

NEET Sample Paper for Chemistry

Q.1 Which one of the following compounds is obtained when Grignard reagent (CH_3MgBr) is treated with water?

- (1) Ethane
- (2) Ethyl alcohol
- (3) Methyl alcohol
- (4) Methane

Q.2 The central atom of which one of the following molecules, has 3 bond pairs and 2 lone pairs of electrons in its valence shell?

- (1) Boron trifluoride
- (2) Phosphorous trichloride
- (3) Chlorine trifluoride
- (4) Xenon trioxide

Q.3 Assertion: The thermodynamic factor which determines the spontaneity of a process is the free energy. For a process to be spontaneous the free energy must be $-ve$.

Reason: The change in free energy is related to the change in enthalpy and change in entropy. The change in entropy for a process must always be positive if it is spontaneous.

- (1) Assertion is correct, reason is correct; reason is a correct explanation for assertion.
- (2) Assertion is correct. reason is correct: reason is not a correct explanation for assertion.
- (3) Assertion is correct. reason is incorrect.
- (4) Assertion is incorrect, reason is correct

Q.4 Select the incorrect statement about a catalyst:

- (1) It increases the rate of reaction
- (2) It does not affect the energy of activation
- (3) It does not alter G of a reaction
- (4) It does not change the equilibrium constant of a reaction

Q.5 Which one of the following pairs of pyrimidine bases are present in DNA?

- (1) Cytosine and uracil
- (2) Cytosine and guanine
- (3) Cytosine and adenine
- (4) Cytosine and thymine