

**EE as infused in NCERT Syllabus
as per NCF- 2005**

A Comparative Study



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EE as infused in NCERT syllabus as per NCF 2005 vis a vis EE syllabus NCFSE 2000	
EE syllabi as per NCFSE 2000	EE components infused in the syllabus of different subjects as per NCF 2005
<p>Class VI 6.1 Knowing the Environment 6.1.1 The environment - social and natural.</p>	<p>(Code*, class, Subject topics in order) * <i>The code like 6.1 includes all the sub codes</i></p> <p>6.1(VI) Geography- the earth our habitat planet; earth in t he solar system, four realms of the earth, India in the world, Physiographic divisions of India</p> <p>6.1.2 (VI) History: the earliest societies The first farmers and herders</p> <p>6.1 (VI) Hindi - First Lang.</p> <ul style="list-style-type: none"> • <i>Nadaan Dost</i> <p>6.1 (VI) Urdu/Sanskrit –</p> <ul style="list-style-type: none"> • Text Books,Pahar aur Gilheri (poem),Aasmani Dost (Story), Ghore aur Hiran ki (story), Hamare Tehwar (prose), Subh Ke Sitare (poem) • Supplementary Reader Poems Mera watan, Garmi ka Mausam, Barsar Ki Baharein, Subh Ke Nazare, Makra aur Makkhi, Story, Aitbar, Chhiddu , Prose, Phoolwaton ki sair, Saakun Ali <p>6.1 (VI) English</p> <ul style="list-style-type: none"> • Textbook Stories / Prose, The Dog Family, A Different kind of School, Desert Animals, The Banyan Tree • Supplementary Reader , A Tale of Two Birds, A Pact with the Sun, What happened to the Reptiles <p>6.1 Science (VI) - MATERIALS</p> <ul style="list-style-type: none"> • Materials of daily use, Different kinds Of Materials <p>6.1 Science (VI) -THE WORLD OF THE LIVING</p> <ul style="list-style-type: none"> • Surroundings affect the Living; The

<p>6.1.2 Human dependence on the environment</p> <p>6.1.3 Interdependence of plants and animals</p> <p><i>6.2 . Natural Resources and their Utilization</i></p> <p>6.2.1 Natural resources - air, water, land (soil and minerals) and sunlight (energy); significance for growth, development and survival of all organisms</p> <p>6.2.2 Utilization of resources for developmental and social activities _ production of food, electricity and fuels, construction and other infrastructure</p>	<p>breath of life; Movement of substances; Multiplication in plants</p> <p>6.1.2 and 6.1.3 (XII) Biology and human welfare;</p> <ul style="list-style-type: none"> • Plant breeding, food production, food processing etc <p>6.1.3 (VI) Science – food</p> <ul style="list-style-type: none"> • Sources of food, Components of food, Cleaning of food <p>6.1.3 (VII) Science- Food</p> <ul style="list-style-type: none"> • Food from where? Utilization of food <p>6.2.1 (VI) Science - NATURAL RESOURCES:</p> <ul style="list-style-type: none"> • Importance of water and air <p>6.2.1 (VI) Science - NATURAL PHENOMENA</p> <ul style="list-style-type: none"> • Rain, thunder and lightning <p>6.2.1 (VII) Science - NATURAL PHENOMENA</p> <ul style="list-style-type: none"> • Rain, thunder and lightning <p>6.2.1 (VIII) Science - NATURAL PHENOMENA</p> <ul style="list-style-type: none"> • Rain thunder and lightning <p>6.2.1 (VII) Geography- Our environment</p> <ul style="list-style-type: none"> • Environment in its totality Natural environment • Land,.... Air,water,.... natural vegetation and wild lifeHuman environment..... • Human and environment interaction .. <p>6.2.2 (VI) Science - Natural resources:</p> <ul style="list-style-type: none"> • Man’s intervention in phenomenon of nature <p>6.2.2 (XII) Biology and human welfare;</p> <ul style="list-style-type: none"> • food production, industrial production • sewerage treatment and energy generation <p>6.2.2 (VIII) Geography: resources and development:</p> <ul style="list-style-type: none"> • Types of resources
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6.2.3 Overutilisation of resources

6.3. Waste Generation

6.3.1 Generation of waste and its sources

6.3.2 Types of waste - solid, liquid and gaseous

6.3.3 Hazards of waste accumulation

6.3.4 Waste, community health and sanitation

6.4 Management of Waste

6.4.1 Waste and its disposal : solid waste (physical removal and dumping), liquid waste (drainage and sewer system) and gaseous waste (discharged directly into air)

6.4.2 Conditions for proper waste management co-operation of individuals and community; proper functioning of governmental and local bodies

- Utilisation of resources: agriculture, industry etc

6.2.2 (IX) History: India and the contemporary world I

- Economies and livelihood
- Industrialisation 1850- 1950 Farmers and peasants

chapter IX

6.2 VI Urdu

- **Text Book**, Baarish ke Phela Qatra (poem), Payam-e-Amal (poem)
- **Supplementary Reader** Jaisi Niyal Waisi barkat (story)

6.3 (VII) Science –Natural Resources
Waste generation and disposal

6.3 (VII) Science – waste management

- Sewerage and need for a sewerage

6.3.4 (XII) Biology - Biology and human welfare;

- sewerage treatment and energy generation

6.4 (VII) Science – Waste management

- Sewerage and need for a sewerage

6.4.2 (VI) Political Science – Diversity , interdependence and conflict

- Urban local government

6.4.2 (VII) political science – democracy and equality

- State Government

6.4.2 (VIII) Mathematics :

- Symmetry, Mensuration, Ratio and Proportion

Class VII

7.1 Environment and Natural Resources

7.1.1 Water - a precious resource; essential for life and life activities, a habitat of plants and animals (fresh and marine), sources of water (fresh and marine) _ rain, snow, ponds, wells, lakes, rivers and seas.

7.1.2 Air - atmosphere as reservoir of air; role of atmosphere _ a blanket for the earth, for maintaining humidity and temperature, a source of gases and medium for dispersal of gaseous wastes.

