

DEPARTMENT OF BOTANY
CORE COURSES
SEMESTER – IV

CORE COURSE -IX: PLANT ECOLOGY & PHYTOGEOGRAPHY – 100 MARKS

(Credits-6: Theory-4, Practical-2)
 [75 marks (Mid Sem 15 + End Sem 60)]
 Lectures: 60 [40 Theory + 20 Practical classes]

UNIT-I	(i) Introduction Concept of ecology, Autoecology, Synecology, system ecology, Levels of organization. Inter-relationships between the living world and the environment, the components of environment, concept of hydrosphere and lithosphere and dynamism, homeostasis. (ii) Light, temperature, wind and fire: Variations; adaptations of plants to their variation.
UNIT-II	(i) Soil: Formation; Composition; Physical; Chemical and Biological components; Soil profile; Role of climate in soil development. (ii) Water: Importance: States of water in the environment; Atmospheric moisture Precipitation types (rain, fog, snow, hail, dew); Hydrological Cycle; Water in soil; Water table.
UNIT-III	Biotic interactions and Population ecology: Characteristics and Dynamics Plant communities: Concept of ecological amplitude; Habitat and niche; Characters: analytical and synthetic; Ecotone and edge effect; Dynamics: succession – processes, types; climax concepts.
UNIT-IV	(i) Ecosystems: Structure; Processes; Trophic organisation; Food chains and Food webs; Ecological pyramids. (ii) Functional aspects of ecosystem: Principles and models of energy flow; Production and productivity; Ecological efficiencies; Biogeochemical cycles; Cycling of Carbon, Nitrogen and Phosphorus. (iii) Phytogeography: Principles; Continental drift; Theory of tolerance; Endemism; Phytogeographical division of India; Vegetation of Odisha.

SEMESTER-IV (SPECIAL PAPER)

**PAPER-MLCC403
ENVIRONMENTAL BIOLOGY**

Time: 3 Hours

Full Marks: 100 (20 + 80)

UNIT – I: STRESS PHYSIOLOGY ENVIRONMENTAL POLLUTION

1. Basic concepts of stress (Stress, Strain, Resistance, Tolerance and Avoidance, Incipient lethal level, Acclimation and acclimatization, Homeostasis.
2. Water deficit stress and adaptations of plants and animals to water deficit stress.
3. Water, air, soil and radioactive pollution (causes, effects and control)

UNIT – II: ECOLOGICAL PRODUCTIVITY

1. Primary Production and methods of measurement.
2. Secondary Production and Yield to man.
3. Ecological efficiencies and production in different regions of the world.

UNIT – III: CONSERVATION ECOLOGY

1. Natural habitat conservation in Orissa with special reference to Chilika, Bhitarkanika, Similipal, Mahendragiri.
2. Afforestations and forest management.
3. Wild life conservation.
4. Soil conservation.

UNIT – IV: ENVIRONMENTAL MANAGEMENT

1. Environmental monitoring and management.
2. Environment protection laws.
3. Environmental education and awareness.
4. Biological control of pests.
5. Sewage and solid waste management.
6. Treatment of effluents in distilleries and paper and pulp industries.

SEMESTER-VI

Discipline Specific Elective-III Wildlife Conservation And Management

Unit 1: Wildlife

Values of wild life - positive and negative; Conservation ethics; Importance of conservation; Causes of depletion; World conservation strategies, Conservation and protection Laws, wild animal of India and Odisha.

Habitat analysis, Physical parameters: Topography, Geology, Soil and water; Biological Parameters: food, cover, forage, browse and cover estimation; Standard evaluation procedures: remote sensing and GIS.

Unit 2: Management of habitats

Setting back succession; Grazing logging; Mechanical treatment; Advancing the successional process; Cover construction; Preservation of general genetic diversity; Restoration of degraded habitats, In situ and Ex situ conservation, Wild life Protection act, wildlife trade and related laws.

Unit 3: Population estimation

Population density, Natality, Birth rate, Mortality, fertility schedules and sex ratio computation; Faecal analysis of ungulates and carnivores: Faecal samples, slide preparation, Hair identification, Census methods; Bio- telemetry; Care of injured and diseased animal; Quarantine; Common diseases of wild animals.

Unit 4: Management planning of wildlife in protected areas

Estimation of carrying capacity; Eco tourism / wild life tourism in forests; Concept of climax persistence; Ecology of perturbation, National parks & sanctuaries, Community reserve; Important features of protected areas in India; Tiger conservation - Tiger reserves in India; Management challenges in Tiger reserve.

PRACTICAL

1. Identification of flora, mammalian fauna, avian fauna, herpeto-fauna India and Odisha.
2. Demonstration of basic equipment needed in wildlife studies use, care and maintenance (Compass, Binoculars, Spotting scope, Range Finders, Global Positioning System, Various types of Cameras and lenses).
3. Familiarization and study of animal evidences in the field; Identification of animals through pug marks, hoof marks, scats, pellet groups, nest, antlers, animal sounds.
4. Demonstration of different field techniques for flora and fauna.
5. Trail / transect monitoring for abundance and diversity estimation of mammals and bird (direct and indirect evidences)
6. Submission of field study report (national park/ reserve forest/ sanctuary)

TEXT BOOKS

1. Gopal Rajesh (2011) Fundamentals of Wildlife Management, Natraj Publishers.
2. Caughley, G., and Sinclair, A.R.E. (1994). Wildlife Ecology and Management. Blackwell Science.

SKILL ENHANCEMENT COURSE (CREDIT: 02)- SEC-2
SEMESTER-IV

RENEWABLE ENERGY AND ENERGY HARVESTING

The aim of this course is not just to impart theoretical knowledge to the students but to provide them with exposure and hands-on learning wherever possible

UNIT-I

Fossil fuels and Alternate Sources of energy: Fossil fuels and nuclear energy, their limitations, need of renewable energy, non-conventional energy sources. An overview of developments in Offshore Wind Energy, Tidal Energy, Wave energy systems, Ocean Thermal Energy Conversion, solar energy, biomass, biochemical conversion, biogas generation, geothermal energy tidal energy, Hydroelectricity.

UNIT-II

Solar energy: Solar energy, its importance, storage of solar energy, solar pond, non plate collector, solar distillation, solar cooker, solar green houses, solar cell, absorption air conditioning. Need and characteristics of photovoltaic (PV) systems, PV models and equivalent circuits, and sun tracking systems.

UNIT-III

Wind Energy harvesting: Fundamentals of Wind energy. Wind Turbines and different electrical machines in wind turbines, Power electronic interfaces, and grid interconnection topologies.

Ocean Energy: Ocean Energy Potential against Wind and Solar, Wave Characteristics and Statistics, Wave Energy Devices.

Tide characteristics and Statistics, Tide Energy Technologies, Ocean Thermal Energy, Osmotic Power, Ocean Bio-mass.

Geothermal Energy: Geothermal Resources, Geothermal Technologies.

Hydro Energy: Hydropower resources, hydropower technologies, environmental impact of hydro power sources.

