Saraswati Mahila Mahavidyalaya, Palwal

 **Lesson Plan**

**Name of the Assistant/Associate Professor:** Anju Sorout

**Class and Section:** BSC I (Th), BSC II (A+B), BSc III (L)

**Name of subject:** Physics

**Subject Lesson Plan : 18 weeks(from January 2018 to April 2018)**

**(Note: Prepare as per list of holidays declared by Haryana govt.)**

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| **WEEK 1** |
| **ASSIGNMENT:** |
| **WEEK 1,DAY1 ,DATE :01/01/2018(MONDAY)** |
| (Lab) BSC III – Find e/m Thompson’s Method(Lab) BSC IInd – To draw a graph between wavelength and minimum deviation using mercury  discharge tube. |
| **WEEK 1 ,DAY 2 ,DATE :02/01/2018(TUESDAY)** |
| (Lab) BSC III – Continue when same experiment(Lab) BSC II – Continue with same Experiment. |
| **WEEK 1,DAY 3 ,DATE :03/01/2018(WEDNESDAY)** |
| (Lab) BSC III – Find e/m by Thompson’s Method(Lab) BSC II – To draw a graph between wavelength and minimum deviation wing mercury  discharge tube |
| **WEEK 1 ,DAY 4 ,DATE :04/01/2018(THURSDAY)** |
| (Th) BSC I – Elasticity (Introductions)(Th) BSC II – Interference by division of amplitude (Introductions)(Lab) BSC II – Continue with same experiments. |
| **WEEK 1,DAY 5 ,DATE :05/01/2018(FRIDAY)** |
|  **Holiday on account of Guru Govind Singh’s Birthday** |
| **WEEK 1 ,DAY 6 ,DATE :06/01/2018(SATURDAY)** |
| (Th) BSC I – Stress, Strain, Modulus of elasticity(Th) BSC II – Interference of Light in thin films |
| **WEEK 2** |
| **ASSIGNMENT:** |
| **WEEK 2,DAY1 ,DATE :08/01/2018(MONDAY)** |
| (Lab) BSC III – Continue with same experiment.(Lab) BSC II – Continue with same experiments |
| **WEEK 2 ,DAY 2 ,DATE :09/01/2018(TUESDAY)** |
| (Lab) BSC III – Continue(Lab) BSC II - Continue |
| **WEEK 2,DAY 3 ,DATE :10/01/2018(WEDNESDAY)** |
| (Lab) BSC III – Continue(Lab) BSC II - Continue |
| **WEEK 2 ,DAY 4 ,DATE :11/01/2018(THURSDAY)** |
| (Th) B.Sc I – Load Extension curve, Poisson’s Ratio(Th) BSC II – Production of Colours of thin Films, Classification(Lab) BSC II - Continue |
| **WEEK 2,DAY 5 ,DATE :12/01/2018(FRIDAY)** |
| (Th) BSC I – Relation between (i) y, k & $σ$ (ii) y, $η$ & $σ$ (Th) BSC II – Wedge – shape film. |
| **WEEK 2 ,DAY 6 ,DATE :13/01/2018(SATURDAY)** |
| (Th) BSC I – Relation between (iii) y, k & $η$ (ii) k $η$ & $σ$ limiting Value of Poison’s Ratio(Th) BSC II – Test of the above discussed articles. |
| **WEEK 3** |
| **ASSIGNMENT:** |
| **WEEK 3,DAY1 ,DATE :15/01/2018(MONDAY)** |
| (Lab) BSC III – Diameter of lycopodium powder using corona rings(Lab) BSC II – Wavelength of Na light and No. of lines ruled/cm using grating |
| **WEEK 3 ,DAY 2 ,DATE :16/01/2018(TUESDAY)** |
| (Lab) BSC III – Continue with same experiments.(Lab) BSC III – Continue with same experiments. |
