**GATITU MIXED SECONDARY SCHOOL**

**CHEMISTRY FORM 1 MID TERM EXAM TERM 2 2015**

1. Define chemistry. 1mk
2. Define matter and state the three states of matter. 4mks
3. State any five differences between luminous and non –luminous. 4mks
4. Define the following terms: 4mks
5. Solution
6. Solvent
7. Solute
8. Suspension
9. The diagram below shows a heating curve of a pure substance. Study it and answer the questions that follows:



1. What physical changes are taking place at point X and Z? 1mk
2. What are the physical states of the substance at point W, X, and Y? 3mks
3. Using the simple kinetic theory of matters explain what happens to the substance between points A and C. 3mks
4. What happens to temperature between points B and C? 2mks
5. Give the effect of impurities on melting point of pure substance. 1mk
6. Name the elements present in the following compounds 2mks
7. Sodium chloride
8. Sodium carbonate
9. Calcium sulphite
10. Sodium hydride
11. Differentiate using characteristics of each change between permanent changes and non- permanent change. 4mks
12. Define the following terms. 4mks
13. Elements
14. Compound
15. Atoms
16. Molecule
17. Complete the following word equation 5mks
18. Iron + sulphur →
19. --------------------- → sulphur (iv) oxide
20. Iodine → ---------------------------------
21. Carbon + -------------- → carbon (iv) oxide
22. Zinc +oxygen → ------------------------------
23. Write chemical symbols for the following elements. 4mks
24. Carbon
25. Silver
26. Sodium
27. Mercury
28. Copper
29. Iron
30. Calcium
31. Magnesium
32. State the function of the following apparatus. 5mks
33. Desiccators
34. Crucible
35. Separating funnel
36. Thistle funnel
37. Pipe clay triangle
38. Give the function of each an every part of the Bunsen burner as follows. 5mks
39. Chimney
40. Colar
41. Air hole
42. Base
43. Gas inlet
44. The figure below shows a wooden splint burnt using non- luminous flame. 3mks



Explain why the middle part is not charred

1. Name a solvent that is used in a paper chromatography
2. Why is water not a suitable solvent in paper chromatography?
3. Complete the table below. 5mks

|  |  |  |
| --- | --- | --- |
| Indicator | Colour in basic solution | Colour in acidic solution |
| Blue litmus |  |  |
| Phenolphthalein |  |  |
| Bromothymol blue |  |  |
| Methyl orange |  |  |
| Red litmus |  |  |

1. How can you separate a mixture of salt and sand in the lab. 5mks
2. Define the following terms. 5mks
3. Strong acid
4. Weak base
5. Strong base
6. Alkalinity
7. Spots of pure pigments A and B, and a mixture Z were placed on a filter paper and allowed to dry. The paper was then dipped in a solvent. The results obtained were as on the paper chromatogram. 5mks



1. Which is the base line
2. Which of the pure pigments was a component of Z? explain