MIT-World Peace University (MIT-WPU)

Faculty of Engineering

School of Computer Engineering & Technology

SYNOPSIS (Annexure-II)

- **Name of Student:** Aditya Vikramsinh Desai
- **PRN no:** 1032170282
- **Panel:** C
- **Title of the Topic:** Survey of Energy Efficient Cloud Computing techniques

- **Abstract:**

Cloud data centers consume large amounts of energy, generating a considerable amount of heat and CO2, even when most of the servers are idle and doing any processing. This is not an efficient way to manage the vast resources provided by the cloud. However, cloud services include not just computation servers, but also a broad variety of intra-cloud and inter-cloud network resources to be regarded. The rapid development in mobile and networking technology has led to comprehensive data-centered activities being carried out. This results in critical need for energy efficient task scheduling schemes for data centers. The more we send emails, watch online videos, do business online, and use social media such as Facebook, the greater the demand grows for data centers. The rising challenge is how to provide services effectively to meet such enormous demands with improved service quality, low energy usage and minimal greenhouse gas emissions. This paper will try to show a few methods to handle this challenge, and hence promote energy efficiency in cloud computing.

- **Keywords:**

Cloud Computing, Virtual Machining, Data Centers, Energy Efficiency, Processor Scheduling, Containers, Optimization, Resource Management, Dynamic Scheduling

Seminar Guide

Prof. Rajendra G. Pawar