

*TEST NAME 01

*CHEMISTRY

1. Boron has two stable isotopes, ^{10}B (19%) and ^{11}B (81%). Calculate average at.wt. of boron in the periodic table.

- I. 10.8
- II. 10.2
- III. 11.2
- IV. 10.0

2. In which case is the number of molecules of water maximum?

- I. 18 mL of water
- II. 0.18 g of water
- III. 0.00224 L of water vapours at 1 atm and 273K
- IV. 10^{-3} mol of water

3. 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 _____.

- I. 201 amu
- II. 202 amu
- III. 199 amu
- IV. 200 amu

4. 1 cc N_2O at NTP contains _____.

- I. 1.8224×10^{22} atoms
- II. 6.0222400×10^{23} molecules
- III. 1.32224×10^{23} electrons
- IV. all the above

5. What mass of 95% pure CaCO_3 will be required to neutralise 50 mL of 0.5 M HCl solution according to the following reaction?



[Calculate upto second (2^{nd}) place of decimal point]

- I. 1.2g
- II. 1.3g

III. 3.6g
IV. 9.50g