



The Islamia University of Bahawalpur

Department of Chemistry

Course Title: Advance Inorganic Chemistry (Practical)

Course Code: CHEM-021333

Class: MSc. Semester-2nd

Course Instructor: Dr. Ejaz Hussain

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Course splits to be covered on weekly-basis

Week	Course	Experiment
1	Inorganic Chemistry-II Practical	General Safety Rules when You are Working in Chemistry Laboratory
2	Inorganic Chemistry-II Practical	Prepare Sodium Thiosulphate and Calculate Percent Yield
3	Inorganic Chemistry-II Practical	Prepare Ferrous Ammonium Sulphate and Calculate Percent Yield
4	Inorganic Chemistry-II Practical	Prepare Triethylenediamine Nickel(II) Chloride and Calculate its Percent Yield
5	Inorganic Chemistry-II Practical	Prepare Chrome Alum and Calculate its Percent yield
6	Inorganic Chemistry-II Practical	Prepare Potassium Trioxalato Chromate Complex and Calculate its Percent Yield
7	Inorganic Chemistry-II Practical	Prepare Microcosmic Salt and Calculate its Percent Yield
8	Inorganic Chemistry-II Practical	Prepare Sodium Hexanitrito Cobalt(III) Complex
9		Mid Term Examination
10	Inorganic Chemistry-II Practical	Determine Ca^{2+} and Mg^{2+} ions in the Given Sample by Complexometry
11	Inorganic Chemistry-II Practical	Determine Amount per litre of Ni(II) by Using Dimethyl Glyoxime
12	Inorganic Chemistry-II Practical	Determine Amount per litre of Pb(II) in the Given Sample Gravimetrically
13	Inorganic Chemistry-II Practical	Determine Amount per litre of Cl^- and NaCl in the Given Sample Solution by Argentometry using Adsorption Indicator. You are Provided with 0.025M AgNO_3 solution
14	Inorganic Chemistry-II Practical	Determine Amount per litre of Br^- in KBr in the Given Sample Solution by Argentometry using Adsorption Indicator. You are Provided with 0.025M AgNO_3 solution
15	Inorganic Chemistry-II Practical	Estimation of Cu and Ni Ions in the Given Sample by Method of Gravimetry
16	Inorganic Chemistry-II Practical	Separation and Identification of First Group Cations [Ag(I) , Pb(I) , Hg(I)] by Paper Chromatography

17	Inorganic Chemistry-II Practical	Separation of Mixture of Inks by Paper Chromatography
18		Final term Examination

Recommended Books

1. Chromatography, Part B: Applications by E. Heftmann; 6th Edition, 2004
2. Modern Analytical Chemistry by David Harvey; New Edition 2000; McGraw Hill Companies.

Exam Assessment

Assessment Coverage	Marks weightage
Mid-Term Exam	30 %
Final-Term Exam	50 %
Sessional. (1) Presentations & Quiz: 10 % (2) Attendance: 10%	20 %
Total	100 %