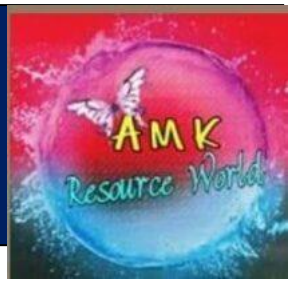
AMK Resource World

SSLC – Daily Practice Papers



PERIODIC CLASSIFICATION OF ELEMENTS

SCIENCE PRACTICE PAPER 03

Total Marks : 20

I. Choose the Most Appropriate Answers **3 x 1 = 3**

1. An atom of an element has the electronic configuration 2,8,2. To which group does it belong?
   a. 4^{th} group c. 3^{rd} group
   b. 6^{th} group d. 2^{nd} group
2. Element 'X' forms a chloride with the formula XCl_2, which is a solid with high melting point. X would most likely be in the same group of the periodic table as
   a. Si b. Mg c. Al d. Na
3. Carbon belongs to the second period and Group 14. Silicon belongs to the third period and Group 14. If atomic number of carbon is 6, the atomic number of silicon is
   a. 7 b. 14 c. 24 d. 16

II. Answer the following questions **2 x 1 = 2**

4. What are groups and periods in the periodic table?
5. State Mendeleev's periodic law.

III. Answer the Following questions **4 x 2 = 8**

6. Write the formula of the product formed when the element A (atomic number 19) combines with the element B (atomic number 17). Draw its electronic dot structure.
7. What are the merits and demerits of Newland's classification?
8. What were the limitations of Dobereiner's classification?
9. What were the criteria used by Mendeleev in creating his Periodic Table?

IV. Answer the following questions **1 x 3 = 3**

10. Lithium, sodium, potassium are all metals that react with water to liberate hydrogen gas. Is there any similarity in the atoms of these elements? Helium is an unreactive gas and neon is a gas of extremely low reactivity. What, if anything, do their atoms have in common?

V. Answer the following questions **1 x 4 = 4**

11. Nitrogen (atomic number 7) and phosphorus (atomic number 15) belong to group 15 of the Periodic Table. Write the electronic configuration of these two elements. Which of these will be more electronegative? Why?