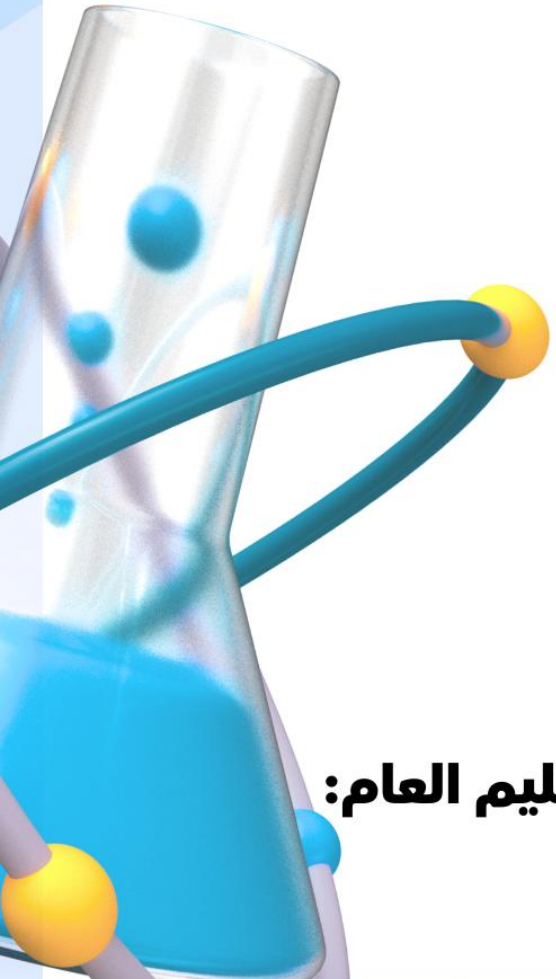
الإدارة المركزية للتعليم العام
مكتب تنمية مادة العلـــــوم

CHEMISTRY

2nd secondary
first term

HOME PERFORMANCE



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2026

week

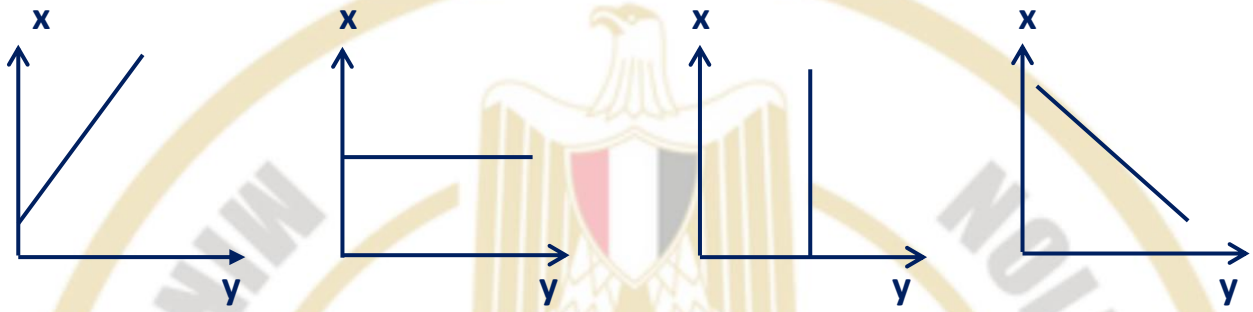
9

Home performance (Week 9)

Q1/ Choose the correct answer:-

1- Which graph in front of you represents the relation between atomic number and number of electron in valence shell in group 2A?

(x) Axis represent atomic number , (y) axis represent valances electrons



(a) (b) (c) (d)

2- Two elements (X) and (Y) are successive elements in periodic table, the four Values of quantum number for last electron of element (X)

[n=2, ℓ =1, m ℓ = +1, ms = -1/2] , So the four quantum number of last electron of element (Y)

(a) n=2 , ℓ= 1 , m ℓ =+1 , m_s = +1/2

(b) n=2 , ℓ = 0 , m ℓ =0 , m_s = +1/2

(C) n=3 , ℓ = 0 , m ℓ =0 , m_s = -1/2

(d) n=3 , ℓ = 0 , m ℓ =0 , m_s = +1/2

3- Elements (X) its electronic configuration [Xe] $6s^2 4f^{14} 5d^2$ it lies in Period…….group……

(a) 6 , 4B

(b) 6, 5A

(c) 4 , 6B

(d) 6, 4B

4-The electronic configuration of an element is $[_{54}Xe]$ $6s^2 4f^7 5d^1$, its type is…….

