

Environmental Studies & Disaster Management

SEMESTER-I

For Under Graduate Compulsory Courses for Arts, Science and Commerce

FULL MARK-100 (Credit-3)

Unit 1: Multidisciplinary nature of environmental studies (8 Period)

Definition, scope and importance

Need for public awareness

Environmental Pollution

Definition

• Cause, effects and control measures of:-

- a) Air pollution
- b) Water pollution
- c) Soil pollution
- d) Marine pollution
- e) Noise pollution
- f) Radiation pollution

Unit 2: Natural Resources: (8 Period)

Renewable and non-renewable resources:

Natural resources and associated problems.

- a) Forest resources: Use and over-exploitation, deforestation, case studies.
Timber extraction, mining, dams and their effects on forest and tribal people.
- b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.
- c) Mineral resources : Use and exploitation, environmental effects of extracting and using mineral resources, case studies.
- d) Food resources : World food problems, changes caused by agriculture and Overgrazing, effects of modern agriculture, fertilizer-pesticide problems, waterlogging, salinity, case studies.
- e) Energy resources : Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies.

Biodiversity:-

Introduction-Definition; Biogeographically classification of India

India as a mega diversity nation. Hot spots of biodiversity, Threats to biodiversity.

Endangered and endemic species of India. Conservation of biodiversity. In Situ and Ex-situ conservation of biodiversity

Unit-3: Disaster Management (8 Period)

1. **Disaster Management:** Types of disasters (natural and Man-made) and their causes and effect)
2. **Vulnerability Assessment and Risk analysis:** Vulnerability to various disasters (Flood, Cyclone, Earthquake, Heat waves, Desertification and Lightning)
3. **Institutional Framework:** Institutional arrangements for disaster management (National Disaster Management Authority (NDMA), State Disaster Management Authority (SDMA), Disaster Management Act, 2005, District Disaster Management Authority (DDMA), National Disaster Response Force(NDRF) and Odisha Disaster Rapid Action Force(ODRAF)
4. **Preparedness measures:** Disaster Management cycle, Early Warning System, Pre-Disaster and Post-Disaster Preparedness, strengthening of SDMA and DDMA, Community Preparedness for flood cyclone, heat waves, fire safety, lightening and snake biting. Stakeholders participation, Corporate Social Responsibility (CSR)
5. **Survival Skills:** Survival skills adopted during and after disaster (Flood, Fire, Earthquake, Cyclone and Lightning), Disaster Management Act-2005, Compensation and Insurance

Unit 4: Social Issues and the Environment

(6 Period)

A.

- a) Environmental Ethics: Issues and possible solutions.
- b) Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case studies
- c) Environment Protection Act
- d) Air(Preservation Control of Pollution) Act
- e) Water(Preservation Control of Pollution) Act
- f) Wildlife Protection Act
- g) Forest Conservation Act
- h) Solid waste management Cause, effect and Control Measure of Urban and Industrial waste
(Role of each individual in conservation of Natural resources and prevention of pollution)

B. Human Population and the Environment

Population Ecology: Individuals, species, population, community
Human population growth, population control method
Urbanisation and its effect on society

Unit 5: Field work

(15 Periods of 30 hrs)

- Visit to an area to document environmental assets: river/forest/flora/fauna, etc.
- Visit to a local polluted site- Urban/Rural/Industrial/Agricultural
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems-pond, river, Delhi Ridge ,etc.

ETHICS & VALUES

Credit point: 3

Full mark -100

Total Hours: 45

COURSE OUTCOME

- Development of a good human being and a responsible citizen
- Developing a sense of right and wrong leading to ethically correct behavior
- Inculcating a positive attitude and healthy work culture
- To equip the students to prepare themselves national and state level civil service and other competitive examination.

COURSE CONTENTS

UNIT-I- ETHICS AND HUMAN INTERFACE

[5 Hours]

Learning Outcome-

- ✓ *Understand the basic concept of ethics and its relevance in life*
- Ethics and Human Interface: Essence, Determinants and consequence of ethics and human action.
- Dimensions of Ethics in private and public relationship
- Human Values: Tolerance, Compassion, Rationality, Objectivity, Scientific Attitude Integrity, Respecting conscience and Empathy etc.
- Mahatma Gandhi and Ethical Practices: Non-Violence, Truth, Non-hatred and love for all, concern for the poorest, objective Nationalism and Education for man making. Relation between Ends and Means.

