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| **Lesson Plan for the Month April2022 to July 2022**  | **Subject : Physics**  |
| **Name of the Teacher** | Sumit Chauhan | **Class** | B.Sc. 4th Semester  |
| 09-04-2022 To16-04-2022 | Probability, some probability considerations, combinations possessing maximum probability, combinations possessing minimum probability,  |
| 18-04-2022 To23-04-2022 | Distribution of molecules in two boxs. Case with weightage (general). Phase space, microstates and macrostates, statistical fluctuations constraints and accessible States Thermodynamical probability. |
| 25-04-2022 To30-04-2022 | Postulates of Statistical Physics. Division of Phase space into cells, Condition of equilibrium between two system in thermal contact. b-Parameter. Entropy and Probability, Boltzman’s distribution law. Evaluation of A and b. Bose-Einstein statistics, Application of B.E. Statistics to Plancks’s radiation law, B.E. gas. |
| 02-05-2022 To07-05-2022 | Fermi-Dirac statistics, M.B. Law as limiting case of B.E. Degeneracy and B.E., Condensation. F.D. Gas, electron gas in metals. Zero point energy. Specific heat of metals and its solution. |
| 09-05-2022 To14-05-2022 | Interference by Division of Amplitude : Colour of thin, films, wedge shaped film, Newton’s rings. Interferometers: Michelson’s interferometer and its application to (I) Standardisation of a meter (II) determination of wave length.  |
| 16-05-2022 To21-05-2022 | Fresuel’s Diffraction : Fresnel’s half period zones, zone plate, diffraction at a straight edge, rectangular slit and circular apperture. Fraimhoffer diffraction : One slit diffraction, Two slit diffraction N-slit diffraction,  |
| 23-05-2022 To28-05-2022 | Plane transmission granting spectrum, Dispersive power of a grating , Limit of resolution, Rayleigh’s criterion, resolving power of telescope and a grating. |
| 30-05-2022 To04-06-2022 | Polarization :Polarisation and Double Refraction : Polarisation by reflection, Polarisation by scattering, |
| 05-06-2022 To12-06-2022 | **Break** |
| 13-06-2022 To18-06-2022 | Polarization :Polarisation and Double Refraction : Polarisation by reflection, Polarisation by scattering, |
| 20-06-2022 To25-06-2022 | Malus law, Phenomenon of double refraction, Huytgen’s wave theory of double refraction (Normal and oblique incidence), |
| 27-06-2022 To02-07-2022 | Analysis of Palorised light : Nicol prism, Quarter wave plate and half wave plate, production and detection of (i) Plane polarized light (ii) Circularly polarized light and |
| 04-07-2022 To09-07-2022 | (iii)Elliptically polarized light, Optical activity, Fresnel’s theory of rotation, Specific rotation, Polarimeters (half shade and Biquartz). |