7.1.3 Soil - a medium for growth of plants, types of soil, habitat for organisms, facilitator for percolation and retention of water.

7.1.4 Forests - a habitat for plants and animals, an agent for percolation and retention of water; maintaining ground water level; prevention of soil erosion; maintaining air humidity; a source of firewood, timber, fruits, lac, resins and medicinal plants.

7.2 Man and Environment

7.2.1 Response of living beings to changes in environment adaptation in plants and animals.

7.2.2 Modification of environment by human beings to protect themselves against changes and meet their needs.

7.1 (VII) Geography: Our environment

- *Environment in its totality Natural environment Land, Air, water, natural vegetation and wild life*

7.1 (VII) Hindi Second Language

- **textbook** Chidya aur Churgun, Kubare per chita

7.1 (VII) Urdu

- **Text book** Dop Gaz Zameen (Story)Aadiwasi (Prose), Barkha Rut (poem)

7.1 (VII) English

- **Text book** , Tree

7.2 (VII) Geography – our environment

- *Human environment, settlement , transport and communication*
- *Human - environment interaction*

7.2.2 (IX) History: India and the contemporary world I

- *Economies and livelihood*
- *Forest society and colonialism*
- *Farmers and peasants*

<p>7.2.3 Effect of human activities and population growth on agriculture, harnessing of energy, housing, industrial development and other areas of consumption and social activities (an elementary idea).</p> <p>7.2.4 Consequences of human activities - stress on land use, water sources, energy and mineral resources; forests, ocean life; environmental degradation.</p> <p>7.2.5 Role of individuals in maintaining peace, harmony and equity in nature; good neighbourly behaviour; use and misuse of common property resources.</p>	<p>7.2.2 (VI) History: An introduction to History</p> <ul style="list-style-type: none"> • <i>The earliest societies</i> • <i>The first farmers and herders</i> • <i>The first cities</i> <p>7.2.2 (VII) History –our pasts II</p> <ul style="list-style-type: none"> • <i>Where When and How</i> <p>7.2 (VII) English</p> <ul style="list-style-type: none"> • Textbook:The Ashes that made tree Bloom, I can play schools, Fire – Friend or Foe? • Supplementary ReaderThe Tiny Teacher, Bringing up Kari, The Desert <p>7.2.2 (VIII) History- our pasts III</p> <ul style="list-style-type: none"> • <i>Crafts and industries</i> <p>7.2.3 (VIII) Geography- India : resources and their development:</p> <ul style="list-style-type: none"> • <i>Types of resources Utilisation of resources: agriculture, industry etc</i> <p>7.2.3 (IX) Geography – India: land and the people</p> <ul style="list-style-type: none"> • River pollution, etc. <p>7.2.2 and 7.2.3 (X) Geography - India: resource and their development</p> <ul style="list-style-type: none"> • changing land use pattern, land degradation, farming etc, • water scarcity, stress on energy resources, industrial pollution <p>7.2.3 (X) India – resource and their development</p> <ul style="list-style-type: none"> • <i>Sources of energy</i>
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	<p>7.2.4 (VII) Science- NATURAL RESOURCES</p> <ul style="list-style-type: none"> • Scarcity of water and Forest products <p>7.2.4 (X) India: resource and their development:</p> <ul style="list-style-type: none"> • Conservation of forests, oceans, etc <p>7.2.4 (VI) Mathematics:</p> <ul style="list-style-type: none"> • Integers • Comparing Quantities <p>7.2.5 (XII) Cotemporary world politics Conflict over traditional and common property resources.....</p>
<p>Class VIII 8.1 Balance in Nature 8.1.1 Eco-system interaction between living and non-living components, structure and function;</p> <p>8.1.2 Energy flow through ecosystem (food chain, food webs); examples of terrestrial and marine food chains; and</p> <p>8.1.3 Balance in nature importance of eco-system.</p> <p>8.2 Impact of Population on Environment 8.2.1 Impact of population growth on ecosystem, human settlements, land distribution.</p>	<p>8.1.1 (VIII) Science – Food</p> <ul style="list-style-type: none"> • Crop Production • Micro organisms <p>8.1.1 (VIII) Science - THE WORLD OF THE LIVING</p> <ul style="list-style-type: none"> • Why conserve <p>8.1.2 (IX) Science - THE WORLD OF THE LIVING:</p> <ul style="list-style-type: none"> • Biological diversity <p>8.1.3 (X) Science - The world of the living</p> <ul style="list-style-type: none"> • Our environment <p>8.1.3 (VIII) Science - NATURAL RESOURCES</p> <ul style="list-style-type: none"> • Man’s interventions in phenomena of nature <p>8.1.3 (VIII) Mathematics: Powers Ratio and Proportion</p> <p>8.2.1 (VIII) Geography - Resources and development:</p> <ul style="list-style-type: none"> • <i>Types of resources Human resources</i>

