



PRESIDENT'S OFFICE  
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT  
UKEREWE DISTRICT COUNCIL



FORM ONE EXAMINATION  
CHEMISTRY

1. (1 mark each)

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

2. (1 mark each)

|        |    |     |      |     |    |
|--------|----|-----|------|-----|----|
| List A | i. | ii. | iii. | iv. | v. |
| List B | D  | H   | F    | C   | G  |

SECTION B (70 MARKS)

3. (a) Suspension as used in chemistry. (2 marks)

Suspension *is the heterogenous mixture of liquid contain undissolved solid particles that settle at the bottom of the container when left for some time.*

(b) Two general components of each of the following. (4 marks)

- Solution = *solvent* and *solutes*.
- Aerosol = *air (gases)* and *liquid droplets*.

(c) Method of separating mixture used to obtain each of the following substances from its mixture; (4 marks)

- Cooking oil from groundnuts = *solvent extraction method*.
- Chlorophyll or green pigment from plant leaf = *solvent extraction method*.
- Oxygen gas from air = *fractional distillation method*.
- Sulphur from mixture of Sulphur and sand = *sublimation method*.

4. (a)

- Toxic
- Flammable
- Oxidizing Agent
- Corrosive

## (b) Answer

|        |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|
| Step   | 1 | 2 | 3 | 4 | 5 | 6 |
| Letter | C | E | F | B | A | D |

## 5. (a)

- i. Helps to make fertilizers
- ii. Helps to make pesticides (five points 01 MARKS @= 5 MARKS)
- iii. Helps to make Herbicides
- iv. Helps to advices farmers on the best use of soil
- v. Helps to make Animal Vaccines

## (b) Water is a compound 1 Marks

Because

- (i) The components of water cannot be seen separately
- (ii) The components of water cannot be separated by physical methods.
- (iii) The components of water are in fixed ratio.
- (iv) Chemical changes are involved when water is formed.
- (v) The properties of water are very different from those of individual elements.  
Any five points, @ 1Marks, Total = 5 Marks

## 6. (a)(i) Wet chemical extinguisher

Foam extinguisher

Carbon dioxide extinguisher

Dry powder extinguisher 2 points, @ 1 Marks, Total = 2 Marks

Sand/Fire blanket if fire is small

- (ii) Water because the water is denser than oil so if water is used, the oil will float above it and fire will continue. Also the water would spread the flame.

## (b)

- i. Rust will not occur, this is because boiling water does not contain dissolved oxygen which cause rusting to occur. 1 Marks
- ii. Rust will not occur, this is because the paint coating prevents oxygen and water from coming into contact with the iron bar. 1 Marks
- iii. Rust will occur, this is because there will be a direct contact between iron bar, water and oxygen (rusting agents). 1 Marks
- iv. Rust will not occur, this is because the oil prevents a direct contact between iron bar, oxygen and water (rusting agents). 1 Marks
- v. Rusting will not occur, this is because unlike iron and steel, aluminium does not rust in moist conditions. It's surface is protected by natural layer of aluminium oxide. 1 Marks
- vi. Rust will not occur, this is because the layer of cotton wool prevents the moisture and oxygen from reaching the iron bar. 1 Marks

## 7. (a)

- A laboratory is a special room or building designed and used for scientific experiments.
- A laboratory rule is a set of regulations governing practical activities in the laboratory.

- A laboratory measure is the condition in which measures of risk are avoided during laboratory activities.
- A chemistry laboratory is a special room or building designed and used for chemistry experiments.
- A chemistry apparatus is a special tool or equipment used in a chemistry laboratory.

*1mark@=05 total marks*

(b) Benefits (importance) of studying chemistry

- It help to produce basic human needs like food, shelters and clothes.
- It enables a person to change natural resources into useful ones.
- It answers question about nature of things. Example; why iron undergoes rusting?
- It help to conserve our environment
- It help in manufacturing of detergents which are used for cleaning.
- It leads the production of fertilizers used in agriculture.
- It help in manufacturing of medicines which are used to cure people.

*Any five points 1mark@=05 total marks*

8. (a) (i) Latin names **1 mark**

(ii) any 3 points **1mark@ =3 marks**

| ENGLISH NAMES | LATIN NAMES |
|---------------|-------------|
| Copper        | Cuprum      |
| Gold          | Aurum       |
| Iron          | Ferrum      |
| Lead          | Plumbum     |
| Potassium     | Kalium      |
| Silver        | Argentum    |
| Sodium        | Natrium     |
| Tin           | Stannum     |

(b) (i) It help to distinguish one element from the other. **1 mark**

(ii) It help to quickly understand the element that is being referred. **1 mark**

(c) They were not correct, because;

(i) Solution is transparent (clear) while Suspension is opaque (Not clear)

(ii) The particles in solution are completely dissolved in a solvent while particles in suspension settles if it is undisturbed.

(iii) Solution is homogeneous mixture while suspension is heterogeneous. **1mark@ =3 marks**

9. (a) first aid kit **1 mark**

| Item        | Uses           |
|-------------|----------------|
| Pain killer | To reduce pain |

|                  |                             |
|------------------|-----------------------------|
| Adhesive bandage | To cover the wound          |
| Petroleum jelly  | To soften the wound         |
| Iodine tincture  | To kill germs and pathogens |

**1 marks@ = 4 marks**

(b)

- i Large window and door open out ward
- ii Water supply
- iii Gas supply
- iv Electricity supply
- v Fume chamber
- vi Fire extinguisher
- vii Rough floor **five points 5 marks**

**SECTION C (10 MARKS)**

10.

- Steam engine
- Water cycle
- Refinery
- Metallurgy
- Drying material
- Production of electricity **10 Marks**