SUMMARY OF LESSON PLANS OF COLLEGE FACULTY

Name of College: G.V.M.GIRLS COLLEGE SONEPAT **Academic Session:** 2017-18 **Semester:** Odd
For the month of JULY-NOVEMBER, 2017

S. No.	***Name of Assistant/Associate Professor***	***Subject***	***Topics/Chapters to be covered***	***Academic activity to be organized***	***Topic of Assignments/Tests to be given to the students***
1	Dr. Manjula Spah	Physical Chemistry B.Sc. 2nd Year (Non-Med.) A & B	**JULY:-** **Distribution Law** Nernst distribution law – its thermodynamic derivation, Modification of distribution law when solute undergoes dissociation, association and chemical combination.		
			AUGUST:- Applications of distribution law: (i) Determination of degree of hydrolysis and hydrolysis constant of aniline hydrochloride. (ii) Determination of equilibrium constant of potassium tri-iodide		Two Class test of the same chapter

			complex and process of extraction. **Thermodynamics-I** Definition of thermodynamic terms: system, surrounding etc. Types of systems Intensive and extensive properties. State and path functions and their differentials. Thermodynamic process. Concept of heat and work.		
			SEPTEMBER :- Zeroth Law of thermodynamics, First law of thermodynamics: statement, definition of internal energy and enthalpy. Heat capacity, heat capacities at constant volume and pressure and their relationship. Joule's law – Joule – Thomson coefficient for ideal gases and real gas: and inversion temperature		Class tests

			OCTOBER:- **Thermodynamics-II** Calculation of w.q. dU & dH for the expansion of ideal gases under isothermal and adiabatic conditions for reversible process, Temperature dependence of enthalpy, Kirchhoff's equation. Bond energies and applications of bond energies. **Chemical Equilibrium** constant and free energy, concept of chemical potential, Thermodynamic derivation of law of chemical equilibrium. Chemical Equilibrium constant and free energy, concept of chemical potential.		Assignment on Le Chatelier's Principle
			NOVEMBER :- Thermodynamic derivation of law of chemical equilibrium.		Revision and Discussion

			Temperature dependence of equilibrium constant; Van’t Hoff reaction isochore, Van’t Hoff reaction isotherm. Le-Chatetier’s principle and its applications Clapeyron equation and Clausius – Clapeyron equation its applications.		