<p>8.2.2 Stress due to population growth on common social facilities and civic services;</p> <p>8.3 Harnessing Resources</p> <p>8.3.1 Increase in consumption, encroachment on monuments</p> <p>8.3.2 Sources of energy - renewable and non-renewable sources, availability and potential (Indian context);</p> <p>8.3.3 Renewable sources - solar, wind, hydro-energy, ocean (tidal), biomass including bio wastes;</p> <p>8.3.4 Non-renewable sources - coal, petroleum and its products, natural gas;</p> <p>8.3.5 Agriculture and animal husbandry - impact on environment;</p> <p>8.3.6 Utilization of resources for Industry - processing and production of goods; need for planning and management; adoption of efficient and environment friendly technologies; industrial waste management practices; and Environmental concerns- regional and national.</p> <p>8.4 Environmental Pollution – Cause and Effect</p> <p>8.4.1 Emerging lifestyles in modern societies - overutilisation of resources; increasing consumption of energy (electricity and fuels), materials and facilities; synthetic materials –</p>	<ul style="list-style-type: none"> • <i>Population, distribution and density</i> <p>8.2.1 (XI) Geography- fundamentals of physical Geography</p> <ul style="list-style-type: none"> • <i>Human settlements</i> <p>8.2.2 (XI) Geography- fundamentals of physical geography:</p> <ul style="list-style-type: none"> • <i>Geographical perspective on selected issues and problems: urban waste disposal, stress on resources, problem of slums</i> <p>8.3 (X) Geography- India – resource and development</p> <ul style="list-style-type: none"> • <i>Sources of energy(renewable, non renewable)</i> <p>8.3.1 (XI) Geography</p> <ul style="list-style-type: none"> • <i>Project work</i> <p>8.3.5 (VIII) Geography: resources and development</p> <ul style="list-style-type: none"> • <i>Types of resources Utilisation of resources: agriculture and animal husbandry</i> <p>8.3.6 (XI) Chemistry - environmental chemistry</p>
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<p>plastics, detergents, paints and refrigerants; advantages and disadvantages of using them.</p> <p>8.4.2 Factors affecting environment, overexploitation of resources, population growth industrialization, use of synthetic materials.</p> <p>8.4.3 Pollution of soil, air and water - sources, impact on physical environment and all forms of life, control and preventive measures (modern and traditional):</p> <p>8.4.4 Noise pollution sources, impact and preventive measures.</p> <p>8.4.5 Disasters - natural and man-made, major types and their causes, impact on environment and human life.</p> <p>8.4.6 Impact of environmental degradation on - natural habitats, living forms (endangered and extinct species) and domestic animals.</p> <p>8.4.7 Impact of environmental pollution on human health - indoor and outdoor pollution, pollution related diseases (respiratory, dietary, physiological, genetic, psychological), occupational hazards and disorders (local examples).</p> <p>8.4.8 Role of individuals, community and government in planning, decision-making,</p>	<ul style="list-style-type: none"> • <i>Industrial waste management</i> <p>8.3.6 (VIII) Geography- Resources and development</p> <ul style="list-style-type: none"> • <i>Utilisation of resources: industry etc</i> <p>8.3.6 (X) Science - Regional environment</p> <ul style="list-style-type: none"> • Dams, rivers, lakes , wild life <p>8.4.1 (XI) Chemistry - Environmental chemistry</p> <p>8.4.1 (VIII) Science - materials in daily life</p> <ul style="list-style-type: none"> • synthetic clothing, plastics <p>8.4.2 (XII) Chemistry: Haloalkanes and haloarenes</p> <ul style="list-style-type: none"> • <i>Polymers natural synthetic, freons, DDT etc</i> <p>8.4.3 (VIII) Geography - resources and development:</p> <ul style="list-style-type: none"> • Manufacturing industries, industrial pollution <p>8.4.3 (IX) Science - materials</p> <ul style="list-style-type: none"> • Melting, freezing, evaporation, pollution of air and water <p>8.4.3 (IX) Science – Natural Phenomena Balance in nature, air water soil pollution</p> <p>8.4.3 (IX) Science Food – higher yields</p> <ul style="list-style-type: none"> • Pollution of air and water <p>8.4.4 (XI) Chemistry - Environmental Chemistry</p> <ul style="list-style-type: none"> • Air, water and soil pollution, strategies for controlling pollution <p>8.4.4 and 8.4.3 (IX) Science - how do we hear from a distance ?</p> <ul style="list-style-type: none"> • Structure of the human ear
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<p>legislation and social action for prevention of pollution and improvement of environment.</p>	<p>8.4.5 (IX) Geography – India: land and the people</p> <ul style="list-style-type: none"> • A case study of a disaster <p>8.4.6 (VIII) Science - the world of the living</p> <ul style="list-style-type: none"> • Conservation of wild life, bio-diversity, zoos, fauna, endangered specie, poaching <p>8.4.7 (XII)Biology- Biology and human welfare</p> <ul style="list-style-type: none"> • Diseases due to pollution <p>8.4.7 (IX) Science – the world of the living</p> <ul style="list-style-type: none"> • What is the living beings made of? • How do we fall sick? <p>8.4.8 (VI) political science – Diversity , interdependence and conflict</p> <ul style="list-style-type: none"> • Urban local government <p>8.4.8 (VII) political science – democracy and equality</p> <ul style="list-style-type: none"> • State Government
<p>Class IX 9.1 Understanding Ecosystem 9.1.1 Types of ecosystem - forest, grassland, desert, aquatic, costal, marine</p>	<p>9.1.1 (VII) Geography: Our environment</p> <ul style="list-style-type: none"> • <i>Environment in its totality Natural environment Land, Air, Water, Natural vegetation and wild life</i> <p>9.1.1 (IX)Mathematics – Hero’s formula</p> <ul style="list-style-type: none"> • Heron’s formula-Forest, grassland, desert, aquatic, costal, marine based calculations <p>9.1 (IX) Hindi Course B-</p> <ul style="list-style-type: none"> • Text book, Keechad ka Kavya <p>9.1 (IX) English</p> <ul style="list-style-type: none"> • Textbook The name of the

