

Environment & Ecology

Notes Environment

1. Ecology Functions of an ecosystem, terrestrial & aquatic ecosystem.
2. Environmental Pollution - Air, Water, Soil, Noise Thermal Plastic.
3. Solid Waste, e-waste, radio active waste etc.
4. Types of pollutants, acid Rain, Fly ash, Smog etc
5. Bioremediation technique etc.
6. Land degradation, sand mining, & Ground water scarcity etc.
7. Environmental Impact assessment
8. Other contemporary issues.

NCERT -Biology - 12 Uith 10 or

9. Biodiversity
10. Indian Biodiversity
11. Scheduled Animals of wildlife protection act, 1972
12. Animal Diversity of India.
13. Plant diversity of India
14. Marine Organisms
15. Protected Area Network
16. Conservation Efforts.

Climate change -

17. Global Warming Green Houses effect, Climate forcing, global warming potential etc.
18. Ocean acidification
19. Ozone Depletion

Impact of Climate Change - India

17. Agriculture & food Security
18. Climate change and health.
19. Water Security
20. Ecosystem and Biodiversity.

Mitigation Strategies :

21. Carbon Sequestration
22. Carbon sink, carbon credit, Carbon offsetting, carbon tax, Geo-engineering etc.
India and climate change :-
23. National action plan on climate
24. Green Building
25. GRIHA
26. BSE Greenex
27. National Initiative on climate resilient Agriculture etc.

Acts and Policies:

28. Wild life protection Act -1972
environmental Protection Act. 1986
Forest Act 2006 ect
29. Institutions and measures - India and world:
30. Clean development Mechanism.
31. Joint Implementation
32. CAMPA
33. National Wildlife Action plan.
34. National Afforestation and Eco-development.
35. National Mission for electric Mobility etc.
36. Environment organizations and conventions.
37. Animal Welfare board
38. Wildlife crime control board etc.
39. UNFCC
40. TRAFFIC
41. IUCN
42. CBD
43. UNCCD etc.

HISTORY

<u>Prelims</u>	<u>Mains</u>
<ol style="list-style-type: none"> 1. Decline of Mugal Empire 2. Indian State and Society in the 18 century 3. European Penetration & British Conquest of India. 4. Economic policies and the Structure of Government of British in India (1757-1857) 5. Administrative Organization and Social & cultural policy. 6. Social & Cultural Awakening in the 1st half of 19th century. 7. The Revolt of 1857 8. Administrative changes after 1858 9. The economic Impact of British Rule. <p style="text-align: right; margin-right: 20px;">Source : (NCERT - 12 Old bipan chandra)</p>	<ol style="list-style-type: none"> 1. Revolt of 1857 2. Civil Rebellion and tribal uprising 3. Peasant movements and uprising after 1857 4. Foundation of congress 5. Socio-Religious Reforms & National Awakeing 6. The Economic Critique of Colonialism <p style="text-align: right; margin-right: 20px;">Bipan Chndra</p> <p style="text-align: right; margin-right: 20px;">Source : (India's Struggle for Independence)</p>

Medieval India

1. India during Arab Invasions
2. Delhi Sultanate
3. Through the eye of Travellers.
4. Bhakti Sufi movements and traditions
5. Vijayanagara and Bahamani Kingdom.
6. Mughal Empire.
7. Rise of Marathas & their Kingdom
8. Coming of the Europeans to India- Establishment of British rule in India.

Source : (Satish Chandra)

Ancient India :

9. Prehistoric period
10. Harappan/Indus Valley Civilization
11. Vedic Period
12. Religious reforms like Buddhism and Jainism
13. Mauryan and post Mauryan age
14. Sangam Age
15. Gupta Age & Harshvardhana Age.
16. Central Asian contacts and their results.
17. Age of Satvahanas.

