FORM ONE TERM ONE EXAMS 2017

CHEMISTRY MARKING SCHEME

SCHOOLS NET KENYA

Osiligi House, Opposite KCB, Ground Floor Off Magadi Road, Ongata Rongai | Tel: 0711 88 22 27 E-mail:infosnkenya@gmail.com | Website: <u>www.schoolsnetkenya.com</u> 1(a). tobacco,alcohol,bhang and khat.

(b), stress, depression. hallucination, addiction dependency, may be fatal.

2.(i). Chemistry is the study of the structure ,properties and compositions of matter and the changes that matter undergoes.

(ii). The knowledge of Chemistry helps in the following fields:

-manufacture of drugs, food production, manufacture of cheaper fabrics such as nylon, manufacturer of plastics such as pvc,manufacture of detergents, production of fuels for transport and domestic use.

3.(i).beaker. used to measure approximate volumes of liquids.

(ii).gas jar .used for gas collection.

(iii). Dropping funnel. Used to add controlled amounts of liquids into reaction vessels.

(b). to allow easy observation as the experiment progresses./ transparent

.glasses do not easily react with chemicals.

- 4. (i). Aflame is a mass of burning gases.
 - (ii)(a) a- non-luminous flame

b-luminous flame.

- (b). a- non-luminous flame. Produces much heat.
- (c).

(a) non luminous flame	(b) luminous flame
Has three zones	Has four zones
Produces much heat and less light	Produces much light and less heat
Short and steady	Large and wavy
Roaring noisy flame	Quiet flame
Produces soot	No soot

(d)(i). a-non-luminous flame is produced when the air hole is open while the luminous flame (b) is produced when the air hole is closed.

(ii)(a).non luminous flame.

(b). the inner part has unburnt gases hence not hot while the outer part has completely burnt gases and is therefore hotter.

(iii)- to preserve the gases, to avoid fire accidents because non-luminous flame is not easy to sea .

(iv).chemicals already used should be disposed off immediately to avoid contamination, if a chemical gets into your skin or mouth, rinse it immediately with a lot of clean water, always extinguish flames that are not in use to avoid accidents and to minimize fuel wastage, never taste or eat anything in the laboratory to avoid poisoning, label all the chemicals you are using to avoid confusion.(accept any correct)

(v). a mixture is a physical combination of two or more substances which can be separated by physical means.

(vi) . Winnowing, sieving, filtering. Evaporating, decanting, use of magnets.

5(a). use of amagnet.

(b). iron filings are magnetic while sulphur is not.

(c). spread the mixture on a plain cardboard. Pass the magnet through the mixture. Iron filing are attracted to the magnet and are removed while sulphur is left on the cardboard

(d).anhydrous iron (iii) chloride, aluminum chloride ,benzoic acid carbon (iv) oxide(dry ice),iodine.

(e). - it sublimes leaving no wetness

-it is a better coolant compared to ordinary ice

6(a)(i).shiny-black crystals are iodine crystals

-white crystals are sodium chloride solid

(ii). To cool and condense the iodine vapour to form iodine solid.

(iii). When the mixture is heated, iodine sublimes into purple vapour . on reaching the surface of the watch glass , it is cooled and condensed into shiny black crystals of iodine .

(iv) . iodine sublimes when heated .

(v). iodine sublimes while sodium chloride does not.

7(a)(i). a saturated solution is a solution that has maximum solute and that cannot dissolve any more solute at a given temperature.

(ii). Crystallization is the process of obtaining salt crystals from a saturated solution by cooling.

(b)(i). evaporate the solution to dryness . allow the saturated solution to cool to form crystals.

(ii). Extraction of salt from salty water.

Extraction of sugar from sugar cane.

Extraction of medicinal substances from plants.

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