| **WEEK 3,DAY 3 ,DATE :17/01/2018(WEDNESDAY)** |
| (Lab) BSC III – Diameter of Lycopodium power using corona rings.(Lab) BSC II – Wavelength of No. light and No. of lines rule/cm uing grating. |
| **WEEK 3 ,DAY 4 ,DATE :18/01/2018(THURSDAY)** |
| (Th) BSC I – Test of Half unit(Th) BSC II – Newton’s Rings(Th) II – Continue with some experiments. |
| **WEEK 3,DAY 5 ,DATE :19/01/2018(FRIDAY)** |
| (Th) B.SC I – Torsion of a cylinder and Twisting couple(Th) BSC II – Continue with Newton’s Rings |
| **WEEK 3 ,DAY 6 ,DATE :20/01/2018(SATURDAY)**(Th) BSC I – Comparison between hollow and solid cylinder and work done(Th) BSC II – Michelson’s Interferometer. |
| **WEEK 4** |
| **ASSIGNMENT:** |
| **WEEK 3,DAY1 ,DATE :22/01/2018(MONDAY)** |
|  **Holiday on account of Basant Panchmi.** |
| **WEEK 4 ,DAY 2 ,DATE :23/01/2018(TUESDAY)** |
| (Lab) BSC III – To study double slit interference using he- ne laser(Lab) BSC II – Continue with same experiments. |
| **WEEK 4,DAY 3 ,DATE :24/01/2018(WEDNESDAY)** |
|  **Holiday on account of Sir Chotu Ram Jayanti.** |
| **WEEK 4 ,DAY 4 ,DATE :25/01/2018(THURSDAY)** |
| (Lab) BSC I - Numericals based on above articles(Lab) BSC II – Application of Michelson’s Interferometer(Lab) BSC III – Continue with same experiment |
| **WEEK 4,DAY 5 ,DATE :26/01/2018(FRIDAY)** |
|  **Holiday on account of Republic Day.** |
| **WEEK 4 ,DAY 6 ,DATE :27/01/2018(SATURDAY)** |
| (Th) BSC I – Bending of beam and bending moment.(Th) BSC II – Standardization of meter and numerical based on articles |
| **WEEK 5** |
| **ASSIGNMENT:** |
| **WEEK 5,DAY1 ,DATE :29/01/2018(MONDAY)** |
| (Lab) BSC III – Continue with same experiment(Lab) BSC II – Determination of wavelength by Newton’s Rings |
| **WEEK 5 ,DAY 2 ,DATE :30/01/2018(TUESDAY)** |
| (Lab) BSC III – Continue with same experiments(Lab) BSC II – Continue with same experiments. |
| **WEEK 5,DAY 3 ,DATE :31/01/2018(WEDNESDAY)** |
|  **Holiday on account of Guru Ravi Dass Jayanti** |
| **WEEK 5 ,DAY 4 ,DATE :01/02/2018(THURSDAY)** |
| (Th) BSC I – Cantilever and beam supported at its ends and loaded in the middle.(Th) BSC II – Test of remaining articles of 1st unit.(Lab) BSC III – Determination of wavelength by Newton’s Rings |
| **WEEK 5,DAY 5 ,DATE :02/02/2018(FRIDAY)** |
| (Th) BSC I – Numericals based on Complete unit.(Th) BSC II – Numericals based on complete unit. |
| **WEEK 5 ,DAY 6 ,DATE :03/02/2018(SATURDAY)**(Th) BSC I – Test of remaining half unit.(Th) BSC II – Problems of Numericals. |
| **WEEK 6** |
| **ASSIGNMENT:** |
| **WEEK 6,DAY1 ,DATE :05/02/2018(MONDAY)** |
| (Lab) BSC III – Determination of diameter thin wire by diffraction method (He- ne laser)(Lab) BSC II – Continue with same experiment. |
| **WEEK 6 ,DAY 2 ,DATE :06/02/2018(TUESDAY)** |
