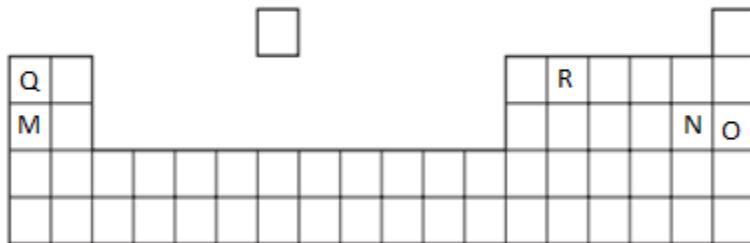


DAWOOD PUBLIC SCHOOL
HOME WORK: SCIENCE (Task 3)
GRADE VIII

Q.1. In the given periodic table, elements are represented by letters.



Using this information, answer the following questions:

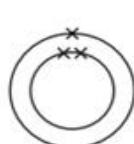
(i) Identify the Inert element from the table, predict its name and explain why it is inserted.

(ii) Name two elements which combine together to form an ionic compound. Also write a chemical equation of the reaction.

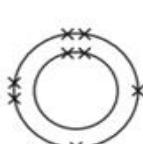
(iv) Which element is present as a gas in the exhaled air?

(v) Which is a soft metallic element that is stored in oil?

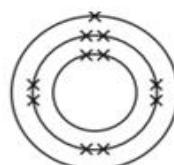
Q.2. The electronic structures of various atoms are shown below.



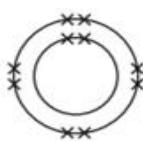
A



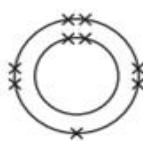
B



C



D



E

(i) Which two of these structures represent atoms from the same group of the Periodic Table?

(ii) Which one of these structures represents an atom with an atomic number of 8?

(iii) Which one of these structures forms a stable ion by gaining one electron?

(iv) Which one of these structures is in period 3 of the Periodic Table?

(V) Figure shows the arrangement of electrons in the atoms of six different elements, A – F. The letters are not the chemical symbols of these elements.

Atoms	A	B	C	D	E	F
Electron arrangement	2, 5	2, 8	2, 8, 2	2	2, 8, 7	2, 8, 4

Use the letters to answer the following questions:

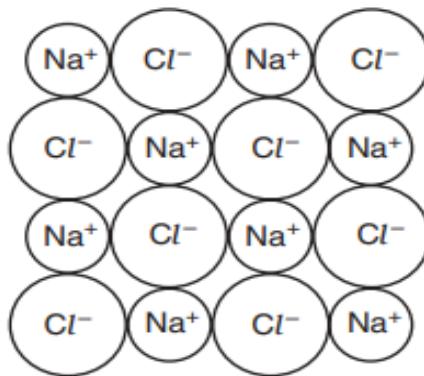
(a) Which element is a noble gas?

(b) Which element has proton number 17?

(c) Which element is a metal?

(d) Which two elements will combine together to form an ionic compound?

When sodium burns in chlorine, sodium chloride is produced. The structure of sodium chloride is illustrated in the following figure.



(e) What type of bonding is present in sodium chloride?

(f) State the formula of sodium chloride.

Q.3. Research on the following topics:

- The research must be presented in a booklet form, either hand written or printed.
 - It should contain complete knowledge of air and water pollution, their causes and their effects on living and non-living environment.
-
- a. Air Pollution
 - b. Water Pollution
 - c. Over exploitation of natural resources.