NGALA MEMORIAL GIRLS SECONDARY SCHOOL FORM THREE CAT 1 TERM1 2017

ATTEMPT ALL QUESTIONS.

1. Molten sodium chloride and graphite both conduct electricity. State their difference in electrical conductivity (2mks)

2. Compare the second ionization energy of magnesium with its first ionization energy. Explain your answer. (2mks)

3. State six ways of preventing rusting. 6 mks

4. Discuss four effects of rusting to the environment. 4 mks

5. Explain the procedure of preparing carbon(iv) oxide in the lab. 3 mks

6. Discuss the impacts of carbon (iv) oxide to the environment 3 mks

7. The figure below shows a paper that was placed horizontally across the middle of a non-luminous flame and quickly withdrawn.

**Paper**

**Charred black**

**Unburnt**

(a) Explain the observations (2mk)

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(b) Why is luminous flame not used for heating in the laboratory? (2mk)

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8. Use the information in the table below to answer the questions that follow.*(Letter A,B.C,D,E and Z are not actual symbols of elements)*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Oxide | A2O | BO | C2O3 | DO2 | E2O5 | ZO2 |
| PH of oxide in water | 13 | 9 | x | x | 1 | 4 |
| Melting point | 1193 | 3075 | 2045 | 1728 | 563 | -91 |

1. Identify oxide with the following structures

(i) Giant atomic ( ½ mk)

……………………………………………………………………………………………………..

(ii) Simple molecular ( 1 mk)

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(b) Write another formula of the oxide formed when E and oxygen combine apart from the one

given above. (1mk)

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(c) Explain why DO2 is a solid at room temperature and pressure while ZO2 is a gas (4mks)

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