18. South Indian Empires- Pallavas, Chalukyas, Rashtrakutas & Cholas.

Source : (Old NCERT)

Modern History:

19. Freedom Struggle
20. Extremist phase - (1905-17)
Emergence of Extremist leaders.
The Partition Of bengal
Morley Minto Reforms
Swadeshi Movement
Home rule movement

The Gandhian Era (1917-47)

21. Gandhi Advent & Achivement
22. Rowlatt act, Jallianwala Bagh Massacre & Khilafat movement Non-Co-operation Disobedience and quit India Movement
23. British response & negotiations
24. INA and Subash Chandra Bose
25. Indian Independence act.

Source : (Bipan Chandra or any book preffered by the reader for covering the following topics:)

ECONOMY

Topics

1. Indian Economy on the Eve of Independence
2. Indian economy (1950-1990)
3. Liberalization, privatization and globalization (LPG)
4. Poverty and Related Issues
5. Human capital formation in India
6. Rural development
7. Employment : Growth & Informatization & other issues

Population Issues : -

8. Demography
Census Study.
9. Environment & Sustainable development
10. Comparative development experiences of India & it's Neighbours.

Source (NCERT - 11th Indian Economic development and chapter - 2, 3, 4, 5, & 6 from Ramesh Singh.)

Prelims	Mains
<ol style="list-style-type: none"> 1 National Income Accounting 2 Money and Banking 3 Income Determination 4 The Government Budget & Economy 5 Open Economy Macro economics 6 Introduction 7 Inflation and Business cycle 8 Indian Financial Market. 9 Banking In India. 10 Agricultrue & Food Management. 11 Industry & infrastructure 12 Service Sector 13 Insurance in India. 14 Securities market in India. 15 External sector in India 16 Tax structure in India. 17 Public Finance in India. 18 International Economic Organization. 19 Sustainability & Climate Change 20 Human Development in India 21 Burning Socio- economic issues. 22 Economic Concepts and terminologies. 23. Securities market in India. <p style="text-align: right; margin-right: 20px;">Source : (NCERT 12) Ramesh Singh</p>	<ol style="list-style-type: none"> 1. Indian economy & issues 2. Relating to planning mobilization of resources growth. 3. Development and employment 4. Inclusive growth & issues arising from it 5. Government Budgeting 6. Transport & Marketing of agriculture produce and issues and related constraints, e-technology in the aid of farmers. 7. Issues related to direct & indirect of farm subsidies and minimum support prices. 8. Public distribution system objective functioning limitations revamping. 9. Issues of buffer stock & food security 10. Tecnology missions, economics of animals rearing. 11. food processing & Related industries in India- Scope & significance , location,, upstream, and downstream requirements supply chain management. 12. Land reforms in India. <p style="text-align: right; margin-right: 20px;">Source : (NCERT 12) Ramesh Singh</p>

POLITY AND CONSTITUTION

Prelims

1. Constitution : Why & How?
2. Constitution as a living document
3. The philosophy of the constitution
4. Rights in the Indian constitution.
5. Executive Legislature, Judiciary
6. Federalism, local Governments
7. Election and representation
Source : (Indian constitution At work, NCERT 11)
8. Historical Background.
9. Making of the constitution.
10. Salient features of the constitution
11. Preamble of the constitution
12. Union and its territory.
13. Citizenship.
14. Fundamental Rights.
15. Directive Principles of state policy.
16. Fundamental Duties.
17. Amendment of the Constitution.
18. Basic Structure.
19. Parliamentary System
20. Federal System
21. Centre- State Relations / Inter state relations
22. Emergency Provisions
23. Special Status of J & K
24. Special Provisions for some states
25. Panchayati Raj.
26. Urban Local Governments.
27. Union Territories.
28. Scheduled and tribal Areas.
29. President and vice - president
30. Governor prime Minister / CM
31. Council of Ministers / State Council of Ministers, Cabinet Committees.
32. Parliament, Parliamentary Committees, forums, Group, State Legislature.
33. Supreme Courts, High court & Subordinate courts, Judicial Review, Judicial Activism, Public Interest Litigation.
34. NITI Ayog
35. National Human Rights Commission State
36. State Human Right Commission
37. Central Information Commission

Mains

Indian Constitution

1. Historical Underpinning
2. Evolution
3. Features.
4. Daily Current affairs
5. New analysis
6. Over lapping topics of prelims put more focus on centre state relations and devolution of power.

