

Assignment for SSC Examinees, 2021

Subject: Chemistry

Subject Code: 137

Level: SSC

Assignment Number, Chapter Number, Chapter Title	Assignment	Learning Outcomes	Guidelines (cues/steps or stages)	Assessment Criterion /Rubric					Com'ts																																						
<p style="text-align: center;">02</p> <p>Chapter Four: Periodic Table</p>	<p>Position of the elements in the periodic table according to the electronic configuration, Comparative ionization energy and Characteristics of group or class of relevant elements</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Li</td> <td>Be</td> </tr> <tr> <td>Na</td> <td>Mg</td> </tr> </table> <p>In accordance to the electronic configuration of the 4 elements, prepare a report on their position in the periodic table, comparative ionization energy and the characteristics of the groups they are in.</p>	Li	Be	Na	Mg	<p>Students' will be</p> <ul style="list-style-type: none"> • Able to determine the relation of major groups of periodic table with the outer most energy level electronic configurations of elements(first 30 elements) •Able to find out the period of an element • Able to get the knowledge about physical and chemical properties of an element by knowing the position in the periodic table • Able to say 	<ul style="list-style-type: none"> • Has to find out the periods of the four elements in the periodic table according to the electronic configurations • Has to find out the groups or classes of the four elements in the periodic table according to their electronic configurations • Has to compare the ionization energy of same period and same group or class of adjoining elements in the periodic table • Has to write the characteristics of the group or 	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th data-bbox="1312 551 1587 684" rowspan="2">Indicator</th> <th colspan="4" data-bbox="1602 551 2655 602">Rating Scale</th> <th data-bbox="2670 551 2823 684" rowspan="2">Score</th> </tr> <tr> <th data-bbox="1602 633 1861 684">4</th> <th data-bbox="1876 633 2136 684">3</th> <th data-bbox="2151 633 2411 684">2</th> <th data-bbox="2426 633 2655 684">1</th> </tr> </thead> <tbody> <tr> <td data-bbox="1312 694 1587 1042">a) Determination of period</td> <td data-bbox="1602 694 1861 1042">Has determined the exact periods of four elements with electronic configurations</td> <td data-bbox="1876 694 2136 1042">Has determined the exact periods of three elements with electronic configurations</td> <td data-bbox="2151 694 2411 1042">Has determined the exact periods of two elements with electronic configurations</td> <td data-bbox="2426 694 2655 1042">Has determined the exact periods of one element with electronic configuration</td> <td data-bbox="2670 694 2823 1042"></td> </tr> <tr> <td data-bbox="1312 1052 1587 1441">b) Determination of group</td> <td data-bbox="1602 1052 1861 1441">Has determined the exact groups or classes of four elements with electronic configurations</td> <td data-bbox="1876 1052 2136 1441">Has determined the exact groups or classes of three elements with electronic configurations</td> <td data-bbox="2151 1052 2411 1441">Has determined the exact groups or classes of two elements with electronic configurations</td> <td data-bbox="2426 1052 2655 1441">Has determined the exact group or class of one element with electronic configuration</td> <td data-bbox="2670 1052 2823 1441"></td> </tr> <tr> <td data-bbox="1312 1451 1587 1982">c) Comparative ionization energy</td> <td data-bbox="1602 1451 1861 1982">Has compared appropriately the ionization energies of four pairs of elements in terms of group and period differences</td> <td data-bbox="1876 1451 2136 1982">Has compared appropriately the ionization energies of three pairs of elements in terms of group and period differences</td> <td data-bbox="2151 1451 2411 1982">Has compared appropriately the ionization energies of two pairs of elements in terms of group and period differences</td> <td data-bbox="2426 1451 2655 1982">Has compared appropriately the ionization energies of one pair of elements in terms of group and period differences</td> <td data-bbox="2670 1451 2823 1982"></td> </tr> <tr> <td data-bbox="1312 1992 1587 2033">d)</td> <td data-bbox="1602 1992 1861 2033">Has written</td> <td data-bbox="1876 1992 2136 2033">Has written</td> <td data-bbox="2151 1992 2411 2033">Has written</td> <td data-bbox="2426 1992 2655 2033">Has written</td> <td data-bbox="2670 1992 2823 2033"></td> </tr> </tbody> </table>					Indicator	Rating Scale				Score	4	3	2	1	a) Determination of period	Has determined the exact periods of four elements with electronic configurations	Has determined the exact periods of three elements with electronic configurations	Has determined the exact periods of two elements with electronic configurations	Has determined the exact periods of one element with electronic configuration		b) Determination of group	Has determined the exact groups or classes of four elements with electronic configurations	Has determined the exact groups or classes of three elements with electronic configurations	Has determined the exact groups or classes of two elements with electronic configurations	Has determined the exact group or class of one element with electronic configuration		c) Comparative ionization energy	Has compared appropriately the ionization energies of four pairs of elements in terms of group and period differences	Has compared appropriately the ionization energies of three pairs of elements in terms of group and period differences	Has compared appropriately the ionization energies of two pairs of elements in terms of group and period differences	Has compared appropriately the ionization energies of one pair of elements in terms of group and period differences		d)	Has written	Has written	Has written	Has written		
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		about the special naming of elements ● Able to show the eagerness to guess the properties of elements by following the periodic table	class of a relevant elements	Characteristics of a group or class of relevant elements	the characteristics of two groups or classes with special names properly	the characteristics of two groups or classes properly	the characteristics of one group or class with special names properly	the characteristics of one group or class properly		
								Total		
Total marks for this assignment: 16										

Marks Obtained	Comments
13-16	Excellent
11-12	Very good
08-10	Good
0-07	Needs improvement