu</b>
<b>Magnesium</b>	Mg

9.

- Transparent, hence reactions can be observed easily.
- Does not react with most reagents.

10.

- Does not make beakers dirty because it has no soot.
- It is the hottest hence heats faster.

11.

a) 30<sup>0</sup>C

b)

PQ – Temperature increases steadily as solid X absorbs heat energy, the heat absorbed increases kinetic energy of the particles as they vibrate vigorously.

QR – solid-liquid Temperature remains constant until solid X melts heat supplied is used to weaken forces of attraction holding particle of solid X together. The particles move far apart as solid changes from solid to

RS – Temperature rises steadily as the liquid X absorbs heat energy. The heat supplied increases further the kinetic energy of the particle causing them to move fast.

12.

- Bhang
- Cocaine
- Miraa

13. Wash immediately with cold water.

14.

- Don't run in the lab.
- Label reagents to avoid confusion.
- Don't smell gases directly, waft instead.

15.

(a) Parts of the flame

A – pale blue zone

B – green blue zone

C – almost colourless zone

(b)