Reference Books:

- Non-conventional energy sources - G.D Rai - Khanna Publishers, New Delhi
- Solar energy - M P Agarwal - S Chand and Co. Ltd.
- Solar energy - Suhas P Sukhative Tata McGraw - Hill Publishing Company Ltd.
- Godfrey Boyle, "Renewable Energy, Power for a sustainable future", 2004, Oxford University Press, in association with The Open University.
- Dr. P Jayakumar, Solar Energy: Resource Assessment Handbook, 2009
- J.Balfour, M.Shaw and S. Jarosek, Photovoltaics, Lawrence J Goodrich (USA).
- http://en.wikipedia.org/wiki/Renewable_energy

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PHYSICS-DSE: 3
BIO-PHYSICS
(CREDITS: THEORY-05, TUTORIALS-01)
SEMESTER-VI

UNIT-I

Building Blocks & Structure of Living State: Atoms and ions, molecules essential for life, what is life. **Living state interactions:** Forces and molecular bonds, electric & thermal interactions, electric dipoles, Casimir interactions, domains of physics in biology.

UNIT-II

Heat Transfer in biomaterials: Heat Transfer Mechanism, The Heat equation, Joule heating of tissue. **Living State Thermodynamics:** Thermodynamic equilibrium, first law of thermodynamics and conservation of energy. Entropy and second law of thermodynamics, Physics of many particle systems, Two state systems, continuous energy distribution, Composite systems, Casimir contribution of free energy, Protein folding and unfolding.

Open systems and chemical thermodynamics: Enthalpy, Gibbs Free Energy and chemical potential, activation energy and rate constants, enzymatic reactions, ATP hydrolysis & synthesis, Entropy of mixing, The grand canonical ensemble, Hemoglobin.

UNIT-III

Diffusion and transport Maxwell-Boltzmann statistics, Fick's law of diffusion, sedimentation of Cell Cultures, diffusion in a centrifuge, diffusion in an electric field, Lateral diffusion in membranes, Navier Stokes equation, low Reynold's Number Transport, Active and passive membrane transport.

UNIT-IV

Fluids: Laminar and turbulent fluid flow, Bernoulli's equation, equation of continuity, venturi effect, Fluid dynamics of circulatory systems, capillary action.

Bioenergetics and Molecular motors: Kinesins, Dyneins, and microtubule dynamics, Brownian motion, ATP synthesis in Mitochondria, Photosynthesis in Chloroplasts, Light absorption in biomolecules, vibrational spectra of bio-biomolecules.

Reference Books:

- Introductory Biophysics, J. Claycomb, JQP Tran, Jones & Bartlett Publishers
 - Aspects of Biophysics, Hugh S W, John Wiley and Sons.
 - Essentials of Biophysics by P Narayanan, New Age International
 - Molecular Biophysics- P.K.Banarjee (S. Chand Publication) 2014.
 - Essentials of Biophysics : P. Narayanan, (New Age International, New Delhi) 2005 .
 - Biophysics: An introduction : Rodney Cotterill, John Wiley and Sons Ltd, 2002.
 - Biophysics- Dr.G.R.Chatwal (Himalaya Pub.) 2011
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Course No. CHE-CC-104

Course Name: Environmental Chemistry

Semester: I

Credits: 4

Course Coordinator: Dr. Niranjana Biswal & Dr. Arun Kumar Mishra

Objective and brief description on course and expectations: This course gives an in-depth understanding of a broad range of environmental chemistry such as environmental processes, pollution, chemical analysis and natural resources.

Unit I

Environment & Cycles

Environment and its classification, Environmental Impact Assessment and management, Factors influencing environment, Atmosphere: Structure and composition of atmosphere, Environmental degradation, Biogeochemical cycles; Hydrological cycle, Gaseous cycles (Oxygen cycle, Carbon cycle, Nitrogen cycle), Sedimentary cycles (Sulfur cycle, Phosphorous cycle)

Unit-II

Natural Resources

Introduction, classification of resources; land resources, formation of soil, soil erosion, Water resources, Sources of fresh water, Uses of water, causes for the depletion of water resources; mineral resources, Forest resources, Deforestation, consequences of deforestation; affords to control deforestation, Renewable and nonrenewable resources, Conventional and nonconventional energy resources

Unit-III

Environmental pollution

Introduction, Pollutants, Types of pollutants, Classification of pollution, effects of pollution, Radiation pollution: sources, effect and control of radiation pollution, Water pollution: sources, effects and its control, Industrial pollution, Air Pollution: Consequences (Ozone layer depletion, Greenhouse effect, Global climate, Smog, Acid rain) Sewage and sewage treatment

Unit-IV

Environmental Chemical Analysis

Working principles and applications: Neutron activation analysis, Anodic Stripping voltametry, Atomic Absorption Spectroscopy, Induced Coupled Plasma Emission Spectroscopy, X-Ray Fluorescence, Fourier Transformation Infrared, Chemiluminescence, Gas Chromatography, High Performance Liquid Chromatography, Ion-Selectivity Electrode, Ion Chromatography, Non-Dispersive IR Spectroscopy

Text books:

1. Environment and Ecology By Dr. Sunakar Panda
2. Environmental Chemistry By A.K. De
3. Air Pollution By Wark & Werner
4. Environmental Pollution Control in Process Industries By S.P. Mahajan
5. Environmental Chemistry By B.K. Sharma & H. Kaur
6. Introduction to Air Pollution By P.K. Trivedi
7. Environmental Pollution Analysis By S.M. Khopkar
8. A Text Book of Environmental Pollution By D.D. Tyagi, M. Mehre
9. Environmental Pollution Engineering and Control By C.S. Rao

Course No.CHE-CC-404

Course Name: Industrial Chemistry

Semester: IV

Credits: 4

Course Coordinators: Sri. A. Srinivas & Dr. Niranjana Biswal

Objective and brief description on course and expectations: The student will learn how to make their own chemical industry with perspective to Food chemistry, Petroleum and coal based chemicals, Pesticides and Pharmacological industries.

Course Details

Unit I: Chemistry in food:

Carbohydrates: Classification, sugar and non-sugar, Glucose, fructose, starch and cellulose. Importance of carbohydrates.

Amino acids: Classification, essential and nonessential amino acids, Zwitter ion structure, polypeptides, proteins (classification and function).

Lipids: Classification, oils and fats, metabolism of lipids.

Vitamins: Classification, Nomenclature and disease caused by the deficiency of vitamins.

Unit II: Petroleum and coal based chemicals: Composition of petroleum, cracking processes, commercial production of Ethylene, Acetylene, Polymerization mechanism, addition, condensation, step growth, chain growth, method of polymerization, distillation of coal.

Unit III: Fertilizers & Pesticides: classification of fertilizers: nitrogenous, phosphorous and potassium fertilizer. Pesticides classification, insecticides, fungicides and rodenticides. Detrimental effects of pesticides (DDT, BHC, Parathion).

