

### Senior 3 - CHEMISTRY BASH

ATTEMPT ALL QUESTIONS

(1 hour : 20 minutes )

1. a) Write ALL possible valencies of each of the following: (20 marks)

i) Cu.....

ii) Fe.....

iii) Ag.....

iv) Cl.....

v) OH.....

vi) NO<sub>3</sub>.....

vii) HCO<sub>3</sub>.....

viii) Pb.....

ix) Mg.....

x) SO<sub>4</sub>.....

xi) C.....

xii) H.....

xiii) Zn.....

xiv) Ca.....

xv) Al.....

xvi) SO<sub>3</sub>.....

xvii) K.....

xviii) Hg.....

xix) Br.....

xx) Li.....

2. Write the formulae of the following compounds: (10 marks)

Copper(I)oxide

Silver sulphate

.....

Potassium chlorate

Zinc nitrate

.....  
Sodium hydrogen carbonate

.....  
Mercuric Chloride

.....  
Iron(III)sulphate

.....  
Aluminium hydroxide

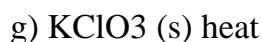
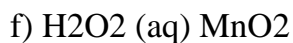
.....  
Lead(IV)oxide

.....  
Ammonium Phosphate

.....  
3. Calculate the percentage composition by mass of SULPHUR in: ( Zn=65, S=32, O=16, Cu=64, )

a) Zinc sulphite b) Hydrated copper(II)sulphate

4. Complete and balance the following chemical equations: (10 marks)



5. Draw a well labelled diagram to illustrate how clean and pure water can be obtained from the school pond. (10 marks )