<p>9.1.2 Interaction between biotic and abiotic factors in an eco-system</p> <p>9.1.3 Energy flow and its importance, cycles of nutrients in terrestrial and aquatic (fresh water and marine) ecosystems, nature's mechanism in maintaining balance</p> <p>9.1.4 Destruction of ecosystem due to changing patterns of land use; factors responsible for this – population growth, migration, industrialization and urbanization, dwelling units, transport; encroachment on water bodies, forests and agricultural land, shifting cultivation; facilities for tourism, pilgrimage, recreation and adventure; construction of large dams, mining and war</p> <p>9.1.5 Impact of ecosystem destruction - loss of habitat, stress on resources</p> <p>9.1.6 Conservation of ecosystem - alternative practices including indigenous conservation practices, planning for proper land use</p> <p>9.1.7 Role of Environmental Impact Assessment (EIA) in maintaining the quality of the environment</p>	<p>book itself is Beehive.</p> <p>9.1 (IX) English –</p> <ul style="list-style-type: none"> • text books Poems Wind Prose, e Snake and the Mirror, tree ,Green Snake,Bond of love • Supplementary Reader;The adventure of Tadoo <p>9.1.2 (X) Science - The world of the living</p> <ul style="list-style-type: none"> • Our environment <p>9.1.1 to 9.1.3 (IX) Science: NATURAL RESOURCES</p> <ul style="list-style-type: none"> • Balance in nature <p>9.1.4 (X) Mathematics Coordinate geometry</p> <p>9.1.3 (VIII) Geography: resources and development</p> <ul style="list-style-type: none"> • Types of resources Utilisation of resources: agriculture, industry, urbanisation, transports and trade <p>9.1.4 (X) History - India and the contemporary world</p> <ul style="list-style-type: none"> • Urbanisation and urban lives patterns of urbanisation, growth of cities, social change and urban life <p>9.1.5 (X) Geography - India :resource and development</p> <ul style="list-style-type: none"> • changing land use pattern, land degradation, farming etc, water scarcity, stress on energy resources, industrial pollution <p>9.1.5 (X) Mathematics - Surface area and Volumes</p> <ul style="list-style-type: none"> • <p>9.1.6 (X) Science- Natural resources</p> <ul style="list-style-type: none"> • Regional environment <p>9.1.7 (X)India – resource and development;</p> <ul style="list-style-type: none"> • Changing land use pattern, land degradation, farming etc, water scarcity, stress on energy resources
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<p>9.2 . Depletion of Resources</p> <p>9.2.1 Natural resources -air, water, soil, metals, minerals, forests and fuels,</p> <p>9.2.2 Causes of depletion of resources -over-use/irrational use, non-equitable distribution of resources, technological and industrial development, population growth</p> <p>Impact of resource depletion - imbalance in nature, shortage of materials, struggle for existence; slackening of economic growth</p> <p>Practices for conservation of resources - search for alternatives promotion of renewable resources,</p> <p>9.2.3 Landscape pollution, health hazards, effect on terrestrial and aquatic (fresh water and marine) life .</p> <p>9.3 . Waste Generation and Management</p> <p>9.3.1 Sources of waste - domestic, industrial, agricultural, and commercial</p> <p>9.3.2 classification of waste - bio-</p>	<p>9.1.7 (X) Geography Political science, Biology etc project work</p> <p>9.1.4 ,9.1.5 and 9.1.7 (X) Mathematics - Probability ,Statistics</p> <p>9.2 (IX)English</p> <ul style="list-style-type: none"> • text book , Rain • Supplementary Reader, Weathering the storm in Ersame <p>9.2.1(VII) Geography: Our environment</p> <ul style="list-style-type: none"> • Environment in its totality Natural environment Land, Air, water, natural vegetation and wild life • Human environment • Human and environment interaction <p>9.2.2 (VIII)Geography - resources and development</p> <ul style="list-style-type: none"> • <i>Types of resources Utilisation of resources: agriculture, industry, urbanisation, transports and trade</i> <p>9.2.2 (X) Geography - India: resource and development;</p> <ul style="list-style-type: none"> • Changing land use pattern, land degradation, farming etc, water scarcity, stress on energy resources, industrial pollution <p>9.2.2 (X) Science - Regional environment</p> <ul style="list-style-type: none"> • Dams, lakes etc <p>9.2.2 (X) Mathematics Some applications of Trigonometry</p> <p>9.2.3 (IX)Science – Food</p> <ul style="list-style-type: none"> • Food – higher yields • Pollution of water <p>9.2.3 (XI) chemistry - environmental chemistry:</p> <ul style="list-style-type: none"> • Air, water and soil pollution • Strategies for controlling pollution <p>9.3 (VII)Science - Waste management</p>
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<p>degradable, non-biodegradable; toxic, non-toxic, bio-medical</p> <p>9.3.3 Impact of waste accumulation - spoilage of landscape, pollution, health hazards, effect on terrestrial and aquatic (fresh water and marine) life</p> <p>9.3.4 Need for management of waste</p> <p>9.3.5 Methods of safe disposal of waste - segregation, dumping, composting, drainage, treatment of effluents before discharge, incineration, use of scrubbers and electrostatic precipitators</p> <p>9.3.6 Need for reducing, reusing and recycling waste</p> <p>9.3.7 Legal provisions for handling and management of waste</p> <p>9.4 . Environmental Values and Ethics</p> <p>9.4.1 Human rights, fundamental duties and value education</p>	<ul style="list-style-type: none"> • Sewerage and need for a sewerage <p>9.3 (XII) Biology - Biology and human welfare</p> <ul style="list-style-type: none"> • Sewerage treatment <p>9.3.4 9.3.5, 9.3.6 and 9.3.7 (XI) chemistry - Environmental chemistry</p> <ul style="list-style-type: none"> • <i>Industrial waste management</i> <p>9.4 (XII)Business studies- social responsibility of business and business ethics</p> <ul style="list-style-type: none"> • Business and environmental protection <p>9.4 (XII) psychology</p> <ul style="list-style-type: none"> • Promoting pro- environmental behaviour <p>9.4.(1X)English</p> <p>Supplementary Reader , A Triumph of a Surgery, Bholi</p> <p>9.4.1 (IX) political science – democratic politics I</p> <ul style="list-style-type: none"> • Fundamental rights and duties • Human rights <p>9.4.1(IX)English</p> <ul style="list-style-type: none"> • Supplementary Reader The Happy Prince, The Accidental
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<p>9.4.2 Women and Child Welfare</p>	<p>Tour</p> <p>9.4.2 (VIII) History - Our Pasts : III Women and reform</p> <p>9.4.2 VII Political Science - Democracy and Equality</p> <ul style="list-style-type: none"> • Unpacking gender
<p>Class X</p> <p>10.1 Restoring Balance in Ecosystem</p> <p>10.1.1 Need for adopting control measures to check spoilage of landscape</p> <p>10.1.2 Need for conservation and management of water -integrated water shed management, recharging of ground water including rain water harvesting, development of appropriate technology</p> <p>10.1.3 Conservation and management of forests, grasslands, and semi _ arid ecosystems</p> <p>10.1.4 Conservation and management of ocean resources _ marine and coastal eco-systems,</p>	<p>10.1 (X)Hindi Course B</p> <ul style="list-style-type: none"> • Text book Ab Kahan Dusroe Ke Dukh Se, Dukhi Honewale <p>10.1(X)English</p> <ul style="list-style-type: none"> • Text book, Poems, A Tiger in the Zoo, Trees, Prose / Stories, His First Flight, Glimpses of India, Mijbil the Otter, • Supplementary Reader, The making of a Scientist , A Triumph of a Surgery, Bholi <p>10.1.1 (XI) Geography - Fundamentals of physical geography</p> <ul style="list-style-type: none"> • Natural hazards and disasters, causes and management <p>10.1.2 (X) Geography- India :resource and development</p> <ul style="list-style-type: none"> • Need for conservation and management of water resources • Rain water harvesting, multi purpose projects <p>10.1.2 and 10.1.3 (X) Science- Natural resources</p> <ul style="list-style-type: none"> • Conservation of the natural <p>Regional environment</p> <ul style="list-style-type: none"> • Conservation <p>10.1.3 (X) Science – regional environment</p> <ul style="list-style-type: none"> • Water harvesting <p>10.1.4 (X) India – resource and</p>

