Dr. C.V. Raman University

Kargi Road Bilaspur (C.G.)

DEPARTMENT OF CHEMISTRY

LIST OF EXPERIMENT (B.SC.)

Sem. – I (CHEMISTRY)

1. To calibrate the thermometer.
2. To determine the melting point of the given compound.
3. To determine the boiling point of the given compound.
4. To determine the percentage composition of the given organic mixture using viscosity method.
5. To determine the mixed melting point of the given compound.
6. To crystallization of the given organic compound.
7. To kinetically the reaction rate of decomposition of iodide by hydrogen peroxide(H_2O_2)
8. To compare the strength of HCl & H_2SO_4 by studying the kinetics of hydrolysis of ester.
9. To decolourisation and crystallization using charcoal.

Sem. – II (CHEMISTRY)

1. To detect the element on the given sample.
2. To detect the element on the given sample.
3. To detect the element on the given sample.
4. To identify the elementary special element and functional group in the given organic compound.
5. To identify the elementary special element and functional group in the given organic compound.
6. To identify the elementary special element and functional group in the given organic compound.
7. To identify the functional group in the given organic compound.
8. To identify the functional group in the given organic compound.
9. To identify the functional group in the given organic compound.
10. To identify the functional group in the given organic compound.

Sem. – III (CHEMISTRY)

1. To calibrate the 1ml, 2ml, 5ml, 10ml, and 20ml pipettes.
2. To calibrate the 1ml, 2ml, 5ml, 10ml, 20ml and 50ml burettes.
3. To determine the strength of Calcium (Ca^{++}), Magnesium (Mg^{++}) from the given solution of $CaCO_3$ and $MgSO_4$ by complexometric titration using EDTA.
4. To the estimation of Ba as as $BaSO_4$
5. TO find out the hardnees in given water sample using EDTA method.
6. To prepare standard oxalic acid solution from crystallization oxalic acid.
7. To prepare standard sodium hydroxide solution from crystalline sodium carbonate.
8. To prepare standard copper sulphate solution from crystalline copper sulphate.
9. To prepare standard sodium hydroxide solution from crystalline sodium hydroxide.

Sem. – IV (CHEMISTRY)

1. To identify the functional group of the given organic compound.
2. To identify the functional group of the given organic compound.
3. To identify the functional group of the given organic compound.
4. To identify the functional group of the given organic compound.
5. To identify the functional group of the given organic compound.
6. Determination of transition temperature of given substance ($MnCl_2$) by thermometric method.
7. To study effect of two partially miscible solution (Phenol water system) with observe its temperature.
8. Determination of transition temperature of given substance ($BaCl_2$) by thermometric method.

Sem. – V (CHEMISTRY)

1. To prepare the acetylation.
2. To prepare the benzoylation.
3. To prepare the meta-dinitrobenzene.
4. To find out the hardness in given water sample using EDTA.
5. To determination of dissolved oxygen in the given water sample.
6. To determine biological oxygen demand (BOD) of a given sample of water.
7. To find out the chemical oxygen demand (COD) of a waste water sample using $K_2Cr_2O_7$.

Sem.- VI (CHEMISTRY)

1. To prepare the Tetra-amine Copper (II) Sulphate monohydrate.
2. To prepare the Hexa-amminenickil (II) Chloride.
3. To analyze the binary mixture.
4. To analyze the binary mixture.
5. To analyze the binary mixture.
6. To analyze the binary mixture.
7. To analyze the binary mixture.
8. To analyze the binary mixture.
9. To prepare the Dimethyl Glyoxime.
10. To prepare the bis (methyl acetoacetato) Cobalt III