Source : (Indian Constitution Laxmikanth)

Prelims	Mains
38. State Information Commission 39. Central Vigilance Commission 40. Central Bureau of Investigation 41. Lokpal & Lokyuktas. 42. Constitutional Bodies. 43. Other Constitutional Dimensions and political Dynamics. Source (Laxmikath 5th edition)	

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GEOGRAPHY

Prelims	Mains.
<ol style="list-style-type: none"> 1. The Earth in the Solar system 2. Globe - latitudes and Longitudes Maps 3. Motion of the Earth and Major Domains of the Earth 4. Major Landforms of the Earth 5. India. Size & Location Physical Features, Climate Drainage, Vegetation and Wildlife, Environment. 6. Inside our Earth 7. Natural vegetation and wildlife. 8. Human Environment Settlement Transport and Communication 9. Human Environment Interaction : The Tropical & the Subtropic Regions 10. Life in Temperate Grasslands, Life in the deserts 11. Land, Soil, Water, Natural Vegetation and wildlife resoures 12. Mineral and power resources. 13. Agriculture and Manufacturing Industries. 14. Human Resources. <p style="text-align: center; margin: 5px 0;">Source : (6-12th NCERTS)</p> <ol style="list-style-type: none"> 15. Indian Physiography : 16. The Northern Mountains 17. The Great plains 18. The Peninsular Uplands 19. The Indian Coasts and Islands. <p>Drainage.</p> <ol style="list-style-type: none"> 20. Himalyan Rivers, Indus River System 21. Ganga River system 22. Brahmaputra River System 23. The peninsular River System 24. The East flowing Rivers West flowing • Rivers. 25. Main Rivers and Their tributaries. <p style="text-align: center; margin: 5px 0;">Source : (NCERT - 11 th)</p> <ol style="list-style-type: none"> 26. Human Geography ; 27. Primary, Secondary Tertiary and Quaternary Activites- <p>Transport and Communication.</p> <ol style="list-style-type: none"> 28 Railways 29 Roads, And highways. 30. National Waterways. 	<ol style="list-style-type: none"> 1. Distribution of Key natural resources across the world (including) South Asia & the Indian subcontinents 2. Factors responsible for the location of primary, secondary and tertiary sector industries in various parts of the world) including India. 3. Major crops, cropping patterns in various parts of the country, different types of irrigation and irrigation systems storage.

Prelims	Mains.
<p>31. Major and Minor ports. 32. Inland Water ways. 33. Land Resources and Agriculture : 34. Land Utilization in India. 35. Types of Farming 36. Cropping and Irrigation. 37. Types of crops 38. Policies. 39. Minerals and energy Resources. 40. Renewable Energy 41. Nuclear energy, solar energy, Wind energy 42. India's power scenario 43. Thermal power plants 44. Metallic and nonmetallic minerals. Source : (NCCERT 12th)</p> <p>45. Oil refineries and pipelines 46. petroleum and coal 47. Natural Gas, CNG, LPG etc. 48. Various other sources of Energy</p> <p>Industries : 49. Agro based 50. Cotton 51. Jute textile 52. Sugar 53. Iron 54. Steel 55. Silk 56. Tea-Coffee 57. Government Policies associated with industries.</p>	
Prelims	Mains
<p>1. Landforms and soil : 2. Mineral and rocks 3. Geomorphic Processes. 4. Volcanism, Earthquake. 5. Land forms, - Desert Limestone Lakes Coastal Islands/ coral reefs. 6. Acidity of soil types of soil 7. Major soil groups in India 8. Soil texture and erosion etc. 9. Climatoglogy: 10. Composition and structure of atmosphere. 11. Solar Radiaction, Heat balance & Temperature.</p>	<p>1. Same sources as Prelims. 2. Salient features of world's physical geography 3. Important geophysical phenomenon such as earth quakes, Tsunami, Volcanic Activity, Cyclone etc. 4. Geographical features and their locations. 5. Change in critical geographical features (Including water - bodies and ice-caps) and in flora and fauna and the effects of such change.</p>