<p>importance of coral reefs</p> <p>10.1.5 Conservation and management of soil - alternate cropping, judicious use of inputs like water, fertilisers, pesticides; use of manure, bio-fertiliser and bio-pesticide; plantation and conservation of grasslands to check soil erosion; forest conservation including Joint Forest Management (JFM), afforestation including social forestry and agro-forestry</p> <p>10.1.6 Measures to conserve wildlife - national parks, sanctuaries and bio-reserves; breeding programmes for endangered species; preventing poaching, hunting and bio-piracy; enforcement of legal provisions</p> <p>10.1.7 Application of bio-technology</p> <p>10.1.8 Public awareness programmes concerning conservation of water, soil, air, forests and other resources</p> <p>10.1.9 Relevance of indigenous practices</p> <p>10.1.10 Tribal culture and its linkages with forest resources and their conservation</p> <p>II. Pollution</p> <p>10.2.1 Types of pollution - air, water (fresh and marine), soil, radiation and noise</p>	<p>development</p> <ul style="list-style-type: none"> • Conservation and management of forests and wildlife <p>10.1.5 (X) India – resource and development</p> <ul style="list-style-type: none"> • Conservation and management of ocean resources <p>10.1.5 (XII) Sociology –environment and society</p> <ul style="list-style-type: none"> • Social forestry, agro forestry <p>10.1.6 (XII) Economics – Indian economic development</p> <ul style="list-style-type: none"> • Alternative farming and organic farming <p>10.1.6 (VIII) Science - the world of the living</p> <ul style="list-style-type: none"> • Conservation of wild life, bio- diversity, zoos, fauna, endangered specie, poaching <p>10.1.6 (X) Geography -India : resource and development</p> <ul style="list-style-type: none"> • Conservation and management of forests and wildlife <p>10.1.7 (XII) Biology - Biotechnology and its applications</p> <ul style="list-style-type: none"> • Application for agriculture and health <p>10.1.8 (XII) Economics- project work</p> <p>10.1.9 (XII) Political Science- contemporary world politics</p> <ul style="list-style-type: none"> • Indigenous practices <p>10.1.9 and 10.1.10 (XII) sociology –Social institutions continuity and change</p> <ul style="list-style-type: none"> • Tribal culture, marginalization of tribal communities <p>10.2.1 (IX) Science - Food</p> <ul style="list-style-type: none"> • Higher yields: use of pesticides, manures etc • Pollution of air and water
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<p>10.2.2 Sources of pollution and major pollutants; oil spills</p> <p>10.2.3 Effects of pollution on - environment, human health and other organisms</p> <p>10.3. Issues of the Environment</p> <p>10.3.1 Decline in forest, agricultural and marine productivity and its effect on economy</p> <p>10.3.2 Resettlement and rehabilitation of people</p> <p>10.3.3 Energy crisis - urban and rural sectors</p> <p>10.3.4 Greenhouse effect and global warming</p> <p>10.3.5 Climatic changes</p> <p>10.3.6 Acid rain</p> <p>10.3.7 Ozone layer depletion</p> <p>10.3.8 Disaster-natural and manmade; disaster management and its mitigation</p>	<p>10.2.2 (XI) Chemistry - environmental chemistry:</p> <ul style="list-style-type: none"> • Air, water and soil pollution, strategies for controlling pollution <p>10.2.3 (XII) Biology - Biology and human welfare</p> <ul style="list-style-type: none"> • Diseases due to pollution <p>10.2.3 (IX) science – the world of the living</p> <ul style="list-style-type: none"> • What is the living beings made of? • How do we fall sick? <p>10.3.1 (XI) Economics – Indian Economic Development</p> <ul style="list-style-type: none"> • Current challenges facing Indian economy <p>10.3.2(X)Science -Regional environment</p> <ul style="list-style-type: none"> • Big dams and displacement <p>10.3.3, 10.3.4, 10.3.5, 10.3.6 and 10.3.7 (XI) chemistry - environmental chemistry:</p> <ul style="list-style-type: none"> • Greenhouse effect and global warming Climatic changes, Acid rain, Ozone layer depletion <p>10.3.7 (X) Science- world of the living</p> <ul style="list-style-type: none"> • Ozone depletion <p>10.3.8 (IX) Geography - India- land and the</p>
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<p>10.4 <i>Striving for a Better Environment</i></p> <p>10.4.1 Use of efficient and eco-friendly technology</p> <p>10.4.2 Sustainable use of resources</p> <p>10.4.3 Adoption of indigenous practices; sacred groves</p> <p>10.4.4 Consumer education - consumer rights, making correct choices while buying different items, food adulteration</p> <p>10.4.5 Community participation for ecological restoration and conservation</p> <p>10.4.6 Protection of wildlife; stopping of cruelty to animals</p> <p>10.4.7 Enforcement of acts, laws and policies</p>	<p>people</p> <ul style="list-style-type: none"> • A case study of a disaster <p>10.3.8 (XI) Geography - fundamentals of physical geography</p> <ul style="list-style-type: none"> • Natural hazards and disasters: causes and consequences and management; floods and draughts, cyclones, landslide etc <p>10.4.1 (X) Science – Natural Resources Case study of CNG</p> <p>10.4.2 (XI) Economics: Indian Economic Development</p> <ul style="list-style-type: none"> • Current challenges facing Indian economy • Sustainable development <p>10.4.3 (XII) Political Science - contemporary world politics</p> <ul style="list-style-type: none"> • Right of indigenous people <p>10.4.3 (XII) sociology – Environment and society</p> <ul style="list-style-type: none"> • Society and ecology • Tribal culture <p>10.4.4 (IX) Economics – project work</p> <ul style="list-style-type: none"> • Consumer awareness, role of the state in generating consumer awareness <p>10.4.5 (XII) sociology – environment and society, social movements</p> <ul style="list-style-type: none"> • Environmental movements • Society and ecology <p>10.4.6 (XI) Geography- India : land and the people</p> <ul style="list-style-type: none"> • Protection of wild life <p>10.4.6 (VIII) Science - the world of the living</p> <ul style="list-style-type: none"> • Conservation of wild life, bio- diversity, zoos, fauna, endangered specie, poaching
