HOMEWORK ONE

1)A. Choose the correct answer :

- 1. Mendeleev arranged the elements of similar properties in....
- a. vertical periods.
- b. vertical groups.
- c. horizontal groups.
- d. horizontal periods.
- 2. Moseley classified elements in his table in an ascending order according
- to their.....
- a. atomic weights.
- b. chemical activity.
- b. atomic numbers.
- d. valencies.
- 3. The number of elements in Mendeleev's periodic table is.....
- a. 67
- b. 76
- c. 92
- d. 116

4.....left gaps in his table to be filled with suitable discovered elements in future.

- a. Moseley
- b. Rutherford
- c. Mendeleev
- d. Bohr

5. The scientist..... added the zero group to Mendeleev's periodic table.

- a.Moseley
- b. Rutherford
- c. Mendeleev
- d. Bohr
- 6. The scientist..... discovered the main energy levels.
- a.Moseley
- b. Rutherford
- c. Mendeleev
- d. Bohr

<u>B. Write the scientific term:</u>

1.A table in which the elements are arranged in an ascending order according to their atomic weights.

2.A table in which the elements are arranged in an ascending order according to their atomic numbers.

3. They are symbolized by K ,I.,M,N,0,Pand Q letters.

2. A. Complete the following statements :

1. Mendeleev discovered that the properties of elements were repeated......by the beginning of each new.....

2. The atomic number of each element in Moseley's periodic table increases by......from the preceding element in the same.....

3. Moseley specified a place below the table forand......and......

4. Mendeleev arranged the elements ascendingly according

to......while Modern arranged them ascendingly according to......and.....

5. Mendeleev explained his periodic table in his book.....

2. What are the disadvantages of Mendeleev's table ? (Mention two only).

<u>3. Put (v) or (×), then correct what is wrong:</u>

1. The elements which have similar chemical properties are put in horizontal periods.

2. Scientists classified the elements in order to facilitate their study.

3. Mendeleev had to put more than one element in one cell, as iron, cobalt and nikel.

4. Rutherford discovered the main energy levels of the atom.

4.A. Give a reason for :

Many attempts are made by scientists for classification of elements.

B. Correct the underlined words:

1. The elements are arranged in <u>Mendeleev's table</u> in an ascending order according to their atomic numbers and the way of filling their energy sublevels with electrons.

2. The number of energy levels in the heaviest known atoms is $\underline{9}$ levels.

3. The number of known elements in the modern periodic table till now is $\underline{92}$ elements