



Assignment

ABHYAS Academy,

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www.abhyasonline.in

Date: __ / __ / ____

Name: _____

Max Marks: 20

Section- A (One Marks Each)

- 1 Define valency of an element.
- 2 Define one mole.
- 3 Define Avogadro number. Explain its derivation.
- 4 How is number of moles related to molar mass?
- 5 Which has more number of atoms: 120 g of carbon or 120 g of calcium? (C =12 and Ca=40)

Section- B (Two Marks Each)

- 6 What is the percentage composition of the elements in ammonia?
- 7 Calculate the percentage composition of iron in ferric oxide. Fe_2O_3 (Atomic mass of Fe=56)
- 8 Calculate the number of calcium ions in 5.6gm of calcium oxide.

Section-B (Three Marks Each)

- 9 Calculate the number of particles in each of the following:
 - a) 53 g sodium atoms
 - b) 0.5 moles of hydrogen atoms
 - c) 20 g of O_2 molecules
- 10 Calculate the mass of the following:
 - a) 6.022×10^{23} number of Cl_2
 - b) 0.1 mole of N_2 gas
 - c) 3.011×10^{23} number of O atoms
- 11 The density of liquid mercury is 13.6 gm/cc. How many moles of mercury are there in 2 litre of the metal? (At. Mass of Hg =200)



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