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<p>11.1.3 Society and environment in India; Indian traditions, customs and culture - past and present</p> <p>11.1.4 Population and environment</p> <p>11.1.5 Impact of human activities on environment</p> <p>11.1.6 Environmental problems of urban and rural areas</p>	<p>11.1.2 (VII) Geography: Our environment</p> <ul style="list-style-type: none"> • <i>Environment in its totality; Human environment,</i> • <i>Human and environment interaction</i> <p>11.1.2 (IX) Geography: India- land and the people</p> <ul style="list-style-type: none"> • <i>Climate, Drainage, natural vegetation population</i> <p>11.1.3 (XI) Psychology: Learning</p> <ul style="list-style-type: none"> • Effect of Noise on Learning. <p>11.1.3 (XI) Psychology: Motivation and emotion</p> <ul style="list-style-type: none"> • Post-traumatic Stress Disorder. <p>11.1.3 (XII)Psychology: Meeting life challenges</p> <ul style="list-style-type: none"> • Physical and Environmental Stress. <p>11.1. 3 (XII)Psychology: Social influence and group processes</p> <ul style="list-style-type: none"> • Promoting Pro-environmental Behaviour. <p>11.1. 3 (XII) Psychology : Psychology and life</p> <ul style="list-style-type: none"> • Environmental Effects on Human Behaviour • Human Influence on the Environment – Noise, Pollution, Crowding, and Natural Disasters • Project on Effects of Pollution <p>11.1.3 (XII)sociology – environment and society</p> <ul style="list-style-type: none"> • Society and ecology <p>11.1.4 (VIII) Geography: resources and development</p> <ul style="list-style-type: none"> • Types of resources Human resources- population, distribution and density. <p>11.1.5 and 11.1.6 (X) Geography- India :resource and development</p> <ul style="list-style-type: none"> • Changing land use pattern, land degradation, farming etc, water scarcity, stress on energy resources, industrial pollution
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<p>11.1.7 Natural resources and their depletion</p> <p>11.1.8 Stress on civic amenities; supply of water and electricity, waste disposal, transport, health services</p> <p>11.1.9 Vehicular emissions</p> <p>11.1.10 Urbanization - land use, housing, migrating and floating population</p> <p>11.2 . Environment and Development</p> <p>11.2.1 Economic and social needs - as basic considerations for development Agriculture and industry as major sectors of development</p> <p>11.2.2 Social factors affecting development - poverty, affluence, education, employment, child marriage and child labor; human health HIV/AIDS, social, cultural and ethical values</p>	<p>11.1.5 and 11.1.6 (X) Science - Regional environment</p> <p>11.1.5 and 11.1.6 (X) Geography - India : resource and development</p> <ul style="list-style-type: none"> • Globalisation <p>11.1.5 and 11.1.6 (XI) business studies</p> <ul style="list-style-type: none"> • Privatisation and globalisation <p>11.1.6 (X)history – India and the contemporary world – II</p> <ul style="list-style-type: none"> • Urbanisation and urban lives • Patterns of urbanisation, • Growth of cities, social change and urban life <p>11.1.6 (VII) History - our pasts II</p> <ul style="list-style-type: none"> • Colonialism and urban change, de-urbanisation and the emergence of new towns <p>11.1.7 (X)Science – Natural resources</p> <p>11.1.8 (XI) fundamentals of physical geography:</p> <ul style="list-style-type: none"> • Geographical perspective on selected issues and problems: urban waste disposal, stress on resources, problem of slums <p>11.1.9 (XI) Chemistry- environmental chemistry:</p>
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<p>11.2.3 Impact of development on environment - changing patterns of land use, land reclamation, deforestation, resource depletion, pollution and environmental degradation</p> <p>11.2.4 Impact of liberalization and globalization on - agriculture and industries, dislocation of manpower and unemployment, implications for social harmony</p> <p>11.2.5 Role of society in development and environment - public awareness through education, eco-clubs, population education programme, campaigns, public participation in decision-making</p> <p>11.3 . Environmental Pollution and Global Issues</p> <p>11.3.1 Air, water (fresh and marine), soil pollution - sources and consequences</p> <p>11.3.2 Noise and radiation pollution - sources and consequences</p> <p>11.3.3 Solid, liquid and gaseous pollutants</p> <p>11.3.4 Handling of hazardous materials and processes; handling and management of hazardous wastes</p> <p>11.3.5 Ozone layer depletion and its effect</p>	<ul style="list-style-type: none"> • <i>Vehicular emissions</i> <p>11.1.10(XI) Geography- fundamentals of physical geography:</p> <ul style="list-style-type: none"> • <i>Geographical perspective on selected issues and problems:; urbanisation, problems of slums</i> <p>11.2 (XI)English</p> <ul style="list-style-type: none"> • Task: Note Making, Sources of Energy Green Sahara <p>11.2.1 (XI) political science - political theory</p> <ul style="list-style-type: none"> • What is development <p>11.2.2(XI)Economics – Indian economic development</p> <ul style="list-style-type: none"> • Poverty in India, unemployment etc <p>11.2.1 and 11.2.2 (XI)Economics – Indian Economic Development</p> <ul style="list-style-type: none"> • Current challenges facing Indian economy, poverty, rural development, sustainable economic development <p>11.2.2 (XI)sociology -social change and the economy</p> <p>11.2.2 (X) Geography- India: resource and development;</p> <ul style="list-style-type: none"> • Changing land use pattern, land degradation, farming etc, water scarcity, stress on energy resources, industrial pollution <p>11.2.3 (VIII)Science – Natural Resources 11.2.3 (X) Geography - India: resource and development</p> <p>11.2.4 (XI) business studies</p> <ul style="list-style-type: none"> • <i>Privatisation and globalisation</i> <p>11.2.4 (X) Economics: Globalisation 11.2.4 (XI)Economics – Indian Economic</p>
