**Subject – Chemistry THEORY BSc. 4th Sem (Non med.)**

**Name of Assistance Prof. - ALVEERA**

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| **Month 2019** | **Topic** | **Practicals** |
| **1 jan** | **Introduction of Lanthnides – electronic configuration different physical properties** |  |
| **2 jan** | **Continue** |  |
| **3 jan** | **Study of chemistry of lanthenides** |  |
| **4 jan** | **Sepration of lathenides** |  |
| **5 jan** | **Revision** |  |
| **6 jan** | **Sunday** |  |
| **7 jan** | **Study of actinides** | **Experiments – 1** |
| **8 jan** | **Chemistry ofactinides** |  |
| **9 jan** | **Continue** |  |
| **10 jan** | **Continue** |  |
| **11 jan** | **Comparison of lanthanides and actinides** |  |
| **12 jan** | **Revision of lanthanides** |  |
| **13 jan** | **Sunday** |  |
| **14 jan** | **Holiday** |  |
| **15 jan** | **Problems of lanthanides** |  |
| **16 jan** | **Test** |  |
| **17 jan** | **Revision** | **Experiments – 2** |
| **18 jan** | **Thermodynamics Introduction** |  |
| **19 jan** | **Definitions of all thermodynamic quantity** |  |
| **20 jan** | **Sunday** |  |
| **21 jan** | **Laws of themodynamic** |  |
| **22 jan** | **Concept of entropy enthalpy** | **Experiments – 3** |
| **23 jan** | **Continue** |  |
| **24 jan** | **Carnot cycle** |  |
| **25 jan** | **Criteria of spontinity** |  |
| **26 j an** | **Republic day** |  |
| **27 jan** | **Sunday** |  |
| **28 jan** | **Laws of thermodynamics** |  |
| **29 jan** | **Nernst heat theorem** |  |
| **30 jan** | **Gibbs and Helmholtz fuction** |  |
| **31 jan** | **Continue** |  |
|  | **Varitation of G with P T V** |  |
| **1 feb** | **Continue** |  |
| **2 feb** | **Continue** |  |
| **3 feb** | **Sunday** |  |
| **4 feb** | **Revision** | **Experiments – 4** |
| **5 feb** | **Problems** |  |
| **6 feb** | **Test** |  |
| **7 feb** | **Introdution of IR spectroscopy** |  |
| **8 feb** | **Selection rule Intensity and positions of signals** |  |
| **9 feb** | **Interpretation of IR spectroscopy** |  |
| **10 feb** | **Sunday** |  |
| **11 feb** | **Continue** |  |
| **12 feb** | **Problems** | **Experiments – 5** |
| **13 feb** | **Application of IR spectroscopy** |  |
| **14 feb** | **Continue** |  |
| **15 feb** | **Continue** |  |
| **16 feb** | **Nomenclature of amines** |  |
| **17 feb** | **Sunday** |  |
| **18 feb** | **Preparation of alkyl amines and aryl amines** | **Experiments – 6** |
| **19 feb** | **Holiday** |  |
| **20 feb** | **Continue** |  |
| **21 feb** | **Chemical reaction of amines** |  |
| **22 feb** | **Continue** |  |
| **23 feb** | **Electrophilic reactions** |  |
| **24 feb** | **Sunday** |  |
| **25 feb** | **Revision** |  |
| **26 feb** | **Chemistry of analysis of acidic and basic radicals** |  |
| **27 feb** | **Identification of acids radicals** |  |
| **28 feb** | **Holiday** |  |
|  | **Basic radicals** |  |
| **1 March** | **Common ion effect** | **Experiments – 7** |
| **2 March** | **Theory of precipitation** |  |
| **3 March** | **Sunday** |  |
| **4 March** | **Purification of precipitates** |  |
| **5 March** | **Continue** |  |
| **6 March** | **Continue** |  |
| **7 March** | **Revision** |  |
| **8 March** | **Electrolytic and galvanic cells introduction** |  |
| **9 March** | **Electrochemicals cells** |  |
| **10 March** | **Sunday** |  |
| **11 March** | **Revesible and irreversible reactions** |  |
| **12 March** | **Calculation of G H K** |  |
| **13 March** | **Types of electrodes** | **Experiments – 8** |
| **14 March** | **Continue** |  |
| **15 March** | **Nernest equation** |  |
| **16 March** | **Standard hydrogen electrodes** |  |
| **17 March** | **Sunday** |  |
| **18 March** | **Holiday** |  |
| **19 March** | **Holiday** |  |
| **20 March** | **Holiday** |  |
| **21 March** | **Holiday** |  |
| **22 March** | **Holiday** |  |
| **23 March** | **Holiday** |  |
| **24 March** | **Holiday** |  |
| **25 March** | **Applications of EMF** |  |
| **26 March** | **Numerical** | **Experiments – 9** |
| **27 March** | **Numerical** |  |
| **28 March** | **Numerical** |  |
| **29 March** | **Test** |  |
| **30 March** | **Sunday** |  |
| **31 March** | **Mechanism of diazotization** |  |
|  | **Continue** |  |
| **1 April** | **Replacement of diazo group with different groups** |  |
| **2 April** | **Continue** |  |
| **3 April** | **Continue** |  |
| **4 April** | **Nomenclature of aldehydes and ketones** |  |
| **5 April** | **Preparation of aldehydes and ketones** | **Experiments – 10** |
| **6 April** | **Continue** |  |
| **7 April** | **Sunday** |  |
| **8 April** | **Physical properties of aldehydes and ketones** |  |
| **9 April** | **Comparison of properties of aldehydes and ketones** | **Revision of practicals** |
| **10 April** | **Nucleophilic reaction of carbonyl compounds** |  |
| **11 April** | **Continue** |  |
| **12 April** | **Different chemical reactions of aldehydes** |  |
| **13 April** | **Holiday** |  |
| **14 April** | **Sunday** |  |
| **15 April** | **Reactions of ketones** | **Revision of practicals** |
| **16 April** | **Perkin reaction MPV reactions** |  |
| **17 April** | **Holiday** |  |
| **18 April** | **Continue** |  |
| **19 April** | **Continue** |  |
| **20 April** | **Reduction of carbonyl compounds** |  |
| **21 April** | **Sunday** |  |
| **22 April** | **Continue** |  |
| **23 April** | **Revision** |  |
| **24 April** | **Revision** |  |
| **25 April** | **test** |  |
| **26 April** | **Revision** |  |
| **27 April** | **Revision** |  |
| **28 April** | **Sunday** |  |
| **29 April** | **Revision** |  |
| **30 April** | **Revision** |  |
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