Unit IV: Chemistry in Medicines:

Development of new drugs, procedure followed in drug design, different types of drugs, analgesics, antipyretics, antiseptics and antibiotics, broad spectrum antibiotics. Metals in medicines: Metal deficiency and disease, toxic effect of metals, Pharmacological industries

Text books:

1. *Chemistry in Context: Applying Chemistry to Society*, 9th Ed, American Chemical Society, ISBN9781260222029
2. *Aurand, L. W. and Wood, A. E. (1973). Food Chemistry. The AVI Publishing Co., Connecticut*
3. *Belitz, H. D., Grosch, W. and Schieberler, P. (2004). Food Chemistry. Springer, Berlin.*
4. *DeMan, J. M. (1999). Principles of Food Chemistry. A Chapman and Hall Food Science Book, Aspen Publ., Inc., Gaithersburg, Maryland.*
5. *Fennema, O. R. (ed). (1996). Food Chemistry. Marcel Dekker, Inc., NewYork*
6. *Meyer, L. H. (1976). Food Chemistry. Reinhold Publ. Corporation, NewYork.*
7. *Potter, N. M. (1995). Food Science. The AVI Publishing Co., Connecticut*
8. *Chemistry and Medicines: An Introductory Text, James R Hanson; RSC*
9. *Textbook of Agro-Chemistry by H. P. Hegde, Discovery Publishing Pvt.Ltd (2009)*

DSE-3: INDUSTRIAL CHEMICALS AND ENVIRONMENT

Credits-6: (Theory-4, Practical-2)

Industrial Gases and Inorganic Chemicals (Unit-I)

Industrial Gases: Large scale production, uses, storage and hazards in handling of the following gases: oxygen, nitrogen, argon, neon, helium, hydrogen, acetylene, carbon monoxide, chlorine, sulphur dioxide.

Inorganic Chemicals: Manufacture, application and hazards in handling the following chemicals: hydrochloric acid, nitric acid, sulphuric acid, caustic soda, common salt, bleaching powder, sodium thiosulphate, hydrogen peroxide, potash alum, potassium dichromate and potassium permanganate.

Industrial Metallurgy: Preparation of metals (ferrous and nonferrous) and ultrapure metals for semiconductor technology.

Environment and its segments (Unit-II)

Ecosystems. Biogeochemical cycles of carbon, nitrogen and sulphur. Air Pollution: Major regions of atmosphere. Chemical and photochemical reactions in atmosphere. Air pollutants: types, sources, particle size and chemical nature; Photochemical smog: its constituents and photochemistry. Environmental effects of ozone. Major sources of air pollution. Pollution by SO_2 ; CO_2 ; CO ; NO_x ; and H_2S and control procedures. Effects of air pollution on living organisms and vegetation. Greenhouse effect and global warming, Ozone depletion by oxides of nitrogen, chlorofluorocarbons and halogens, removal of sulphur from coal.

Water Pollution (Unit-III):

Hydrological cycle, water resources, aquatic ecosystems, Sources and nature of water pollutants, Techniques for measuring water pollution, Impacts of water pollution on hydrological and ecosystems. Water purification methods. Effluent treatment plants (primary, secondary and tertiary treatment). Industrial effluents from the following industries and their treatment: electroplating, textile, tannery, dairy, petroleum and petrochemicals, fertilizer. Sludge disposal. Industrial waste management, incineration of waste. Water treatment and purification (reverse osmosis, ion exchange). Water quality parameters for waste water, industrial water and domestic water.

Energy & Environment (Unit-IV)

Sources of energy: Coal, petrol and natural gas. Nuclear fusion/fission, solar energy, hydrogen, geothermal, tidal and hydel. Nuclear Pollution: Disposal of nuclear waste, nuclear disaster and its management.

Biocatalysis: Introduction to biocatalysis: Importance in green chemistry and chemical industry.

Reference:

- E. Stocchi: Industrial Chemistry, Vol-I, Ellis Horwood Ltd. UK.
- R.M. Felder, R.W. Rousseau: Elementary Principles of Chemical Processes, Wiley Publishers, New Delhi.
- Kent: Riegels Handbook of Industrial Chemistry, CBS Publishers, New Delhi.
- S. S. Dara: A Textbook of Engineering Chemistry, S. Chand & Company Ltd. New Delhi. De, Environmental Chemistry: New Age International Pvt., Ltd, New Delhi.
- S. M. Khopkar, Environmental Pollution Analysis: Wiley Eastern Ltd, New Delhi. S.E. Manahan, Environmental Chemistry, CRC Press (2005).
- G.T. Miller, Environmental Science 11th edition. Brooks/ Cole (2006).
- Mishra, Environmental Studies. Selective and Scientific Books, New Delhi (2005).

DEPARTMENT OF BOTANY

**ENVIRONMENTAL STUDIES (AECC-I)
SEMESTER – I**

FOR UNDER GRADUATE ARTS, SCIENCE & COMMERCE – 2019-20

FULL MARKS: 100

TIME: 3HOURS

END SEMESTER: 80

TIME: 1HOUR

MID SEMESTER: 20

Unit – I	The Environment: The Atmosphere, Hydrosphere, Lithosphere, Biosphere, Ecology, Ecosystem, Biogeochemical Cycle (Carbon Cycle, Nitrogen Cycle), Environment Pollution: Air Pollution, Water Pollution, Soil Pollution, and Radiation Pollution.
Unit – II	Population Ecology: Individuals, Species, Pollution, Community, Control Methods of Population, Urbanization and its effects on Society, Communicable Diseases and its Transmission, Non-Communicable Diseases.
Unit- III	Environmental Movements in India: Grass root Environmental movements in India, Role of women, Environmental Movements in Odisha, State Pollution Control Board, Central Pollution Control Board.
Unit -IV	Natural Resources: Conservation of Natural Resources, Management and Conservation of Wildlife, Soil Erosion and Conservation, Environmental Laws: Water Act, 1974, Air Act, 1981, The Wildlife (Protection) Act, 1972, Environment Protection, 1986, Natural Disasters and their Management.

Books Recommended

1. Dash MC and Mishra PC, Man and Environment, McMillan, London.
2. Mishra PC and Das MC, Environment and Society, McMillan, London.
3. Odum EP, Fundamentals of Ecology, Natraj Publication.
4. Mishra DD, Fundamental Concept in Environmental Studies, S.Chand, New Delhi.
5. Asthana DK and Asthana Meera, A Testbook of Environmental Studies, S. Chand, New Delhi.
6. Bharucha Erach, Textbook for Environmental Studies, Universities Press India Pvt. Ltd., Hyderabad.

SEMESTER-II
PAPER-MLCC201
ECOLOGY AND BIostatISTICS

Time: 3 Hours

Full Marks: 100 (20 + 80)

UNIT – I ECOLOGY:

Concept of Ecosystem (Emergent Properties, Biological levels of Organization, Structure, Classification of Ecosystems, Ecological energetics, Gaia hypothesis and Cybernetics).

Leibig's Law of Minimum and concept of limiting factors, Law of Tolerance.

UNIT – II POPULATION ECOLOGY:

Population characteristics, structure and dynamics.

Community Structure, Community dynamics, Ecological niche.

UNIT – III ENVIRONMENTAL CONCERNS:

Environmental Pollution: sources & control (Air Pollution, Water Pollution, Land Pollution, Noise pollution)

Green house effect, Ozone depletion, Global warming, climate change, Waste Management &

Bioremediation,

Environmental Management and Auditing, EIA, Environmental Education and awareness.