| (Lab) BSC III – Continue with same experiments(Lab) BSC II – Continue with same experiments. |
| **WEEK 6,DAY 3 ,DATE :07/02/2018(WEDNESDAY)** |
| (Lab) BSC III – Determination of diameter thin wire by diffraction method (He- ne lax)(Lab) BSC II – Continue with same experiment. |
| **WEEK 6 ,DAY 4 ,DATE :08/02/2018(THURSDAY)** |
| (Th) BSC I – Kinetic theory of gases ( introduction)(Th) BSC II – Fresnel’s Diffraction ( Introduction)(Lab) BSC III – Continue with same experiment |
| **WEEK 6,DAY 5 ,DATE :09/02/2018(FRIDAY)** |
| (Th) B.SC I – Postulates of kinetic theory of gases and pressure exerted by a perfect gas(Th) B.SC II – Fresnel’s Half – period Zones. |
| **WEEK 6 ,DAY 6 ,DATE :10/02/2018(SATURDAY)** |
|  **Holiday on account of Maharshi Dayanand Saraswati Jayanti.** |
| **WEEK 7** |
| **ASSIGNMENT:** |
| **WEEK 7,DAY1 ,DATE :12/02/2018(MONDAY)** |
| (Lab) B.SCIII – Continue with same experiments(Lab) B.SC II – To study series and parallel resonant circuits. |
| **WEEK 7 ,DAY 2 ,DATE :13/02/2018(TUESDAY)** |
| **Holiday on account of Maha Shivaratri.** |
| **WEEK 7,DAY 3 ,DATE :14/02/2018(WEDNESDAY)** |
| (Lab) B.SC III – Continue with same experiments.(Lab) B.SC II – To study of series and parallel resonant circuits. |
| **WEEK 7 ,DAY 4 ,DATE :15/02/2018(THURSDAY)** |
| (Th) B.SC I – Kinetic interpretation degree of freedom, law of equipartition of energy(Th) B.SC II – Zone plate and action of zone plate(Lab) B.SC III – Continue with same experiment |
| **WEEK 7,DAY 5 ,DATE :16/02/2018(FRIDAY)** |
| (Th) B.SC I – Principal specific heat of a gas and numerical related to the article(Th) BSC II – Diffraction at a straight edge |
| **WEEK 7 ,DAY 6 ,DATE :17/01/2018(SATURDAY)** |
| (Th) BSC I – Test of half of 2nd unit(Th) B.SC II – Diffraction at a rectangular slit |
| **WEEK 8** |
| **ASSIGNMENT:** |
| **WEEK 8,DAY1 ,DATE :19/02/2018(MONDAY)** |
| (Lab) B.SC III – Velocity of ultrasonic waves by grating elements(Lab) B.SC II – Continue with same experiment. |
| **WEEK 8 ,DAY 2 ,DATE :20/02/2018(TUESDAY)** |
| (Lab) B.SC III – Continue with same experiment(Lab) B.SC II – Continue with the same experiments |
| **WEEK 8,DAY 3 ,DATE :21/02/2018(WEDNESDAY)** |
| (Lab) B.SC III – Velocity of ultrasonic waves by grating elements(Lab) B.SC II – Continue with same experiments. |
| **WEEK 8 ,DAY 4 ,DATE :22/02/2018(THURSDAY)** |
| (Th) B.SC I – Maxwell’s law and phase space & Cells(Th) B.SC II – Diffraction at a circular aperture(Lab) B.Sc II – Continue with same experiments. |
| **WEEK 8,DAY 5 ,DATE :23/02/2018(FRIDAY)** |
| (Th) B.SC I – Maxwell’s distribution law of velocity of gas(Th) B.SC II – Numericals based on above articles |
| **WEEK 8 ,DAY 6 ,DATE :24/02/2018(SATURDAY)** |