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<p>11.3.6 Greenhouse effect; global warming and climatic changes and their effects on human society, agriculture, plants and animals</p> <p>11.3.7 Pollution related diseases</p> <p>11.3.8 Disasters - natural (earthquakes, droughts, floods, cyclones, landslides) and man-made (technological and industrial); their impact on the environment; prevention, control and mitigation</p> <p>11.3.9 Strategies for reducing pollution and improving the environment</p> <p>11.4 . Energy</p> <p>11.4.1 Changing global patterns of energy consumption - from ancient to modern times</p> <p>11.4.2 Energy consumption as a measure of quality of life</p> <p>11.4.3 Rising demand for energy, gap between demand and supply (Indian context)</p> <p>11.4.4 Conventional energy sources - fossil fuels and firewood, potential (Indian context)</p>	<p>Development</p> <ul style="list-style-type: none"> Economic reforms since 1991 <p>11.2.5 (XI)sociology – Environment and society</p> <ul style="list-style-type: none"> Society and ecology <p>11.3 (XI)English</p> <ul style="list-style-type: none"> Task: Subtitling - A new deal for old cities <p>11.3.1, 11.3.3 , 11.3.4 and 11.3.5 (XI)chemistry - Environmental chemistry</p> <ul style="list-style-type: none"> Air , water , soil pollution, solid liquid and gaseous pollutants, ozone layer depletion and its effects, green house effect <p>11.3.7(XII) Biology- Biology and human welfare;</p> <ul style="list-style-type: none"> Diseases due to pollution <p>11.3.7 (IX) Science - What is the living beings made of?</p> <p>11.3.7 (IX) Science - How do we fall sick?</p> <p>11.3.8 (IX) Geography - India- land and the people,</p> <ul style="list-style-type: none"> A case study of a disaster <p>11.3.8 (XI) Geography - fundamentals of physical geography:</p> <ul style="list-style-type: none"> Natural hazards and disasters: causes and consequences and management; floods and draughts, cyclones, landslide etc <p>11.3.9 (X) Science - Natural resources</p>
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<p>and limitations of each source, methods of harnessing and environmental consequences of their use</p> <p>11.4.5 Non-conventional energy sources - types of non-conventional sources (bio-mass, solar, wind, ocean, hydel, geothermal, nuclear), potential (Indian context) and limitations of each source, methods of harnessing and their environmental consequences, need to promote non-conventional energy sources</p> <p>11.4.6 Conservation of energy sources - efficiency in production, transportation and utilization of energy · Planning and management of energy; future sources of energy _ hydrogen, alcohol, fuel cells Enhancing efficiency of the devices and optimising energy utilisation</p> <p>11.4.7 Planning and management of energy; future sources of energy _ hydrogen, alcohol, fuel cells</p> <p>11.4.8 Enhancing efficiency of the devices and optimizing energy utilization</p>	<ul style="list-style-type: none"> • Case study on chipko movement and CNG use and silent valley <p>11.4 Mathematics XI and XII: Relations and functions</p> <p>11.4 Mathematics XI and XII: Inequality</p> <p>11.4 Mathematics XI and XII: Permutation and combinations</p> <p>11.4 Mathematics XI and XII: Probability</p> <p>11.4 Mathematics XI and XII: Relations and functions</p> <p>11.4.1 (XII) Political Science : Contemporary world politics-</p> <ul style="list-style-type: none"> • Environment and natural resources in global politics <p>11.4.3 (IX) Geography – India: resource and Development;</p> <ul style="list-style-type: none"> • Stress on energy resources in India <p>11.4.4 11.4.5 and 11.4.6 (X) Geography – India: resources and development</p> <ul style="list-style-type: none"> • Sources of energy, conventional non-conventional, distribution and conservation
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<p><i>Class XII</i></p> <p>12.1 . Biodiversity</p> <p>12.1.1 Concept and value of biodiversity</p> <p>12.1.2 Types of biodiversity - species, eco and genetic</p> <p>12.1.3 Balance in nature</p> <p>12.1.4 Biodiversity for sustenance of mankind</p> <p>12.1.5 Resource limitations</p> <p>12.1.6 Ecological role of biodiversity</p> <p>12.1.7 Interdependence between different species</p> <p>12.1.8 India as a mega diversity nation</p> <p>12.1.9 Economic potential of biodiversity</p> <p>12.1.10 Loss of biodiversity - threatened, endangered and extinct species</p> <p>12.1.11 Strategies for conservation of biodiversity - in situ and ex situ</p> <p>12.1.12 Mitigating the people-wildlife conflict</p> <p>12.2 Environmental Management</p> <p>12.2.1 Need for environmental management vis-à-vis development</p> <p>12.2.2 Aspects of environmental management - ethical, economic, technological and social</p>	<p>12.1 (XII) Psychology: Psychology and life</p> <ul style="list-style-type: none"> • Human-Environment Relationship <p>12.1 (XI) Geography - Physical geography</p> <ul style="list-style-type: none"> • Concept of bio- diversity, types • Biodiversity and conservation, eco-systems, bi- chemical cycles, and ecological balance <p>12.1 (XII) Biology- Ecology and environment</p> <ul style="list-style-type: none"> • Centre for diversity and conservation of bio- diversity, national parks and sanctuaries <p>12.1 (XII) Hindi Core</p> <ul style="list-style-type: none"> • Text book – AARAH BHAG 2, Kaale Megha Pani de, Baayan Darshan, Shirish ke pool <p>12.1 (XII) Urdu</p> <ul style="list-style-type: none"> • Text book - Bajooka , Is Abaad Kharabe-mein, Mulke be Sehroshaam, Yad Nagar • Supplementary Reader, Bewa,Jalti Jhadi <p>12.1 (XII) English</p> <ul style="list-style-type: none"> • Text book , Journey to the end of the Earth, (The English Core textbooks for classes XI and XII are titled, HORNBILL and FLAMIGO). The description of the birds and habitat is given at the back cover. <p>12.2.1 and 12.2.3 (XI) Economics – Indian Economic Development Sustainable economic development, limited availability of resources</p> <p>12.2 .2 (XII) Psychology: Attitude and social cognition.</p> <ul style="list-style-type: none"> • Green Environment –Attitudes towards