Biodiversity: Types/Levels, Conservation strategies.

UNIT – IV BIostatISTICS:

Probability distribution (Normal, Binomial & Poisson).

Students 't' test

Analysis of variance ratio test (Two-way & Three-way).

Correlation and Regression analysis.

Goodness of fit and association analysis by chi-square test.

SEMESTER-IV (SPECIAL PAPER)

**PAPER-MLCC403
ENVIRONMENTAL BIOLOGY**

Time: 3 Hours

Full Marks: 100 (20 + 80)

UNIT – I: STRESS PHYSIOLOGY ENVIRONMENTAL POLLUTION

1. Basic concepts of stress (Stress, Strain, Resistance, Tolerance and Avoidance, Incipient lethal level, Acclimation and acclimatization, Homeostasis.
2. Water deficit stress and adaptations of plants and animals to water deficit stress.
3. Water, air, soil and radioactive pollution (causes, effects and control)

UNIT – II: ECOLOGICAL PRODUCTIVITY

1. Primary Production and methods of measurement.
2. Secondary Production and Yield to man.
3. Ecological efficiencies and production in different regions of the world.

UNIT – III: CONSERVATION ECOLOGY

1. Natural habitat conservation in Orissa with special reference to Chilika, Bhitarkanika, Similipal, Mahendragiri.
2. Afforestations and forest management.
3. Wild life conservation.
4. Soil conservation.

UNIT – IV: ENVIRONMENTAL MANAGEMENT

1. Environmental monitoring and management.
2. Environment protection laws.
3. Environmental education and awareness.
4. Biological control of pests.
5. Sewage and solid waste management.
6. Treatment of effluents in distilleries and paper and pulp industries.

Sub. Code: PSC- C203	New Social and Political Movements in India	
Semester: II	Credit:04	Core Course
Objectives: Under the influence of globalization, development processes in India have undergone transformation to produce spaces of advantage and disadvantage and new geographies of power. A variety of protest movements emerged to interrogate and challenge this development paradigm that evidently also weakens the democratic space so very vital to the formulation of critical consensus. This course proposes to introduce, students to the conditions, contexts and forms of political contestation over development paradigms and their bearing on the retrieval of democratic voice of citizens. To introduce the Social and Political movements in the Post – independent India with special reference to mobilization politics like movements for the formation of States, agrarian movements, anti – caste movements and movements related to development issues. To help the students to develop the capability of standing the perspectives of three major ideological strands represented by agrarian movements, Anti – caste movements & Women’s movement. To help students to understand the impact of movements on shaping the pattern of politics.		

Unit-I

13 Hours

Social and Political Movements: Concepts, Theories and Types.
Social and Political Movements in India: Background, History and Debate

Unit-II

13 Hours

Peasant’s Movement: Genesis and Growth
Tribal Movements: Issues and Dynamics

Unit-III

13 Hours

Dalit and Backward Caste Movement: Issues, Leaderships and organizations.
Women’s Movement: Gender Justice and Empowerment, Challenges to Women’s Movement- Fundamentalism, Caste, Violence, and Moral Policing

Unit-IV

13 Hours

Environmental Movements: Chipko Movement, Silent Valley Movement & Narmada Bachao Andolan.
State, Civil Society and Social Movements in India.

Suggested Readings:

1. Basu, Amrita (edited): The Challenge of Local Feminism: Women’s Movements in Global Perspective, New Delhi, 1999.
2. Shah Ghanshyam : Social Movements and the State, Sage Publications, New Delhi, 2002.
3. Shah Ghanshyam : Social Movements in India: A Review of the Literature, Sage Publications, New Delhi, 1990.
4. Mohanty Manoranjan (ed): Caste, Class and Gender, Sage Publications, New Delhi, 2004

Sub. Code: PSC-C204	Issues in International Relations	
Semester: II	Credit:04	Core Course
Objectives: This Course is designed to give students a sense of some important theoretical approaches to understand international relations; Concepts: State system and non-state actors, Power, Sovereignty; Contemporary Global Concerns International Political Economy and an outline of the evolution of International organizations and their possible future trajectory.		

Unit-I

13 Hours

Concepts: State system and non-state actors, Power, Sovereignty, Culture and Religion, Security: traditional and non- traditional.

Unit-II

13 Hours

International Political Economy: Globalisation, Global Governance and Bretton Woods system (IMF, World Bank and WTO), Theory of Dependency, North-South Dialogue, South-South Cooperation.

Unit-III

13 Hours

Contemporary Global Concerns: Environmental Issue, Human Rights, International Terrorism and Humanitarian Interaction: Human Security, Migration and Refugees; Poverty and Development.

Unit-IV

13 Hours

International organizations: United Nations, Aims and objectives, Changing Role and its Reform, Humanitarian intervention, International law, International Criminal Court.

Suggested Readings:

1. Mitrany, David (1948) The Functional Approach to World Organisation; International Affairs, 24(3), 350-363.
2. Mary Farrell, Bjorn Hettne and Luk Van Lagenhoe, Global Politics of Regionalism: Theory and Practice, London, Pluto Press.
3. Calvocoressi, Peter, World Politics since 1945, New York, 1982.
4. Goodrich, L.M., 1974, UN in a Changing World, New York, Columbia University Press.
5. Annan, Kofi A., 2000, We the Peoples: The Role of UN in the 21st Century, New York; United Nations.
6. Blackmore, R and A. Reddish (eds), 1996 Global Environmental Issues, London; Hodder and Stoughton.
7. Crenshaw, Martha and John Pimlott (eds), 1997, International Encyclopaedia of World Terrorism, Armonk, N.Y: Sharpe Reference

Sub. Code: PSC-CC 403	Odisha Government and Politics	
Semester: IV	Credit:04	(Core Elective Course)
Objectives: This course expects the students to study one state in an in-depth manner to understand how the political process evolves at the State level. It will also allow the students to do assignments based on field studies. The study is to be done from socio-historical as well as political economy perspectives. The course seeks to sensitize students to the changes in the political process over the period of over half a century from 1936 to the present.		

Unit I

Context of State and Politics in Odisha:

13 hours

- (a) Evolution of conceptions of Odia nationalism
- (b) Evolution of Odisha as a separate and unified political entity Freedom movement and evolution of Political Culture of Odisha.

Unit II:

13 hours

Party System, Elections and Voting Behaviour. : Role of National Parties in Odisha: Congress, Janata Dal and BJP.

Role of Regional parties: Ganatantra Parishad, Jana Congress, Utkal Congress and Biju Janata Dal.

Coalitional Politics in Odisha and Problem of Factionalism

Unit III:

13 hours

Democratic Decentralization: Panchayati raj & grassroots politics, urban local bodies.

Marginalized groups and the political process: Women, Dalits and Tribal with focus on representation, participation and leadership.

Sub. Code: PSC- CC-404	Human Rights: Theories and Practices	
Semester: IV	Credit:04	Core Elective Course
Objectives : This course attempts to build an understanding of human rights among students through a study of specific issues in a comparative perspective. It is important for students to see how debates on human rights have taken distinct forms historically and in the contemporary world. The course seeks to anchor all issues in the Indian context, and pulls out another country to form a broader comparative frame. Students will be expected to use a range of resources, including films, biographies, and official documents to study each theme. Thematic discussion of sub-topics in the second and third sections should include State response to issues and structural violence questions.		

