**ST.MARIE EUGENIE GIRLS SECONDARY SCHOOL**

**HILIDAY PACKAGE CHEMISTRY FORM ONE 2020**

**SECTION A**

1. For each of the items (i) – (x), choose the correct answer from the given alternatives and write its letter in the space provided.
2. Which of the following are the main components of fire triangle?
3. Air, temperature andfire
4. Oxygen, fuel and temperature
5. Oxygen, fuel and fire
6. Oxygen, temperature and fire
7. Separation of a mixture by factional distillation is possible if the mixture constituents differ in their
8. Melting point
9. Boiling point
10. Vaporizing points
11. Freezing points
12. The process of coating iron or steel with zinc is known as
13. Zinc painting
14. Alloying
15. Tin plating
16. Galvanization
17. Which of the following methods is used to test for the presence of oxygen gas in the laboratory
18. It burns with a pop sound
19. It extinguishes a glowing splint
20. It relights a glowing splint
21. It turns wet blue litmus paper red
22. Which of the following is the best apparatus for measuring accurately the volume of a given solution?
23. Conical flask (b) Burette (c) Beaker (d) Test tube
24. The factors that affect the problem being investigated are referred to as:
25. Dependent factors
26. Variables
27. Independent factors
28. Condition
29. Which of the following is a chemical change?
30. Heating of ammonium chloride
31. Heating a mixture of Sulphur powder and iron
32. Break down of a piece of mirror to small pieces
33. Heat water until all change to vapor

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Item | (i) | (ii) | (iii) | (iv) | (v) | (vi) | (vii) |
| Answer |  |  |  |  |  |  |  |

**SECTION B**

1. Gas M is prepared by reacting Zinc granules and sulphuric acid in the laboratory
2. draw a well labeled diagram of preparation of gas M
3. Write a balanced chemical equation for the chemical reaction taking place in (a) above

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1. Give four uses of gas M
2. …………………………………………………..
3. …………………………………………………...
4. ……………………………………………………
5. …… ………………………………………………
6. (a) Explain whypetroleum and coal are non-renewable source of energy.

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(b)Describe the energy transformations that take place in each of the following cases

1. Energy from the sun is used to generate electricity for lighting a house …………………………………………………………………………………
2. Mechanical energy from the water falls is used to generate electricity …………………………………………………………………………………
3. A bicycle wheel is used to turn a dynamo. The energy from the dynamo is used to power a bulb to produce light …………………………………………………………………………………
4. Source of electric current is connected to an electric motor, a rotational motion is produced in the motor …………………………………………………………………………………
5. Write down the method which can be used to separate the following mixtures
6. Mixture Ammonia chloride and sand ……………………………………………….
7. Chlorophyll from green leaves …………………………………………………………
8. Ion fillings and table salt ………………………………………………………………..
9. Crude oil …………………………………………………………………………………….
10. Mixture of Ethanol and water …………………………………………………………
11. a) Define the term flame
12. Anna was preparing food for her family using hot oil in a frying pan. Accidentally, the pan tipped over and a huge fire spread on her kitchen floor.
13. State the class of fire …………………………………………………………………
14. Which extinguishers would be appropriate for putting out the fire ………………………………………………………………………………………………
15. Which extinguishers would be dangerous to use to try to put out the fire? Explain.

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(c)With one example, mention other four classes of fire

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| --- | --- | --- |
|  | Class of fire | Example of burning material |
| (i) |  |  |
| (ii) |  |  |
| (iii) |  |  |
| (iv) |  |  |

1. a) Three stages in purifying water are
2. Treatment with chlorine
3. Sedimentation
4. Treatment with alum and slaked lime

Put these three stages in the correct order

1. ………………………………………………………………..
2. ………………………………………………………………..
3. ………………………………………………………………...

 (b) Masumbuko wanted to test for substances he could use to test for the presence of water in a certain compound. He put some hydrated copper (II) sulphate on a watch glass and added a few drops of distilled water to it. There was no change in colour.

1. Why was there no change in the colour of the copper (II) sulphate? ……………………………………………………………………………………………………………………………………………………………………………………………………..
2. Name two substances he could have used in the place of the copper (II) sulphate to observe the required colour change
3. ………………………………………………………..
4. ………………………………………………………..
5. “No water, No life” give three points to support this statement
6. …………………………………………………………………………………..
7. …………………………………………………………………………………..
8. …………………………………………………………………………………..
9. a) What do you understand by the following terms?
10. First aid …………………………………………………………………………

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1. First Aid kit ………………………………………………………………………

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1. Name five components which can be found in first Aid kit and state one function in each components