



# UNIVERSITY OF MYSORE

CPDPS & University  
Career Hub

## STUDENTS' HANDBOOK: CHECKLIST OF TOPICS FOR ALL COMPETITIVE EXAMS

Prepare, Practice & Perform

Success depends on time-bound  
Preparation (99%) with sound  
Inspiration(1%)

## **SUBJECT AREAS CHECKLIST FOR COMPETITIVE EXAMS**

### **INDIAN HISTORY (ANCIENT HISTORY)**

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#### **HOI001 PRE HISTORIC HUMAN ANCESTORS**

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#### **HOI002 INDIA DURING STONE AGE**

- Periodization of Indian Pre History
- Sources of Pre History
- Palaeolithic Or Old Stone Age
- Mesolithic Or Middle Stone Age
- Neolithic Age Or New Stone Age
- Chalcolithic Age
- Major Chalcolithic Cultures
- Early Iron Age
- Geographical Distribution and Characteristics

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#### **HOI003 INDUS VALLEY CIVILIZATION**

- IVC Geography and Archaeological Findings
  - Major cities, Town Planning
- IVC Society and Culture
  - Script and Language, Crafts, Religions
  - Seals and Images
- IVC Economy
  - Harappan Trade, Agriculture
  - Domestication of animals
  - Weights and Measures
- Decline of Harappan Culture

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#### **HOI004 INDIA DURING VEDIC PERIOD**

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##### **RIG VEDIC PERIOD**

- Sources for Reconstructing Vedic Society and Culture
- Geography of the Rig Vedic Period - Area of Settlement
- Political Organisation and Evolution of Monarchy
- Social Organization, Economy
- Religious Practices and Culture

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##### **LATER VEDIC PERIOD**

- Geography of the later Vedic Phases - Area of Settlement
- Political System, Social Organisation and Varna System
- Economy, Religious Practices and Culture

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#### **HOI005 JAINISM AND MAHAVIRA**

- Birth and Life of Mahavira (540- 468 B.C.)
- Teachings of Mahavira
- Organisation and Sects of Jainism
- Literature of Jainism
- Councils, Spread and Royal Patrons

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#### **HOI006 BUDDHISM**

- Birth and Life of Buddha (563-483 BC)
- Teachings of Buddha
- Organisation and Sects of Buddhism

- Literature of Buddhism
- Councils, Spread of and Royal Patronage
- Causes for the Decline

### **HOI007\_MHAJANAPADAS\_PERIOD**

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- Republics and Monarchies
- 16 Mahajanapadas
- Magadha
  - Key Dynasties-Haryanka dynasty,Shishunaga Dynasty,Nanda Dynasty
- Persian Invasions
- Alexander's Invasion
- Society and Rise of urban centres
- Economy,System of Administration

### **HOI008\_MAURYAN\_EMPIRE**

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- Sources: Inscriptions and Sites and Literary Sources (The Arthashastra)
- Rulers and Political History of the Mauryas
  - Chandragupta and Bindusara
  - Megasthenes
  - Asoka and His Successors
- Asoka's Inscriptions and Sites
- Asokan Reign,Asoka and Buddhism
- Asoka Policy of Dhamma
- Mauryan Administration,Foreign Relations
- Decline of the Mauryas

### **HOI009\_POST\_MAURYAN\_INDIA**

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- Society: Evolution of Jatis
- Satavahanas,Sungas and Kanvas
- Sakas, Kushanas , Kanishka

### **HOI010\_GUPTA\_PERIOD**

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- Sources of Gupta Rule
- Rulers and Political history of Guptas Chronology
- Foreign Travellers Visit – Fahien's Visit
- Gupta Administration
- Other Important Dynasties
- Society Religion and Culture
- Urban centres in Gupta period
- Economy, Science and Technology
- Literature, Later Guptas
- Other Important Dynasties

### **HOI011\_HARSHAVARDHANA\_PERIOD**

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- Harsha Military Conquests
- Harsha and Buddhism
- Administration, Society and Culture, Economy

### **HOI012\_SANGAM\_PERIOD (SOUTH INDIAN DYNASTIES)**

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- Sangam Literature
- South Indian Dynasties
  - Cholas ,Cheras , Pandyas
- Sangam Polity, Society and Culture

- Economy of Sangam Period
- Foreign Dynasties
- Commercial Contacts with the Outside World
- Schools of Art

## **HISTORY (MEDIEVAL INDIA)**

### **HOI013\_DYNASTIES\_EARLY\_MEDIEVAL-INDIA**

#### **PERIOD (750-1200)**

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- The Pratiharas (8th to 10th Century)
- The Palas (8th to 11th Century)
- The Tripartite Conflict
- The Senas (11th to 12th Century)
- The Rajaputas
- Pallavas, Chalukyas, Rashtrakutas
- Indian Feudalism, Administration
- Society and Culture, Economy and the decline of Trade

### **HOI014\_CHOLAS\_AND\_SOUTH\_INDIAN\_KINGDOMS**

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- Chola Rulers and Political History
- Chola Administration
- Socio-Economic Life
- Education and Literature
- The Cheras (9<sup>th</sup> to 12<sup>th</sup> Century)
- The Yadavas (12<sup>th</sup> to 13<sup>th</sup> Century)
- Contact with South-East Asia

### **HOI015\_EARLY\_MUSLIM\_INVASIONS**

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- The Arab Conquest of Sindh
- Mahmud of Ghazni, Muhammad Ghori

### **HOI016\_THE\_DELHI\_SULTANATE**

#### **PERIOD (1206-1526 AD)**

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- Slave Dynasty
- Khalji Dynasty (1290-1320 AD)
- Tughlaq Dynasty (1320-1414 AD)
- Provincial Kingdoms and Resistance by Indian Chiefs
- Sayyid Dynasty, Lodi Dynasty
- Attacks by Mongols and other Turks
- Administration, Economy, Urbanization
- Society and Culture, Scientific Knowledge and legal System
- Challenges leading to the decline of the Sultanate

### **HOI017\_AFGHANS\_RAJPUTS\_AND\_MUGHALS**

#### **STRUGGLE FOR EMPIRE IN NORTH INDIA**

#### **(AFGHANS, RAJPUTS AND MUGHALS)**

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- Struggle between Ibrahim Lodi and Babur
- The Battle of Panipat
- Babur's problems after the Battle of Panipat
- Struggle with Rana Sanga
- Problems of the Eastern Areas and the Afghans
- Babur's Contribution and Significance of his Advent into India

- Humayun and the Afghans
- Early Activities of Humayun, and the Tussle with Bahadur Shah
- The Gujarat Campaign
- The Bengal Campaign, and Struggle with Sher Khan

### **HOI018\_ESTABLISHMENT\_NORTH\_INDIAN\_EMPIRE**

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- Social and Political Background of Bihar and the Rise of Sher Shah to Power
- The Sur Empire (1540-56)
- Contributions of Sher Shah
- Coinage, Architecture

### **HOI019\_EMPIRE\_OF\_AKBAR\_CONSOLIDATION\_EXPANSION**

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- Conflict with the Afghans - Hemu
  - 2<sup>nd</sup> Battle of Panipat
- Struggle with the Nobility: Bairam Khan's Regency; Revolt of Uzbek Nobles
- Early Expansion of the Empire (1560-76) - Malwa, Garh-Katanga, Rajasthan, Gujarat, Eastern India
- Relations with the Rajputs - Growth of a Composite Ruling Class
- Rebellions, and Further Expansion of the Empire in the North West

### **HOI020\_GOVERNMENT\_UNDER\_AKBAR**

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- Akbar's Concept of Suzerainty
- Structure of Government, Central and Provincial -the Vikalat, the Central Ministries, Provincial Government, District and Local Government
- The Working of Government - the Ruler, Land-Revenue System, the Dahsala System, the Mansabdari System and the Army

### **HOI021\_AKBAR\_AND\_HIS\_RELIGIOUS\_VIEWS**

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- Relations with the Ulama and Social Reforms
- The Early Phase (1556-73)
- The Second Phase (1573-80) - the Ibadat Khana
- Debates - the Mahzar - Breach with Orthodox
- Ulama - Re-organisation of Madadd-i-Maash Grants
- Third or Final Phase - Din-i-Ilahi - State
- Policies and religious toleration

### **HOI022\_THE\_DECCAN\_AND\_THE\_MUGHALS**

#### **PERIOD (UP TO 1657)**

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- The Deccani States up to 1595
- Mughal Advance towards the Deccan
- Mughal Conquest of Berar, Khandesh and Parts of Ahmadnagar
- Rise of Malik Ambar Mughal Attempt at Consolidation (1601-27)
- Extinction of Ahmadnagar, Acceptance of Mughal
- Suzerainty by Bijapur and Golconda
- Shah Jahan and the Deccan (1636-57)
- Cultural Contribution of the Deccani States

### **HOI023\_FOREIGN\_POLICY\_OF\_THE\_MUGHALS**

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- Akbar and the Uzbeks
- The Question of Qandahar and Relations with Iran
- Shah Jahan's Balkh Campaign

- Mughal - Persian Relations - the Last Phase

## **HOI024\_INDIA\_FIRST\_HALF\_OF\_THE\_SEVENTEENTH\_CENTURY**

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- Jahangir's Accession - his Early Difficulties
- Territorial Consolidation and Expansion of the Empire - Mewar, East India and Kangra
- NurJahan, and the NurJahan 'Junta' The Rebellions of Shah Jahan, and the coup de main of Mahabat Khan
- Jahangir as a Ruler
- State and Religion in the First Half of the Seventeenth Century
- Shah Jahan - Consolidation and Expansion of the Empire
- Evolution of the Mughal Ruling Class and the Mansabdari System

## **CRISIS\_OF\_THE\_MUGHAL\_EMPIRE**

### **HOI025 THE MARATHAS AND THE DECCAN**

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- Rise of the Marathas - Early Career of Shivaji
- Treaty of Purandar - the Agra Visit
- Aurangzeb and the Deccani States (1658-87)
- Marathas and the Deccan (1687-1707)
- Assessment of Aurangzeb and the Jagirdari Crisis

### **HOI026 THE MARATHA AND-OTHER INDIAN-STATES**

#### **SOCIETY IN THE 18TH CENTURY**

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- The Marathas and their Policy of Expansion
- The Marathas and Nizam-ul-Mulk
- The Maratha Advance into Gujarat and Malwa
- The Maratha Advance into Doab and Punjab:
- First Phase (1741-52); Second Phase (1752-61);
- Third Battle of Panipat
- Shivaji (1627-1680), Shivaji's administration, Successors of Shivaji
- The Peshwas (1713-1818)
- Other Indian States ( The Bhonsles The Gaikwads Holkars Sindhias)
- Economic Condition in 18th Century, Social and Cultural Life

### **HOI027 VIJAYANAGAR EMPIRE**

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- Sources, Political History, Administration
- Social and Cultural Life, Economic Condition
- Conflicts with the Bahmani Kingdom

### **HOI028 REGIONAL STATES IN THE MEDIEVAL PERIOD**

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- Regional States of North and South India (Bahmani, Bengal, Avadh, The Sikhs, Rajput States Jats Hyderabad Mysore), Social and Cultural Conditions
- Economic Conditions , Military Conditions

### **HOI029 NORTHERN INDIA FIRST HALF EIGHTEENTH CENTURY**

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- Bahadur Shah I, and the Beginning of the Struggle For Wizarat
- Rajput Affairs
- Marathas and the Deccan – Accentuation of the Party Struggle
- Struggle for 'New' Wizarat: Zulfiqar Khan and Jahandar Shah (1712-13)
- The Saiyid Brothers' Struggle for 'New' Wizarat
- The Saiyid 'New' Wizarat

- The Wizarat of M. Amin Khan and Nizam-ul-Mulk
- Rise of Regional States, Beginning of Foreign Invasions of India (1725-48)

### **HOI030 SOCIETY STRUCTURE AND GROWTH**

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- Rural Society, Towns and Town Life
- Artisans and Master-Craftsmen, Women
- Servants and Slaves, Standard of Living
- The Ruling Classes - Nobility, Rural Gentry
- The Middle Strata, The Commercial Classes

### **HOI031 ECONOMIC LIFE PATTERNS AND PROSPECTS**

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- Inland Trade
- Overseas Trade - Role of Foreign Trading
- Companies - Position of Indian Merchants Over-land Trade
- The Mughal State and Commerce
- Trend of India's Economy and Prospects during the First Half of the Eighteenth Century

## **HISTORY (MODERN HISTORY)**

### **HOI032 THE ADVENT OF EUROPEANS IN INDIA**

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- The Portuguese in India, De Almeida
- Albuquerque, Causes of failure of Portuguese empire in India
- The Dutch in India, The Danes in India
- The English, The French, Anglo-French Rivalry
- First Carnatic War, Rise of the Hyderabad State
- The Second Carnatic War, The Third Carnatic War
- Causes of English Success

### **HOI033 BRITISH EXPANSION IN INDIA**

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- Bengal, Anglo Maratha Wars
- The Subsidiary Alliance System
- Second Phase of British Expansion In India
- The Conquest of Sindh, Anglo-Sikh Wars
- Doctrine of Lapse, Annexation of Oudh

### **HOI034 ADMINISTRATION BEFORE 1857**

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- The Dual System, The Charter Acts
- Judicial System, Impact of British Administration

### **HOI035 ECONOMIC POLICIES OF THE BRITISH**

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- Phase of Mercantilism (1757-1813)
- Phase of Free Trade (1813-1858)
- Phase of Finance Imperialism (1858 onwards)
  - Land Revenue Policy, Ryotwari, Mahalwari, Permanent Settlement
- Impact of British Policy on Indian Economy
- Drain of Wealth Theory

### **HOI036 IMPACT OF BRITISH ADMINISTRATION**

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- Industrialization—Ruin of Artisans and Handicrafts men
- Impoverishment of Peasantry
- Emergence of New Land Relations, Ruin of Old Zamindars
- Stagnation and Deterioration of Agriculture
- Commercialization of Indian Agriculture
- Development of Modern Industry

- Rise of Indian Bourgeoisie
- Economic Drain, Famine and Poverty
- Nationalist Critique of Colonial Economy
- Abolition of the Dual System

### **HOI037 THE REVOLT OF 1857**

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- Causes of the Revolt
  - Economic Causes
  - Political Causes
  - Administrative Causes
  - Socio -Religious Causes
  - Influence of Outside Events
  - Discontent Among Sepoy's
- Centres and Spread of the Revolt
- Leaders of the Revolt
- Causes of Failure of the Revolt
- Nature and Impact of the Revolt
- Consequences

### **ADMINISTRATIVE CHANGES AFTER 1857**

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- Administration - Central, Provincial, Local
- Changes in the Army, Public Services
- Princely States, Foreign Policy

### **DEVELOPMENT OF CIVIL SERVICES**

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- Indian Civil Services Act, 1861
- Aitchison Committee on Public Services (1886)
- Montford Reforms (1919)
- Lee Commission (1924)
- Government of India Act, 1935

### **DEVELOPMENT OF EDUCATION**

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- Charter Act of 1813, Orientalist-Anglicism Controversy
- Efforts of Thomson, Wood's Dispatch (1854) Hunter Education Commission (1882-83)
- Indian Universities Act, 1904, Government Resolution on Education Policy—1913
- Saddler University Commission (1917-19)
- Education Under Dyarchy, Hartog Committee (1929)
- Wardha Scheme of Basic Education (1937)
- Sergeant Plan of Education, Kothari Education Commission (1964-66)
- Development of Vernacular Education, Development of Technical Education
- Evaluation of British Policy on Education

### **DEVELOPMENT OF PRESS**

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- Different Publications and Journals
  - Acts related to Press, Vernacular Press Act, 1878
- Struggle by Early Nationalists to Secure Press Freedom, During and After the First World War, During the Second World War
- After Independence

### **SOCIO-RELIGIOUS REFORMS**

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- Factors causing Reforms
- Directions of reforms
- Hindu Reform Movements, Reform Movements Among Muslims
- Sikh Reform Movement
  - Parsi Reform Movement, Parsi Religious Reform Association



- Significance of Reform Movements, Impact of Reform Movements

## **PERSONALITIES**

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- Raja Ram Mohan Roy
- Swami Vivekananda, Swami Dayananda Saraswati
- Ishwar Chandra Vidyasagar, Keshab Chandra Sen
- Sri Ramakrishna Paramhansa, Mahadev Govind Ranade
- Annie Besant–Theosophical Society, Syed Ahmad Khan
- Baba Dayal Das, Pandita Ramabai Sarojini Naidu
- Jyotiba Phule, Dr. Bhimrao Ramji Ambedkar