Unit-I

13 Hours

The Idea of Human Rights: Evolution, Concepts, Nature and Theoretical Foundations.

Unit-II

13 Hours

International Protection of Human Rights: Civil, Political, Social and Economic Rights

Unit-III

13 Hours

Collective Rights: Rights and Vulnerable Groups; Women, Children, Refugee and Ethnic groups

Unit-IV

13 Hours

Human Rights in India: National Human Rights Commission; Organisations and Movements, Violations and Safeguards .

Suggested Readings

1. Alston Philip, The United Nations and Human Rights – A Critical Appraisal, Oxford, 1995.
2. Basu, Durga Das: Human Rights in Constitutional Law, Practice Hall of India, New Delhi, 1994.
3. Bari Upendra (ed.) The Right to be Human, Delhi, Lancer, 1987 Beetham, David edited, Politics and Human Rights Oxford Blackwell, 1995.
4. Desai, A.R (ed.) Violations of Democratic Rights in India, Popular Prakashan, Bombay, 1986.
5. Kothari and Sethi Harsh (eds.) Rethinking Human Rights, Delhi, Lokayan, 1991,
6. Saksena, K.P.(ed), Human Rights: Fifty Years of India's Independence, Delhi, Gyan, 1999.

Discipline Specific Elective Paper-I

INTRODUCTION TO HUMAN RIGHTS

Introduction: This course attempts to build an understanding of human rights among students through a study of specific issues in a comparative perspective. It is important for students to see how debates on human rights have taken distinct forms historically and in the contemporary world. The course seeks to anchor all issues in the Indian context, and pulls out another country to form a broader comparative frame.

Human Rights: Theory and Institutionalization

UNIT-I:

- i) Understanding Human Right
- ii) Three Generations of Rights

UNIT-II

- i) Universal Declaration of Human Rights

UNIT-III

- i) Rights in National Constitutions: South Africa and India

UNIT-IV

- i) International Refugee Law, International Humanitarian Law

Discipline Specific Elective Paper IV

WOMEN, POWER AND POLITICS

Introduction: This course opens up the question of women's agency, taking it beyond 'women's empowerment' and focusing on women as radical social agents. It attempts to question the complicity of social structures and relations in gender inequality. This is extended to cover new forms of precarious work and labour under the new economy. Special attention will be paid to feminism as an approach and outlook.

UNIT-I: Feminism

- (i) Meaning and Development
- (ii) Liberal, Socialist and Radical Feminism

UNIT-II: Issues

- i) Patriarchy
- ii) Sex and Gender
- iii) Gender, Power and Politics

UNIT-III: Issues

- (i) Women Movement in India
- (ii) Women Empowerment: Policies and Practices
- (iii) Violence against Women

UNIT-IV: Women and Development

- i) WID (Women in Development),
- ii) WAD (Women and Development),
- iii) GAD (Gender and Development)
- iv) Women and Work (Visible and Invisible)

Generic Elective Paper I

FEMINISM: THEORY AND PRACTICE

Introduction: The aim of the course is to introduce students to contemporary debates on feminism and the history of feminist struggles. The course begins with a discussion on construction of gender and an understanding of complexity of patriarchy and goes on to analyze theoretical debates within feminism. It offers a gendered analysis of Indian society, economy and polity with a view to understanding the structures of gender inequalities. And the last section aims to understand the issues with which contemporary Indian women's movements are engaged with.

UNIT-I: Understanding Feminism

- (i) Feminist theorizing of the sex/gender distinction; Public Man and Private Woman
- (ii) Understanding Patriarchy and Feminism

UNIT-II: Theories of Feminism

- (i) Liberal and Socialist,
- (ii) Radical feminism and Eco-feminism

UNIT-III: Feminist issues and women's participation: The Indian Experience

- (i) Women's participation in anti-colonial and national liberation movements with special focus on India
- (ii) Traditional Historiography and Feminist critiques; Social Reforms Movement and position of women in India, History of Women's struggle in Post- Independent India

UNIT-IV: Family in contemporary India and Understanding Woman's Work and Labour:

- (i) Family in contemporary India - patrilineal and matrilineal practices. Gender Relations in the Family, Patterns of Consumption: Intra Household Divisions, entitlements and bargaining, Property Rights
- (ii) Understanding Woman's Work and Labour – Sexual Division of Labour, Productive and Reproductive labour, Visible - invisible work – Unpaid (reproductive and care), Underpaid and Paid work,- Methods of computing women's work , Female headed households

SEMESTER-I

Credits-4

ECO-CC-105 Indian Economic Policy

ECO-CC- 105.1 Basic Economic Indicators of Indian Economy

Basic Economic Indicators – National Income of Different Sectors; Poverty, Unemployment, Migration and Inequality.

ECO-CC- 105.2 Objectives and Priorities of Planning

Objectives and Priorities of Planning; Five Year Plans; Problems of Resource Mobilization; New Economic Policy since 1991.

ECO-CC- 105.3 The Agricultural Sector

Agricultural Strategy– Land Relation and Land Reforms; Rural Credit; Role of Irrigation and Fertilizer; Agricultural Marketing; Prices of Agricultural Produce; Community Development; Institutional and Technological Aspects, New Agricultural Policy.

ECO-CC- 105.4 The Industrial Sector

Strategy of Industrial Development; Problem of Location; Problems of Large and Smalls Scale Industries; New Industrial Policy and Liberalisation; Sources of Industrial Finances; Role of Foreign Capital; Public Enterprises – Organisation, Management, Control, Accountability and Price Policy.

Note: The candidate has to appear a mid-semester examination of 20 marks and Semester examination of 80 marks. The question paper in the Semester examination consists of Group A and Group B. In group A there are 8 very short questions of 2 marks each with an alternative 4 short questions of 4 marks each. In both the cases there is no alternative choice. In group B there are 4 long questions of 16 marks each from the 4 units of the syllabus with suitable alternatives.

SEMESTER-IV

Credits-4 ECO-CC-404 FINANCIAL INSTITUTIONS AND MARKETS - II

ECO-CC-404.1 Non-Bank Financial Intermediaries

Definition and Types of Non-Bank Financial Intermediaries: Their Growth and Impact on India's Economic Development, Measures taken to Control their Operations.

ECO-CC-404.2 Financial Markets

Role and Structure of Money Market and Capital Market- Call Money Market, Treasury Bill Market, Commercial Bill Market including Commercial Paper and Certificate of Deposits, Discount Market; Regulation of Capital Market.

ECO-CC-404.3 Securities and Derivatives Markets

Government Securities Market- Markets for Derivatives: Features and Options and Other Derivatives; Types, Uses and Pricing of Derivatives- Primary and Secondary Market for Securities;

SEBI: Its Impact on the Working of Capital Market in India; IRDA and its Role in Financial Markets.