Prelims	Mains.
<p>13. Atmospheric Circulation and weather systems.</p> <p>14. Water in the atmosphere.</p> <p>15. Western disturbances, El-Nino</p> <p>16. La-Nina and southern Oscillation. etc.</p> <p>17. Monsoon and seasons etc.</p> <p>Source ; (G.C. Leong- Chapter 3 to 11 and 13-14 11 th NCERT - Unit 3 Indian Physical Environment)</p> <p>1. World Climate and vegetation.</p> <p>2. The Hot Wet equatorial Climate</p> <p>3. The Tropical Monsoon and tropical Marine Climates.</p> <p>4. The Savanna and Sudan Climate.</p> <p>5. The Hot Desert and Mid-Latitude Climate</p> <p>6. The Steppe Climate</p> <p>7. The China- Type Climate</p> <p>8. The Siberian Type Climate</p> <p>9. The Arctic and Polar Climate etc.</p> <p>Hydrosphere :</p> <p>10. Ocean, Seas and Salinity</p> <p>11. Ocean Currents</p> <p>12. Composition and Temperature distribution</p> <p>Source : (GC leong - Chapter - 12, 15 to 25 and NCERT 11th Unit 5)</p>	
<p style="text-align: center;">KOTHARI INSTITUTE</p>	

Art and Culture

1. Architecture & Sculptures.
2. Religion & Philosophy
3. Indian Painting
4. Indian Music
5. Indian Dance
6. Indian Theatres
7. Indian Cinema
8. Indian Language & Literature
9. Arts & Crafts
10. Science and echnology in Ancient India.
11. Indo-Islamic Culture.

Source : (CCRT Website :)

International Relatins

1. India's Foreign Plicy
2. South Asia
3. India and it's Neighbourse
4. SAARC
5. Central ASia
6. West Asia
7. ASia - Pacific
8. India & Africa
9. India & Europe
10. India - US China
11. Indian Ocean
12. Indian Diaspora

World History

Mains

1. Industrial Revolution
2. American Rvolution
3. French Revolution
4. Unification of Germany & Italy
5. Rise of Socialism
6. World War - 1
7. The League of Nations
8. International Relations from 1919-1939

World War - II

1. United Nations Organization
2. Conflict in the Middle East
3. The Rise of fascism in Italy Germany, Japan, & Spain
4. Russian Revolution
5. Communist Rule in USSR
6. China 1900-1949
7. China Since 1949

8. Colonization & Decolonization
9. USA Before and after World War - II

Source : (Norman Lowe)

Socail Issues

1. Salient Features of Indian Society
2. Role of women & Women's Organisation, Population & Associated issues , poverty and developmental issues.
3. Urbanization , their problems and their remedies.
4. Effect of Globalization on indian society• Social Empowerment, communalism
5. Regionalism & Secularism

Source : (NCERT Sociology 12 th 1, 2, 3, 5 & 6 Chapter)

Ethics

1. 2nd ARC - 4th report

Source : (Lexicon)

Disaster Management

1. 2nd ARC.

Science & Technology

1. Biotechnology
2. Energy
3. Health
4. Nanotechnology
5. Robotics.
6. Space Technology
7. Nuclear Technology
8. Defence Technology

Source : (Class notes, NCERTs & Current affairs)