### Society and Ethics in Information Technology

Course Title: Society and Ethics in Information Technology

Course No: CSC334

Full Marks: 60 + 20 + 20

Pass Marks: 24 + 8 + 8

Nature of the Course: Theory + Lab Credit Hrs: 3

## **Course Description:**

This course covers different concepts related with sociology, and social and ethical issues related with the use of Information Technology. This course also covers social context of computing, software issues and new frontiers of computer ethics.

#### **Course Objective:**

The basic objective of this course is to provide fundamental knowledge on the concept of sociology to understand social, cultural, economic, political and technical aspects, and knowledge of different social and ethical issues related with Information Technology.

#### **Unit 1: Introduction [4 Hrs.]**

Concept and Evolution of Sociology; Applications of Sociology; Emergence of Social and Ethical Problems; Computer Ethics and Computer Ethics Education; Ethics and Professions

## **Unit 2: Social and cultural change [6 Hrs.]**

Process; Theories of Social Change (Evolution, Functional, Conflict); Factors of Social Change (Economics, Technology, Education, Demography); Role of Media and Communication in Social and Cultural Change; Innovation and Diffusion; Resistance of Social Change; Technological Changes and its Consequences

## **Unit 3: Understanding development [5 Hrs.]**

Definition and Approaches of Development; Indicators of Development; Features of Developing Countries; Development Planning; Role of National and International Community and State

### **Unit 4: Process of transformation [4 Hrs.]**

Modernization, Globalization and Migration, E-governance, E-commerce

### Unit 5: Ethics and Ethical Analysis [4 Hrs.]

Traditional Definition; Ethical Theories; Functional Definition of Ethics; Ethical Reasoning and Decision Making; Codes of Ethics; Reflections on Computer Ethics; Technology and Values

# Unit 6: Intellectual Property Rights and Computer Technology [6 Hrs.]

Definitions; Computer Products and Services; Foundations of Intellectual Property; Ownership; Intellectual Property Crimes; Protection of Ownership Rights; Protecting Computer Software; Transnational Issues and Intellectual Property

# **Unit 7: Social Context of Computing [4 Hrs.]**

Introduction; Digital Divide; Obstacles to Overcome the Digital Divide; ICT in the Workplace; Employee Monitoring; Workplace, Employee, Health, and Productivity

# **Unit 8: Software Issues [5 Hrs.]**

Definitions; Causes of Software Failures; Risk; Consumer Protection; Improving Software Quality; Producer Protection

### **Unit 9: New Frontiers for Computer Ethics [7 Hrs.]**

Artificial Intelligence ad Ethics; Virtualization, Virtual Reality, and Ethics; Cyberspace and Ethics; Cyberbullying

### **Recommended Books:**

- 1. Alex Inkles, "What is Sociology? Introduction in the Discipline & Profession", Prentice Hall of India
- 2. Joseph Migga Kizza, Ethical and Social Issues in the Information Age, Springer International Publishing, 6<sup>th</sup> Edition, 2017
- 3. Michael J. Quinn, Ethics for the Information Age, 7th Edition, Pearson Education, 2017
- 4. G. M. Foster, "Traditional Culture & Impact of Technological Change"
- 5. C.N.S. Rao, "Principle of Sociology with an Introduction of Social Thought", S. Chand & Co. Ltd.
- 6. Pratley Peter, "The Essence of Business Ethics", Prentice Hall of India, New Delhi
- 7. A .Giddens & D. Mitchell, "Introduction to Sociology", 3rd Ed., London, W.W. Norton & company