KEC

## K Education Centre

## **AS Chemistry**

C1: Atomic Structure and Periodic Table

Assignment Questions

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## Atomic Structure and Periodic Table Assignment -1

Q1 : Draw the structures of s, p and d quantum shells.

Q2: Explain Hund's rule with example.

- Q3 : Explain Pauli Exclusion Principle with example.
- Q4: i) Write down the electronic configuration of following :
  - a) Oxygen b) Nitrogen

ii) Fill up the following using Paulis exclusion principle :

$$O - \prod_{1S} \prod_{2S} \prod_{2P_{N}} \bigcap_{2R_{1}} \prod_{2R_{2}} \prod_$$

Q5: Write down the electronic configuration of Calcium. Describe the changes in electronic configuration.

Q6: What is ionisation energy?

Q7: Write the equations to represents:

- a) Third ionisation energy of Aluminium
- b) The fourth ionisation energy of Carbon.

Q8: What are the factors on which ionisation energy of an atom depends on?

Q9 : What are Isotopes ? Give example.

Q10 : How many protons neutrons and electrons are in Carbonate ion  $\int O_3$ ?