(a) Main transition -3rd series

(b) Inner transition - lanthanide

(C) Representative

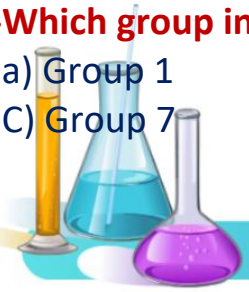
(d) Inner transition- actinides

5-Element (Y) has a mass number of 19 and a protons number of 9.

-Which group in the periodic table does it belong to?

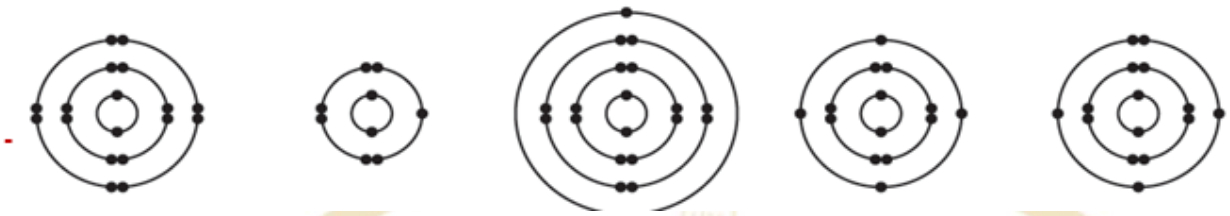
(a) Group 1 (b) Group 17

(C) Group 7 (d) Group 13



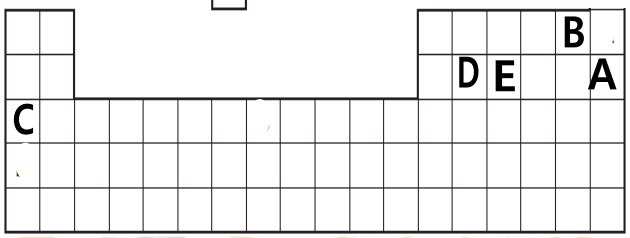
6 - The electronic structure of five atoms A, B, C, D and E, are shown.

(A) (B) (C) (D) (E)

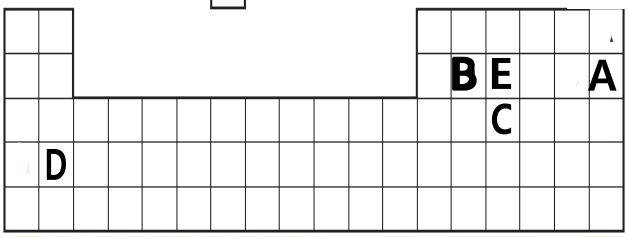


Which of the following figures represents the arrangement of these elements in the table?

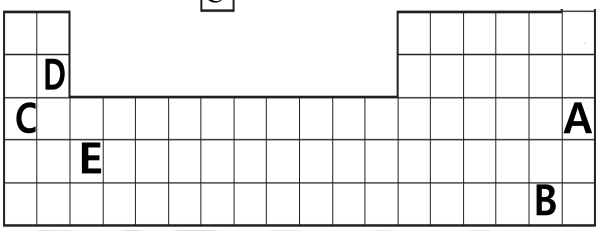
A



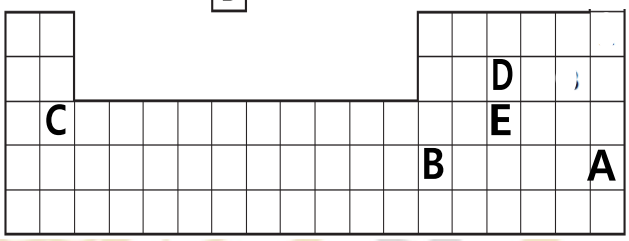
B



C



D



Question (1):- State the scientific reason for each of the following:

1- s-Block consists of two groups of elements.

.....

2- There are no p-block elements in the first period of the periodic table.

.....

3-The d-block consists of 10 vertical columns.

.....

.....

