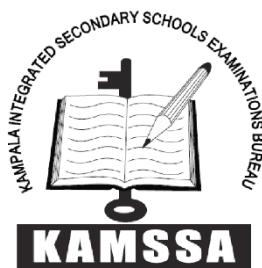


NAME:.....STREAM.....



KAMSSA LOWER SECONDARY EDUCATION EXAMINATIONS
CHEMISTRY
SENIOR ONE
END OF YEAR 2022
2 Hours 30 Minutes

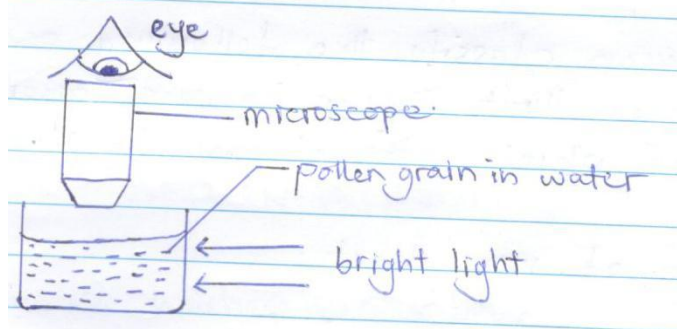
INSTRUCTIONS.

- **This paper consists of two sections A and B.**
- **Attempt all questions from section A and any 2(two) in section B.**
- **Answer to section A must be written in the spaces provided.**

SECTION A

1. Betty, a senior one student wants to separate sand and water from their mixture.
(i) identify any two different methods Betty can use to separate the mixture (1mark)
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.....
(ii) Briefly describe the procedures of any of the above methods Betty can follow to separate her mixture. (3marks)
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.....
2. Odong took two beakers A and B, to A added hot water, to B added cold water. He then added potassium permanganate to each at ago. He observed that hot water in A turned purple faster than the cold one in B.
(i) Identify the property responsible for the colour change in both beakers (1mark)
.....
(ii) Explain why hot water turned purple faster than the cold one. (03mark)
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3. Three beakers X, Y and Z are taken, beaker X is half filled with tap water; beaker Y is half filled with boiled water, beaker Z is left empty. Iron nails are added to all the three beakers. And a layer of oil to beaker Y. With reason state what was observed in each beaker.
- (i)X(01mark)
(ii)Y(01mark)
(iii)Z(01mark)
4. Previously in Uganda, petroleum has been discovered in the western region of Uganda. After the extraction of petroleum, how will the discovery of petroleum contribute to the development of Uganda? (04marks)
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5. The knowledge of chemistry has improved peoples' lives through manufacturing of medicine, detergents for cleaning and many others. However its knowledge has also been misused in different ways. What are some of the different ways in which the knowledge of chemistry has been misused (04marks)
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6. Using kinetic theory of matter. Explain the following observations.
- (i)The air pressure in the tubes with in a car tyre increases after a very long journey drive on a hotter day (02mark)
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.....
- (ii)When a drop of spirit is put on your skin of the hand, you feel cold as the drops evaporats. (02mark)
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.....
7. In an experiment to investigate the existence of particles of matter, Abdul and Tonny carried out the experiment below; they poured powdered pollen grain particles on to water in a glass beaker and then passed a beam of light into the beaker. When each one of the students observed through the microscope, they saw pollen grain particles moving in a zig zag pattern.



(a)i State why the pollen grain particles were seen moving in zig zag pattern. (01mark)

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(ii) Give a reason for your answer (01mark)

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(b) Supposing Addul and Tonny increased the temperature of water state what they observed (01mark)

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(ii) Give a reason for answer (01mark)

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8. Outline four ways how you can conduct yourself in the laboratory during a chemistry experiment to ensure that everyone in the laboratory is safe. (04mark)

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9. With a reason classify the following examples of changes that occur in our everyday life as either physical or chemical changes

(i) Rusting of iron sheet (01mark)

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(ii) Burning of wood (01mark)

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(iii) Evaporation of water (01mark)

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(iv) Rotting of meat (01mark)

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10. In a certain school, the toilet is near the senior one class. The foul smell disturbs the students in the class and the smell becomes much more on the hot day.

(i) Explain briefly how the smell molecules are able to move from the toilet up to the classroom (02marks)

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(ii) Explain why the smell from the toilet become more during the hot day. (02marks)

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SECTION B

11. Opito always washes his clothes at any time and they can get dried at any time whether on a hot day, inside the house or even on a windy day.
- (a) Explain why clothes dry,
- (i) On a dry day (03mark)
 - (ii) Inside the house (03mark)
 - (iii) On a windy day. (03mark)
- (b)i) From the knowledge of different states of matter, explain the process of rain formation. (08marks)
- (ii) State any three importance of water to man. (03marks)
12. Chemistry has contributed to the society both positively and negatively.
- (i) Explain any five ways in each case in which chemistry has contributed positively and negatively to the society. (10marks)
 - (ii) Identify any five sectors where chemistry plays an important role in the economy of Uganda. (05marks)
 - (iii) Name any five products used in our day to day life obtained from the knowledge of chemistry. (05marks)
13. In your village you have challenge of water, where the wells have muddy water and the boreholes provide salt water that hardly quench their thirst but rather increase it. Describe any scientific procedures that you as chemistry student can perform to make the village water clean and safe for human consumption. (20marks)
14. Polythene bags, car tires, buckets, iron sheets and petrol are some of the materials used in our day to day life.
- (i) Describe any five ways how polythene bags are dangerous to our environment. (10marks)
 - (ii) Explain any five ways of how to prevent the effects of polythene bags on the environment. (10marks)

END