## **PEASANT, TRIBAL AND OTHER MOVEMENTS**

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- Tribal Movements-Bhil Uprising, Kol Uprising
- Santhal Rebellion, Jaintia and Garo Rebellion
- Rampa Rebellion, Munda Rebellion
- Khonda Dora Uprisings, Tana Bhagat Movement
- Peasant Movements
  - Champaran Satyagraha, Kheda Peasant Struggle
  - Bardoli Movement, Moplah Rebellion
  - Tebhaga Movement, Telangana Movement

## **REVOLUTIONARY NATIONALISM**

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- Early Phase Indian National Congress
- The Moderate Congress (1885-1905)
- Opinion Against Economic Exploitation Administrative Reforms Constitutional Reforms : Weaknesses & Evaluation
- The Extremist (1905-1920)
  - Terrorist Movements, The Revolutionary Movement
  - Reasons for Failure, Revolutionary Activities in Maharashtra
  - Revolutionary Activities in Bengal
  - Revival of Revolutionary Nationalism
  - Surya Sen, Revolutionary Activities Outside India
  - The Indian Independence Committee in Berlin
- Differences between the Moderates and the Extremists

## **INDIAN NATIONAL MOVEMENT – I (1905-1918)**

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- Partition of Bengal (1905), Swadeshi Movement
- Muslim League, 1906, Surat Session of INC, 1907
- Indian Council Act (Morley-Minto Act) 1909
- Ghadar Party, 1913, Komagata Maru Incident 1914
- The Lucknow Pact (1916), Home Rule Movement (1915–1916)
- August Declaration, 1917

## **INDIAN NATIONAL MOVEMENT –II (1918-1929)**

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- World War I-Reforms and Agitation
- Champaran Satyagraha (1917), Ahmadabad Mill Strike (1918)
- Kheda Satyagraha (1918), The Government of India Act, 1919
- Rowlatt Act and Jallianwala Bagh Massacre (1919)
- Khilafat Movement, The Non-Cooperation Movement (1920-22)
- Bardoli Resolution, Nagpur Session of Congress
- Swaraj Party and its Evaluation, Muddiman Committee (1924)
- Simon Commission (1927)
- Bardoli Satyagraha (1928), Nehru Report (1928)
- Jinnah's Fourteen Points, Lahore Session, 1929
- Allahabad Address (1930)

## **INDIAN NATIONAL MOVEMENT - III (1930-1947)**

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- Civil Disobedience Movement (1930-1931)
- First Round Table Conference, 1930
- Gandhi-Irwin Pact, 1931, Karachi session of 1931
- Second Round Table Conference, 1931
- Civil Disobedience Movement (Second-Phase)
- Third Round Table Conference (17 November 1932)
- Communal Award, Poona Pact, 1932
- Government of India Act, 1935
- World War II and Indian Nationalism
- Resignation of Congress Ministers (1939)
- Poona Resolution and Conditional Support to Britain (1941)
- August Offer of 1940, The Individual Civil Disobedience
- Two-Nation Theory, Demand for Pakistan (1942)
- Cripps Mission (1942), Quit India Movement
- Azad Hind Fauj, Indian National Army
- N.A. Trials, I.N. Rebellion, Rajagopalachari Formula, 1945
- Desai - Liaqat Pact, Cabinet Mission (1946)
- Wavell Plan, Jinnah's Direct Action Resolution
- Mountbatten Plan of June 1947
- Indian Independence Act 1947

## **GOVERNOR GENERALS DURING BRITISH INDIA**

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- Governor of Bengal (Before 1773)
- Governor Generals of Bengal (1773-1833)
- Governor Generals of India (1832-1858)
- Viceroy and Governor Generals of India (1858-1947)

## **LIST**

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- Robert Clive (1754-1767)
- Lord Warren Hastings (1773-1785)
- Lord Cornwallis (1786-1793)
- Sir John Shore (1793-1798)
- Lord Arthur Wellesley (1798-1805)
- Lord George Barlow (1805-1807)
- Lord Minto-I (1807-1813)
- Francis Rawdon Hastings (1813-1823): (Marques of Hastings)
- Lord Amherst (1823-28)
- Lord William Bentinck (1828-1835)
- Sir Charles Metcalfe (1835-1836)
- Lord Auckland (1836-1842)
- Lord Ellenborough (1842-1844)
- Lord Hardinge-I (1844-1848)
- Lord Dalhousie (1848-1856 great imperialist and colonist)
- Lord Canning (1856-1857 and 1858-1862)
- Lord Elgin-I (1862-1863)
- Lord Lawrence (1864-1869)
- Lord Mayo (1869-1872)
- Lord Northbrook (1872-1876)
- Lord Lytton (1876-1880)
- Lord Rippon (1880-1884)
- Lord Dufferin (1884-1888)
- Lord Lansdowne (1888-1894)
- Lord Elgin-II (1894-1905)
- Lord Curzon (1899-1905)

- Lord Minto-II (1905-1910)
- Lord Hardinge-II (1910-1916)
- Lord Chelmsford (1916-1921)
- Lord Reading (1921-1926)
- Lord Irwin (1926-1931)
- Lord Willingdon (1931-1936)
- Lord Linlithgow (1936-1944)
- Lord Wavell (1944-1947)
- Lord Mountbatten (1947-1948)

## **CONSTITUTIONAL DEVELOPMENT IN INDIA**

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- Regulating Act 1773
- Pitts India Act of 1784
- Charter Act of 1793
- Charter Act of 1813
- Charter Act of 1833
- Charter Act of 1853
- Government of India Act 1858
- The Indian Councils Act 1861
- Indian Councils Act 1892
- Indian Councils Act 1909 or Morley - Minto Reforms Government of India Act 1919 or Montague - Chelmsford Reforms
- Government of India Act 1935
- Indian Independence Act, 1947

## **HISTORY (INDIAN CULTURE (PRELIMS))**

### **VISUAL ARTS**

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- Architecture
  - Harappan Period
  - Mauryan Architecture
  - Post-Mauryan Period
  - Gupta Period
  - Temples of Khajuraho
  - Temples of Odisha
  - Temples of Gwalior
  - Temples of Gujarat
  - Temples of Rajasthan
  - Temples of Bengal
  - Temples of Assam
  - Temples of Himachal Pradesh
  - Temples of Jammu and Kashmir
  - Pallava Period Temples
  - Chola Period Temples
  - Pandya Temples
  - Vijaynagar Period Temples
  - Nayaka Temples
  - Temples of Kerala
  - Rashtrakuta Period Temples
  - Schools of Temple Architecture
    - Nagara Style
    - Vesara Style
    - Hoysala Style
    - Dravidian Style

- Indo-Islamic Architecture
  - Imperial Style (Delhi Sultanate)
  - Provincial Style
  - Mughal Style
  - Sikh Style of Architecture
  - Avadh (Oudh) Style
  - Rajput Architecture
  - Jaina Art
- Modern Architecture
  - European Influence
    - Portuguese
    - Danish
    - British
  - Indo-Saracenic Architecture
  - Post-Independence Period
- Sculptures
  - - Sculptures of Harappan Civilisation
    - Sculptures of Mauryan Age
    - Post-Mauryan Period
    - Jain Sculptures
    - Buddhist Sculpture
    - Gupta Sculpture
    - Medieval School of Sculpture
    - Modern Indian Sculpture
- Paintings
  - - Cave Paintings
    - Tradition of Mural Paintings in India
    - Tradition of Miniature Paintings in India
    - Paintings in the Deccan
    - Rajput School of Painting
    - Pahari School of Painting
    - Miniature Painting in South India
    - Regional Paintings
    - Modern Paintings
    - Contemporary Paintings
- Pottery Tradition
  - Ochre: Coloured Pottery(OCP)
  - Black and Red Ware (BRW)
  - Painted Grey Ware (PGW)
  - Northern Black Polished Ware (NBPW)
  - Glazed and Unglazed Pottery
- Numismatics
  - Coinage

## **PERFORMING ARTS**

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- Music in India
  - Classical Indian Music
    - Hindustani Music
      - Gharanas
    - Carnatic Music
  - Main Pillars of Indian Music
  - Forms of Indian Music
  - Musical Instruments

- Institutions Related to Music in India
- Folk Music
- Dances in India
  - Concept of Dance in India
  - Concept of Ashta Nayika
  - Rasa and Bhava
  - Eight Classical Dance Forms in India
  - Folk Dances
  - Modern Dances
- Sports in India
  - Various Type of Sports
  - Genesis of Martial Arts
  - Forms of Traditional Martial Arts
  - Animal Sports
- Indian Theatre
  - History of Theatre in India
  - Classical Sanskrit Theatre
  - Traditional Theatre
  - Regional Theatre
  - Modern Theatre in India
  - Renaissance of Indian Theatre
  - Cinema in India
    - History of Indian Cinema
    - Classification of Indian Cinema Film
- Indian Puppetry
  - String Puppets
  - Shadow Puppets
  - Rod Puppets
  - Glove puppets
  - Modern Puppetry
  - Tribal Puppetry

## **RELIGION, LANGUAGE & LITERATURE**

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- Religions in-India
  - Pre-Vedic Religion
  - Hinduism
  - Buddhism
  - Jainism
  - Sikhism
  - Islam
  - Christianity
  - Zoroastrianism
  - Judaism
  - Philosophy in India
  - Bhakti Movement
  - Saints of Bhakti Movement
  - Sufism
- Languages and Literature in India
  - Classical Language
  - Sanskrit Literature
  - Pali Literature
  - Prakrit Literature
  - Tamil Literature
  - Telugu Literature
  - Malayalam Literature

- Kannada Literature
- Odia Literature
- Assamese Literature
- Bengali Literature
- Gujarati Literature
- Rajasthani Literature
- Punjabi Literature
- Marathi Literature
- Hindi Literature
- Persian Literature
- Urdu Literature
- Influence/Contribution of foreign languages & Literature to India language

## **MISCELLANEOUS**

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- Government Cultural Institutions in India
- UNESCO's List of Cultural Heritage in India
- Protection and Promotion of Indian Culture and Heritage :Legal Provisions
- Schemes and Awards
  - Awards and Honours Associated with Culture
  - International Yoga Day
  - Indian Handicrafts
- Personalities Related to Culture
- Places of Cultural Interest
- The Calendar & the Eras
- Science and Technology in Ancient India
- Recent developments
  - Important Festivals
  - Kheer Bhawani festival
  - Mahapushkaram
  - Bathu kamma
  - Manipur Sangai Festival
  - Losar festival
  - Intangible Cultural Heritage under UNESCO has inscribed 'Kumbh Mela'
  - Sankalp Parva-Sankalp se Siddhi'
  - Paryatan Parv
  - Bharat Parv
  - Orange Festival Nagpur
  - Protest against Sunburn fest
  - 2017 Teesta Rangit Tourism Festival
  - Ganga sagarmela
  - Nabakalebar Rath Yatra
  - Chapchar Kut Festival
  - Hornbill Festival
  - Wangala Festival
  - Schemes for Cleanliness of Tourist Places
  - Swachh Bharat Swachh Smarak
  - 'Swachh Bharat Swachh Paryatan'
  - Incredible India 2.0 Campaign
  - Schemes for Development of Cultural Heritage
  - Sanskriti App
  - Cultural Mapping of India
  - Schemes for Monument Development
  - HRIDAY
  - SWADESH DARSHAN
  - PRASAD SCHEME

- AdarshSmarak Yojana
- Cultural Scheme Monitoring System
- Schemes for promotion of Culture
- Schemes for Serious Literature and Litterateurs
- National Mission on Monuments and Antiquities
- National Mission on Manuscripts
- Gandhi Heritage Sites Mission
- Muziris Heritage Site
- International Initiatives for Cultural Development and Recognition
- Project Mausam
- International Buddhist Conclave
- World's Heritage
- UNESCO inscribes Yoga in the representative list of Intangible Cultural Heritage of Humanity
- UNESCO Creative Cities Network
- UNESCO Global Geopark
- National Virtual Library of India
- Jallikattu
- Kambala
  - GI Tag-Definition,GI vs. Trademark,Rights under GI,Famous Goods
  - Latest addition
- Rashtriya Ekta Diwas

## **GENERAL GEOGRAPHY**

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- Universe
  - Theories of development of Universe
  - Galaxy, Star formation
  - Planet formation, Asteroid, Meteor
  - Kupier belt, Comets, Dwarf planets
- Solar system
- Planet Earth and its Moon
  - Evolution of the Earth Layered Structure
    - Evolution of Lithosphere, Evolution of Atmosphere
    - Evolution of Hydrosphere
  - Latitude and Longitude including important Parallels and Meridians
  - Motions of the Earth - Rotation, Revolution and their effects
  - Inclination of the Earth's Axis and its effects
  - Time Zones, Local and Standard Time and the International Date Line, Calendar
  - Eclipses - Solar, Lunar, Earth's magnetic field
- Earth's Geological time scale
  - ORIGIN of LIFE

## **GEOMORPHOLOGY**

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- Earth's Interior-Interior of the Earth, Crust, Mantle, Core
  - Sources of Information
    - Direct, Indirect - Earth Quake Waves Volcanoes
  - Theories – Suess Theory
- Major Elements of the Earth's Crust
- Minerals
  - Minerals – Feldspar, Quartz, Pyroxene Amphibole, Mica, Olivine
  - Physical Characteristics – Crystal Form, Cleavage Fracture, Lusture, Color, Streak
  - Transparency, Structure, Hardness, Specific Gravity
  - Metallic minerals – precious Ferrous, Non Ferrous

- Non-metallic Minerals – Sulphur, Phosphates, Cement
- **Rocks (Aggregate of Minerals)**
  - Petrology, Rocks & landforms
  - Rocks & Soils, 3 Family of Rocks
  - Igneous, Sedimentary, Metamorphic
- **Geomorphic Processes**
  - Earth's Surface, Exogenic Forces, Endogenic Forces, Gradation, Degradation & Agradation, Endogenic Forces, Diastrophism, Exogenic Forces, Denudation Processes, Erosion Transportation & Deposition, Landforms
- Orogenic, Epierogenic Earthquakes, Plate movements
- Weathering & Mass movements
- Earthquakes and Volcanism
- Distribution of Continents & Oceans
- Continental Drift Theory - Alfred Wegner, Pangea, Panthalasa
  - Laurasia, Gondwanaland
  - Evidence in support of Continental Drift Theory
    - Jigsaw Fit, Rocks of Same age across oceans
    - Tillite, Placer Deposits, Distribution of Fossils
  - Isostasy
  - Sea Floor Spreading-Forces of Drifting
    - Pole Fleeing Force, Tidal Force
  - Post Drift Studies, Convectional Current Theory
  - Mapping of the Ocean Floor
  - Plate Tectonics
    - Lithospheric Plates - Major Plate - Minor Plates
  - Plate Boundaries – Divergent – Convergent – Transform
  - Rates of Plate Movements
  - Force of plate movement
  - Indian Plate
- Landforms and their evolution
  - Causes-Geomorphic Processes
  - Geomorphic Agents
  - Geomorphic Agent-Erosional or Destructional
- Depositional or Constructional Agents and their Impacts - Wind, Running Water, Ground Water, Glaciers, Waves & Currents
  - Winds-As agents in Hot deserts
  - Cause – Deflation Abrasion Impact
  - Erosional landforms
    - Pediments and Pediplains
    - Playas
    - Deflation Hollows and Caves
    - Mushroom, Table & Pedestal Rocks
  - Depositional Landforms
    - Barchans
    - Seif
    - Parabolic
    - Transverse
    - Longitudinal
  - Running Water
    - Erosional Landforms
      - Valleys
        - Rills
        - Gullies
        - Valleys – V Shape, Gorge (Hard Rocks), Canyon (Sedimentary)
      - Potholes & Plunge pools