Subject Teacher: Philosophy/Political Science or Any other Teacher.

UNIT-II- ETHICS AND MAJOR RELIGIONS AND CIVILIZATIONS

[7 hours]

Learning Outcome-

- ✓ *Be familiar with ethical principles and values promoted by major religious traditions and civilization*
- Hinduism- Dharma and Mokhya (out of 4 goals of life Dharma, Artha, Kama and Mokhya), Concept of Purusartha, Nisakama Karma(work without attachment to results), Concept of Basudev Kutumba and Peace (Whole world including all animals, plants, inanimate beings and human form one world)
- Ten Commandments: (Christianity and Judaism Tradition)
- Islamic Ethics: Justice, Goodness, Kindness, Forgiveness, Honesty, Purity and Piety
- Egyptian- Justice, Honesty, Fairness, Mercy, Kindness and Generosity
- Mesopotian-Non-indulgence in lying, stealing, defrauding, maliciousness, adultery, coveting possession of others, unworthy ambition, misdemeanors and injurious teaching.

- Buddhism-Arya Astangika Marg: Right View, Thought, Speed, Action, Livelihood, Efforts, Attention and Concentration.
- Jainism-Right faith, knowledge and conduct(Triratna)
- Chinese-Confucianism- Respect for Autonomy, Beneficence, non-maleficence and justice. Taoism: No killing, No stealing, No sexual misconduct, No false Speech and No taking of intoxicants.

Subject Teacher: History/Philosophy/Political Science or Any other Teacher.

UNIT-III- CONSTITUTIONAL VALUES, GOOD CITIZENSHIP, PATRIOTISM AND VOLUNTEERISM

[10 Hours]

Learning Outcome-

- ✓ *Students Learn about constitutional values of India, Civic Sense and good Citizenship (both National and International) Patriotism and need for Volunteerism*
- Salient Values of Indian Constitution: Sovereign, Socialist, Secular, Democratic, Republic, Justice, Liberty, Equality and Fraternity
- Patriotic values and ingredients of National Building, Examples of great Patriots, Rani Laxmi Bai, Bhagat Singh, Mangal Pandey, Birsa Munda, Laxman Naik, Subhas Chandra Bose and Khudiram Bose.
- Law abiding citizenship
- Concept of Global citizenship in contemporary world
- Volunteerism- concept and facts of Volunteerism, building a better society through Volunteerism, Blood Donation, Social work, Helping the Aged, Promotion of Green Practices and Environment protection.

Subject Teacher: Philosophy/Political Science /History/ or Any other Teacher.

UNIT-IV- WORK ETHICS

[6 hours]

Learning Outcome-

- ✓ *Understand the concept of work ethics, ethics in work place and ethical practices to be adopted by various professionals*
- The concept of professionalism.
- Professional ethics at work place
- Core values needed for all professionals. Reliability, Dedication, Discipline, Productivity, Co-operation, Integrity, Responsibility, Efficiency, Professionalism, Honesty, Purity and Time Management, Accountability, Respect Diversity, Gender Sensitivity, Respect for others, Cleanliness, Rational Thinking, Scientific Attitude, Clarity in Thinking. Diligence, cleanliness and Environment Consciousness.
- Codes of conduct for Students(both in College and Hostels), Teachers, Business professional, Doctors, Lawyers, Scientist, Accountants, IT professionals and Journalist.
- Practical ethics in day to day life.

Subject Teacher: Commerce/Philosophy/Education/History/ or Any other Teacher.

