



DPP – 7 [Average Atomic Mass]

Chapter: Some Basic Concepts of Chemistry

“The difference between average and confident students is assignment completion”

TYPE : Average Atomic Mass

Q.1 B has two isotopes ^{10}B (19%) and ^{11}B (81%). The atomic mass of B is

- (1) 10.81 (2) 10^5 (3) 11 (4) 10.5

Q.2 An element X has the following isotopic composition; ^{200}X : 90%; ^{199}X : 8.0%; ^{202}X : 2.0%. The weighted average atomic mass of the naturally occurring element X is closest to: [AIPMT (Prelims)-2007]

- (1) 199 amu (2) 200 amu (3) 201 amu (4) 202 amu

Q.3 An element X has the following isotopic composition ^{56}X : 90%, ^{57}X : 8%, ^{59}X : 2.0%. The weighted average atomic mass of the naturally occurring element X is closest to

- (1) 56.14 amu (2) 56.8 amu (3) 60 amu (4) 55 amu

Q.4 Nitrogen occurs in nature in the form of two isotopes with atomic mass 14 and 15 respectively. If average atomic mass of nitrogen is 14.0067, the % abundance of ^{14}N isotope is

- (1) 99.33% (2) 0.67% (3) 50% (4) 14.67%

Q.5 Copper has two naturally occurring isotopes ^{63}Cu and ^{65}Cu . If the average atomic mass of copper is 63.546 u, then natural abundance of lighter isotope of Cu will be [NCERT Pg. 17]

- (1) 46.4% (2) 27.3% (3) 54.2% (4) 72.7%