- Incised or entrenched meanders
    - River Terraces – paired & unpaired
  - Depositional Landforms
    - Alluvial Fans
    - Delta
    - Flood plains, Natural Levees, Point Bars
    - Meanders, Slip off bank, Under cut bank
    - Oxbow lake
    - Braided Channels
- Ground Water (Karst Topography)
  - Permeable Rocks
    - Percolation
    - Bedding Plains
- Limestone and Dolomite Regions,
  - Balkans , Adjacent to Adriatic regions
- Erosional Landforms
  - Pools - Swallow Hole, Valley Sinks (Uvalas), Sinkholes, Collapse sinks (Dolines), Lapias, Ridges, Limestone Pavements
  - Caves – Altering bed of Rocks (Shale sandstone quartzit, Caves and Tunnels)
- Depositional landforms
  - Stalactites
  - Stalagmites
  - Pillar Columns
- Glaciers
  - Erosional Landforms
    - Cirque of Tarn Lakes
    - Hors and Serrated Regions – Arete
    - Glacial Valleys / Troughs – Fjords
  - Depositional Landforms
    - Glacial Till
    - Moraines
    - Eskers
    - Outwash Planes
    - Drumlins
- Waves and Currents
  - High Rocky Coasts & Low Sedimentary Coasts
  - Erosional Landforms
    - Cliffs
    - Terraces
    - Caves
    - Stacks
  - Depositional Landforms
    - Beaches and Dunes
    - Bars, Barriers, Spits
- Weathering
  - Factors
    - Geological
    - Climatic
    - Topographic
    - Vegetative
  - Major Processes
    - Chemical
    - Physical or Mechanical
    - Biological

- Chemical – Forces Chemical Action
      - Solution
      - Carbonation
      - Hydration
      - Oxidation & Reduction
    - Physical Forces Gravitational, Expansion, Water Pressure
      - Unloading & Expansion
      - Temperature changes and Expansion
      - Freezing, Thawing, & Frost Wedging
      - Salt Weathering
  - Biological Weathering
    - Burrowing
    - Wedging
    - Plant Roots
  - Effects of Weathering
    - Exfoliation (Flakin) – Exfoliation Domes
  - Significance of Weathering
    - Soil Formation
    - Biomes and Biodiversity
    - Leaching / Enrichment
  - Mass Movements
    - Activating causes
    - Forms of movement – Heave Flow Slide
- Landforms across the world
  - Rivers and lakes (Factual)
  - Mountain and Peaks (Factual)
  - Plateaus (Factual)

## **OCEANOGRAPHY**

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- Hydrosphere
  - Water on the Surface of the Earth
  - Hydrological Cycle
    - Component
    - Processes
- Relief of the Ocean floor-Submarine Relief Features
  - Oceans-Divisions of the ocean floor
    - Continental Shelf
    - Continental Slope
    - Deep sea plain
    - Oceanic deep and Trenches
- Minor relief features
  - Mid oceanic ridges
  - Seamount, Submarine canyons
  - Guyouts
  - Volcanic Islands
  - Fracture Zones
  - Hotspots,
  - Coral Islands, Atoll
- Temperature and Salinity
  - Temperature of the Ocean Water
    - Vertical, Spatial
    - Factors affecting Temperature distribution
      - Latitude, Unequal distribution of land & Water
      - Prevailing wind, Ocean Currents
      - Horizontal & Vertical Distribution

- Salinity of the Ocean Water
  - Factors affecting salinity
    - Evaporation and precipitation
    - Fresh water flow from rivers
    - Ocean currents
      - Horizontal distribution of salinity
      - Vertical Distribution of salinity
  - Density of Ocean Waters
- Waves, Ocean Currents, Tides
  - Movements of ocean Water
  - Factors influencing Movement
    - Temperature, Salinity, Density
  - Motion – Horizontal and Vertical Currents
  - Waves
    - Motion of waves and water molecules
    - Characteristics of wave
    - Crest and Trough, Height
    - Amplitude, Period, Length
    - Speed, Frequency
  - Tides
    - Relation between Gravitational Forces and Tides
    - Tidal currents, Types of Tides
      - Based on Frequency – Semi Diurnal, Diurnal, mixed
      - Based on SME position – spring and Neap Tides
    - Importance of Tides
  - Ocean Currents
    - Primary Force that initiates the movement
      - Heating of solar energy
      - Wind, Gravity, Coriolis force
    - Secondary force that influence the currents to flow
    - Types of ocean currents:
      - Surface currents & Deep water currents based on Depth
      - Cold and Warm Currents based on Temperature
    - Major Ocean currents of the World
    - Effects of Ocean Currents
- Marine Resources
  - Underground water resource
  - Surface water resources
  - Inland water resources: Utilization of inland water resources
  - Oceanic Water Resources (Marine Resource)
  - Utilization of oceans by man
  - Water consumption patterns
  - Conservation of Water Resources
  - Techniques of Water Conservation
- Ocean Deposits and Corals
  - Terrigenous Deposits
  - Volcanic Deposits
    - Biotic deposits-Neritic, Pelagic ( Calcereous , Siliceous )
  - Abiotic Deposits,
  - Coral Reefs, Great Barrier Reef

## **CLIMATOLOGY**

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- Atmosphere
  - Composition, Gases
  - Water Vapour, Dust Particles

- Structure, Exosphere
- Thermosphere, Mesosphere
- Stratosphere, Troposphere
- Altitude vs. Temperature
- Inversion of Temperature
  - Temperature, Factors controlling Temp distribution
  - Distribution of Temp Month of January-July
  - Range of Temp Month of January-July
  - Inversion of Temperature
- Insolation and Heat Budget
  - Solar Radiation Heat Balance Temperature Insolation
  - Aphelion and Perihelion
  - Variability of Insolation at the surface of the Earth
    - Day Season Year
    - Rotation on Axis, Angle of Inclination of sun rays, Length of the day
    - Transparency of Atmosphere, configuration of land in terms of its aspect.
  - Heat Balance
  - Heating and cooling of atmosphere
    - Conduction, Convection, Advection
  - Terrestrial Radiation
  - Heat Budget of the Planet Earth
  - Macro Budget
    - Albedo, Shortwave Radiation
    - Long wave Earth Radiation
  - Variation in the net Heat Budget at the Earth's Surface
- Winds and Pressure belts
  - Atmospheric Circulation and Weather Systems
  - Atmospheric Pressure, Vertical variation of pressure
  - Horizontal distribution of pressure
  - World Distribution of Sea Level Pressure
  - Factors affecting the velocity and direction of the Wind
  - Pressure Gradient Force, Frictional Force
  - Coriolis Force, Pressure and Wind (Cyclonic & Anticyclone Circulation)
  - General Circulation of the Atmosphere – Pattern of Planetary Winds
  - Latitudinal Variation of Atmospheric Heating
  - Emergence of Pressure Belts
  - Migration of Belts Following apparent Path of Sun
  - Distribution of continents & Oceans
  - Rotation of the Earth, Circulation
  - Simplified Global Circulation – Hadley Cell, Ferrel Cell
  - Seasonal Wind, Local Wind
  - Land and Sea Breezes
  - Mountain and Valley Winds
- Air Mass, Fronts, Cyclones and Jet Stream
  - Air mass & fronts
  - Cyclones
  - Thunderstorms
  - Tornadoes
  - Monsoons
  - Fronts
- Precipitation
  - Water in the Atmosphere-Water Vapour
  - Precipitation-Humidity – Absolute and Relative
  - Saturation – Dew Point
  - Evaporation and Condensation

- Dew, Frost, Fog & Mist
- Clouds
  - Types – Cirrus, Cumulus, Stratus, Nimbus
  - High – Cirrus, Cirrostratus, Cirrocumulus
  - Middle – Altostratus, Altocumulus
  - Low – Stratocumulus, Nimbostratus
- Vertical Development – Cumulus and Cumulonimbus
- Precipitation-Rainfall, Snowfall, Sleet Hail, Hailstones
- Types of Rainfall-Conventional-Orographic-Cyclonic
- World Distribution of Rainfall
- Climatic Zones of the World
  - Köppen's Classification Climatic Zones
  - World Climate
  - The Hot, Wet Equatorial Climate
  - The Tropical Monsoon and Tropical Marine Climates
  - The Savanna or Sudan Climate
  - The Hot Desert and Mid-Latitude Desert Climates
  - The Warm Temperate Western Margin (Mediterranean) Climate
  - The Temperate Continental (Steppe Climate)
  - The Warm Temperate Eastern Margin (China Type Climate)
  - The Cool Temperate Western Margin (British Type Climate)
  - The Cool Temperate Continental (Siberian) Climate
  - The Cool Temperate Eastern Margin (Laurentian) Climate
  - The Arctic or Polar Climate

## **BIO-GEOGRAPHY**

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- Soil Characteristics
  - Soil Characteristics-Factors Responsible for Soil Formation
  - Stages of Soil Formation-Soil Forming Processes
  - Soil Profiles and Horizons-Soil Classification
  - Soil Erosion and Conservation
- Vegetation resources
  - Types of natural vegetation
  - Forests-Significance of forests
  - Economic significance, Ecological significance
  - Cultural significance-Factors of forest development
  - Extent of forest cover
  - Classification of forests
  - Grasslands
  - Desert vegetation
  - Tundra Vegetation
  - Economic utilization of forests
  - Deforestation
  - Deforestation in tropical forests
  - Deforestation in temperate forests
  - Rate and extent of deforestation
  - Causes and factors of deforestation: Immediate causes of deforestation
  - Indirect deforestation
  - Underlying causes of deforestation
  - Conservation of forests
  - Forest conservation strategies
  - Reforestation
  - Monoculture plantation
  - Afforestation
  - Types of forestry-Social forestry-Agro-forestry

## **HUMAN AND ECONOMIC GEOGRAPHY OF THE WORLD**

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- Demography and Census
  - Concept of human resources
  - Factors affecting the distribution of Population
    - Geographical Factors-Availability of water-Landforms
    - Climate-Soils
    - Economic Factors
      - Minerals-Urbanisation-Industrialisation
      - Socio-cultural factors
  - Population Growth
    - Growth of Population,Growth Rate of Population
    - Natural growth of Population,Positive Growth of Population
    - Negative Growth of Population
  - Components of Population change
    - Crude Birth Rate,Crude Death Rate
    - Migration – Place of Origin and Place of Destination
    - Immigration,Emigration
    - Push Factors and Pull Factors
  - Trends in Population Growth
  - Doubling time of world population
  - Spatial pattern of Population change
  - Impact of Population Change
  - Demographic Transition
    - Demographic Transition Theory
    - Demographic Cycle
  - Theories of population growth
    - Malthusian theory,Marxian theory
    - Demographic Transition Theory
    - Optimum population
    - Over-population,Under-population
  - Population Control Measures
  - World population distribution, Density and Growth
    - Continent-wide distribution of population
    - Pattern of population density globally
    - Population increase in the world
  - Population Composition
    - Sex composition-Sex Ratio
    - Natural Advantage vs Social Advantage
    - Age Structure
      - Age – sex Pyramid,Expanding Populations
      - Constant Population,Declining Popoulation
    - Literacy – literacy Rate
    - Rural Urban Composition
    - Occupational Structure,Religion based Composition
  - Population problems
    - Population problems of developing countries
    - Population problems of developed countries
    - Population Policies: of China, of India
  - Census 2011
    - Census Terminologies,Census of India important information
- Human Development
  - Growth vs Development
  - The four pillars of Development

- Equity, Sustainability, Productivity, Empowerment
  - Approaches to Human Development
  - Measuring Human Development
    - Income Approach, Welfare Approach
    - Basic Needs Approach, Capability Approach
  - International Comparisons of Human Development
- Economic Activities
  - Primary Activities
    - Hunting and Gathering Pastoralism
    - Nomadic Herding, Commercial livestock Rearing
    - Agriculture
      - Subsistence Agriculture
      - Primitive Subsistence Agriculture
      - Intensive Subsistence Agriculture
      - Plantation Agriculture
      - Extensive Commercial Grain Cultivation
      - Mixed Farming
      - Dairy Farming
      - Mediterranean Agriculture
      - Viticulture
      - Market Gardening and Horticulture – Truck Farming
      - Cooperative Farming
      - Collective Farming
    - Mining-
      - Factors affecting Mining, Methods of Mining – Open Cast and underground mining
  - Secondary Activities
    - Manufacturing, Characteristics of Modern large scale Manufacturing
    - Specialisation of Skills/ methods of Production, Mechanisation - Technological Innovation
    - Access to market, Access to labour Supply, Access to Sources of Energy, Access to Transportation and communication Facilities
    - Government Policy
  - Classification of Manufacturing Industries
    - Industries based on size
      - Small Scale manufacturing, Large Scale manufacturing
    - Industries based on Inputs/Raw Materials
      - Agro Based industries,
      - Mineral Based Industries
      - Chemical based Industries
      - Forest based Raw material using industries
      - Animal Based industries
    - Industries based on Output/Product
    - Industries based on ownership
  - Tertiary, Quaternary and Quinary Activities
    - Types of Tertiary Activities
      - Retail trading, Trade and commerce
      - Wholesale Trading, Transport
      - Communication, Services
    - People engaged in tertiary Activities
      - Tourism, Medical Services
      - Quaternary Activities, Quinary Activities
    - Concept of Digital Divide
- Transport and Communication
  - Transport

- Modes of Transportation
  - Land Transport
  - Roads
  - Railways
  - Water Transport
  - Sea Routes
  - Inland Waterways
  - Air Transport
  - Pipelines
  - Communications
    - Satellite communication
    - Cyber space internet
- International Trade
  - History of international Trade
  - Basis of International Trade
    - Difference in national resources
    - Population Factors
    - Stage of Economic Development
    - Extent of Foreign Investment
    - Transport
  - Important aspects of International Trade
    - Volume of Trade
    - Composition of Trade
    - Direction of Trade
    - Balance of Trade
  - Types of International Trade
  - Case of Free Trade
  - WTO – World Trade Organisation and Regional Trade Blocs
  - Gateways of International Trade
    - Ports
      - Industrial Ports
      - Commercial Ports
      - Comprehensive Ports
      - Inland Ports
      - Out Ports
      - Oil Ports
      - Port of call
      - Packet station
      - Entrepot Ports
      - Naval Ports
- Settlement
  - Types and Patterns of settlements
    - Compact of Nucleated Settlements
    - Dispersed settlement
  - Rural Settlements
    - Factors affecting location of rural settlements
    - Patterns of Rural settlements
  - Urban Settlements
    - Classification of Urban Settlements
    - Factors affecting location of rural settlements
    - Functions of Urban Centre
    - Classification of Towns on the basis of Forms
    - Types of Urban Settlements
      - Town, City, Conurbation, Megalopolis, Million City
  - Issues of Urbanization in India



- Rural Urban Migration
- Emergence of Slums
- Inclusive Cities/Smart cities

## INDIAN GEOGRAPHY

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- Physiography of India
  - Geological Region
  - Location
  - Physiographic Sub-Units
    - Himalayans
    - Northern Plains
    - Peninsular Plateau
    - Thar Desert
    - Coastal Plain
    - The Islands
  - Mountain System
    - Classification of The Himalayan System
    - Regional Division of the Himalaya
  - The Peninsular - Peninsular Plateaus
  - Plains - Northern Plains of India
  - Lakes
  - Deserts
  - Indian Coasts and Islands
- Drainage System
  - Classification of Drainage
  - Himalayan Drainage
  - Indus river system
  - Indus drainage system
  - Ganga River System
  - Brahmaputra river system
  - Peninsular River System
  - East flowing Rivers
  - West flowing Rivers
  - Main Rivers and their tributaries
  - Famous cities and river banks
- Climate
  - Factors influencing the climate of India
  - Monsoon
  - Mechanism of the Monsoon
    - Classical Theory
    - Modern theory
    - Air mass theory
    - Jet stream theory
  - EL NINO and LA NINA
  - Seasonal rhythm
  - Koppen's Climatic classification
  - Indian Droughts and Floods
- Soils in India
  - Soil Acidity-Soil textures
  - Minerals of Soil-Soil Erosion
  - Soil Conservation
- Natural Vegetation
  - Vegetation-Mangroves
  - Distribution of Forest Area
  - Forest Problems in India