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<p>12.2.3 Legal provisions for environmental management</p> <p>12.2.4 Approaches for environmental management - economic policies, environmental indicators, setting of standards, information exchange and surveillance</p> <p>12.3 Sustainable Development</p> <p>12.3.1 Concept of sustainable development</p> <p>12.3.2 Concept of sustainable consumption</p> <p>12.3.3 Need for sustainable development for improving the quality of life for the present and future</p> <p>12.3.4 Challenges for sustainable development - social, political and economic considerations</p> <p>12.3.5 Support base for sustainable development - political and administrative will, dynamic and flexible policies, appropriate technologies, comprehensive review and revision mechanism, humane approach</p> <p>12.3.6 Development of skilled manpower</p> <p>12.3.7 Role of individual and community</p>	<p>the Environment.</p> <ul style="list-style-type: none"> • Project on Attitudes towards and Awareness of Waste Management. <p>12.2.2 (XII) Psychology: Psychology and life</p> <ul style="list-style-type: none"> • Promoting Pro-environmental Behaviour. <p>12.2.2 (X) Science – Natural Resources</p> <ul style="list-style-type: none"> • Conservation of natural resources <p>12.2.3 (X) Science - natural resources</p> <ul style="list-style-type: none"> • Legal perspective in conservation <p>12.2.3 and 12.2.4 (XII) Political Science - Contemporary world politics</p> <ul style="list-style-type: none"> • Environmental movements and evolution of global environmental norms <p>12.3 1 to 12.3.5 (XI) Economics – Indian E Economic Development</p> <ul style="list-style-type: none"> • Sustainable development • Concept and need, social political and economic dimensions of sustainable development <p>12.3.6 to 12.3.7 (XI) Economics – Indian Economic Development</p> <ul style="list-style-type: none"> • Human capital formation • How people become resource, role of human capital in economic
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<p>12.3.8 Role of national and international agencies (both governmental and non-governmental)</p> <p>12.4 . Sustainable Agriculture</p> <p>12.4.1 Need for sustainable agriculture</p> <p>12.4.2 Green revolution - impact on environment</p> <p>12.4.3 Importance of soil for crops</p> <p>12.4.4 Irrigation systems, use of manure and fertilizers</p> <p>12.4.5 Crop protection - major plant pests and diseases, measures for their</p>	<p>development</p> <p>12.3.8 (XI) Economics – Indian economic Development</p> <p>12.4 Mathematics XI and XII: Relations and functions</p> <p>12.4 Mathematics XI and XII: Permutation and combinations</p> <p>12.4 Mathematics XI and XII: Probability</p> <p>12.4 Mathematics XI and XII: Linear Programming</p> <p>12.4 Mathematics XI and XII: Differential equations</p> <p>12.4.1 (XI) Economics – Indian Economic Development</p> <ul style="list-style-type: none"> • Need for sustainable agriculture <p>12.4.2 , 12.4.3 and 12.4.4 (X) Geography - India – resources and their development</p> <ul style="list-style-type: none"> • Agriculture; types of farming, major crops, cropping pattern, technological and institutional reforms (hybrid varieties, green revolution etc) contribution of agriculture to national economy- employment output food security , impact of globalisation, agriculture in national economy <p>12.4.4 (IX) Science – Food</p> <ul style="list-style-type: none"> • Higher yields, fertilisers, manures, protection from pests and diseases, organic farming <p>12.4.4 (XII) Biology - Biology and human welfare , Biotechnology and its applications in agriculture, bio-pesticides and fertilizers</p> <p>12.4.5 (XII) Biology - Biology and human welfare , Biotechnology and its</p>
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<p>control _ agrochemicals</p> <p>12.4.6 Impact of agrochemicals on environment</p> <p>12.4.7 Elements of sustainable agriculture - mixed farming, mixed cropping, crop rotation, biological and economic considerations, use of bio-fertilizers and bio-pesticides, biological pest control, integrated pest management</p> <p>12.4.8 Applications of biotechnology in crop improvement</p> <p>12.4.9 Management of agricultural produce - storage, preservation, transportation and processing</p>	<p>applications in agriculture, bio- pesticides and fertilizers</p> <p>12.4.6 (XII) Biology - Biology and human welfare , Biotechnology and its applications in agriculture, bio- pesticides and fertilizers</p> <p>12.4.7 (XII) Biology - Biology and human welfare , Biotechnology and its applications in agriculture, bio- pesticides and fertilizers</p> <p>12.4.8 (XII) Biology - Biology and human welfare; biotechnology and its applications in agriculture</p> <p>12.4.9 (IX) Economics - Food Security</p> <ul style="list-style-type: none"> • Public distribution system; procurement of food grains, ration shops, cooperative shops etc
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