ECO-CC-404.4 International Financial Markets

Reforms in International Monetary System for Developing Countries- Lending Operations of World Bank and its Affiliates- Working of IDA and IFC; The Growth of Regional Financial Institutions; Asian Development Bank and its Lending Activities; Asian Development Bank and India; Euro-Dollar and Euro-Currency Markets; Their Developmental Role and Regulation at the International level.

Note: The candidate has to appear a mid-semester examination of 20 marks and Semester examination of 80 marks. The question paper in the Semester examination consists of Group A and Group B. In group A there are 8 very short questions of 2 marks each with an alternative 4 short questions of 4 marks each. In both the cases there is no alternative choice. In group B there are 4 long questions of 16 marks each from the 4 units of the syllabus with suitable alternatives.

Core Paper XI

INDIAN ECONOMY I

Introduction:

Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Unit I: Basic Characteristics of Indian Economy as a Developing Economy

Indian Economy in the Pre-British Period; The Structure and Organization of Villages and Towns; Industries and Handicrafts in Pre-British India; Colonialism; Economic Consequences of British Rule; Decline of Handicrafts and Progressive Ruralization; The Land System and Commercialization of Agriculture; Industrial Transition; Colonial Exploitation and Impacts– Underdevelopment; Colonization and Modernization; State Policies and Economic Underdevelopment; The Current State of Indian Economy

Unit II: Population and Human Development

Population Growth and Economic Development – size, growth and future of population; Causes of rapid population growth; Population and economic development; Population policy; Demographic issues– Sex and Age Composition of population; Demographic Dividend; Urbanization and Migration; Human Resource Development– Indicators and importance of Human Resource Development; Education policy; Health and nutrition.

Unit III: National Income in India– The Growth Story and Current Challenges

Trends in national and per capita income; Changes in sectoral composition of national income; Regional disparities in Growth and Income; Savings and Investment and Economic Growth – The Linkage; Poverty– Estimation and Trends, Poverty Alleviation Programs– MGNREGA, NRLM, SJSRY; Inequality–Measures and trends in India; Unemployment– Nature, Estimates, Trends, Causes and Employment Policy.

Unit IV: Economic Planning in India

Rationale, Features, Objectives, Strategies, Achievements and Assessment of Planning in India; Eleventh Five Year Plan– Objectives, Targets and Achievements; Twelfth Five Year Plan– Vision and Strategy; From Planning to NITI– Transforming India's Development Agenda.

Text Book:

- Misra, S. K. and Puri V. K; Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai

Reference Books:

- Dutt R. and Sundharam K. P. M.; *Indian Economy*. S. Chand & Company Ltd., New Delhi.
- Indian Economy Datt and Sundharam, Gaurav Datt and Ashwani

Core Paper XII

DEVELOPMENT ECONOMICS I

Introduction:

This is the first part of a two-part course on economic development. The course begins with a discussion of alternative conceptions of development and their justification. It then proceeds to aggregate models of growth and cross-national comparisons of the growth experience that can help evaluate these models. The axiomatic basis for inequality measurement is used to develop measures of inequality and connections between growth and inequality are explored. The course ends by linking political institutions to growth and inequality by discussing the role of the state in economic development and the informational and incentive problems that affect state governance.

Unit I: Study of Economic Development

Development Economics as subject; economic growth and economic development; Characteristics of underdeveloped countries – vicious cycle of poverty and cumulative causation; obstacles to economic development; measures of economic development – national and per capita income, basic needs approach, capabilities approach, three core values of development, PQLI, HDI, HPI, MDPI, GDI; capital formation and economic development.

Unit II: Theories of Economic Growth and Development

Classical theory, Marxian theory; Schumpeterian theory; Rostow's stages of economic growth; Solow model and convergence with population growth and technical progress.

Unit III: Poverty, Inequality, Agriculture, Industry and Development

Measuring poverty: Head Count Ratio, Poverty Gap Ratio, Squared Poverty Ratio, FGT Ratio; Measuring Inequality– Lorenz curve and Kuznets' inverted U hypothesis; Growth, poverty and inequality; Policy options – some basic considerations.

Agriculture, Industry and Economic Development: Role of agriculture; Transforming traditional agriculture; Barriers to agricultural development; Role of industrialization; Interdependence between agriculture and industries– A model of complementarities between agriculture and industry; terms of trade between agriculture and industry; functioning of markets in agrarian societies; interlinked agrarian markets.

Unit IV: Institutions and Economic Development:

Role of institutions in economic development; Characteristics of good institutions and quality of institutions; The pre-requisites of a sound institutional structure; Different measures of institutions

– aggregate governance index, property rights and risk of expropriation; The role of democracy in economic development; Role of markets and market failure; Institutional and cultural requirements for operation of effective private markets; Market facilitating conditions; Limitations of markets in LDCs; Corruption and economic development – tackling the problem of corruption.

Text book: Todaro, Michael P and Stephen C Smith (2006): *Economic Development*,

Core Paper XIII

INDIAN ECONOMY II

Introduction:

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually.

Unit I: Agricultural Development in India

Indian Agriculture: nature, importance, trends in agricultural production and productivity, factors determining production, land reforms, new agricultural strategies and green revolution, rural credit; Agricultural marketing and warehousing.

Unit II: Industrial Development in India

Trends in industrial output and productivities; Industrial Policies of 1948, 1956, 1977 and 1991; Industrial Licensing Policies – MRTP Act, FERA and FEMA; Growth and problems of SSIs, Industrial sickness; Industrial finance; Industrial labour.

Unit III: Tertiary Sector, HRD and the External Sector

Tertiary Sector: growth and contribution of service sector to GDP of India, share of services in employment; Human development – concept, evolution, measurement; HRD: indication, importance, education in India, Indian educational policy; Health and Nutrition.

Foreign Trade: role, composition and direction of India's foreign trade, trends of export and import in India, export promotion versus import substitution; Balance of Payments of India; India's Trade Policies; Foreign Capital – FDI, Aid and MNCs.

Unit IV: Indian Economy and Environment

Environmental Policies in India: The Environment (Protection) Act 1986, The Environment (Protection) Rules 1986, The National Forest Policy 1988, Policy statement for Abatement of Pollution 1992, National Conservation Strategy and Policy Statement on Environment and Development 1992, The National Environment Appellate Authority Act 1997, National Environmental Policy 2006; Global deal with Climate Change: Introduction, Intergovernmental Panel for Climate Change (IPCC), Impact of Climate Change on India, Global Response on Climate Change, Possible Role of India.

Text Book:

- Misra, S. K. and Puri V. K. *Indian Economy— Its Development Experience*. Himalaya Publishing House, Mumbai.

Reference Books:

- Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.
- Indian Economy Datt and Sundharam, Gaurav Datt and Ashwani Mahajan, S Chand Publications, 7th Revised Edition
- Indian Economy Since Independence, ed by Uma Kapila, Academic Foundation,

Core Paper XIV

DEVELOPMENT ECONOMICS II

Introduction:

This is the second unit of the economic development sequence. It begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development.

Unit I: Population and Development

Demographic concepts: birth and death rates, age structure, fertility and its determinants, the Malthusian population trap and the microeconomic household theory of fertility; costs and benefits of population growth and the model of low level equilibrium trap; rural-urban migration – the Harris Todaro migration model and policy implications.

