SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc – Information Technology (Integrated)
Semester: V
Syllabus with Effect from: June - 2014

Paper Code: PS05EIIT02	Total Credit: 2
Title of Paper: Introduction to Green IT	

Unit	Description in Detail	Weightage (%)
I	**An Overview** Introduction **Environmental Concerns & Sustainable Development** The inconvenient truth Sustainable development Why should you go green? Environmental impact of IT **Green IT** Green IT Framework Direct impact of IT Enabling impact of IT Systemic impacts of IT **Holistic Approach to Greening IT** Greening computer's entire life cycle The three Rs of green IT Applying IT for enhancing environmental sustainability	25%
II	**Green Devices and Hardware** Introduction Life cycle of a device or hardware Reuse, recycle and dispose **Processor Power Status** C-status and P-status **Energy Saving Software Techniques** Computational efficiency Data efficiency Awareness of power source Idle efficiency	25%
III	**Green Data Centres and Storage** Data Centre IT infrastructure Data Centre facility infrastructure : Implications for energy efficiency IT infrastructure management Storage media power characteristics Energy management techniques for hard disks System level energy management	25%
IV	**Green Networks and Sustainable Software Development** Introduction Objectives of green network protocols Green network protocols and standards Sustainable software Software sustainability attributes Software sustainability metrics	25%

Basic Text & Reference Books:

- ➢ Harnessing Green IT : Principles and Practices. First Edition. Edited By San Murugesan and G.R. Gangadharan , Published By John Wiley & sons ,Ltd