| (Th) B.Sc I – Maxwell’s distribution law of speed of gas (Th) B.SC II – Molecules Test of the complete unit. |
| **WEEK 9** |
| **ASSIGNMENT:** |
| **WEEK 9,DAY1 ,DATE :26/02/2018(MONDAY)** |
| (Lab) B.SC III – Continue with same experiment(Lab) B.SC II – Frequencies of tuning fork by Melde’s experiments. |
| **WEEK 9 ,DAY 2 ,DATE :27/02/2018(TUESDAY)** |
| (Lab) B.SC III – Continue with same experiments(Lab) B.SC II – Continue with same experiments |
| **WEEK 9,DAY 3 ,DATE :28/02/2018(WEDNESDAY)** |
|  **VACATION -II** |
| **WEEK 9 ,DAY 4 ,DATE :01/03/2018(THURSDAY)** |
|  **VACATION -II** |
| **WEEK 9,DAY 5 ,DATE :02/03/2018(FRIDAY)** |
|  **VACATION -II** |
| **WEEK 9 ,DAY 6 ,DATE :03/03/2018(SATURDAY)** |
|  **VACATION -II** |
| **WEEK 10** |
| **ASSIGNMENT:** |
| **WEEK 10,DAY1 ,DATE :05/03/2018(MONDAY)** |
| (Lab) B.SC III – Measurement of energy bond gap by four probe method(Lab) B.SC II – Continue wire same experiments. |
| **WEEK 10,DAY 2 ,DATE :06/03/2018(TUESDAY)** |
| (Lab) B.SC III – Continue with same experiments(Lab) B.SC II – Continue with same experiments |
| **WEEK 10,DAY 3 ,DATE :07/03/2018(WEDNESDAY)** |
| (Lab) B.SC III – Measurements of energy band gap using four probe method(Lab) B.SC. II - Frequency of tuning fork by Melde’s experiments  |
| **WEEK 10,DAY 4 ,DATE :08/03/2018(THURSDAY)** |
| (Th) B.SC III – Test of the complete unit(Th) B.SC II – Test of the above discussed articles.(Th) B.SC II – Continue with same experiments |
| **WEEK 10,DAY 5 ,DATE :09/03/2018(FRIDAY)** |
| (Th) B.SC I – Experimental Verification of Maxwell’s law of speed distribution, Most probable  speed, average speed.(Th) B.SC II – Fraunhoffer Diffraction (Introduction) |
| **WEEK 10 ,DAY 6 ,DATE :10/03/2018(SATURDAY)** |
| (Th) B.SC I – Mean free path, Transport Phenomenon – Momentum and energy(Th) BSC II – Difference between Fresnel’s and frauhoffer diffraction |
| **WEEK 11** |
| **ASSIGNMENT:** |
| **WEEK 11,DAY1 ,DATE :12/03/2018(MONDAY)** |
| (Lab) B.SC. III – Continue with same experiment(Lab) B.SC II – Continue with same experiment. |
| **WEEK 11,DAY 2 ,DATE :13/03/2018(TUESDAY)** |
| (Lab) B.SC. III – Continue(Lab) B.SC II - Continue |
| **WEEK 11,DAY 3 ,DATE :14/03/2018(WEDNESDAY)** |
| (Lab) B.SC. III – Double slit interference by He – Ne loser(Lab) B.SC II - Continue |
| **WEEK 11,DAY 4 ,DATE :15/03/2018(THURSDAY)** |
| (Th) B.SC. I – Transport of mass, Brownian motion(Th) B.SC II – Fraunhoffer diffraction as single slit(Lab) B.SC III - Continue |
| **WEEK 11,DAY 5 ,DATE :16/03/2018(FRIDAY)** |
| (Th.) B.SC I – Deviation of real gas from ideal gas, Vander wall equation(Th.) B.SC II – Analytical treatment of diffraction at single slit. |
| **WEEK 11 ,DAY 6 ,DATE :17/03/2018(SATURDAY)** |
| (Th.) B.SC. I – Numericals based on above article(Th) B.SC. II – Fraunhoffer diffraction at double slit |
