JSS COLLEGE FOR WOMEN (AUTONOMOUS) SARASWATHIPURAM, MYSORE-09

LESSON PLAN

Name of the Teacher: UMESH V

Academic year and Semester: 2021-2022 CBCS

Class and Section: V SEM

Course Name: B.Sc

Course Code: FMA 590

Department: PHYSICS

Program: PCM & PMCs

MODERN PHYSICS-II

SI NO	Month	Topic to be covered
Unit 1		
1	OCT	Nucleus: Nuclear forces and their – Characteristics, Yukawa's theory (qualitative) Meson theory of nuclear forces.
2	NOV	 Mass Spectrograph: Dempster's mass spectrograph, Aston's mass spectrograph. Radioactivity: Successive disintegration, radioactive equilibrium – transient and secular, radioactive series.
3	DEC	Nuclear Decay: α decay, Gamow's theory (qualitative), Geiger – Nuttal law, range and energy of α particle – measurement, β decay, β ray spectra, Pauli's neutrino hypothesis, electron capture, γ –ray spectra, nuclear isomerism, internal conversion.
4	JAN	Nuclear Detectors – G.M. Counter (qualitative)-construction and working-quenching and types, scintillation detector, photomultiplier tube, semiconductor detectors.
5	FEB	NUMERICALS on Nucleus, Mass Spectrograph, Nuclear Decay, Nuclear Detectors. And PROJECT WORK

Principal