

Chemistry Sample Question Set 2

1. **The sum of number of protons and number of neutrons is called as**

1. Atomic Number
2. Mass number
3. Quantum number
4. Spin quantum number
5. None of these

Answer & Explanation

Answer – **2. Mass number**

Explanation :

C^{12} – 12 is the mass number.

2. **Isotones have numbers of neutrons**

1. Same
2. Different
3. Maximum
4. Minimum
5. None of these

Answer & Explanation

Answer – **1. Same**

Explanation :

Isotones have same numbers of neutrons

3. **have same atomic number but different mass number**

1. Isobars
2. Isotones
3. Isotropics
4. Isotopes
5. None of these

Answer & Explanation

Answer – **4.Isotopes**

Explanation :

Isotopes have same atomic number but different mass number

4. **Azimuthal Quantum Number(l) has values**

- 1.0 to n
- 2.n-1
- 3.n
- 4.0 to n-1
- 5.None of these

Answer & Explanation

Answer – **4.0 to n-1**

Explanation :

Azimuthal Quantum Number(l) has values 0 to n-1

It describes the subshells and orbital angular momentum of each electron

5. **Ionisation energy is the energy required to remove an from the outermost shell of an isolated gaseous atom**

- 1.Both electron and Proton
- 2.Neutron
- 3.Proton
- 4.Electron
- 5.None of these

Answer & Explanation

Answer – **4.Electron**

Explanation :

Ionisation energy is the energy required to remove an electron from the outermost shell of an isolated gaseous atom. It increases along a period from left to right and decreases along a group on moving downwards

6. Sea water contains pH value in the range of

- 1.8.5
- 2.7
- 3.6.5-7.5
- 4.10.5
- 5.None of these

Answer & Explanation

Answer – **1.8.5**

Explanation :

The acidity of the acidic water is represented by pH value. The neutral fresh water has pH value of 7 and Salt water 8.5

7. Spin Quantum number have the values lies in the range of

- 1.-1/2
- 2.1/2
- 3.0 to 1/2
- 4.+1/2 or -1/2
- 5.None of these

Answer & Explanation

Answer – **4.+1/2 or -1/2**

Explanation :

Spin Quantum number(S) = +1/2 or -1/2

It describes the spin of each electrons

8. $E = h\nu$ is known as theory

- 1.Planck's Quantum Theory
- 2.Niels Bohr Model
- 3.De-Brpgile Concept
- 4.Quantum Theory
- 5.None of these

Answer & Explanation

Answer – **1.Planck's Quantum Theory**

Explanation :

The energy of quantum is proportional to its frequency

$$E=h\nu$$

$$h=\text{planck's constant} = 6.626 \times 10^{-34} \text{ Js}$$

9. **Isobars have the mass number but atomic number**

1. Different, Same
2. Same, Same
3. Same, Different
4. Maximum, Minimum
5. None of these

Answer & Explanation

Answer – **3.Same, Different**

Explanation :

Isobars are atoms (nuclides) of different chemical elements that have the same number of nucleons.

10. **Tomato contains which of the following acid ?**

1. Malic acid
2. Citric acid
3. Oxalic acid
4. Lactic acid
5. All 1, 2 and 3

Answer & Explanation

Answer – **5.All 1,2 and 3****Explanation :**

Potatoes contains malic, citric, oxalic, phosphoric and pyroglutamic acids.