

Third year of Five Years integrated M.Sc (Physics)
M.Sc. - III, Semester –VI

L T P C
3 0 0 3

MP 308 : Introduction to Space Physics

- **INTRODUCTION TO SOLAR SYSTEM AND GEOSPACE** (05 Hours)
Birth, Life & Death of a Star, H-R diagram, Energy generations in the stars
- **SUN AS A STAR** (06 Hours)
Sun as an ordinary star, Inner and Outer structure, Solar radiations and its variability
- **PLANETARY ATMOSPHERES** (06 Hours)
Atmospheres of different planets and their satellites
- **EARTH ATMOSPHERE** (05 Hours)
The atmospheric structure of the earth and its layers, temperature and Pressure variability and constituents in the atmosphere, ozonosphere, Ionosphere etc.
- **EFFECT OF SOLAR RADIATION ON EARTH ATMOSPHERES** (10 Hours)
Solar radiation characteristics and its penetrating effect in different regions Of the atmosphere,
- **PRODUCTION OF IONOSPHERE AND ITS ROLE IN RADIO PROPAGATION** (10 Hours)
Ionizing radiation and ionosphere, effect of ionosphere in communications

(Total Contact Time (Theory) : 42 Hours)

BOOKS RECOMMENDED :

- | | | | |
|------------------------------------|--|-----------------------------|------|
| 1. Ratcliff, J. A., | <i>Introduction to ionosphere & Magnetosphere,</i> | Cambridge University Press. | 1975 |
| 2. Hargreaves, J. K., | <i>The Solar Terrestrial Environment,</i> | Cambridge University Press | 1995 |
| 3. Kievelson, M. J. , | <i>Introduction to Space Physics</i> | Cambridge University Press. | 1995 |
| 4. Lillesand T. M. & Keifer R. W., | <i>Remote sensing & Image interpretation</i> | Willey. | 2003 |
| 5. Lang, K. R. | <i>Sun, Earth and Sky</i> | Springer | 2006 |