CLASS X CHEMISTRY ASSIGNMENT

Periodic Classification of Elements

1. How many groups and periods are there in the Modern periodic table?
2. What was the prediction of Mendeleev regarding the gaps in his periodic table?
3. How is valence of an element determined?
4. What will be the valence of an element having atomic number 16?
5. How does valence vary in going down a group?
6. Why inert gases have zero valences?
7. What would be the valence of an atom containing 8 electrons in its outermost shell?
8. How does the electronegative character of elements vary along a period of the periodic table?
9. The present classification of elements is based on which fundamental property of elements?
10. Among first ten elements in the modern periodic table name the metals present.
11. Metals are on which side of Modern periodic table?
12. Name two elements, other than Gallium, whose existence was predicted by Mendeleev.
13. State Modern Periodic law.
14. Write the name given to the vertical columns in a periodic table.
15. What name is given to the horizontal rows in a periodic table?
16. Why does silicon is classified as Metalloid?
17. Name the scientist who proposed modern periodic law? On which fundamental property of elements it is based?
18. Why could no fixed position be given to hydrogen in Mendeleev's Periodic table?
19. What are metalloids? Give two examples.
20. In group 1 of periodic table three elements X, Y and Z have atomic radii 133pm , 95pm and 65pm respectively giving a reason, arrange them in the increasing order their atomic number.
21. How and why does the atomic size vary as you go down the group?

CBSE QUESTIONS

1. Arrange the following is descending atomic size Na, Mg, K (1)
2. Give the name and electronic configuration of second alkali metal? (1)
3. What is the similarity in the electronic configuration of Mg, Ca and Sr? (1)
4. Which is bigger in size Na OR K? (1)
5. Name three elements which behave as metalloids? (1)
6. Alkali metals form positive ions why? (2)

7. Answer these questions
(a) Name the elements present in the third period and classify them into metals and non metals.
(b) On which side of the table do you find the metals?
(c) On which side of the table do you find the non metals? (3)

8. Calcium is an element with Z = 20 (3)
(a) Is it a metal or a non metal?
(b) Will its size be more or smaller than that of potassium?
(c) Write the formula of its chloride