B.Sc. Semester-I
Course code: PH-MDC-2
Total Credits: 04 (Theory: 2, Practical; 2)
Total Hrs: Theory: 30, Practical: 60
Course Title: Space Science-1

PH-MDC-2 (Theory)

Unit 1	**Universe, Comets, Meteors, Asteroids**
	Planets - interior planets - exterior planets - crust, mantle and core of the earth - different – region of earth's atmosphere-rotation of the earth - magnetosphere- Van Allen belts -Aurora. Composition and structure of comets –periodic comets–salient features of asteroids, meteors and its use
Unit 2	**The Sun**
	Structure of photosphere, chromospheres, corona , sunspots , solar flares ,solar prominences – solar piages-satellites of planets -structure, phase and their features of moon.

Reference Books:

1. K.D.Abyankar,Astrophysics ofthesolar system,Universitypress,India (1999)
2. BaidyanathBasu,SudhindraNath BiswasAndTanukaChattopadhyay, AnIntroductionToAstrophysics,PrenticeHall OfIndia, New Delhi(2010)
3. Prof.P.Devadas,ThefascinatingAstronomy,DevadasTelescopies,Chennai
4. R.P.Singhal,ElementsofSpacePhysics,PHI,(2009)

B.Sc. Semester-I

Practical: PH-MDC-2 (P)

S.No.	Experiment
1	I-V Characteristics of solar cell and verification of inverse square law of intensity.
2	Study of Plane diffraction Grating.
3	Determination of focal length of convex and plano□convex lenses by auto collimation method.
4	Calibration of spectrometer.
5	Measurement and identification of spectral lines (Hg and Na source)
6	Intensity distribution curve of ordinary electric bulb using photo cell.
7	Study of solar spectrum
8	Sunspots activity analysis.
9	Measurement of Planck's constant using LED.
10	Measurement of wavelength of given LASER source using diffraction grating.