

NEET Sample Paper 3 PDF for Class 12 (Chemistry)

1. Statement I: The solubility of AgCl will be minimum in CaCl₂ aqueous solution.

Statement II: It is due to the common ion effect of chloride.

- (1) Statement I and Statement II both are correct.
- (2) Statement I is correct, but Statement II is incorrect.
- (3) Statement I is incorrect, but Statement II is correct.
- (4) Statement I and Statement II both are incorrect.

2. Statement I: Carbon dioxide turns lime water milky.

Statement II: Carbon dioxide dissolved in lime water.

- (1) Statement I and Statement II both are correct.
- (2) Statement I is correct, but Statement II is incorrect.
- (3) Statement I is incorrect, but Statement II is correct.
- (4) Statement I and Statement II both are incorrect.

3. Statement I: Xenon compounds XeF₂, XeF₄, XeF₆ have linear, square planar and distorted octahedral shape respectively.

Statement II: Xenon compounds XeF₂, XeF₄, XeF₆ have 6, 4 and 2 number of electrons respectively.

- (1) Statement I and Statement II both are correct.
- (2) Statement I is correct, but Statement II is incorrect.
- (3) Statement I is incorrect, but Statement II is

correct.

(4) Statement I and Statement II both are incorrect.

4. If nickel oxide has the formula $\text{Ni}_{0.98}\text{O}$, then what fraction of nickel exists as Ni^{3+} ?

- (1) 96% (2) 4%
(3) 98% (4) 2%

5. Maximum number of hydrogen bonds per H_2O molecule is:

- (1) 2 (2) 4
(3) 3 (4) 1

6. Which of the following is not the right match?

- (1) CO_2 , irregular geometry.
(2) BF_3 , regular geometry.
(3) NH_3 , irregular geometry.
(4) SO_2 , irregular geometry.

7. The molecule with the least dipole moment is:

- (1) CHCl_3 (2) H_2O
(3) NH_3 (4) CO_2

8. Assertion: The number of radial nodes in 3s and 4p orbitals are not equal.

Reason: The number of radial nodes in any orbital depends upon the values of 'n' & 'l' which are different for 3s and 4p orbitals.

- (1) Both Assertion (A) and Reason (R) are the true, and Reason (R) is a correct explanation of Assertion (A).
(2) Both Assertion (A) and Reason (R) are the true, but Reason (R) is not a correct explanation of Assertion (A).
(3) Assertion (A) is true, and Reason (R) is false.

(4) Assertion (A) is false, and Reason (R) is true.

9. Assertion: In Cl_2 & Br_2 bond formed by overlapping of p-p orbital.

Reason: In Cl_2 & Br_2 bond formed by overlapping of hybrid orbitals.

(1) Both Assertion (A) and Reason (R) are the true, and Reason (R) is a correct explanation of Assertion (A).

(2) Both Assertion (A) and Reason (R) are the true, but Reason (R) is not a correct explanation of Assertion (A).

(3) Assertion (A) is true, and Reason (R) is false.

(4) Assertion (A) is false, and Reason (R) is true.

10. The degree of ionisation of compound depends on;

(1) size of solute.

(2) nature of solute.

(3) nature of vessel.

(4) quantity of electricity passed.

11. A system absorbs 500 kJ heat and performs 250 kJ work on the surroundings. The increase in internal energy of the system is;

(1) 750 kJ (2) 250 kJ

(3) 500 kJ (4) 1000 kJ

Atomic number of element Ununnilium is;

(1) 101

(2) 110

(3) 111

(4) 100

12. Bleaching action of H_2O_2 is due to its:

- (1) oxidising nature.
- (2) reducing nature.
- (3) acidic nature.
- (4) thermal instability.

13. Nitrobenzene can be prepared from benzene by using a mixture of conc. HNO_3 and conc. H_2SO_4 .

In the mixture, nitric acid acts as a/an:

- (1) catalyst. (2) reducing agent.
- (3) acid. (4) base.

14. The oxidation state of Cr in Cr_2O_3 is

- (1) +3 (2) +7
- (3) -7 (4) +5

15. Reaction of HBr with propene in the presence of peroxide gives:

- (1) 3-bromo propane.
- (2) allyl bromide.
- (3) n-propyl bromide.
- (4) isopropyl bromide.

16. Mendeleev's Periodic Law is based on:

- (1) atomic number.
- (2) atomic weight.
- (3) number of neutrons.
- (4) all of these.