

R.M.K. COLLEGE OF ENGINEERING AND TECHNOLOGY



R.S.M. Nagar, Puduvoyal – 601 206.

DEPARTMENT OF SCIENCE & HUMANITIES

FDP Title	The use of Virtual physics labs
Faculty attended	Ms. N. Jayanthi
Learning Outcome	To know how to use virtual physics labs
Summary / Content of the programme	 This FDP creates an interactive environment for creating and conducting experiments as if the students were in a normal physics lab. The real video clips of the real experiment performed. Day 1:Experiment performed: Photoelectric effect From the experiment we can understand the phenomenon Photoelectric effect as a whole and we can determine the Planck's constant from kinetic energy versus frequency graph. The stopping potential from the photocurrent versus applied potential graph was also determined. Day 2:Experiment Performed: Newton's Rings The formation of Newton's rings in the air-film in between a plano-convex lens and a glass plate using nearly monochromatic light from a sodium-source and the radius of curvature of the plano-convex lens was determined Day3:Experiment Performed: Energy gap of semiconductor A method for determining the band gap in germanium and silicon at 0 K based upon the temperature dependence of the electrical conductivity of a p-n junction is described. Results are given for the band gaps that are in good agreement with the accepted values. Day 4:Experiment Performed: Melde's experiment The frequency of electrically maintained tuning fork by means of Melde's apparatus in longitudinal and transverse mode of vibration was performed. Day 5:Experiment Performed: Stewart and Gee's experiment The variation of magnetic field with the distance along the axis of current carrying circular coil was studied
Suggestions / comments of Faculty	The PPT and organizing committee was Excellent.