- Population
  - Size, growth rate and distribution of population
  - India in World Population
  - Demographic transition
  - Census in India
  - Ranking of States and Union
  - Territories by population: 2001 & 2011
  - Population Growth Rates
  - Population: States and UT
  - Decadal growth rate
  - National Population Policy
  - Density of population
  - Literacy
  - Literacy in major states
  - Literacy rate in India: 1951-2011
  - Ranking of States and UTs by 206 literacy rate: 2011
  - Gender composition of the Population
  - Trends in Sex Ratio in India
  - Child sex ratio in age group 0-6 yrs
  - Sex ratio of age 7 years and above population
  - Old Age People
  - Health Indicators
- Settlements and Urbanization
  - Rural Settlements-Factors affecting settlement patterns
  - Settlement types
  - Urbanization-Urban Agglomeration / Cities
- Land Resource
  - Land-use-Land capability classification
  - Causes of Land Degradation
  - Impact of Land Degradation
  - Steps taken by GOI
  - Sustainable Land Management
- Mineral Resource
  - Types of minerals: Metallic minerals
  - Non-metallic mineral
  - Distribution of minerals and mining regions
  - Distribution, production and international trade of Metallic minerals: Ferrous metals: Iron ore
  - Ferro-alloys and non-ferrous
  - Manganese, Chromium, Nickel
  - Tungsten, Antimony, Copper, Bauxite and Aluminium
  - Zinc; Lead, Tin, Gold, Silver, Platinum
  - Mineral chemicals, Mica
  - Potash, Phosphate, Nitrates
  - Sulphur, Conservation of mineral resources
- Energy Resources
  - Classification of energy
  - Production of conventional energy
  - General trends of energy production and consumption
  - Reserves and sources of energy
  - Coal-Nature and origin of coal
  - Constituents and kinds of coal
  - Coal fields and coal production
  - Byproducts of coal-Conservation of Coal
  - Petroleum-Nature and properties of petroleum
  - Origin and recovery-Exploration-Petroleum refining

- Petroleum reserves-Producing areas-Consumption of petroleum
- International trade
- OPEC and its role in oil trade
- Natural gas: Reserves and Production
- Hydro-electricity-Advantages of hydro-electricity
- Ideal conditions for generation of hydro-electricity
- Distribution of potential hydro-power
- Hydro-electric power generation in India
- Atomic (nuclear) energy-Atomic: source minerals: Uranium
- World distribution of Uranium
- Production of Uranium
- Thorium
- Production of Atomic (Nuclear) Energy
- Nuclear Energy
- Alternative (non-conventional) sources of energy
- Solar energy
- Wind energy
- Geothermal power
- Tidal energy
- Wave energy
- Biomass energy
- Agriculture Basic Terminologies
  - Performance of the agriculture sector
  - Types of farming in India
  - Dry zone farming, Organic farming
  - Cropping seasons in India, Cropping Pattern in India
  - Agriculture regionalization
  - Infrastructure factors: Seeds; Fertilizers; Irrigation
  - Land use pattern in India
  - Institutional Factors as land reform
  - Horticulture sector in India
  - Agricultural revolutions
  - Agricultural labours
  - Price Policy for Agriculture
  - Agricultural marketing, Agricultural Insurance
  - Agricultural Census
  - Major schemes in agricultural sector
  - National Policy for farmers
  - Impact of climate change on agriculture
  - What is sustainable agriculture?
  - Use of IT in agriculture
  - Agriculture Issues and Challenges
- Recent Developments in Agriculture Field
  - NITI Aayog proposed the idea of taxation of agricultural income
  - Removing agricultural commodities from the essential commodities Act: NITI Aayog
  - Feminization of Agriculture
  - e-auction portal : e-Rakam for selling agricultural produce
  - “AGRI-UDAAN” – Food and agri-business acceleration 2.0 to bring startup revolution
  - APEDA (Agricultural and Processed Food Products Export Development Authority Act)
  - SMAM (Sub-Mission on Agricultural Mechanization)
  - Jute-ICARE Project
  - Project CHAMAN
  - Doubling the farmers income: Ashok Dalwai Committee
  - RKVY-RAFTAAR
  - Agro Irradiation Centers

- Agricultural Marketing and Farm Friendly Reforms Index
- National Food Security Act
- Digitization and Agriculture
- Direct Benefit Transfer in Fertilizer Sector
- Draft Regulation on Fortification of Foods
- Law Commission Recommendation on Food Laws
- Concept of Modern Terminal Markets
- Animal Husbandry, Dairying and Fisheries
- e-Pashuhaat Portal
- Schemes of Bio-Tech Kisan and Cattle Genomics
- RashtriyaGokul Mission
- Mission Fingerling
- Ornamental Fishing
- Agricultural Science Congress
- RubSiS
- Ethanol Blending
- National Bureau of Plant Genetic Resources
- Amendments to the NABARD Act, 1981
- Revenue Insurance Scheme for Plantation Crops
- Neem Coating of Urea
- National Agriculture Market
- Productivity of Crops and conditions for growth
  - Wheat
    - Conditions of growth, Varieties, Types of cultivation
    - Production pattern, International trade
  - Rice
    - Conditions of growth, Varieties
    - Methods of cultivation, Production pattern
    - International trade
  - Maize (Corn)
    - Conditions of growth, Production pattern
    - International trade
  - Barley
    - Conditions of growth, Production pattern
    - International trade
  - Oats
  - Rye
  - Beverages
  - Tea
    - Condition of growth, Production pattern
    - International trade
  - Coffee
    - Types of coffee, Conditions of growth
    - Production pattern, International trade
  - Cocoa
    - Conditions of growth, Production pattern
    - International trade
  - Tobacco
    - Conditions of growth, Production pattern
    - International trade
  - Fibre Crops
  - Cotton
    - Varieties of cotton, Conditions of growth
    - Production pattern, International trade
  - Jute

- Conditions of growth, Production pattern
    - International trade
  - Substitutes of Jute: Flax, Hemp
    - Raw Silk, Production pattern
  - Natural Rubber
    - Other sources of rubber, Plantations in South-east Asia
    - Production pattern
  - Sugarcane
    - Conditions of growth, Production pattern
    - International trade
    - Sugarbeet—Conditions of growth, Production pattern
    - Sugar industry, Sugar consumption
    - International trade.
- Industry
  - Industrial development
  - Iron and Steel Industry-Location of iron and steel industry-Development of iron manufacture-Distribution of iron and steel industry
  - Global steel production-International trade in Steel
  - Textile Industry-Cotton Textile Industry: Location of the industry
  - Recent trends in localization-Distribution and production of cotton textiles
  - Woollen textile industry: Location of the industry
  - Silk textile industry: Raw silk manufacture-Silk textile manufacturing
  - Synthetic (artificial) silk industry
  - Distribution of man-made fibre and fabrics
  - Engineering Industries
  - Machine tools and machines: Areas of production
  - Industrial machinery: Textile machinery
  - Agricultural machinery
  - Manufacturing of transport equipment
  - Automobile industry
  - Shipbuilding
  - Aircrafts Industry
  - Fertilizer industry: Nitrogen fertilizers-Phosphate fertilizers-Potash fertilizers
  - Agro-industries
  - Synthetic rubber industry
  - Pulp and paper industry: Essential conditions for pulp production-Production of paper and paper board-Newsprint
  - Cement industry-Distribution of cement industry
  - Recent trends: Main global competitors
  - Petroleum refining industry: Localization-Site selection of petroleum refineries
  - History of oil refineries-World pattern of oil refining-Petroleum products
  - Industrial Regions-Characteristics of industrial regions
  - Delimitation of an industrial region-Principal industrial regions of the world
  - Industrial regions of Anglo America—USA, Canada, Western Europe and Central Britain, Germany, Belgium, Netherlands, France, Italy, Eastern Europe, Poland, Former USSR
  - Eastern Asia—Japan, China, the ‘Dragons’, India, High tech patterns.
- Transport
  - - Importance and development of transport
    - Means of transport
    - Transport costs and economic distance
    - Operating costs in transport
    - Relative importance of means of transport: Railways, Roads, Pipeline, Oceans, Air transport

- Profits and freight rates
- Government's transport policy
- Ocean transport routes
- Inland waterways
- Main regions of inland waterways
- Railways: Factors affecting the railroads
- Distribution of railroads in the world
- Air transport: Factors influencing air transport
- Air transport in various continents
- Pipeline transport
- Petroleum (oil) pipelines
- Gas pipelines
- Recent Development in Transport Sector
  - - Rural electrification corporation: First green bond
    - Time and costs over runs of infrastructure projects
    - India's First Mega Coastal Economic Zone (CEZ) to come up in Maharashtra
    - Logistic sector gets infrastructure status
    - AIIB approves \$150 million for India infrastructure fund
    - Ro-Ro Ferry service
    - Bharatmala project for construction of 24,000 km of highway connecting Western and Eastern part
    - Union Ministry of shipping is planning to expand Logistics Data Bank (LDB)
    - Railways India Development Fund
    - National Infrastructure Investment Fund
    - Defence Innovation Fund
    - Flexi Fare Method in Railway
    - Rail Cadre Management
    - TRI-NETRA in Railways
    - National Rail Plan 2030
    - India's First Caterpillar Train
    - Green corridor concept
    - Made in India 'Medha' train
    - Antyodaya Express
    - Smart Railway Station
    - Yatri Mitra Seva
    - National Highways Interconnectivity
    - Vehicle Fleet Modernization Programme
    - Transit Oriented Development Policy
    - Logistic Efficiency Enhancement Programme
    - Indian Bridge Management System
    - National Road Safety Policy
    - TARANG
    - E-trans
    - DEEP (Discovery of Efficient Electricity Price)
    - GARV II APP
    - Trading of Energy Saving Certificates
    - Powers for all 24x7
    - Draft National Electricity Plan
    - Habitat Commitment Index
- Recent developments in Industrial Sector
  - Disinvestment of PSUs
  - Report titled "India's Labor Market: A New Emphasis on Gainful Employment
  - Wage code Bill in line of recommendations of 2<sup>nd</sup> National Commission on Labor

- CAR for the operation of Drones in India.
- Draft Evaluation template for the star rating of Minor Minerals
- Online database containing GIS-Enabled portal Maps land related information
- Chennai-Bangalore Industrial Corridor
- Apex Corridor Developmental Authority
- Tamra Portal
- Mining Surveillance System
- Coal Mitra
- M-SIPS for Electronic Sector
- Indian Enterprise Development Service
- Trade Receivables Discounting System
- SME Business Environment Index

## **WORLD REGIONAL GEOGRAPHY**

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- Continents Countries and Cities
  - Continents and Important Cities of the World
  - Important Cities Situated on the Banks of Rivers
  - Changed Names of Some Cities, States, and Countries
  - Distinctive Names of Countries/Towns— Geographical Epithets
  - Regional Grouping of Countries of the World
  - Economic Classification of Countries of the World
- Location in NEWS
  - Govardhan Eco village
  - City livability index
  - Sardar Sarovar Dam in Gujarat
  - Yethinahole Project
  - SMARTGRAM
  - Kaladan project in Myanmar
  - Doklam plateau
  - Gilgit-Balistan
  - SCO Summit-Astana
  - Bosporus strait
  - Nathu-La
  - Lisbon
  - Mahadayi tribunal
  - Jaravas
  - Bengaluru declaration
  - SASEC road connectivity
  - Doklam
  - dams bottom trawling
  - Hambantota Port
  - World Petroleum Congress, Turkey
  - Kaleshwaram project
  - Mega food park in Kapurthala
  - Assam's disturbed area tag
  - North Koel project
  - BIMSTEC
  - Conservation of Pagodas to Bagan
  - Bridge over Mechi River
  - Pangong Lake
  - World's most liveable city
  - Asia Africa Corridor
  - Xiamen declaration
  - Sir Creek
  - Chakma, Majong Refugees Rohingya

- Cleanest Iconic place Meenakshi temple
- OBOR
- Hambantota
- Chahbahar Port
- Gwadar Port
- National Waterway – 4
- Polavaram project
- UNESCO creative cities network
- Singapore Changi Naval base
- India in Antarctica
- Concept of Resilient Cities
- Sericulture
- Blizzards
- New tectonic plate discovered
- Report on Palaeo Channel of North West India
- Cyclones in News

## **POLITY & GOVERNANCE (INDIAN POLITY AND GOVERNANCE)**

- Indian Polity And Governance (Prelims)
  - Features Of Indian Polity & Constitution (Mains)
  - Executive, Judiciary, Legislature (Mains)
  - Governance (Mains)
  - Contemporary Issues: Features of Indian Polity & Constitution (Mains)
  - Contemporary Issues: (Executive, Judiciary, Legislature) (Mains)
  - Constitutional/Non-Constitutional Bodies
  - Contemporary Issues: Governance (Mains)

## **EVOLUTION OF THE CONSTITUTION**

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- The Company Rule (1773-1858)
    - Regulating Act, 1773
    - Amending Act, 1781
    - Pitt's India Act, 1784
    - Amending Act of 1786
    - Charter Act, 1793
    - Charter Act, 1813
    - Charter Act, 1833
    - Charter Act, 1853
  - The Crown Rule (1858-1947)
    - Government of India Act, 1858
    - Indian Councils Act, 1861
    - Indian Councils Act, 1892
    - Indian Councils Act, 1909
    - Government of India Act, 1919
    - Simon Commission
    - Government of India Act, 1935
    - Indian Independence Act, 1947
  - Drafting and Sources of Indian Constitution)
    - Seminal Sources
    - External Sources
    - Developmental Sources
    - Constitutional Practices
    - Important Committees of the Constituent Assembly and their Chairman
-



## **SALIENT FEATURES OF INDIAN CONSTITUTION**

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- Constitution and Types
  - What is a Constitution?
  - Types of Constitution
  - Functions of the Constitution
  - Historical evolution of the Constitution
  - Constituent Assembly
  - Objectives of the Constitution
  - Unitary features
  - Federal features
- Types of Political System
  - Types of Political System
  - Types of Government
  - Parliamentary form of government
  - Features of the Presidential System
  - Features of Semi-Presidential System
- Types of Majorities as per the Indian Constitution
  - Absolute Majority
  - Effective Majority
  - Simple Majority
  - Special Majority
- Preamble and Values in the Constitution
  - The objectives laid down in the Preamble
  - Whether the Preamble is a part of the Constitution or not?
  - Whether Preamble can be amended or not?
    - Ideals (mentioned in the Preamble)
    - Democratic, Sovereign
    - Socialist, Secular Republic, Justice, Equality
    - Liberty, Fraternity, Integrity
- Amendment of the Constitution
  - Procedure for amendment, Types of Amendments
  - Amendability of FR's, Ingredients of basic structure
- Doctrine and Terms
  - Doctrine of severability
  - Validity of Re-Constitutional Laws
  - Doctrine of Eclipse
  - Doctrine of Harmonious Construction
  - Doctrine of Pith and Substance
  - Doctrine of Colorable Legislation (Article 246)
  - Doctrine of Territorial Nexus
  - Doctrine of Laches
  - Due Process of Law
  - Procedure Established by Law
- Other Constitutional Dimensions
  - Schedules and Subjects
  - Official Languages

## **UNION & ITS TERRITORY**

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- ARTICLE 1-4
  - Article 1: Name and Territory of the Union
  - Committee/commission for State Re-organisation
  - The State Reorganization Commission (SRC) 1953
  - Article 2: Admit or Establish new State
  - Article 3: Formation of new States and alternation of areas, boundaries or names of existing States

- Article 4: Laws made under articles 2 and 3 to provide for the amendment of the First and the Fourth Schedule and Supplemental.
- Delimitation Commission

## **CITIZENSHIP**

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- Constitutional Provisions
  - Constitutional provisions of citizenship
  - Citizenship Act, 1955
  - The Citizenship (Amendment) Act, 2016
  - Methodology of getting citizenship
  - Modes of Losing the Citizenship of India
  - Concept of dual citizenship
  - Special privileges enjoyed by citizens in India
  - Rights and Duties of Citizens
- Indian Diaspora
  - Pravasi Bhartiya Divas
  - Non-Resident Indians