| **WEEK 12** |
| **ASSIGNMENT:** |
| **WEEK 12,DAY1 ,DATE :19/03/2018(MONDAY)** |
| (Lab) B.SC. III – Continue(Lab) B.SC. II – To find roots of quadratic equation using compare  |
| **WEEK 12,DAY 2 ,DATE :20/03/2018(TUESDAY)** |
| (Lab) B.SC. III – Continue(Lab) B.SC. II – Continue |
| **WEEK 12,DAY 3 ,DATE :21/03/2018(WEDNESDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II ) – To find roots of quadratic equation using compare. |
| **WEEK 12,DAY 4 ,DATE :22/03/2018(THURSDAY)** |
| (Th.) B.Sc. I – Test of remaining half unit(Th.) B.Sc. II – Fraunhoffer diffraction at N slit(Lab) B.Sc. III - Continue |
| **WEEK 12,DAY 5 ,DATE :23/03/2018(FRIDAY)** |
|  **Holiday on account of Shahidi diwas.** |
| **WEEK 12 ,DAY 6 ,DATE :24/03/2018(SATURDAY)** |
| (Th) B.Sc. I – Theory of relativity (Introduction and definitions)(Th.) B.Sc. II – Lord Rayleigh crition and resolving power. |
| **WEEK 13** |
| **ASSIGNMENT:** |
| **WEEK 13,DAY1 ,DATE :26/03/2018(MONDAY)** |
| (Lab) B.Sc. III – Program to compute product of two matrics of different dimension.(Lab) B.Sc. II - Continue |
| **WEEK 13,DAY 2 ,DATE :27/03/2018(TUESDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II – Program to find area of sphere, Cylinder & Triangle. |
| **WEEK 13,DAY 3 ,DATE :28/03/2018(WEDNESDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II - Continue |
| **WEEK 13,DAY 4 ,DATE :29/03/2018(THURSDAY)** |
|  **Holiday on account of Mahavir jayanti.** |
| **WEEK 13,DAY 5 ,DATE :30/03/2018(FRIDAY)** |
| (Th) B.Sc. I – Galilian transformation, Newton law relativity principal(Th) B.Sc. II – Polarization (Introduction), Polarization by refection and scattering, Malus law |
| **WEEK 13 ,DAY 6 ,DATE :31/03/2018(SATURDAY)** |
| (Th) B.SC. I – Michelson and Morley Experiment(Th) B.SC. II – Double refraction and polarization by double refraction. |
| **WEEK 14** |
| **ASSIGNMENT:** |
| **WEEK 14,DAY1 ,DATE :02/04/2018(MONDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II - Continue |
| **WEEK 14,DAY 2 ,DATE :03/04/2018(TUESDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II - Continue |
| **WEEK 14,DAY 3 ,DATE :04/04/2018(WEDNESDAY)** |
| (Lab) B.Sc. III – Product to compare product of two matrices of different dimension(Lab) B.Sc. II – Program to find area of sphere triangle and cylinder |
| **WEEK 14,DAY 4 ,DATE :05/04/2018(THURSDAY)** |
| (Th) B.Sc. I – Discussion of result of Michelson Morley experiment(Th) B.Sc II – Huygen’s Principal(Th) B.Sc. II - Continue |
| **WEEK 14,DAY 5 ,DATE :06/04/2018(FRIDAY)** |
| (Th) B.Sc I – Test of the above unit(Th) B.Sc II – Quarter wave plate, Half wave plate and Nicol Prism |
| **WEEK 14 ,DAY 6 ,DATE :07/04/2018(SATURDAY)** |