Unit II: Dualism and Economic Development

Dualism – geographic, social and technological; the theory of cumulative causation (Myrdal); the regional inequalities in the context of economic development; the inverted U relationship; international inequality and the centre periphery thesis; dependency, exploitation and unequal exchange; the dualistic development thesis and its implications.

Unit III: Environment and Development

Basic issues of environment and development – Development and environment inter-linkage; Poverty, environmental degradation and externalities; common property resources, renewable and non-renewable resources; concept of sustainable development; basics of climate change.

Unit IV: International Trade and Economic Development and Financing Economic Development

Trade and economic development; export led growth; terms of trade and economic growth– the Prebisch Singer Hypothesis; trade strategies for development– import substitution vs. export promotion; international commodity agreements; trade vs aid.

Saving, capital formation and economic development; financial sector and economic development; taxation, public borrowing and economic development; inflation, foreign finance, investment and foreign aid– controversies and opportunities.

Text Book:

- Todaro, Michael P and Stephen C Smith (2006): *Economic Development*, 8th Edition, Pearson

Generic Elective Paper INDIAN ECONOMY II

Introduction:

This paper is the part II of Indian economy deals with the external sector, financial markets in India, Indian Public Finances and Economic Reforms. This paper also throws some light on current challenges of Indian Economy.

Unit I: External Sector in India

Trends, Composition & Direction in exports from and imports of India; Problems of Balance of Payment: Causes of deficit in BOP & measures to correct it; Trade Policy- Export Promotion Vs Import Substitution; Foreign Trade Policy of India; WTO and India.

Unit II: Financial Markets in India

Commercial Banking in India- Nationalization of Banks; Lead bank scheme and branch expansion; RBI - Functions, Monetary Policy; Development Banking- IFCI, IDBI, SIDBI and NABARD

Unit III: Indian Public Finance

Public Expenditure-Growth and Composition, Causes of Growth of Public Expenditure in India: Tax Revenue of Central and State Governments; Concept of VAT; Deficit Financing in India- Revenue, Budget, Fiscal and Primary Deficits; Purpose and Effects of Deficit Financing; India's Fiscal Policy-Objectives.

Unit IV: Current Challenges Facing Indian Economy

Inflation – Causes, Consequences and Anti-inflationary Policy; Poverty – Poverty line and Estimates, Major Poverty Alleviation Programmes; Environmental Degradation – Growth and Environment; Population Growth and Environment; Environment Policy; Economic Reforms- Globalization, Macroeconomic Stabilization, Structural Reforms, and their impact on the Indian Economy; Foreign capital and MNCs-Role and consequences.

Text Book:

- Misra, S. K. and Puri V. K. Indian Economy — Its Development Experience. Himalaya Publishing House, Mumbai.

Reference Book

- Dutt R. and Sundharam K. P. M. *Indian Economy*. S. Chand & Company Ltd., New Delhi.
- Basu, Kaushik (2016): *An Economist in the Real World: The Art of Policy*

SOCIOLOGY HONOURS
SEMESTER-III
CORE PAPER-VII (DSC-H-SOC-7)
SOCIOLOGY OF GENDER

FULL MARK 100 (INTERNAL ASSESSMENT: 20 MARK, SEMESTER: 80 MARK)

The biological basis to the differences between the sexes does not explain the inequalities faced by the sex groups in the society. In the society variations are marked in the roles, responsibilities, rights of and relations between sex groups depending on the social prescriptions relating to sex affiliations. The differences, inequalities and the division of labour between men and women are often simply treated as consequences of 'natural' differences between male and female humans. But, in reality the social norms, institutions, societal expectations play a significant role in deciding and dictating the behavior of each sex group. This is the crux of the study of Gender and Society.

Unit-1: Social Construction of Gender

- 1.1 Gender as a Social Construct
- 1.2 Gender Vs. Sex
- 1.3 Gender Stereotyping and Socialization
- 1.4 Gender Role and Identity

Unit-2: Feminism

- 2.1 Meaning and Definitions
- 2.2 Origin , Growth of Feminism, Waves of Feminism
- 2.3 Patriarchy
- 2.4 Theories of Feminism-Liberal, Radical, Socialist, Marxist, Materialist

Unit-3: Gender and Development

- 3.2 Approaches -WAD, WID and GAD.
- 3.3 Gender Mainstreaming: Meaning, Policies and Programmes
- 3.3 Gender Development Index
- 3.4 Women Empowerment: Meaning and Dimensions: Political, Economic and Social.

Unit-4: Women in India through ages

- 4.1 Status of Women in Ancient Period
- 4.2 Medieval Period
- 4.3 Women in Pre- independence India
- 4.4 Women in Contemporary Indian Society

Suggested Readings

- 1. Bhasin, Kamla, 2003. *Understanding Gender, Kali for Women.*

Essential Readings:

- 2. Prabhakar, Vani, 2012. *Gender and Society, Wisdom Press (ISBN) (CBCS)*
- 3. John, M. E. (ed.), *Women's Studies: A Reader, New Delhi: Penguin India, 2008.*
- 4. Choudhury, Maitry *Feminism in India: Issues in Contemporary Indian Feminism, Kali for Women, New Delhi, 2004.*
- 5. Kabeer, Naila. *Reversed Realities: Gender Hierarchies in Development Thought: Gender Hierarchies in Development, 1994.*
- 6. Walby, S., *Theorizing Patriarchy, John Wiley and Sons, 1990.*

I.R & P.M HONOURS
THIRD SEMESTER DEGREE EXAMINATION
INDIAN LABOUR STUDIES
SEMESTER-III
PAPER-V
HUMAN RESOURCE MANAGEMENT

Full marks-100 (80+20)

Human Resource Management

25 Marks

Unit-I

Human Resource Management – Meaning, Concept, Objectives and Scope of Human Resource Management.

Unit- II

25 Marks

Growth and Development of Human Resource Management in India.
Development of Management Thought; Human Relation school of Elton Mayo.

Unit-III

25 Marks

Recruitment and Selection. Training- Meaning, Types and Procedure of Importance of Training and Wage and Salary Administration – in India.

Unit-IV

25 Marks

Motivation- Introduction, Types of Motivation, Employees Morale-Definition, Factors effecting moral.

BOOKS RECOMMENDED

Human Resource Management

1. Dr P. Jyothi, Human Resource Management, Oxford University Press, 2015
2. Uday Kumar Haldar and Juthika Sarkar, Human Resource Management, Oxford University Press, 2015
3. T.N. Chhabra, Human Resource Management. Dhanpat Rai & Co. **Publisher.**
4. Jyoti and Venkatesh, Human Resource Management. Oxford University Press India. 2014
5. K. Aswathappa, Human Resource Management. McGraw Hill Education (India) Private Limited, 07 Edition.
6. C.B. Gupta, Human Resource Management. Sultan Chand and Sons **Publisher**, 14 Edition.
7. P. Subba Rao, Essentials of Human Resource Management and Industrial Relations. Himalaya Publishing House Pvt. Ltd., 05 Edition.
8. Edwin Flippo, Personnel Management. Tata McGraw - Hill Education publisher, 06 Edition.