## **FUNDAMENTAL RIGHTS**

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- Evolution Objectives And Features
  - Meaning, Objectives, Features, Importance
  - Restrictive limitations on fundamental rights
- Article 12 and Article 13
  - Definition of state, Laws Inconsistent with Fundamental Rights
- Right to Equality
  - Article 14: Equality before the law or the Equal protection of Law
  - Article 15: Prohibition of Discrimination on the grounds of religion, race, caste, sex or place of birth
  - Article 16: Equality of Opportunity in matters of Public Employment
  - Article 17: Abolition of Untouchability
  - Article 18: Abolition of Titles
- Right to Freedom
  - Article 19
  - Article 20: (Protection in respect of conviction for offenses)
  - Article 21: Protection of life and personal liberty
  - Article 22: Protection against arrest and detention
- Right against Exploitation
  - Article 23: Prohibition of Traffic in human beings and forced labour
  - Article 24: Prohibition of employment of children in factories, etc
- Right to Freedom of Religion
  - Article 25: Freedom of conscience and free profession, practice and propagation of religion
  - Article 26: Freedom to manage religious affairs
  - Article 27: Freedom from payment of taxes for promotion of any particular religion.
  - Article 28: Freedom from attendance at religious instruction or worship in educational institutions
- Cultural and Educational Rights
  - Article 29: Protection of interest of Minorities
  - Article 30: Right of minorities to establish and administer educational institutions
- Right to Constitutional Remedies
  - Article 32: Right to Constitutional Remedies:
    - Habeas Corpus, Mandamus, Certiorari, Prohibition, Quo Warranto
- FR's other Dimensions
  - Article 33
  - Article 34
  - Article 35

- Article 35A

## **DIRECTIVE PRINCIPLES OF STATE POLICY (DPSP)**

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- Evolution, objectives, and features
  - Basic features, Types, Amendments, Implementation
- Socialistic Principles
  - Article: 38
  - Article: 39
  - Article: 39A
  - Article: 41
  - Article: 42
  - Article: 43
  - Article: 43-A
  - Article: 47
- Gandhian Principles
  - Article: 40
  - Article: 43
  - Article: 46
  - Article: 47
  - Article: 48
- Liberal-Intellectual Principles
  - Article: 44
  - Article: 45
  - Article: 48
  - Article: 48A
  - Article: 49
  - Article: 50
  - Article: 51
- Directive Principle Outside Part IV
  - ARTICLE 335 IN PART XVI
  - ARTICLE 350-A IN PART XVII
  - Article 351 in Part XVII

## **FUNDAMENTAL DUTIES**

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- Article: 51A
  - Features-Relation between of Fundamental Rights and Fundamental Duties
  - List Of Fundamental Duties
  - 86<sup>th</sup> Constitutional Amendment Act 2003 : RTE
- Recent Developments
  - Fundamental Duties – Awareness Campaigns is the Duty of Centre
  - National Anthem - Mandatory in Cinema Halls - Article 51(a)
  - Prevention of Insults to National Honour Act, 1971
  - Triple Talaq Issue
  - Uniform Civil Code, MGNREGA: Right to Work
  - Making Aadhar mandatory

## **SYSTEM OF GOVERNANCE**

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- Centre-State Relations
  - Legislative relations (Articles) 245
  - Related to Territorial Powers-Related to Legislative Powers
  - Related to Parliament's Power to make Laws in State
  - Sarkaria Commission's Opinion on Legislative Relations
  - Administrative Relations-Delegation of Union Functions to the States
  - Sarkaria Commission's Opinion on Administrative Relations
  - Financial relations-National Integration Council

- Inter State Relation
  - Inter state water dispute, Inter state councils
  - Inter state trade and commerce, Zonal Councils
- Special Provisions for some States
  - Provisions for Maharashtra and Gujarat, Nagaland, Assam and Manipur
  - Provisions for Jammu and Kashmir (A370) (now abrogated)
- Types of Emergencies
  - National Emergency, Constitutional/State Emergency /President's Rule
- Financial Emergency

## **UNION EXECUTIVE**

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- President
  - Eligibility, Conditions of Office
  - Term of Office, Election, Manner of Election
  - Impeachment of the President
  - Impeachment of the President
  - Vacancy in the Office of President
  - Powers of the President
    - Executive powers (Article 53)
    - Legislative Powers, Financial Powers
    - Ordinance Issuing Power (Article 123)
    - Judicial/Pardoning Power, Military, Diplomatic
    - Emergency Powers
- Vice President
  - Qualification, Conditions of Office
  - Term of Office, Election, Removal, Vacancy
  - Functions of the Vice-President
- The Prime Minister
  - Appointment, Eligibility, Powers and Functions of Prime Minister
  - Relationship between the President and the Prime Minister,
  - Deputy Prime Minister, Prime Minister's Office
- Union Council of Minister
  - Article 74: Council of Ministers to aid and advice President
  - Article 75: Other Provisions as to Ministers
  - Article 77: Conduct of Business of the Government of India
  - Article 78: Duties of Prime Minister
  - Nature of advice by Ministers
  - Strength of the Council
  - Appointment of a Non-legislator as a Minister
  - Collective responsibility of the Ministers
  - Individual Responsibility of Ministers

## **UNION LEGISLATURE**

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- Organisation of Parliament
  - Organisation of Parliament
  - Qualifications and Disqualifications for being a Member of Parliament (Article 84)
  - Functions of the Parliament, Functioning of the Parliament, Sessions of Parliament
  - Devices of Parliamentary Proceedings
  - Parliamentary Privileges and Immunities
  - Collective Privileges of the House
  - Individual Privileges, Houses of the Parliament
- Parliament, Lok Sabha and Rajya Sabha
  - Lok Sabha Composition
  - Rajya Sabha Composition
  - Presiding Officers of the Parliament

- Speaker-Powers & Functions of the speaker, Deputy Speaker
- Panel of Chairpersons of Lok Sabha, Speaker Pro Tem
- Chairman of Rajya Sabha, Deputy Chairman of Rajya Sabha
- Panel of Vice-Chairpersons of Rajya Sabha
- Chairman and Deputy chairman of the Council of States
- Legislative Procedure and Committees of Parliament
  - Legislative Procedure in Parliament
  - Ordinary Bill, Money Bill
  - Financial Bill, Constitution Amendment Bill
  - Lapsing of Bills, Annual Financial Statement: Budget (Article 112)
  - Demand of Grants, Appropriation Bill
  - Cut motions, Stages in Enactment of Budget
  - Other Grants, Related Information of Budget
  - Parliamentary committees

## **STATE EXECUTIVE**

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- Governor
  - Article 152: Definition
  - Article 153: Governors of States
  - Article 154: Executive power of State
    - Powers of Governor
    - Executive power
    - Legislative power
    - Financial Power
    - Judicial Power
  - Discretionary power
  - Article 155: Appointment of Governor
  - Article 156: Term of office of Governor
  - Article 157: Qualifications for Appointment as Governor
  - Article 158: Conditions of Governor's office
  - Article 159: Oath or affirmation by the Governor
  - Article 160: Discharge of the functions of the Governor in certain contingencies
  - Article 161
  - Article 162: Extent of executive power of State
  - Recommendations on the office of Governor
  - ARC (Administrative Reforms Commission)
  - Sarkaria Commission
  - National Commission to Review the working of the Constitution
- The Chief Minister and the CoM
  - Powers and Functions of Chief Minister
    - In Relation to Council of Ministers
    - In relation to the Governor
    - In Relation to State Legislature
    - Other Powers and Functions
  - Composition of the Council of Ministers
  - Responsibility of Ministers
  - Advocate-General for the State

## **STATE LEGISLATURE**

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- Legislative Assembly
  - Legislative Assembly (Vidhan Sabha)
  - Powers and Functions, Speaker & Deputy Speaker
  - Parliament's Control over State Legislature
- Legislative Council (Article 169)

- Qualifications, Powers and Functions

## **LOCAL GOVERNMENT**

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- Panchayati Raj
  - Evolution of the Panchayati Raj Institution (PRI)
  - 73<sup>rd</sup> Amendment Act of 1992
  - Compulsory and Voluntary Provisions
- Urban Local Government
  - 74<sup>th</sup> Constitutional Amendment Act
  - Types of Urban Governments In India

## **UNION TERRITORIES AND SPECIAL AREAS**

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- Union Territories
  - Creation of Union Territories
  - Administration of UT's
  - Special provisions for Delhi
  - Special Category Status
- Schedule and Tribal Areas
  - Administration of Schedule Areas
  - Administration of Tribal areas

## **THE JUDICIARY**

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- The Supreme Court
  - Chief Justice of India
  - Acting Chief Justice of India
  - Appointment of Supreme Court Judges
  - Qualifications for Supreme Court Judges
  - Removal of a Supreme Court Judges
  - Process of Impeachment
  - Ad hoc and Retired Judges
  - Salaries and allowances of Supreme Court Judges
  - Chief Justices of India (Since 1951)
  - Jurisdiction of the Supreme Court
  - Judicial Independence
  - Judiciary Executive Relations
- The High Court Subordinate Courts & Lok Adalats
  - The High Courts
  - Jurisdiction of the High Courts
  - Subordinate Courts
  - Gram Nyayalayas Act, 2008
  - Alternative dispute Resolution
  - Lok Adalat
  - All India Judicial Service
  - E-governance in Judiciary
  - Judicial Impact Assessment
  - Judges Standards and Accountability Bill, 2010
  - National Legal Services Authority (NALSA)

## **CONSTITUTIONAL & NON CONSTITUTIONAL BODIES**

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- Constitutional Bodies
  - Finance Commission-Constitution, Functions
  - Comptroller and Auditor General of India
    - Comptroller and Auditor-General
  - Attorney-General of India
    - Appointment-Functions and Responsibilities

- Other Constitutional Bodies
  - All India Services
  - Union Public Service Commission (UPSC)
- State Public Service Commission (SPSC)
- Joint State public Service Commission (JSPSC)
- National Commission For SCs, National Commission For STs
- Special Officer for Linguistic Minority
- The Advocate General (Article 165)
- Non Constitutional
  - Special officer for linguistic Minorities
  - Central Information Commission, State Information Commission
  - Lokpal and Lok Ayukta, National Human Rights Commission
  - State Human Right Commission
  - CVC (Central Vigilance Commission)

## **POLITICAL DYNAMICS**

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- Political Parties and Election
  - Electoral System in India
  - Electoral Reforms Since 1988
  - Salient features of the Representation of People Act, 1950
    - Salient features of Representation of Peoples Act, 1951
    - Elections in India, Electoral reforms since 1988
    - Criminalization of politics, Negative or neutral voting
    - State funding of Election, Irregularities in polling
  - Types of Political Parties
  - Party System in India
  - Political Parties in India
    - Problems in the working of parties
    - Casteism and Politic
    - Strengthening of Anti-defection measures
  - Pressure Groups
    - Meaning and Techniques
    - Pressure Groups in India
    - Types of pressure groups
      - Role of pressure group in developing countries
      - Functions of pressure groups in India
      - Pressure groups methods
      - Pressure groups and Democracy
      - Criticism of pressure groups

## **GOVERNANCE**

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- Governing Institutions in India
  - Structure of Ministries/departments
  - Political head
  - Secretariat organization secretary-Functions of the secretariat
  - Functions of attached and subordinate office
  - Other organizations, Public sector undertakings
  - The Executive organization
  - Advantages of the separation of secretariat and executive organization.
  - Strengths and weaknesses of the existing structure
  - Recommendations for improving the Organizational structure
- Audit and other Transparency initiatives
  - CVC, CAG, Lokpal, Lok Ayukta
- Role of SHG, NGOs, Civil Society
  - SHGs

- Characteristics, Role of SHGs in development
- NGOs
  - Functions, Role of NGOs in development
- Micro Finance Institutions
  - Salient features, Role of MFIs in development
- Social Sector Bills
  - - The Juvenile Justice (Care and Protection of Children) Act
    - Surrogacy (Regulation) Bill, 2016
    - Child Labour (Prohibition and Amendment) Bill, 2016
    - Maternity Benefit Bill, 2016
    - Pre-Conception & Pre-Natal Diagnostic Techniques (PNDT) Act
    - Mental Health Care Bill, 2013
    - Protection of Children from Sexual Offences (POCSO)
    - Anti Trafficking Bill with Stringent Penalty
    - HIV and AIDS (Prevention and Control) Bill- 2014 - Amendments
    - Domestic Violence Act, 2005 - SC Widens Ambit
    - Rights of Persons with Disabilities Bill, 2014 with more Benefit
    - Transgender Persons (Protection of Rights) Bill 2016
    - The Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Act
- Welfare Schemes
  - Health
    - National Health Mission, National Ayush Mission
    - Jan Aushadhi Scheme, Mission Indradhanush
    - NFHS-4 survey
  - Education
    - Padhe Bharat Badhe Bharat, Mid Day Meal Scheme
    - GIAN (Global Initiative of Academic Networks)
    - SWAYAM (Study Webs of Active – Learning for Young Aspiring Minds)
  - Start-up and Skill Development
    - Start Up India Scheme, Stand up India Scheme
    - National Student Start-up Policy
    - National Skill Development Mission
    - Pradhan Mantri Kaushal Vikas Yojana
    - Deen Dayal Antyodaya Yojana
    - Skill Development Initiative Scheme
    - Self-Employment & Talent Utilisation (SETU)
    - Atal Innovation Mission
  - Vulnerable Sector
    - Social Security, Atal Pension Yojana
    - Pradhan Mantri Jeevan Jyoti Bima Yojana
    - Pradhan Mantri Suraksha Bima Yojana
    - Nai Roshni Scheme
    - USTAAD Scheme (Upgrading the Skills and Training in Traditional Arts/Crafts for Development)
    - Nai Manzil Scheme
    - Women and Child Development
    - Beti Bachao Beti Padhao
    - Sukanya Samridhi Yojana
    - Digital Gudda Guddi Board
    - Ujjawala Scheme, Janani Suraksha Yojana
    - Janani Shishu Suraksha Karyakram
    - SC/ST
    - Vanbandhu Kalyan Yojana



- Pradhan Mantri Adarsh Gram Yojana
- Disability
- Accessible India Campaign (Sugamya Bharat Abhiyan)
- Rural and Urban Development
- Sansad Adarsh Gram Yojana
- Gram Uday Se Bharat Uday Abhiyan
- Shyama Prasad Mukharjee Rurban Mission
- Deendayal Upadhyaya Gram Jyoti Yojana
- Pradhan Mantri Gram Sadak Yojana
- Swachch Bharat Abhiyan
- Pradhan Mantri Awas Yojana- Gramin
- Pradhan Mantri Awas Yojana - Urban
- Housing for all by 2022
- Smart Cities Mission
- Hriday - National Heritage City Development and Augmentation Yojana
- Amrut (Atal Mission for Rejuvenation and Urban Transformation)
- Inclusive growth
  - Measurement criteria
  - Government initiatives for inclusive growth
  - Basic Amenities: Housing/Drinking Waters/Sanitations
  - Sustainable Development
- Rural Development
  - Rural development and poverty alleviation
  - Review of the existing Programmes
  - Development Administration
  - Panchayati Raj
  - Agriculture and Rural Development
- Miscellaneous schemes
  - Digilocker
  - Bharatnet Project (National Optical Fibre Network)
  - INSPIRE (Innovation in Science Pursuit for Inspired Research)
  - SAKAAR, Digital India
  - Namami Gange Project (Integrated Ganga Conservation Mission Project)
  - Ganga Gram Yojana
  - Khelo India
  - PRAGATI (Pro-Active Governance and Timely Implementation)
  - Indian Community Welfare Fund (ICWF)

## **INTERNATIONAL RELATIONS**

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- India's Foreign Policy
  - Evolution of India's Foreign Policy-Post 1990 Scenario,Global Issues
- South Asia
  - India – Nepal Relations
  - India and Bhutan
  - India-Afghanislam Relations
  - India-Bangladesh Relations
  - India-Maldives Relations
  - India-Sri Lanka Relations
  - India-Myanmar Relations
  - India-Pakistan Relations
  - SAARC
  - NAM (Non-Alignment Movement): Relevance
- Central Asia
  - Mongolia
  - Kazakhstan

- Turkmenistan
- Uzbekistan
- West Asia
  - India – UAE Relations
  - India IRAN Relations
  - Israel and Palestine Relations
  - India – Israel Relations
  - India – Saudi Arabia
- Asia – Pacific
  - Asia-Pacific Region
  - India-South East Asia Relations
  - India-Asean Cooperation
  - Indo-Japan Relations
  - Indo-Australia Relations
  - India – South Korea Relations
  - India-Vietnam
- Africa
  - India-South Africa Relations
  - India-Nigeria Relations
  - India-Kenya Relations
  - India-Sudan Relations
- Europe
  - India-Russia Relations
  - India-France Relations
  - India-Germany Relations
  - India-United Kingdom Relations
  - India-EU Kingdom Relations
- US-China
  - India-USA Relations
  - India-China Relations
- Indian Ocean Region
  - Seychelles
  - Mauritius
  - Maldives
- Indian Diaspora
  - Indian Diaspora in West
  - Indian Diaspora in Gulf
  - Indian Diaspora in East and Middle East