| (Th) B.Sc. I – Postulates of Einstein Theory, Current Transformation(Th) B.Sc II – Detection and production of plane polarized light. |
| **WEEK 15** |
| **ASSIGNMENT:** |
| **WEEK 15,DAY1 ,DATE :09/04/2018(MONDAY)** |
| (Lab) B.Sc. III – To find average and standard deviation using computer.(Lab) B.Sc. II – Measurements of specific rotation and concentration of sugar solution  Polari meter  |
| **WEEK 15,DAY 2 ,DATE :10/04/2018(TUESDAY)** |
| (Lab) B.Sc. III – Continue(Lab) B.Sc. II - Continue |
| **WEEK 15,DAY 3 ,DATE :11/04/2018(WEDNESDAY)** |
| (Lab) B.Sc. III – To find average and standard deviation using computer.(Lab) B.Sc. II – Continue |
| **WEEK 15,DAY 4 ,DATE :12/04/2018(THURSDAY)** |
| (Th) B.Sc. I – Length Contraction and time dilation(Th) B.Sc. II – Optical Rotation and Optical activity(Th) B.Sc. III – Measurement of specific rotation concentration of sugar solution using  Polarimeter. |
| **WEEK 15,DAY 5 ,DATE :13/04/2018(FRIDAY)** |
| (Th) B.Sc. I – Velocity addition theorem , Variation of mass with velocity(Th) B.Sc II – Fresnel’s Theory of optical rotation. |
| **WEEK 15 ,DAY 6 ,DATE :14/04/2018(SATURDAY)** |
| **Holiday on account of Vaisakhi & Dr B.R. Ambedkar’s Jayanti.** |
| **WEEK 16** |
| **ASSIGNMENT:** |
| **WEEK 16,DAY1 ,DATE :16/04/2018(MONDAY)** |
| (Lab) B.Sc III – Continue(Lab) B.Sc II - Continue |
| **WEEK 16,DAY 2 ,DATE :17/04/2018(TUESDAY)** |
| (Lab) B.Sc III – Continue(Lab) B.Sc II - Continue |
| **WEEK 16,DAY 3 ,DATE :18/04/2018(WEDNESDAY)** |
| **Holiday on account of Maharshi Pasuram Jayanti** |
| **WEEK 16,DAY 4 ,DATE :19/04/2018(THURSDAY)** |
| (Th) B.Sc I – Mass Energy equivalence(Th) B.Sc II – Specific Rotation(Lab) B.Sc. II - Continue |
| **WEEK 16,DAY 5 ,DATE :20/04/2018(FRIDAY)** |
| (Th) B.Sc III – Numericals of above units(Th) B.Sc II – Polarimeter (Half shade and Biquartz) |
| **WEEK 16 ,DAY 6 ,DATE :21/04/2018(SATURDAY)** |
| (Th) B.Sc III – Test of the above unit(Th) B.Sc II – Problem of numericals |
| **WEEK 17** |
| **ASSIGNMENT:** |
| **WEEK 17,DAY1 ,DATE :23/04/2018(MONDAY)** |
| (Lab) B.Sc III – Continue(Lab) B.Sc II - Continue |
| **WEEK 17,DAY 2 ,DATE :24/04/2018(TUESDAY)** |
| (Lab) B.Sc III – Revision(Lab) B.Sc II - Revision |
| **WEEK 17,DAY 3 ,DATE :25/04/2018(WEDNESDAY)** |
| (Lab) B.Sc III – Revision(Lab) B.Sc II - Revision |
| **WEEK 17,DAY 4 ,DATE :26/04/2018(THURSDAY)** |
| (Th) B.Sc I – Revision(Th B.Sc II - Revision |
| **WEEK 17,DAY 5 ,DATE :27/04/2018(FRIDAY)** |
| (Th) B.Sc I – Revision(Th) B.Sc II - Revision |
| **WEEK 17 ,DAY 6 ,DATE :28/04/2018(SATURDAY)** |
| (Th) B.Sc I – Revision(Th) B.Sc II – Revision(Th) B.Sc III - Revision |
| **WEEK 18** |
| **ASSIGNMENT:** |
| **WEEK 18,DAY1 ,DATE :30/04/2018(MONDAY)** |
| (Lab) B.Sc III – Revision(Lab) B.Sc II - Revision |