CHEMISTRY

AAKASH INSTITUTE ENGLISH

MOCK TEST 5

Example

1. Which of the following is/are Dobereiner's triad?

(a) Li, Na, K

(b) Cu, Ag, Zn

(c) Fe, Co, Ni

(d) Ca, Sr, Ba Correct answer is

A. (a) & (b)

B. (a) & (d)

C. (b) & (c)

D. (a), (b), (c) & (d)

Answer: B

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2. Elements with electronic configuration ns^1 are known as

A. Inert gases

B. Alkali metals

C. Transuranic elements

D. Halogons

Answer: B

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3. The correct order of ionic radii of the following species is

A. $Se^{2-} > I^{-} > Br^{-} > O^{2-} > F^{-}$

B. $I^{-} > Se^{2-} > O^{2-} > F^{-}$

C. Se^(2-) gt I^(-) gt Br^(-) gt F^(-) gt O^(2-)

D. $I^{-} > Se^{2-} > Br^{-} > O^{2-} > F^{-}$

Answer: D

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4. Ammong the following, the element having highest ionization enthalpy as positive electron gain enthalpy is

A. H

B. F

C. He

D. Na

Answer: C

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5. Addition of an electron to a neutral gaseous atom alwayds leads to

(i) Formation of an anion

(ii) Liberation of energy

(iii) Decrease in proton/electron ratio

A. Only (ii)

B. (i) & (ii)

C. (i) & (iii)

D. Only (i)

Answer: C

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6. Predict correct statement.

A. E_(ea) gt 0 (E_(ea) = Electron affinity) implies that electron attachment is exothermic

B. Electron gain enthalpy of O^- ion is negative

C. The electron gain enthalpy of a species X is the negative of the ionization

enthalpy is of its negative ion

D. Both (1) & (3)

Answer: D

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7. In which of the following pairs, the ionisation energy of the first species is less than of the second

A. O^(+) , O

B. S, P

C. N, P

D. Be^(+) , Be

Answer: B

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8. The number of elements which can be accommodated in the present set-up of the long from of the periodic table is :

A. 117

B. 118

C. 119

D. 120

Answer: B

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9. Correct order of ionisation enthalpy is

A. Be lt B lt C lt N lt O

B. $B < Be < C < N < O$

C. BeltBltCltOltN

D. BltBeltCltOltN

Answer: D

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10. Which of the following is correct for electron gain enthalpy (with -ve sign) of halogens?

A. Br gt F

B. $Br > Cl$

C. F gt I

D. F gt Cl

Answer: C

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11. An element with atomic number 113 has been discovered.It will belong to which of the

following block,group number,period and outershell electronic configuration?

A. s-block,group 2,period 7, 7s^2

B. p-block,group 13,period 7, $7s^2 7p^1$

C. p-block,group 13,period 6, 6s^2 6p^1

D. d-block,group -12,period-6, 5d^10 6s^2

Answer: B

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12. In the general electronic configuration $(n-2)^{f(1-14)}$ $(n-1)^{d}(0-1)ns^{2}$,if the value of n=7,the configuration will be of

A. Lanthanoids

B. Actinides

C. Transition elements

D. p-block elements

Answer: B

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13. Which of the following is a metalloid?

A. K

B. Ge

C. Ce

D. Zn

Answer: B

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14. The X-X bond length is 1.5 Å and Y-Y bond length is 1.48 Å.If electronegativity values of X and Y are 3 and 3.5 respectively,then Y-X bond length would be

A. 1.44 Å

B. 0.98 Å

C. 1.75 Å

D. 0.73 Å

Answer: A

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15. The common valency shown by the elements of group 15 is/are

A. 4

B. $3, 5$

C. $2, 6$

D. $1, 7$

Answer: B

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16. Out of the following elements,which one is the most reactive chemically?

A. Ba

B. Sr

C. Ca

D. Mg

Answer: A

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17. What is the covalency of Al in $\left[AlCl(H_2O)_5\right]^{2+}$?

A. 3

B. 4

C. 5

D. 6

Answer: D

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18. Which of the following oxides is most basic in nature?

A. Al_2O_3

B. SiO_2

C. SO_3

D. Na_2O

Answer: D

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19. Elements of which block generally show maximum variation in valency?

A. p-block elements

B. s-block elements

C. d-block elements

D. d and s-block elements

Answer: C

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20. In modern periodic table,the basic character of oxides

A. Decreases from left to right increases from bottom to top

B. Increases from left to right and decreases from top to bottom

C. Decreases from right to left and increases from top to bottom

D. Decreases from left to right and increases from top to bottom

Answer: D

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21. Beryllium and aluminimum exhibit many properties which are

similar . But, the two elements differ in

A. Exhibiting amphoteric nature of their oxides

B. Forming covalent halides

C. Forming polymeric hydrides

D. Exhibiting maximum covalency in compounds

Answer: D

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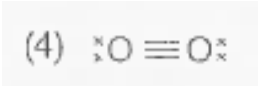
22. Which of the following is the Lewis structure of O_2 molecule?

A. 

B. 

C. 

D. 

Answer: B

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