## **POLITY & GOVERNANCE (CONSTITUTIONAL/NON-CONSTITUTIONAL BODIES)**

### **CONSTITUTIONAL BODIES**

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- Election Commission
- Union Public Service Commission
- State Public Service Commission
- Finance Commission
  - 14<sup>th</sup> Finance Commission and Local Governments
  - 15<sup>th</sup> Finance commission: Issues with Term and References
- State Finance Commission
- Law Commission
  - 268<sup>th</sup> Report of Law Commission on Bail Reforms
  - Law Commission report on Hate Speech
- Pay Commission
  - 7<sup>th</sup> Pay Commission
- National Commission for SCs
- National Commission for STs

- Special Officer for Linguistic Minorities
- Comptroller and Auditor General of India (CAG) , Functioning and Autonomy of CAG
- National Commission for Backward Classes
- Attorney General of India
- Advocate General of the State
- Co-operative Societies
- Tribunals
  - Problems with Tribunals, Problems arising out of sidestepping the HC

## **STATUTORY, REGULATORY AND VARIOUS QUASI-JUDICIAL BODIES**

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- Rationalization Of Autonomous Bodies
- National Human Rights Commission
- National Commission for Women
- State Human Rights Commission
- Central Information Commission
- State Information Commission
- Central Vigilance Commission
  - Preventive Vigilance
- Central Bureau of Investigation
  - Autonomy of CBI
- Lokpal and Lokayuktas
  - Issues related to the appointment of Lokpal
  - Ammendment to Lokpal Act
- Quasi judicial bodies
- NITI Aayog
  - NITI Aayog's Report on Rationalization of Centrally Sponsored Schemes (CSS)
- Model Land leasing Law prepared by NITI Aayog

## **SCIENCE & TECHNOLOGY IN INDIA**

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- Policy Development of S&T in India
  - Role of S&T in the Developing World
  - S&T Policy in India
    - The S&T Policy Resolution in 1958
    - S&T Policy of the 1983
    - S&T Policy of the 2003
    - S&T Policy 2013
  - Science and technology as a source of Human Resource Development
  - Awards related to Science
  - New Initiatives Aligned with the National Agenda
  - India and World collaboration in science projects
  - Technology Vision Document 2035
  - National Biotechnology Development Strategy 2015-2020
  - National Intellectual Property Rights Policy
  - Organ donation rules in India
  - Policy on Synthetic Biology
- Different Organization Institution and Various Department for the S&T
  - List of Various Centre Institutions and Bureaus
  - Ministries and Department for science and Technology
  - Institutional structure
  - Department of Science & Technology
  - CSIR
  - Survey of India
  - Science and Engineering Research Council
  - Technology Development Board

- National Accreditation Board for Testing and Calibration Laboratories

## SPACE

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- Space Research Programme, Orbits and Launch
  - Space Technology
  - Indian Space research Programme
  - ISRO and ANTRIX
  - Orbits Type
  - Satellite Launching Systems
  - Terminologies Related to the Space Science
- Satellites, Launch Vehicles and India Satellite Programmes
  - Earth Observation Systems
  - Satellite Communication in India
  - Remote sensing applications - IRS Sytems
  - INSAT Satellite Application
  - GSAT Satellite Application
  - Launch vehicle Technology
  - GSLV and Various Engine
  - Recent National and International Space Missions
  - Cryogenic rockets
    - Global Positioning System
    - Galileo
    - GLONASS
    - IRNSS
    - GAGAN
  - Chandrayaan – I & II
  - Mars Orbitor Mission
    - Space Organisations
    - Space race/Space junk
  - Recent updates
    - South Asia Satellite: Significance
    - Neutrino Observatory
    - Solar Mission- ADITYA
    - Gravitational Waves
  - RECENT DEVELOPMENTS
    - Spitzer Space Telescope
    - Chandra X-Ray Observatory
    - Multi Application Solar Telescope
    - Thirty Metre Telescope
    - Resourcesat-2A
    - Astrosat
    - Sunspot
    - Magnetars
    - Neutron stars
    - Air-breathing propulsion system
    - Space Junk
    - Graveyard Orbit
    - Super cluster of galaxies known as “Saraswati”.
    - NASA: Asteroid impact and deflection assessment mission.
    - Commercial use of Lithium-Ion battery technology
    - Hyperspectral imaging satellite
    - Water propulsion system in CUBESAT
    - Saturn-cassini Mission
    - OSIRIS-Rex passed by earth to reach asteroid Bennu
    - Hackathon # Open Gov Data Hack
    - Google Lunar X Prize Competition

- NASA-ISRO synthetic aperture radar satellite (NISAR)
- GSAT-17 heaviest communication satellite of ISRO
- Astrosat, Chandra and Hubble Jointly detect massive cosmic explosion
- Scientists create first global map of water on moon
- World's largest aircraft "Strato launch"
- MOM complete 3 years in orbit
- Solar mission Aditya L-1 in 2019
- Gravitational waves news
- Radio galaxies
- Indigenously developed S-Band Doppler weather radar
- Kelvin waves
- ISRO made satellite based chip system
- TDRS-M NASA
- Neutrino Observatory
- Indian Space Vision-2025
  - 'NIRBHAY' sub sonic cruise missile
  - Brahmos
  - INS Koltar
  - INS Kiltan
  - NAG missile
  - Hydrogen bomb
  - Vikram OPV
  - Integrated Quarter Master Package
  - INS Kalvari
  - Prithvi II
  - Air Independent Propulsion
  - Rukmini

## IT & COMMUNICATION

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- Different Regulatory Bodies in India for ICT
  - Ministry of Communication and information Technology
  - Initiatives in 12<sup>th</sup> 5 year plan
  - Major Policy Initiatives National Optical Fibre network
  - Spectrum Management
  - Government initiatives
  - Cyber Law
- Computer Terminology and Fundamental
  - History of Computers
  - Types of Computer
  - Component of Computer system
    - Computer Languages
    - Generation of computers
  - Computer terminologies
  - Supercomputer and its applications
  - Display technologies
  - Cathode ray
  - LCD
  - LED
  - Plasma Monitors
  - OLED
- Mobile Generations and Technology
  - Definition and Impact of ICT on Society
  - Evolution of Telecommunication
  - Media Transmission technology
  - Wireless , Optical Fibres, VSAT SIM IMEI 3G 4 G VoLTE Wi Max

- Mobile generations
  - Smartphone
  - Important concepts
- Internet, Types of Network and e- Governance
  - Internet
  - WWW
  - IP
  - URL
  - HTTP
  - Computer Security Tools: firewalls, hackers
  - Global Internet Governance e
  - Internet of things
  - Internet Protocol
  - VPN
  - Networking : Bluetooth , WiFiHotSpot
  - National E Governance Plan
- **Recent Developments**
  - Government initiatives
    - Digital India Initiative
    - MeghRaj
    - Code Free for India
    - E-Kranti
    - Bharat Net project
    - Bharat QR
    - Contemporary debates
    - Net Nuetrality
    - Internet of Things
    - Big Data Initiative and Privacy
    - Cyber crime and security
  - Spectrum Policy, Broad Band Policy
    - Spectrum Policy in India
    - Spectrum
    - Mobile Spectrum
    - Broadband Policy in India
    - Cloud Computing
    - Big Data
    - Encyption
    - Biometrics
    - Virtual Reality
    - Digital India
    - QR Codes
- Recent Developments in IT & Telecom
  - Quantum computing
  - Project brainwave
  - Sagar Vani System
  - Locky Ransomware, Petya, WannaCry
  - Hindi word for computer i.e., “SANGANAK”
  - India’s first technology and innovation support centre (TISC)
  - Net neutrality
  - National cyber coordination center
  - Hortinet
  - Digital Transaction Methodologies
  - Block chain Technology
  - Bitcoins
  - Cyber Swachhta Kendra

- Digital Transaction Methodologies
- Bharat Net Project
- Wi-Fi Technology
- Digital Terrestrial Television Transmission System
- Internet of Things

## **MATERIALS, NANO TECHNOLOGY & ROBOTICS**

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- Superconductivity Laser, Artificial Intelligence
  - History Classification and Properties of Superconductors
  - Application of Superconductors
  - Types and Applications of LASERS
  - Artificial Intelligence and Application
  - Advantages and Disadvantages of Artificial Intelligence
- Superconductivity Laser, Artificial Intelligence
  - What is Robotics?
  - Robotics Terminologies
  - Laws of Robotics
  - Robotics in India
  - Machine vs Computer vs Robots
  - Parts of a Robot
    - Controller
    - Manipulator
    - End Effector
    - Sensor
  - Classification of Robots
    - Rolling Robots
    - Walking Robots
    - Autonomous Robots
  - Artificial Intelligence
  - Advantages and Disadvantages of Robot
  - Applications of Robotics
    - Industrial Sector
    - Aerospace
    - Healthcare Delivery
    - Outer Space
    - Exploration
    - Military Robots
    - Disaster Areas
    - Entertainment
    - Agriculture
    - Domestic work
  - Nano Technology
    - What is Nanoscience and Nanotechnology?
    - Origination of Nanoscience and Technology
    - Basics of Nanoscience
    - Nanomaterials
    - Applications of nanotechnology
      - Nano medicine
      - Semiconductors and computing
      - Food
      - Textiles
      - Sustainable energy
      - Environment
      - Transport
      - Space

- Carbon Nanotube
- Graphene
- Quantum Dots
- Nano Bots
- Agriculture
- Adverse Health and Environmental Impacts of Nanotechnology
- Social and Ethical Impacts:
- Nano-science and Nano-technology in India

## **DEFENCE**

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- Defence Technology
  - Organisations
  - Missile system and classification
    - On the basis of type
    - On the basis of launch vehicle
    - On the basis of Range
    - On the basis of propulsion system
  - Ballistic vs Cruise Missile
  - IGMDP Intergrated Guided Missile Development Programme
    - Prithvi Trishul Nag Akash AGNI
    - Shaurya Missile
    - ASTRA Missile
    - Dhanush
    - Prahaar
  - Brahmos Missile System
  - Anti-Ballistic Missile System
  - Frigates Destroyers and Aircraft Carriers
  - AWACS
  - Light Combat Aircraft
    - Unmanned Aerial Vehicle
    - Stealth technology
    - Chemical Weapon
    - Biological Weapon
  - Submarines
    - Indian Submarines and Naval Ships
    - Commissioned Submarines
    - Project 75
    - INS Astradharini

## **NUCLEAR TECHNOLOGY**

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- Nuclear Energy and Nuclear Fuels
  - Types of nuclear reactions
    - Nuclear Fusion
    - Nuclear Fission
  - Nuclear Fuel – Stage 1 Stage 2 Stage 3
- Nuclear Programme in India
  - N-Power Policy of India
    - Advantages of Nuclear Energy
    - Disadvantages of Nuclear Energy
  - Institutions involved in Nuclear energy Development, AERB
  - Safety standards in Nuclear Power plants
  - India's 3 stage Civil Nuclear Programme
  - Nuclear Reactors in India
  - Kudankulam Project



- Jaitapur Plant
- Organisation Institutions
  - Department of Atomic Energy
  - BHABHA
- Radioactivity
  - Radiation and Radioactivity
  - Radiation Technologies and Applications
  - Radioactive Waste and Nuclear Waster Management
  - Nuclear & Radiological Disasters

## **IPR AND OTHER MISCELLANEOUS ISSUES**

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- IPR Intellectual Property Rights
  - Copyrights
  - Trademarks
  - Patents
  - Industrial Design
  - Trades Secrets
  - IPR and Agriculture

## **BIOTECHNOLOGY**

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- Biotechnology in India
  - Department of BT
  - Various Fields of BT
  - R&D
- Genetics and Biotechnology
  - Industrial genetics
  - Genetic engineering
  - DNA sequencing
  - Nucleic acid probes
  - Genomics and proteomics
  - Bioprocess/fermentation technology
- Biological fuel generation
  - Global warming and the significance of fossils fuels
  - Biofuels from biomass
  - Bioethanol from biomass
  - Biodiesel
  - Methane
  - Hydrogen
- Environmental Biotechnology
  - Microbial Ecology Environmental Biotechnology
  - Waste water and sewage treatment
  - Landfilling technologies
  - Composting
  - Bioremediation
  - Detect and monitoring of pollutants
  - Microbes and the geological environment
- Plant and Forest biotechnology
  - Plant biotechnology
  - Forest biotechnology
- Animal and insect biotechnology
  - Genetic manipulation and transgenic animals
  - Genetically engineered hormone and vaccines
  - Animal organs for human patients
  - Genetically modified insects
- Food and Beverage Biotechnology

- Food and beverage fermentations
  - Microorganisms as food, Enzymes and food processing
  - Amino acids, vitamins and sweeteners
  - Organic acids and polysaccharides
  - Public acceptance and safety of new biotechnology foods
- Biotechnology and medicine
  - Pharmaceuticals and biopharmaceuticals
  - Antibiotics
  - Vaccines and monoclonal antibodies
  - Biopharmaceuticals/therapeutic proteins
  - Pharmacogenetics
  - Molecular biology and human disease
  - Diagnostics in developing countries
  - Gene therapy
  - Systems biology and medicine
- Stem cell biotechnology
- Protection of biotechnological inventions
  - Patent protection Trade secrets
  - Plant breeders' rights
- Recent Development in Biotechnology
  - Achievements of Biotechnology indifferent fields
  - Genome sequencing of Ragi done for the first time in the world
  - GM mustard policy
  - DNA as storage device
  - Biomarker
  - Algae based footwear
  - Artificial Womb
  - K. grants gene editing license
  - GM Mosquito
  - DBT launched "Sohum" an innovative newborn hearing screening device
  - Biotech-KISAN scheme
  - India's first biomass to ethanol plant & its commercialization
  - Digital Biopiracy
  - Genetically Modified Mosquito
  - Designer Babies' or Three Parents Babies
  - National Biotechnology Development Strategy 2015-2020

## **BIOLOGY**

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- **Origin of Life and Cells**
  - Cell Structure
  - Membranes
  - Cell-Cell Interactions
  - Energy and Metabolism
  - Respiration
  - Cell Division
  - Sexual Reproduction
- **Genetics**
  - Inheritance
  - DNA, The Genetic Material
  - Gene Expression
  - Gene Regulation
  - Mutation
  - Recombinant DNA Technology
- **Classification of Living Things**

- Classification and Domains of Life
- General Biology/Classification of Living Things/Viruses
- Prokaryotes
- Eukaryotes
  - Protista
  - Plants
  - Fungi
  - Animals
- **Evolution of Life**
  - 
  - Evolution of Life
  - Animal Evolution
  - Human Evolution
- **Tissues**
  - 
  - Epithelial tissue
  - Connective tissue
  - Muscle tissue
- **Endocrine System**
  - 
  - Hypothalamus
  - Pineal body (epiphysis)
  - Pituitary gland (hypophysis)
  - Thyroid
  - Adrenal glands
  - Reproductive glands
- **Respiratory System**
  - 
  - External and Internal Respiration
  - Respiratory system in Plants
  - Respiratory System in Insects
  - Respiratory System in Humans and Animals
- **The Transport System in Organisms**
  - 
  - Transport system in a Cell
  - Transport System in Plants
  - Transport System in Animals
  - Blood Vascular System
  - The Lymphatic System
- **Skeletal and Muscular Systems**
  - 
  - Bone and Skeleton System (Osteology)
  - Ligaments (Syndesmology)
  - Muscular System (Myology)
  - Vertebrates
- **Reproductive System**
  - 
  - Asexual Reproduction in Plants
  - Asexual Reproduction in Animals
  - Sexual Reproduction in Plants
  - Sexual Reproduction in Animals
  - Sexual Reproduction in Humans
- **Excretory System**
  - 
  - Excretory products