UNIT-V-ETHICS AND SCIENCE AND TECHNOLOGY

[7 Hours]

Learning Outcome-

✓ *Understand how Science is related to ethics and values has ethical implications.*

- Ethics of Science and Technology. Are science and Technology ethically neutral? Are Science and Technology Value Free?
- Ethics of scientific Research ,Innovation and Technology
- Ethics of Social Media, Modern Gadgets
- AI and Ethics

Subject Teacher: Philosophy or Any Science Teacher

UNIT-VI- ETHICS AND VULNERABLE SECTIONS OF SOCIETY

[10 hours]

Learning Outcome-

✓ *Understand how various vulnerable sections of our society are treated unequally and what needs to be done to address their inequality*

✓ *Understand dimensions of substance abuse*

1. **Women and family**—Gendered practices in the family, marriages (dowry, child marriage, women's consent).
Women and work—women's work at home and at work place, pay gap, gendered roles, harassment at work place and working women and role conflict.
Women and Society— Gender sensitive language, property right, marriage-divorce/Separation and women's right; violence against women
2. **Issues Relating to Children:** Nutrition and health , Child Exploitation: Child labour ,trafficking, sexual exploitation
3. **Issues Relating to Elderly Persons :** Abuse of Elders, Financial insecurity, Loneliness and Social insecurity, Health Care Issues, Needs for a happy and Dignified Ageing
4. **Issues Relating to persons with disability:** Rights of PWD, affirmative action, prevention of discrimination, providing equal opportunity, various scheme for empowering PWD and social justice for PWD.
5. **Issues Relating to Third Gender:** Understanding LGBTQ, Social justice for them, Removal of discrimination, Affirmative action and Acceptance of diversity of gender.

Subject Teacher: Sociology/political Science /Anthropology or Any Science Teacher

Sample Questions-

1. Birsa Munda belongs to which state of India?[1 mark]
2. Recall at least 4 constitutional values from the preamble to India constitution.[2 marks]
3. Explain utility of being Punctual.[5 marks]
4. Explain the ethical principles a scientist should follow.[8 marks]

Course material: To be developed by OSHEC and DDCE, Utkal University. Video Lectures will be also prepared by OSHEC and VTP, Utkal University. There shall be no internal examination for this course. The Term End Examination shall be conducted by the respective Universities. Student would engage in self-study and colleges shall conduct at least 4 doubt clearing session for each unit by engaging subject teachers as indicated above. The Principal may assign responsibility to any teacher.

Organizational Behaviour

Credit point: 3

Full mark -100

Total Hours: 45

COURSE OUTCOME

After completion of this course, students will be able to

- Analyse the behaviour of individuals and groups in organisation
- Manage conflict in organizational context.
- Understand the motivational factors for better productivity in organisation
- Analyse individual personality, attitude and behaviour in work place
- Handle the organisational stress and maintain work life balance

COURSE CONTENTS

UNIT 1: INTRODUCTION TO ORGANIZATIONAL BEHAVIOR

[12 hours]

✓ **Learning Outcome:** The students will be able to gain an understanding about the concept, factors and fundamentals of organizational behaviour

- Concept of Organisational Behaviour (OB),
- Factors influencing Organisational Behaviour.
- Disciplines contributing to OB and Challenges of OB
- Learning Styles and Processes

UNIT 2: FOUNDATIONS OF INDIVIDUAL BEHAVIOR

[11 hours]

✓ **Learning Outcome:** The students will learn the importance of personality and attitude in individuals behaviour

- Personality, meaning, determinants and traits of personalities
- Attitudes, Formation of attitude.
- Perception and Factors Influencing Perception
- Job Satisfaction, Factors influencing job satisfaction.

UNIT 3: MOTIVATION

[11 hours]

✓ **Learning Outcome:** The students will understand the factors influencing motivation.

- Motivation cycle and outcome
- Maslow's and Herzberg's theory of motivation
- Leadership and styles of leadership and types of leadership
- Role of Leader in minimising conflict and types and process of conflict Management

UNIT 4: STRESS MANAGEMENT AND CONTEMPORARY ISSUES

[11 hours]

✓ **Learning Outcome:** The students will understand how stress affects the effectiveness of the employees and work life balance

- Stress Management Techniques,
- Contemporary Issues in Organizational Behavior
- Work-Life Balance and Diversity of work force
- Quality of work life

Suggested Text Books:

- ✓ *Organizational Behavior* by K. Aswathappa (HPH)
- ✓ *Organizational Behavior* by Kavita Singh (Vikas Publications)

Suggested Books:

