

Semester – III

SYBCOM/ SYBA/ SYBSC

Name of the Paper: Foundation Course III

Title of the paper: Foundation Course

Paper Code: SIUCFOC31

Number of Credits: 2

Total No. of Lectures: 45

Objectives

- i. Develop a basic understanding about issues related to Human Rights of weaker sections, ecology, and science and technology.
- ii. Gain an overview of significant skills required to address competition in career choices
- iii. Appreciate the importance of developing a scientific temper towards technology and its use in everyday life

Module 1 Human Rights Provisions, Violations and Redressal (12 lectures)

A. Scheduled Castes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. **(2 Lectures)**

B. Scheduled tribes- Constitutional and legal rights, Forms of violations, Redressal mechanisms. **(2 Lectures)**

C. Women- Constitutional and legal rights, Forms of violations, Redressal mechanisms. **(2 Lectures)**

D. Children- Constitutional and legal rights, Forms of violations, Redressal mechanisms. **(2 Lectures)**

E. People with Disabilities, Minorities, and the Elderly population- Constitutional and legal rights, Forms of violations, Redressal mechanisms. **(4 Lectures)**

Module 2 Dealing With Environmental Concerns (11 lectures)

- A. Concept of Disaster and general effects of Disasters on human life - physical, psychological, economic and social effects. (3 Lectures)**
- B. Some locally relevant case studies of environmental disasters. (2 Lectures)**
- C. Dealing with Disasters - Factors to be considered in Prevention, Mitigation (Relief and Rehabilitation) and disaster Preparedness. (3 Lectures)**
- D. Human Rights issues in addressing disasters- issues related to compensation, equitable and fair distribution of relief and humanitarian approach to resettlement and rehabilitation. (3 Lectures)**

Module 3 Science and Technology I (11 lectures)

- A. Development of Science- the ancient cultures, the Classical era, the Middle Ages, the Renaissance, the Age of Reason and Enlightenment. (3 Lectures)**
- B. Nature of science- its principles and characteristics; Science as empirical, practical, theoretical, validated knowledge. (2 Lectures)**
- C. Science and Superstition- the role of science in exploding myths, blind beliefs and prejudices; Science and scientific temper- scientific temper as a fundamental duty of the Indian citizen. (3 Lectures)**
- D. Science in everyday life- technology, its meaning and role in development; Interrelation and distinction between science and technology. (3 Lectures)**

Module 4 Soft Skills for Effective Interpersonal Communication (11 lectures)

Part A**(4 Lectures)**

- I) Effective Listening - Importance and Features.
- II) Verbal and Non-Verbal Communication; Public-Speaking and Presentation Skills.
- III) Barriers to Effective Communication; Importance of Self-Awareness and Body Language.

Part B**(4 Lectures)**

- I) Formal and Informal Communication - Purpose and Types.
- II) Writing Formal Applications, Statement of Purpose (SOP) and Resume.
- III) Preparing for Group Discussions, Interviews and Presentations.

Part C**(3 Lectures)**

- I) Leadership Skills and Self-Improvement - Characteristics of Effective Leadership.
- II) Styles of Leadership and Team-Building.

B. Environmental Principles-1: the sustainability principle; the polluter pays principle; the precautionary principle.
(4 Lectures)

C. Environmental Principles-2: the equity principle; human rights principles; the participation principle. (4 Lectures)

Module 3 Science and Technology II (11 lectures)

Part A: Some Significant Modern Technologies, Features and Applications:

(7 Lectures)

- i. **Laser Technology-** Light Amplification by Stimulated Emission of Radiation; use of laser in remote sensing, GIS/GPS mapping, medical use.
- ii. **Satellite Technology-** various uses in satellite navigation systems, GPS, and imprecise climate and weather analyses.
- iii. **Information and Communication Technology-** convergence of various technologies like satellite, computer and digital in the information revolution of today's society.
- iv. **Biotechnology and Genetic engineering-** applied biology and uses in medicine, pharmaceuticals and agriculture; genetically modified plant, animal and human life.
- v. **Nanotechnology-** definition: the study, control and application of phenomena and materials at length scales below 100 nm; uses in medicine, military intelligence and consumer products.

Part B: Issues of Control, Access and Misuse of Technology. (4 Lectures)

Module 4 Introduction to Competitive Examinations (11 lectures)

Part A. Basic information on Competitive Examinations- the pattern, eligibility criteria and local centres: (4 Lectures)

- i.** Examinations conducted for entry into professional courses - Graduate Record Examinations (GRE), Graduate Management Admission Test (GMAT), Common Admission Test (CAT) and Scholastic Aptitude Test (SAT).
- ii.** Examinations conducted for entry into jobs by Union Public Service Commission, Staff Selection Commission (SSC), State Public Service Commissions, Banking and Insurance sectors, and the National and State Eligibility Tests (NET / SET) for entry into teaching profession.

Part B. Soft skills required for competitive examinations- (7 Lectures)

- i.** Information on areas tested: Quantitative Ability, Data Interpretation, Verbal Ability and Logical Reasoning, Creativity and Lateral Thinking
- ii.** Motivation: Concept, Theories and Types of Motivation
- iii.** Goal-Setting: Types of Goals, SMART Goals, Stephen Covey's concept of human endowment
- iv.** Time Management: Effective Strategies for Time Management
- v.** Writing Skills: Paragraph Writing, Report Writing, Filing an application under the RTI Act, Consumer Grievance Letter.