- Excretion in plants
  - Excretion in Animals
  - Osmoregulation, ADH and formation of Urine in Animals
  - Physiological and Behavioural Adjustments
- **Nutrition**
  - 
  - Classification by Source of Energy and Carbon
  - Plant Nutrition
  - Animal Nutrition
  - Human Diet
  - The Digestive System
  - Photosynthesis
- **Diseases**
  - 
  - Tuberculosis
  - Non-Communicable diseases
    - Diabetes mellitus
- **Economic Zoology**
  - 
  - 
  - Beneficial animals: Corals - Earthworm - Vermiculture
  - Beneficial insects - Prawns - Lobsters - Crabs - Pearl oysters - Fishes - Guano - Aquarium - Vivarium.
  - Harmful animals: Disease causing organisms - Vectors - Poisonous organisms - Fouling organisms - Pests.
- **Recent Development**
  - India has declared free from Bird flu
  - Revised Draft guidelines for stem cell research, 2017
  - Therapy for sepsis
  - Curcumin, A bioactive component of turmeric treats cancer
  - Embryo transfer technology to increase livestock productivity
  - “SOHUM’ an indigenously developed newborn hearing screening device
  - Kyasanur forest disease or monkey fever developed
  - India Declared Maternal and Neonatal Tetanus, H5N1 and Yaws Free
  - Mission Indradhanush
  - New TB Drug Regimen

## **ENVIRONMENTAL ECOLOGY**

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- Origin of Life forms
  - Origin of Life forms
  - Life on earth
- Basic Concepts of Ecology
  - Types of Ecology
  - Ecological Hierarchy
  - Scope of Ecology
  - Habitat & Ecological Niche
  - Deep vs Shallow Ecology
  - Ecological Principles
  - Ecological Community
    - Structure and Characteristics of a Community
    - Stratification
    - Ecotone
    - Ecological Dominance
    - Seasonal and Diurnal Fluctuation
    - Periodicity

- Turnover
    - Interdependence
  - Ecological Succession
    - Types and Process of Succession
    - Climax Community
  - Range of Tolerance , Maximum Range
  - Difference between Ecology , Environment and Ecosystem
- Ecosystem functions
  - Ecosystem Definitions
  - Functions and Properties of Ecosystem
  - The Structure/Components of Ecosystem
    - Abiotic Components
    - Biotic Components
  - Ecosystem Dynamics
    - Flow of Energy in Ecosystem
    - Trophic Levels
    - Food Chain
    - Types & Significance of Food Chain
    - Food Web
    - Models for Energy Flow
    - Ecological Productivity
    - Ecological Pyramid
  - Biomagnifications
  - Biological Control
- Population Ecology
  - Types of species
  - Population Ecology
  - Population Growth Models
  - Methodology of Tiger census
  - Methodology of Lion Census
- Adaptation of Species and Interactions
  - Adaptation
    - Examples of adaptation in plants
    - Examples of Adaptations in animals
  - Homeostasis
  - Interaction between Species
  - Ecotone
  - Endemic Species
  - Keystone Species
  - Indicator Species
  - Invasive Species
  - Allopatric and Sympatric Speciation
- Terrestrial Ecosystems
  - Terrestrial ecosystem
  - Forest Ecosystem in India
  - Grasslands
  - Tundra
  - Deserts
  - Mountains
- Aquatic Ecosystem
  - Aquatic ecosystem
  - Factors affecting the productivity of aquatic ecosystems
  - Fresh water ecosystem
  - Marine ecosystem
  - Marine Organisms

- Plankton
- Phytoplankton
- Factors Affecting Phytoplankton Biodiversity
  - Importance of phytoplankton
  - Zooplankton
  - Sea-grass
  - Seaweeds
- Human Modified Ecosystems
- Nutrient Cycling
  - Concept of Biogeochemical Cycle
    - Parts of a Biogeochemical Cycle
    - Types of Biogeochemical Cycle
  - Carbon Cycle
    - Steps in the carbon cycle
    - Carbon cycle: Long term and Short term
    - Carbon act as Climate Buffer
    - Human Impact on the Carbon Cycle
    - Effects of high concentration of Greenhouse Gases
  - Hydrological Cycle
    - Different Steps of the Hydrologic Cycle
    - Storage
  - Nitrogen Cycle
    - Human Impact on the Nitrogen Cycle
  - Oxygen Cycle
  - Sulphur Cycle
    - Human Impact on the Sulphur Cycle
  - **Phosphorus Cycle**
    - Human Influence on Phosphorus Cycle

## **BIODIVERSITY**

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- Basics of Biodiversity
  - Biodiversity
  - Types of biodiversity
  - Patterns of biodiversity
  - Bio-geographical classification of World
  - Bio-geographical classification of India
  - Functions of biodiversity
  - Hotspots of biodiversity
  - Bio informatics
  - Eco Regions
  - Role of Traditional Knowledge in Biodiversity
  - Biopiracy
- Animal and Plant Diversity
  - Plant and Animal Kingdom
    - Marine Mammals
    - Egg laying Mammals
    - Marsupials
  - Threats to biodiversity
    - Causes of Biodiversity losses
    - Effects of Loss of Bio-Diversity
    - Extinction of species
    - Mass Extinction
    - IUCN Red List and Classification Scheme
  - Biodiversity Conservation
    - Scheduled Animals in the Wildlife Protection Act

- In-situ methods of Conservation
    - Protected Area Categories
    - Forms of Protected Areas
    - Biosphere reserves
    - Sacred forests and sacred lakes
    - World Heritage sites
    - Geo-heritage sites
    - Advantages of In-situ conservation
    - Disadvantages of In-situ conservation
  - Ex-situ methods of Conservation
    - Advantages of ex-situ preservation:
    - Disadvantages of Ex-situ conservation
  - Zoological Parks
  - Botanical Gardens
  - Seed banks
- National Parks
- Wildlife Sanctuaries
- Biosphere Reserves
- Species based conservation programmes
  - Project Tiger
  - Project Elephant
  - Project Snow Leopard
  - Vulture conservation project
  - Crocodile conservation project
  - Ganges dolphin project
  - Indian Rhino Vision
  - Other projects
  - India adopts SAWEN
- Important Coastal and marine Biodiversity Areas
- Global initiative
  - State of Protected Areas in the World
  - MAB – Man and Biosphere Programme
  - World network of Biosphere Reserves
  - Biodiversity Hotspots
  - CBD – Convention of Biological Diversity
  - Cartagena Protocol
  - Nagoya Protocol
  - Aichi Biodiversity Diversity
- Estuaries
  - What are estuaries?
  - Types of Estuaries
  - Importance of estuaries
  - Threats to estuaries
  - Major Estuaries in Indian coastal states
  - Monitoring and Prediction of Health of Estuarine and Coastal Waters
  - Difference between Lagoon and Estuary
  - Estuary ecosystem: Adaptations made in organisms
  - Conservation of Estuaries
- Mangroves
  - What are mangroves?
  - Mangroves in India
  - Importance of Mangroves
  - Mangroves under threats
  - Legal and Regulatory Approaches for Protection
  - Community based mangrove regeneration

- Coral Reef
  - About coral reefs
  - What do corals feed on?
  - Geographical Conditions
  - Types Of Coral Reefs
  - Uses of coral reefs
  - Concept of Bio-rock reefs
  - Threats to Coral reefs
  - Conservation of coral reef
- Wetlands
  - What are wetlands?
  - Types of wetlands
  - Wetlands in India
  - Importance of wetlands
  - Threats to wetland ecosystems
  - Conservation of Wetlands
  - About Ramsar Convention ‘
  - About Asian Water bird Census

## **RESOURCE DEGRADATION & MANAGEMENT**

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- Land Resource
  - Causes of land degradation
  - Impact of land degradation
  - Desertification
  - Sustainable Land Management
- Forest Resource
  - Definition of forests by FSI
  - Types of Forest Cover
  - Forest Survey of India (FSI report 2017)
  - Types of Forests In India
  - Deforestation
  - Causes of Deforestation
  - Consequences of Deforestation on the Wildlife of India
  - Strategies for Reducing Deforestation
  - Government Programmes for Conservation of Forests
- Soil Resource
  - Soil Characteristics and Soil formation process
  - Factors Responsible for Soil Formation
  - Soil Forming Processes
  - Soil Profiles and Horizons
  - Type of Soils
  - Soils in India
  - Soils in World
  - Soil Erosion
  - Problems due to excessive irrigation
  - Soil Conservation
  - Soil health card scheme
  - Organic Farming
- Water Pollution
  - Surface Water Resource
  - Ground Water Resources
  - Sources of Water Pollution
  - Measurement of Water pollution
  - Causes of Water Pollution
  - Harmful effects of water pollution



- Other terms associated with water pollution
  - Algal Bloom
  - Eutrophication
  - Arsenic contamination of water
  - Mercury Pollution
  - Oxygen Stratification
- Energy Resources
  - Ocean Thermal Energy Conversion
  - Tidal Energy
  - Wave energy
  - Fuel Cell
  - Microbial fuel cell
  - Biofuels
  - Biogas
  - Geothermal Energy
  - Solar Energy
  - New Energy Resources
  - Renewable Energy and Development
  - Petroleum Conservation Research Association
  - Atomic Energy Bill
  - Civil Liability for Nuclear Damage Bill
  - National Electric Mobility Mission Plan
  - National Policy on Biofuels
  - Three Stage Nuclear Power Programme
  - Solar Renewable purchase Obligation
  - Petroleum Planning & Analysis Cell
  - New Energy Policy
  - Energy Organisation

## **ENVIRONMENTAL POLLUTION**

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- Basics of Pollution
  - Sources of pollution
    - Effect of Modern Agriculture on Environment
    - Effect of Housing on Environment
    - Effect of Power Generation on Environment
    - Effect of River Valley Projects (Water Resource Projects) on Environment
    - Effect of Mining on Environment
    - Effect of Transportation Activities on Environment
    - Effect of Tourism on Environment
  - Classification of pollutants
  - Pollution Indicator species
- Mining and Pollution
  - Mining and Environment
  - Sensitivity of Select Ecosystems to Mining
  - Impact of Mining
  - Indirect Impact of Mining
  - International Laws on Mining
  - Main Act or Statue to regulate the impact of
  - Indian Mining Sector
  - Sustainable Mining
- Air Pollution
  - Causes of air pollution
  - Harmful Effects of air pollution
  - Top-ten gases in air pollution
  - Control of Air Pollution

- Concepts related to Air pollution
  - Smog and its impact
  - Ozone depletion
  - Acid rain
  - Respirable Suspended Particulate Matter (RSPM)
  - Fly Ash
  - Bharat stage Norm
  - National Air Quality Index
  - Comprehensive Environmental Pollution Index
- Marine Pollution
  - Sources of marine pollution
  - Effects of marine pollution
  - Concept of dead zone
  - Concept of Ocean acidification
  - Oil spill
  - Trash and Other Debris in ocean
  - Microplastics and its impact
  - Coastal Regulation Zone Notification, 2011
- Noise Pollution
  - Causes of Noise pollution
  - Noise Levels
  - Effects of Noise Pollution on human health
  - Corrective actions
- Biological Pollution
  - Sources of biological pollution
  - Harmful effects from biological contaminants
  - Corrective actions
- Radioactive Pollution
  - Sources of Radioactive Pollution
  - Harmful effects of Radioactive Pollution
  - Corrective actions
- Thermal Pollution
  - Causes of Thermal Pollution
  - Effect of Thermal Pollution
  - Control of Thermal Pollution
- Waste Management
  - Solid waste management
    - Types of Solid Waste
    - What is solid waste management?
    - Issues in solid waste management in India
    - Waste Management Practices
    - Technologies for the Generation of Energy from Waste
    - Policy on Promotion of City Compost
    - Salient features of SWM Rules, 2016
  - E-Waste Management
    - Pollutants and their health impacts
    - E-waste status in India
    - Importance of the E-waste management
    - Steps taken for combating mounting E-Waste
    - E-waste (Management & Handling) Rules, 2016
  - Biomedical Waste Management
    - Hazards associated with waste management
    - Bio-Medical Waste Management Rules, 2016
  - Hazardous waste and its Characteristics

- Hazardous and Other Wastes (Management & Trans-boundary Movement) Rules, 2016
- Treatments Methods in Waste Management
  - Methods for sewage treatment
  - Treatments Methods for waste management
- Hazardous waste treatment

## **CLIMATE CHANGE**

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- **Climate Change Basics**
  - What is Climate Change?
  - What is Global warming?
  - Factors Affecting Climate Change
  - Causes of climate change
    - Extra-Terrestrial Sources of Climate Change
    - Terrestrial Sources of Climate Change
    - Anthropogenic sources of Climate Change
  - Urbanization and climate change
    - Pollution in metros and climate change
    - Real estate boom and environment degradation
    - Urban Heat Island
    - Polythene bags and pollution
    - Methane generation from waste
  - Impact of agriculture on climate
    - Agriculture increases Carbon Dioxide Emissions
    - Monoculture practice impacts biodiversity
    - Pollution due to use of chemical fertilizers
    - Soil-related effects
    - Fertilizer's Effect on the Environment
    - Impact of livestock on environment
    - Impact of use of Pesticides on environment
    - Impact of GM crop on environment
    - Emission of Methane from agricultural practices
    - Sustainable Agriculture Techniques
    - What is greenhouse effect?
  - Non green House Gases and Aerosols
  - Radioactive forcing and global warming
  - Ecological footprint
  - Carbon footprint
  - Global Warming Potential (GWP)
- **Climate Change Impact**
  - Impacts of the Climate Change
    - Acid Rain
    - El Nino
    - La Nina
    - Ozone Depletion
    - Ocean Acidification
  - Global Warming & Health
    - Health impacts of global warming
    - Mosquito-borne diseases
    - Ozone depletion and human health
  - Climate change mitigation
    - Carbon Sequestration
    - Carbon Sink
    - Carbon Credit
    - Carbon Tax

## ENVIRONMENTAL GOVERNANCE

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- Acts and Policies
  - Constitutional Provisions related to environment
  - Wildlife Protection Act 1972
  - Environmental Protection Act
  - National Forest Policy
  - Biological Diversity Act 2002
  - Schedule Tribes and Other Forest Dwellers Act 2006
  - Coastal Regulation Zone
  - Wetland Rules 2010
  - National Green Tribunal
  - Ozone Depleting Substance Rules
- Environment Impact Assessment (EIA)
  - What is EIA?
  - Brief History of EIA in India
  - EIA Process in India
  - The 8 steps of the EIA process
  - Environmental Appraisal Process
  - Drawback in EIA Process
  - Recommendations for Improvement
  - Environment Management
  - EIA in India – Sectorial Analysis
    - Mining Sector
    - Agricultural Sector
    - Industrial Sector
  - International Environmental Governance
    - UNEP
    - UNDP
    - Centre for Biological Diversity
    - WWF for Nature
    - IUCN - Red List
    - Birdlife International
    - International Conventions / Protocols & their Objectives
    - Sustainable Development Goals
    - Various Indices relate to Environment
    - Climate Change Governance
      - United Nations Conference on the Human Environment (Stockholm Conference)
      - United Nations Environment Programme (UNEP)
      - Montreal Protocol and Kigali Agreement
      - The Earth Summit: United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, 1992
      - Global Environment Facility (GEF)
      - Rio Declaration: 1992
      - Agenda 21:1992
      - Commission on Sustainable Development (CSD)
      - United Nations Convention to Combat Desertification (UNCCD)
      - United Nations Framework Convention on Climate Change (UNFCCC): 1992
    - Global Climate Finance Architecture
  - India and Climate Change
    - India's Position with regards to policy on Climate Change
    - Observed Climate and Weather Changes in India
    - NAPCC

- Indian Climate Change Assessment
  - Indian Policy Structure Relevant to GHG Emissions
- Environment related Institutions in India
  - Pollution Control Boards
  - National Green Tribunal
  - National Board for Wildlife
  - Animal Welfare Board
  - Central Zoo Authority
  - National Biodiversity Authority
- Environmental schemes in India
  - National Wildlife Action Plan
  - CAMPA
  - Joint Forest Management
  - Social Forestry
  - National Bamboo Mission
  - National Action Plan on Climate Change
  - National Solar Mission
  - Ganga Rejuvenation Plan
    - Benefits of River Ganga
      - Facts about Ganga River Pollution and its impacts
  - Ecomark Scheme
  - Swachh Bharat Mission
  - Swachh Bharat Kosh
  - Grants in Aid Scheme
  - National Afforestation Program
  - National River Conservation Plan
  - National Mission for Clean Ganga
  - National Air Quality Index (AQI)
  - National Action Programme to Combat Desertification
  - Pradhan Mantri Sauchalay Yojana
  - UJALA Scheme
  - Bharat Stage Norms
  - Corporate Social Responsibility and Environment Protection
- **Other Important Topics**
  - National Parks
  - Tiger Reserves of India
  - Elephant Reserves in India
  - Mike Sites in India
  - Biosphere Reserves
  - Biosphere Reserves in UNESCO's Map List
  - Ramsar Wetland Sites
  - Natural World Heritage Sites
  - List of Sacred Groves
  - Mangrove Sites in India
  - Pollution
    - Key activities and Likely Associate Air Pollutants
    - Respiratory Irritants and Toxic Chemicals
  - Recent Developments
    - Mobile Tower Radiation
    - Shrinking of Cauvery Delta
    - Use of Garbage to Construct Road
    - Moss as Pollution Monitor
    - Graded Plan for Air Pollution
    - Air Quality Index
    - Polluter Pay Principle