- ✓ *Organizational Behavior* by Robbins, Timothy Judge, Seema Sanghi (Pearson Prentice Hall)
- ✓ *Organizational Behavior* by Fred Luthans (McGraw Hill Inc.)
- ✓ *Managing Individual and Group Behavior in Organizations* by Daniel C. Feldman, Hugh Arnold (McGraw Hill)
- ✓ *Organizational Behavior* by Stephen McShane, Mary Von Glinow (Tata McGraw Hill)
- ✓ *Organizational Behaviour* by L.M. Prasad (Sultan Chand & Sons)
- ✓ *Organizational Behavior: Text, Cases & Games* by K. Aswathappa (Himalaya Publishing House)

Sample Question

1. What do you mean by organisational behaviour? [1mark]
2. Outline the factors influencing organisational behaviour. [2 marks] [50 word]
3. Explain the determinants and traits of personalities.[5 marks] [300 words]
4. Discuss about the Maslow's and Herzberg's Theory of Motivation.[8 marks]
[Within 800 words]

Understanding India

Credit point: 3

Full mark -100

Total Hours: 45

COURSE OUTCOME

- To familiarize the students with the history, culture, geography, polity and economy of India
 - To enable them to gain basic understanding of India to prepare for various competitive examinations both at national and state level.
- UGC under NEP 2020 has suggested a course on understanding India under Value Added Course

COURSE CONTENTS

UNIT-I GEOGRAPHY OF INDIA

[11 hours]

- ✓ ***Learning Outcome :** To familiarize the learner with geographic features of India.*
- Physiographic divisions of India, Drainage , Climate of India
- Characteristics of Indian Agriculture,
- Major Crops: production and distribution of rice and wheat, cotton, sugarcane
- Major Industries and minerals: iron ore, coal, petroleum, natural gas
- Demographic structure: Distribution and growth, census in India

UNIT- II UNITY IN DIVERSITY

[12 hours]

- ✓ ***Learning Outcome:** To enable the students to understand how India is plural and multidiversified society. To make the students aware how diversity has been a source of strength for nationalism in India both Pre and Post-Independence period.*
- Ethnic, linguistic, geographic, religious and cultural diversity and unity of India.
- The Idea of India: Jambudipa Bharat Varsha, Uttar Patha, Dakhina Patha, Hindustan and India and 'Bharat'
- Evolution of Syncretic Indian culture during 1000 CE to 1800 CE : Religion (Suffi/Bhakti) Art and Architecture, Music and literature
- Socio- economic, Political and Cultural impact of British Rule: An outline of India's freedom struggle(1857-1947)

UNIT- III INDIAN POLITY AND ITS POLITICAL IDENTITY

[11 hours]

- ✓ ***Learning Outcome -** To know about the Indian polity and its distinctive features*
- Salient features of Indian constitution (Republic, Federal, Parliamentary, Democracy, Secular, Separation of power, Centre-State Relationship, Panchayat- Raj
- Fundamentals Rights and duties, Directive Principles of State Policy and Affirmative Action
- India's Foreign Policy, International Trade Policy and Global Standing

UNIT- IV INDIAN ECONOMY

[11 hours]

Learning Outcome:

- ✓ *To familiarize students of hurdles to development*
- ✓ *To analyze the mechanism of economic transformation in India*
- Concept of development :Core Values of development, Sustainable development and Social development
- Poverty: Poverty line, concepts of absolute and relative poverty, MDPI and Poverty alleviation-measures
- Social Sector Initiatives: Quality education, human capital development, health care, rural development
- Economic growth since independence in Agricultural, Industrial and Service Sectors and Sectorial contribution to GDP in India
- Regional Imbalance: An analytical approach(Convergence/Divergence approach)
- Fiscal Federalism: System of Devolution of Funds
- Economic challenges of 21st century

Text Books

1. Unity in Diversity, R.K. Mookorjee
2. Freedom struggle of India, Barun De, Bipan Chandra and Amle Tripathy, NBT, Govt. of India
3. An Advanced History of India, Roychoudhury Dutt and Majumdar
4. Indian Economy , Mishra and Puri, Himalaya Publication
5. India Year Book, Govt. of India, Publication Division
6. Indian Economy- *Dutta and Sundaam*
7. An Introduction to Constitution of India- *D.D. Basu*
8. Indian Economy by Uma Kapila
9. Indian Polity, M. Laxmikanth, Tata Mc graw Hill

