Sample Questions

Q1. The pH of 0.005 M Sulfuric acid will be nearly
A) 2 B) 12 C) 2.3 D) 5

Q2. The name of the compound
CH_2=CH-CH=CH-CH_2-CH_3 is

A) hexadiene
B) 1,2,3,4-hexadiene
C) 3,5-hexadiene
D) 1,3-hexadiene

Q3. The oxidation number of bromine in $HBrO_3$ is

A) 3
B) 1
C) 5
D) 6

Q4. A radioactive nucleus of an element M decays through emitting an α particle and two β particles to give a product. The product is :

A) an isotope of M
B) an isobar of the element M
C) an isotone of the element M
D) a new element altogether

Q5. At the same temperature and pressure, the gas having the highest average kinetic energy per mole is:

A) H_2
B) O_2
C) CH_4
D) All have same kinetic energy

Q6. If the solubility of CaF_2 in water is 10^{-4} mole/litre, its K_{sp} is:

A) 4×10^{12}
B) 1×10^{-12}
C) 1×10^{-4}
D) 2×10^{-4}

Q7. In the case of melting ice, the degrees of freedom of the system is

A) one
B) two
C) three
D) zero

PS: Answers will be given in a separate sheet using Blue/Black Ball Point Pen only. Calculator, though not necessary, is allowed.