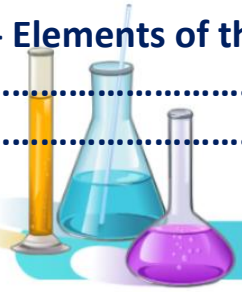
4-The f-block contains twenty eight elements.

.....

5- Elements of the same group are similar in their chemical properties.

.....

.....



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WEEKLY ASSESSMENTS



إعداد:
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2026

week

9

Weekly assessment (Week-9)

Q1/ Choose the correct answer:-

1-Which two elements have the same chemical and physical properties?

Element	Electronic structure
R	$1S^2$, $2S^2$, $2P^5$
T	2 , 8
X	$1S^2$, $2S^2$, $2P^6$, $3S^2$
Z	2 ,8 ,7

(a) R an T
(b) T and X
(C) X and Z
(d) Z and R

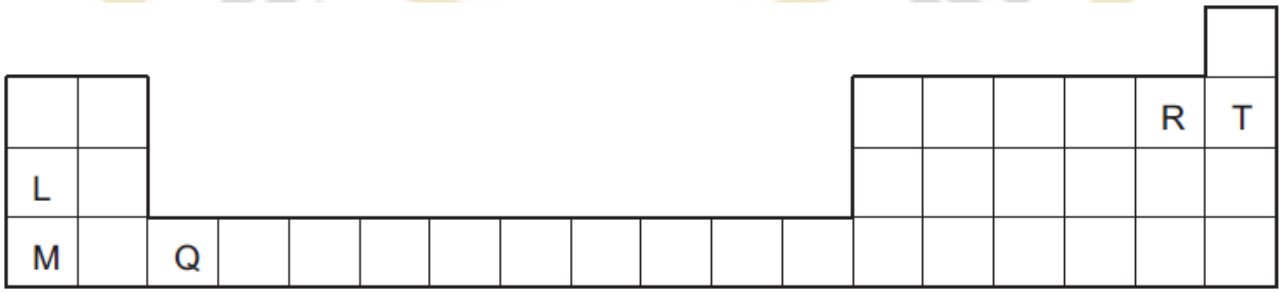
2- Properties of phosphorus element [$_{15}$P] similar to the element whose quantum numbers for the last electron are.....

(a) n=3 ,$\ell = 2$, $m\ell = +1$, m_s = -1/2
(b) n=4 ,$\ell = 0$, $m\ell = -1$, m_s = -1/2
(C) n=3 ,$\ell = 1$, $m\ell = +1$, m_s = +1/2
(d) n=2 ,$\ell = 1$, $m\ell = +1$, m_s = +1/2

3- An element its electronic configuration end with ($6S^2$, $4F^7$, $5d^1$), so this element from .....

(a) transition in the fourth period
(b) transition in the fifth period
(c) Inner transition elements (Actinides)
(C) Inner transition elements (Lanthanides)

4-



-Which of the following statements is correct?

(a) L, M and Q are representative elements.
(b) L, M, R and T are representative elements.
(C) L , M and R are representative elements.
(d) R and T are noble gas.

Question (2):

(1) Locate the block and type of the elements , which have the following electronic configuration:

(a)$1s^2$,$2s^2$,$2p^3$

(b) $1s^2$,$2s^2$,$2p^6$,$3s^2$,$3p^6$,$4s^2$,$3d^5$

(C) $1s^2$,$2s^2$,$2p^6$,$3s^2$,$3p^6$,$4s^2$,$3d^{10}$,$4p^6$

.....

.....

(2) Determine the four quantum numbers of the last electron that has the highest energy in lanthanum $_{57}La$, and then determine the position of this element in the periodic table?

.....

.....

(3) An element located in group 2A and period 4, Apply Pauli Exclusion Principle on the valances electrons.

.....

.....

.....

(4) The penultimate main energy level element, which is the third, contains 14 electrons.

- **Write the electron distribution for this element and for the element follow it in the same period.**

.....

.....

Question (3):

Write the scientific term for each of the following statements:

1- Elements in which the (4f) sublevel is filled successively.
( )

2- Elements in which the (5f) sublevel is filled successively.
( )

3- Elements of the (s) and (p) blocks of the periodic table with the exception Of the noble gases. ( )

4- Elements in which (d) sublevel is filled successively. ( )

5- Elements of the f-block of the periodic table. ( )
( )

