1 Choose the correct answer: 5 Marks

1. All of the following are considered matter, except .....
   a) air. **b)** light.. **c)** sand. **d)** table salt.
2. Which of the following elements is considered a nonmetal?
   a) Magnesium **b)** Sodium **c)** Potassium **d)** Bromine
3. Silk acquires a negative charge when rubbed with .....
   a)cotton **b)paper** c)wool **d)** hair
4. The atomic number of the inert element that located in period (2) is .....
   a) 2 **b)** 8 **c)** 18 **d)** 10
5. Electric charges are measured in.....
   a) newtons. **b)**coulombs. **c)** kilograms. **d)** newtons/kg.

2 Put (✓) or (✗): 5 Marks

1. Dalton considered that the atom is indivisible. ( )
2. NPK fertilizer contains nitrogen, potassium, and calcium elements. ( )
3. Chlorine is a gaseous element whose boiling point is less than 25°C ( )
4. Metal objects can be charged with static electricity when the charged part is insulated. ( )
5. An electric charge accumulates on a carbon rod when it is rubbed with dry silk ( )

3 Complete the following sentences: 4 Marks

1. Limestone rock is composed of moleculess of..... which in turn are composed of smaller units called.....
2. The number of inert gases is.....the number of other nonmetal gases in the periodic table
3. Protons are .....charged particles while electrons are.....charged particles.
4. When wool is rubbed with cotton, electrons transfer from the .....piece to the..... piece.

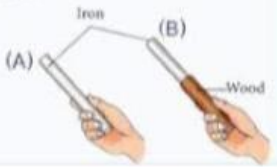
4 Write the scientific term: 3 Marks

1. The charges accumulated on the surfaces of objects due to losing or gaining electrons..(.....)
2. The process of charging two neutral objects as a result of rubbing them together. .(.....)
3. The dot representation of valence electrons around the symbol of the eleme.....

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5 **Study the following figures, then answer the questions** — 3 Marks

From the opposite figure: (A) Which rod, (A) or (B), can be electrically charged when its iron end is rubbed with silk? Explain.

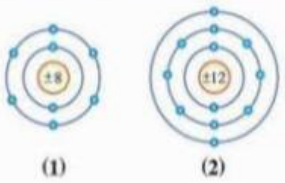


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6 **Study the following figures, then answer the following:** — 4 Marks

Study the two opposite figures, then deduce: (1) The atomic number for each of the two atoms. (2) The mass number for each of the two atoms.

.....
.....
.....
.....



7 **Give reasons for the following:** — 3 Marks

1.Halogens are monovalent nonmetals.

.....

2.Elements of the same group in the modern periodic table have similar chemical properties.

.....

3.Paper scraps are attracted to a wooden rod that has been rubbed with wool.

.....

8 **Study the following figures, then answer:** — 2 Marks

The opposite figure represents one of the periods of the modern periodic table:(1) What is the period number represented by the figure? And why?

$_{11}X$		Y					Z

«The letters shown in the table do not represent the actual symbols of the elements»

9 **Compare between each of the following:** — 2 Marks

($_{16}S$) element **and** ($_{12}Mg$) element **"in terms of:** electron configuration - group number**".**

10 **What are the results of...?** — 2 Marks

1.The electron moving farther away from the nucleus in an element's atom (regarding its energy).

.....

2. Increasing the atomic number of halogens, "regarding their melting and boiling points".

.....

11 **Define each of the following:** — 2 Marks

(1) Electric field. **(2) Electric field is e...**

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