Sample Question

1. Who used the term “Bharat Varsha” in an inscription for the first time in India’s history? [1 mark]
2. State the course of R. Ganga by identifying at least 4 states of India through which it passes. [2 marks]
3. Enumerate explain the major challenges faced in the 21st century by India [5 marks]
4. Write a critical essay on Center State Relationship in India.[8 marks]

N: B

- ✓ *A single text book covering all aspects is not readily available. It shall be developed by OSHEC/DDCE Utkal University/OSOU/ OTBP & P and similar other organization.*
- ✓ *VTP lectures shall be prepared.*

Understanding Odisha

Credit point: 3

Full mark -100

Total Hours: 45

COURSE OUTCOME

- To familiarize the students with Odisha, its history, linguistic heritage, religion, culture, literature, geographic features, tribes and their culture, dance and music and contemporary features.
- To enable the students to develop an informed perspective about their land, people, their past and present and the challenge they face.
- To enable the students to face competitive examinations for jobs under Govt. of Odisha

COURSE CONTENTS

Unit- I ODISHA'S PHYSICAL AND HUMAN GEOGRAPHY [9 hours]

✓ **Learning Outcome:** *Familiar with the physiography, drainage, climate and forests in Odisha*

- Physiography, Drainage systems, Climate, natural vegetation
- Major Industries and Minerals in Odisha : Iron Ore, Coal, Bauxite and Chromite
- Steel and Aluminum industries
- Growth and distribution of population

Unit- II AN OUTLINE OF POLITICAL HISTORY OF ODISHA [9 hours]

✓ **Learning Outcome :** *To enable the students to familiarize themselves with the chronology of Political History , formation of Odisha in modern days and freedom movement*

- Ashoka and Kharavela
- An outline of Dynastic History of Odisha: Bhaumkaras, Somavamsies, Gangas and Gagapatis
- Odisha under Mughals and Marathas
- Movement for Separate Province of Odisha and freedom struggles Odisha

UNIT- III AN INTRODUCTION TO ODISHA'S CULTURE AND HERITAGE

[9 hours]

✓ **Learning Outcome :** *Understand Essence of Odisha's Culture, Art, Architecture, Dance , Music, Religion, and Literature*

- Temple Architecture in Odisha
- History of Odia Literature from ancient period to independence including Bhakti Literature, Development of Odia Script
- Dance and Music : Odissi, Gotipua, Chhau, and Folk
- Religion in Odisha: Shaivism, Vaishnavism and Neo-Vaishnavism(Chaitanya),Shakti cult, Jagannath Culture, Islam and Christianity in Odisha
- Odisha Cuisine
- Major Festival of Odisha

UNIT- IV TRIBES OF ODISHA

[9 hours]

✓ **Learning Outcome:** *Odisha has a large concentration of Tribal Population; students would develop an understanding of their culture, and develop an appreciation at their ways of life.*

- Essentials of 62 Tribes of Odisha : Major Tribes and PVTs, festivals, beliefs, art and craft

UNIT- V CONTEMPORARY ODISHA

[9 hours]

✓ **Learning Outcome:** *To be cognizant of contemporary Odisha*

- Districts of Odisha – An Outline
- Education – Primary, Secondary, Higher education including Technical.
- Tourism in Odisha including Eco-tourism
- Industry, Agriculture, Public Health, Service Sector (including IT)

Text Books

- Odisha Reference Year book (Latest Edition) by B.K. Publication Pvt. Ltd

Reference

- History of Odisha by Prof. Atul Chandra Pradhan
- History of Odia Literature by Mayadhar Mansingh
- Odisha Review and Utkal Prasanga (Current Issues)

Sample Question

1. Dhamsa is the dance form _____Tribe.[1 mark]
2. Name the three types of temple architecture of Odisha.[2 marks]
3. Trace the growth of IT industry in Contemporary Odisha.[5 mark]
4. Write an essay on Jagannath Culture.[8 mark]