MC-CC-101 MANAGEMENT CONCEPT & ORGANISATIONAL BEHAVIOUR

Objective: The objective of this course is to help students understand the conceptual framework of management and Organizational Behaviour.

UNIT-I Schools of Management Thoughts: Nature & Scope of Management, Traditional theories of management, Human behaviour and social system school; Decision theory school; Systems school; Contingency theory of management; functions of a manager.

UNIT-II Planning: concept, significance, types, **Organizing:** concept, principles. Organization structure: Formal and informal organizations; Span of control, authority, responsibility, power, delegation, decentralization, **Fundamentals of Staffing**

UNIT-III Directing: concept, significance

Leadership: Concept; Leadership styles; Theories - trait theory, behavioural theory, Fielder's contingency theory; Situational theory; Likert's four systems of leadership.

Motivation: Process of motivation; Theories of motivation: Maslow's need hierarchy theory, McGregor's Theory X & Y, McClelland's need theory, Victor Vroom's expectancy theory, Herzberg's two factor theory, Skinner's reinforcement theory. **Basics of Controlling**

UNIT-IV Organisational Behaviour: concept, significance, Personality, Perception; Attitudes; Emotions

Group Dynamics & Organizational Culture:

Group Dynamics: Power and politics; Conflict and negotiation; Stress management

Organizational Culture: Organizational development and organizational change

References:

1. Prasad, L.M.; Principles and Practice of Management
2. Michael, V. P: Organisational Behaviour & Managerial Effectiveness, S. Chand, New Delhi.
3. Hellreigel, Don John W Slocum Jr. and Richards W. Woodman: Organisational Behaviour, South Western College Publishing, Ohio.
4. Hersey, Poul, Kenneth H. Blanchard and Dewey E. Johnson: Management of Organisational Behaviour: Utilising Human Resource, Prentice Hall, New Delhi.
5. Aswathappa, K.; Organisational Behaviour, Himalaya Publishing House, Mumbai.
6. Koontz, Harold, Cyril O'Donnell and Heinz Weihrich: Essentials of Management, Tata McGraw-Hill, N. Delhi
7. Luthans Fred: Organisational Behaviour, McGrawHill, New York.
8. Newstrom, John W. and Keith Davis: Organisational Behaviour: Human Behaviour at work, TMH, N. Delhi
9. Robbins, Stephen P, and Mary Coulter: Management, Pearson Education, New Delhi.
10. Steers, Richards M. and J. Stewart Balck: Organisational Behaviour, HarperCollins College Publishers, NY.
11. Thom hill. -Managing Change". Pearson Education. New Delhi. Green Berg -Behaviour in Organisation".
12. Hall. -Organisation Structure, Process and outcomes-.
13. T.N.Chhabra : Principles & Practise of Management
14. Drawker, Peter; Practice of Management

B.Com. (Hons.): Semester - III
Paper 3.3: HUMAN RESOURCE MANAGEMENT (Core-7)

Duration: 3 hrs.

Marks: 100

Lectures: 65

Unit I:

13 Lectures

Human Resource Management: Concept and Functions, Role, Status and competencies of HR Manager, HR Policies, Evolution of HRM. Emerging Challenges of Human Resource Management; workforce diversity, empowerment, Downsizing; VRS; Human Resource Information System;

Unit II

13 Lectures

Acquisition of Human Resource: Human Resource Planning- Quantitative and Qualitative dimensions; job analysis – job description and job specification; Recruitment – Concept and sources; Selection – Concept and process; test and interview; placement induction.

Unit III

13 Lectures

Training and Development; Concept and Importance; Identifying Training and Development Needs; Designing Training Programmes; Role Specific and Competency Based Training; Evaluating Training Effectiveness; Training Process Outsourcing; Management Development; Career Development.

Unit V

13 Lectures

Performance appraisal; nature and objectives; Modern Techniques of performance appraisal; potential appraisal and employee counseling; job changes - transfers and promotions. Compensation: concept and policies; job evaluation; methods of wage payments and incentive plans; fringe benefits; performance linked compensation.

Unit V

13 Lectures

Maintenance: employee health and safety; employee welfare; social security; Employer Employee relations- an overview. grievance handling and redressal Industrial Disputes causes and settlement machinery..

Suggested Readings:

1. Gary Dessler. A Framework for *Human Resource Management*. Pearson.
2. DeCenzo, D.A. and S.P. Robbins, "*Personnel/Human Resource Management*", Prentice Hall of India, New Delhi.
3. Bohlendar and Snell, *Principles of Human Resource Management*, Cengage Learning
4. Chhabra, T.N. *Essentials of Human Resource Management*. Sun India Publication New Delhi.
5. Ivancevich, John M. *Human Resource Management*. McGraw Hill.
6. Wreather and Davis. *Human Resource Management*. Pearson Education.
7. Robert L. Mathis and John H. Jackson. *Human Resource Management*. Cengage Learning.

B.Com. (Hons.): Semester - VI
Paper 6.1: AUDITING AND CORPORATE GOVERNANCE (Core-13)

Duration: 3 hrs.

Marks: 100

Lectures: 65

Objective: To provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards.

Contents:

Unit I:

(13 Lectures)

Auditing: Introduction, Meaning, Objects, Basic Principles and Techniques;
Classification

Audit;
of Audit, Audit Planning, Internal Control – Internal Check and Internal Audit
Procedure – Vouching and verification of Assets & Liabilities.

Unit II:

(13 Lectures)

Audit of Limited Companies: Company Auditor- Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties Auditor's Report-Contents and Types. Liabilities of Statutory Auditors under the Companies Act 2013

Unit III:

(13 Lectures)

Special Areas of Audit: Special features of Cost audit, Tax audit, and Management audit;
Recent Trends in Auditing: Basic considerations of audit in EDP Environment; Standard on Auditing(SA); Relevant Case Studies/Problems;

Unit IV: Corporate Governance: Conceptual framework of Corporate Governance, Corporate Governance Reforms. Major Corporate Scandals in India and Abroad: Common Governance Problems Noticed in various Corporate Failures. Codes & Standards on Corporate Governance.

(13

Lectures)

Unit V: Corporate Social Responsibility (CSR): Strategic Planning and Corporate Social Responsibility; Corporate Philanthropy, Meaning of CSR, CSR and CR, CSR and Corporate Sustainability, CSR and Business Ethics, CSR and Corporate Governance, Environmental Aspect of CSR, CSR provision under the Companies Act 2013, CSR Committees **(13 Lectures)**

Suggested Readings:

1. Gupta, Kamal and Ashok Arora. *Fundamentals of Auditing*. Tata Mc-Graw Hill Publishing Co. Ltd., New Delhi.
2. Jha, Aruna. *Auditing*. Taxmann.
3. Tandon, B. N., S. Sudharsanam and S. Sundharabahu. *A Handbook of Practical Auditing*. S. Chand and Co. Ltd., New Delhi.
4. Ghatalia, S.V. *Practical Auditing*. Allied Publishers Private Ltd., New Delhi.

Jan
04-03-2021
Principal
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