



# ACADEMY OF HEALTH SCIENCES, LODHRAN

## Basic chemistry

### 1. Define the following terms

- i. Science
- ii. Matter
- iii. Solid
- iv. Liquid
- v. Gas
- vi. Atom
- vii. Molecule
- viii. Compound
- ix. Element
- x. Atomic no.
- xi. Atomic mass
- xii. Mole
- xiii. Chemistry

### 2. Write the shells and sub-shells of atom

Shells/electrons	Sub-shells	
K (2)	S	
L (8)	S, p	
M (18)	S, p, d	
N (32)	S, p, d, f	

### 3. What are ions and radicals

- i. Cations
- ii. Anions
- iii. Radicals



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### 4. Write the atomic no. and atomic masses of the following elements

Element	Atomic # (P/E)	Atomic mass (P+N)	Mole	Avogadro #
H				
He				
Li				
C				
N				
O				
Na				
S				
Cl				
K				
Ca				
Mg				
P				

### 5. Write down the formula of following radicals

Radical	Formula	Radical	Formula	Radical	Formula
Carbonate		Nitrate		Oxalate	
Bicarbonate		Nitrite		Permagnate	
Sulphate		Phosphate		Dichromate	
Bisulphate		Phosphite			
Sulphite		Hydroxide			
Thiosulphate		Acetate			

### 6. Write down the rules to make a chemical formula