

PERIODIC CLASSIFICATION OF ELEMENTS

Question 1: The properties of an element in the periodic table depends on its, _____.

1. atomic size
2. atomic mass
3. electronic configuration
4. number of protons

Answer: 3

Question 2: An element has configuration 2, 8, 1. It belongs to, _____.

1. 1 group and 3rd period
2. 3 group and 1st period
3. 1 group and 8th period
4. 17 group and 3rd period

Answer: 1

Question 3: The number of electrons in the valence shell is equal to its _____.

1. atomic mass
2. group number
3. period number
4. atomic volume

Answer: 2

Question 4: The non-metallic element present in the third period other than sulphur and chlorine is _____.

1. oxygen
2. fluorine
3. nitrogen
4. phosphorus

Answer: 4

Question 5: At the end of each period the valence shell is _____.

1. incomplete
2. half filled
3. singly occupied
4. completely filled

Answer: 4

Question 6: The family of elements having seven electrons in the outermost shell is _____.

1. alkali metals
2. alkaline earth metals
3. halogens
4. noble gases

Answer: 3

Question 7: Which of the following factors does not affect the metallic character of an element?

1. Atomic size
2. Ionisation potential
3. Electronegativity
4. Atomic radius

Answer: 3

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Question 8: The family of elements to which potassium belongs is _____.

1. alkali metals
2. alkaline earth metals
3. halogens
4. noble gases

Answer: 1

Question 9: The modern periodic table is given by _____.

1. Mendeleev
2. Einstein
3. Bohr
4. Mosley

Answer: 4

Question 10: Elements belonging to groups 1 to 17 are called _____.

1. noble gases
2. normal elements
3. transition elements
4. inner transition elements

Answer: 2

Question 11: A liquid non-metal is _____.

1. phosphorous
2. mercury
3. bromine
4. nitrogen

Answer: 3

Question 12: The first alkali metal is _____.

1. hydrogen
2. lithium
3. sodium
4. francium

Answer: 2

Question 13: A purple coloured solid halogen is _____.

1. chlorine
2. bromine
3. iodine
4. astatine

Answer: 3

Question 14: Lanthanides and actinides are also called _____.

1. normal elements
2. transition elements
3. noble gases
4. inner transition elements

Answer: 4

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Question 15: The family of elements to which calcium belongs is _____.

1. alkali metals
2. alkaline earth metals
3. halogens
4. noble gases

Answer: 2

Question 16: The least reactive element in group 17 is _____.

1. fluorine
2. chlorine
3. bromine
4. iodine

Answer: 4

Question 17: The valency of chlorine with respect to oxygen is _____.

1. 1
2. 3
3. 5
4. 7

Answer: 4

Question 18: The number of shells in the elements of 3rd period is _____.

1. 1
2. 2
3. 3
4. 0

Answer: 3

Question 19: Four elements along a period have atomic number (11, 13, 16 and 17). The most metallic among these has an atomic number of _____.

1. 11
2. 12
3. 16
4. 17

Answer: 1

Question 20: Six elements A, B, C, D, E and F have the following atomic numbers (A = 12, B = 17, C = 18, D = 7, E = 9 and F = 11). Among these elements, the element, which belongs to the 3rd period and has the highest ionisation potential, is _____.

1. A
2. B
3. C
4. F

Answer: 3

Question 21: A factor that affects the ionisation potential of an element is _____.

1. atomic size
2. electron affinity
3. electro-negativity
4. neutrons

Answer: 1

Question 22: The element, which has the highest electron affinity in the 3rd period is _____.

1. Na
2. Mg
3. Si
4. Cl

Answer: 4

Question 23: The element, which has zero electron affinity in the 3rd period is _____.

1. Al
2. P
3. Ar
4. S

Answer: 3

Question 24: The statement that is not true about electron affinity is

1. It causes energy to be released
2. It causes energy to be absorbed
3. It is expressed in electron volts
4. It involves formation of an anion

Answer: 2

Question 25: Down a group, the electron affinity _____.

1. increases
2. decreases
3. remains same
4. increases and then decreases

Answer: 2