- Pesticide Poisoning
- Aerosols
- Anti-Smog guns
- Particulate matter
- Nalanda Model of Water Conservation
- Wetland Rules, 2017
- Permaculture and Monoculture
- Sand Mining Guidelines
- Coastal Erosion (Parali Island)
- Bottom Trawling to Deep Sea Fishing
- 'Wadi' Model
- Re-greening of Village Commons Project
- Warsaw International Mechanism for Loss and Damage
- Namami Ganga Programme
- River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016
- Smart Ganga City Scheme
- Ganga Task Force
- Ganga, Yamuna termed 'living persons'
- National Capacity Building Project for Waste Management
- NGT Bans Plastic
- Mission Innovation
- Tribunal – Dumping Waste in Ganga
- Ease in Norms for Sewage Plants
- Organic Waste to Make Green Fuel
- New Technologies for Waste Management
- Melting of Antarctic Iceberg
- Melting of Gangotri Glacier
- Carbon Capture
- Black Carbon
- 30<sup>th</sup> Montreal Protocol and World Ozone Day
- El-Nino Caused Record CO<sub>2</sub> Spike
- Glaciers in Asia to sink
- Tropics emit more Carbon
- Climate change impact on Natural Heritage Sites - Impact on Sunderbans
- Marine Diversity in Antarctica under threat
- Carbon Credit
- 2<sup>nd</sup> Kyoto Protocol
- Green Metro System
- Negative Emissions
- Geo-engineering Climate Change
- Sequestering CO<sub>2</sub>
- Bonn Challenge
- COP-23
- Air Quality Index likely to be added to 'playing condition'
- HFCs - India to eliminate use by 2030
- Kigali agreement
- Carbon Neutrality Concept
- Marrakesh Climate Change Conference
- International Solar Alliance (ISA)
- Kyoto Protocol (2<sup>nd</sup> Commitment 2013-20)
- Climate Change Performance Index

## **ETHICS (APPLIED ETHICS)**

### **EUTHANASIA ISSUE**

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- Social and Ethical perspective
- Different arguments related to Euthanasia

### **SURROGACY**

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- Case studies and Ethical Issues
- Concept of ethical surrogacy

### **ETHICS & SPORTS**

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- Importance of sports
- Ethical Issue: Need for sportsmanship, Doping
- Ethical Issue: Discrimination and Sexual Harassment
- Ethical Issue: Sports as a Business
- Measures needed

### **MEDIA ETHICS**

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- Role of Media and Ethical Issues faced by Reporters
- Trial by Media and Media Prejudice
- Ethical Dilemma faced by Photo Journalists
- Digital Media Ethics
- Paid News

### **BUSINESS ETHICS**

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- Principles of Business Ethics
- Dimensions related to Business Ethics in Organisation
- Business Ethics and Corporate Governance
- Journey from Philanthropy to Corporate Social Responsibility
- Issues related to Corporate Social Responsibility
- Issues in implementation of Business Ethics

### **ETHICS RELATED TO ECONOMIC SANCTIONS**

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- Why Economic Sanctions placed?
- Ethics in Economic Sanctions

### **REFUGEES & ETHICS**

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- Why Migration occurs?
- Case study of Syria
- Dilemmas related to Refugee crisis
- Rohingya Crisis

### **ETHICAL DILEMMAS OF GLOBALIZATION**

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- What is Globalization
- Free trade in Globalized world
- Issues with Newly Developed Trade Patterns
- Criticism against global regime

### **ETHICS OF WAR**

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- Ethics and War theories
- Evils of war

### **ENVIRONMENTAL ETHICS**

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- Linkage between Ethics and Environment
- Theories related to Environmental ethics
- Role of individual and society at large

### **ETHICAL ISSUES IN BIOTECHNOLOGY**

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- Issues related to Stem Cell
- Issues related to cloning
- Issues related to designer babies
- Genetic engineering

### **ANIMAL ETHICS**

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- Issues of conducting research on animals
- Issue of keeping animals as pets

- Issue of Cruelty against animals

### **FOOD ADULTERATION AND ETHICS**

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- Ethical dimension
- Ethical issue related to food additive

### **ABORTION: ETHICAL OR UNETHICAL**

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- Law of abortion in India
- Recent Supreme Court verdict
- Ethical Issue: Health of Women vs. foetus
- Justification for abortion - Argument against abortion
- Abortion and women rights
- Abortion and father rights
- Honour Killing
- Role of khap Panchayats

### **MARITAL RAPE**

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- Why Marital Rape should not be criminalized?
- Why Marital Rape should be criminalized?
- What are the hurdles?

### **CHILD LABOUR**

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- Rights of children
- Child labour and company
- Role of consumer

### **ETHICAL ISSUES INVOLVED IN JUVENILE JUSTICE SYSTEM**

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- Negative implications
- Ethics and Old Age
- Ethical issues
- Issues faced
- Importance of autonomy

## **PART-7**

### **SPECIFIC TOPICS OF IMPORTANCE**

List Of States And Their Bird Sanctuaries

List Of States And Their Dance Forms

Transport Systems in India

Sources of Nutrients and Deficiency diseases

List of Gardens in India

List of Highest Himalaya mountain peaks in India

**INDIAN NAVY ADMIRALS**

Attorney Generals of India

Classification of Indian soils

Types of Elections in India

The Nationalist Movements In India

**CHIEF ELECTION COMMISSIONERS OF INDIA**

List of largest libraries in India

The Largest Deserts in the World

Ministers of State

Cups And Trophies Related To Sports

**SUMMITS IN INDIA**

Famous News Papers Names In The World

National Symbols Of India

List Of Countries and their Parliament Names

List of Indian states and their Capitals, Governors & Chief Ministers 2018

List of Governors in India



List Of Countries And Their Capitals And Currencies  
Chief Ministers of India  
Chief Justice of India  
Sustainable Development Goals (SDGs) & their Objective  
List of UPSC chairman in India  
CBI Directors of India  
Important Forest in India  
Important Food Festivals Around The World  
River Side Cities In India  
List of Important Boundary Lines  
List Of Space Centres in India  
List Of State Governors And Chief Ministers Of India  
List of Core Industries  
BANKS HEADQUARTERS List  
Coal Industry  
States official languages  
Superlatives in India  
Nicknames of Indian Cities  
Important Revolutions in India  
Indian Air Chief Marshal  
LIST OF SCIENTIFIC INSTRUMENTS AND THEIR USES  
CENSUS  
List of Nuclear Power Stations in India  
Indian Prime Ministers  
List of active, dormant & extinct volcanoes in India  
Indian Presidents List  
Famous Volcanoes in the world  
Five Year Plans in India  
IMPORTANT AWARDS IN INDIA  
Important Indian exercise with other countries  
Important International Cricket Tournaments  
Important Cricket Tournaments – India  
Important Indian Cities & Their Founders  
UNESCO HERITAGE SITES IN INDIA  
Lists Of Palaces in India  
List of Tiger reserves in India  
Lists Of First Women in India  
Lists Of First Men in India  
List of national parks in India  
Famous Festivals In India  
Famous Temples In India  
BANK TAGLINES  
PORTS IN INDIA  
G20 Summit  
International Banks And Headquarters  
Cabinet Ministers and their Constituencies  
INTERNATIONAL ORGANISATION HEADQUARTERS  
List Of Domestic Airports In India  
REPORTS PUBLISHED BY DIFFERENT ORGANISATIONS  
List Of International Airports In India  
List Of Stadiums of the States  
LIST OF VICE PRESIDENTS OF INDIA  
LIST OF ABBREVIATIONS  
LIST OF REGIONAL RURAL BANKS  
LIST OF SPEAKERS OF LOK SABHA

LIST OF FOREIGN BANKS, HEADQUARTERS, AND THEIR TAGLINES  
LIST OF PRIVATE SECTOR BANKS AND THEIR HEADQUARTERS & TAGLINES  
RBI GOVERNORS  
BOOKS & WRITERS  
GOVERNMENT SCHEMES  
LIST OF IMPORTANT GAMES  
List of Important Summits  
Bird Sanctuaries in India  
NATIONAL PARKS AND WILDLIFE SANCTUARIES IN INDIA  
International Head Quarters  
BIMSTEC Summits  
ASEAN SUMMIT  
Chief Justice of High Court (Indian Administration)  
Father of Various Fields  
LIST OF DRDO LABORATORIES  
LIST OF NATIONAL INSTITUTES  
Important Indian Rivers and their Origin  
National Emergency  
State Emergency  
Financial Emergency  
List of Comptroller and Auditor General of India(CAG)  
List of Noble Prize Winners from India  
Rural Welfare Programmes  
Modern India  
Banks and their Terms  
President & their articles  
Supreme Court of India  
Welfare Schemes for Women in India  
GST Important Points  
Fundamental Duties  
List of Indian Ambassadors to Other Countries  
List Of National Independence Days  
Terms Used in Games  
Largest Desert in the World  
Central Bank Names of Different Countries  
Water Falls  
Indian Celebration Names  
List of Head Quarters

## **GENERAL ENGLISH**

Reading Comprehension  
Jumbled Sentence  
Phrase Replacement  
Sentence Improvement  
Cloze Test  
Fill in the Blanks  
Wrong Spelt  
One Word Substitution  
Error Spotting  
Active Voice and Passive Voice  
Direct and Indirect Speech  
Match the following words  
Choose the correct 'Synonyms'  
Select the correct word (Prefix, Suffix)  
Fill in the blanks with suitable Article

Fill in the blanks with suitable Preposition  
Select the correct Question Tag  
Select the correct Tense  
Select the correct Voice  
Fill in the blanks (Infinitive, Gerund, Participle)  
Identify the sentence pattern  
Find out the Error (Articles, Prepositions, Noun, Verb, Adjective, Adverb)  
Select the correct Plural forms  
Identify the sentence (Simple, Compound, Complex Sentence)  
Identify the correct Degree  
Form a new word by blending the words  
Form compound words (Eg: Noun+Verb, Gerund+Noun)  
Alliteration  
Allusion  
Simile  
Metaphor  
Personification  
Oxymoron  
Onomatopoeia  
Anaphora  
Ellipsis  
Repetition  
Apostrophe  
British English – American English  
English Literature.

#### Syllabus for CSAT Paper (Prelims Paper-II)

- Comprehension
- Interpersonal skills including communication skills
- Logical reasoning and analytical ability
- Decision-making and problem solving
- General mental ability
- Basic numeracy (numbers and their relations, orders of magnitude, etc.) (Class X level), Data interpretation (charts, graphs, tables, data sufficiency, etc. – Class X level)

#### **Reasoning & General Intelligence**

Analogy  
Classification  
Coding and Decoding  
Series  
Blood Relation  
Direction and Distance  
Time Sequence, Number and Ranking Test  
Number Puzzle  
Logical Sequence of Words  
Venn Diagrams  
Clock and Calendar  
Syllogism  
Mathematical Operation  
Arithmetical Reasoning  
Matrix Reasoning

Statement and Reasoning  
Cube and Dice  
Completion of Figure  
Visual Reasoning  
Paper Cutting and Folding

## **English**

- Reading Comprehension
- Cloze test
- Spotting errors
- Sentence Improvements
- Para Jumbles
- Fill in the blanks
- Sentence Corrections
- Para Completion
- Vocabulary

## **Logical Reasoning**

- Syllogism
- Coding-Decoding
- Inequality
- Puzzles
- Seating Arrangement
- Blood Relations
- Order and Ranking
- Distance and Direction
- Alphanumeric Series
- Input-Output

## **General Awareness**

- Current Affairs
- Static General Awareness
- Banking/Financial Awareness

## **Numerical Ability/Quantitative Aptitude**

- Data Sufficiency
- Ratio & Proportion
- Percentage
- Profit, Loss, & Discount
- Time, Work & Wages
- Number Series
- Simplification/Approximation
- Quadratic Equations
- Data Interpretation
- Simple & Compound Interest
- Speed, Time & Distance
- Probability
- Problem on Ages
  - Mixtures & Allegations

- Boats & Streams

### Quantitative Aptitude

1. Number System & Simplification
2. Probability
3. HCF & LCM
4. Algebraic Expressions and in Equalities
5. Average
6. Percentage
7. Profit and Loss
8. Simple & Compound interest
9. Ratio and Proportion & Partnership
10. Mixture & Allegations
11. Time and Work & Pipes and Cisterns
12. Speed, time & Distance (Train, Boats & Stream)
13. Mensuration
14. Trigonometry
15. Geometry
16. Data Interpretation
17. Number Series
18. Number System
19. Speed, Distance and Time
20. Time and Work

### LIC ADO Syllabus and Exam Pattern

Paper	Topics	Questions	Marks	Time
Paper I	Reasoning Ability	25	25	2 hours
	Numerical Ability	25	25	
Paper II	GK & Current Affairs	25	25	
	English Language	25	25	
Paper III	Insurance and Financial Marketing	50	50	

The LIC HFL Assistant Manager 2021 exam pattern is tabulated below:

Section	No.of Questions	Marks	Duration
English	50	50	35
Logical Reasoning	50	50	35
General Awareness	50	50	15
Numerical Ability and Quantitative Ability	200	200	120
Total	200	200	120

### LIC Assistant Mains Exam Pattern

The main examination will consist of objective tests for 200 marks. The objective test will be online. The objective test will have separate timing for every section. The insurance exams Pattern for Mains Exam of LIC Assistant is two types:

#### North/North Central/Central/Western Zones- Mains Pattern

Sections	No. of Ques	Total Marks	Minimum Qualifying Marks		Duration
			SC/ST/PwBD	Others	
Reasoning Ability & Computer Aptitude	40	40	14	16	30 min
General/ Financial Awareness	40	40	14	16	30 min
Quantitative Aptitude	40	40	14	16	30 min
English Language	40	40	14	16	30 min
Hindi Language	40	40	14	16	30 min
<b>Total</b>	<b>200</b>	<b>200</b>			<b>2 h 30 min</b>

#### Eastern/South Central/Southern Zones – Mains Pattern

Sections	No. of Ques	Total Marks	Minimum Qualifying Marks		Duration
			SC/ST/PwBD	Others	
Reasoning Ability & Computer Aptitude	60	60	22	24	40 min
General/ Financial Awareness	50	50	18	16	35 min
Quantitative Aptitude	50	50	18	20	40 min
English Language	40	40	14	16	35 min
<b>Total</b>	<b>200</b>	<b>200</b>			<b>2 h 30 min</b>

There will be negative marks for wrong answers in the Objective tests for the main examination.  $\frac{1}{4}$  marks will be deducted for each wrong answer.

## Important Topics of English Syllabus

Given below are some of the major topics of the English syllabus for SBI PO Prelims exam:

1. Cloze Test
2. Para-jumbles
3. Fill in the blanks
4. Reading Comprehension
5. Paragraph Completion
6. Idioms & Phrases
7. Vocabulary/Word Association
8. Sentence Completion
9. Miscellaneous
10. Multiple Meaning
11. Error Spotting
12. Active/Passive Voices

English Syllabus – SBI PO Prelims	
Topics	Expected Number of Questions
Reading Comprehension	10-15
Cloze Test	10
Fill in the blanks	0-5
Multiple meaning/error solving	0-5
Paragraph/Sentence Correction	5-10
Para Jumbles	5
Jumbled Sentences	5
Word Association/Vocabulary	5
Active/Passive Voice	1-5

## UPSC Prelims Subject Wise Marks Distribution

Topics Covered	Number of Questions	Total Marks
Current Affairs	14	28
Geography	12	24
Indian Economy	13	26
Environment	13	26
Polity	12	24
General Science and Tech	9	18
History	13	26
Art and Culture	5	10

The difficulty level of the examination can be bifurcated as easy, moderate, and difficult.

UPSC Prelims 2021 Exam Pattern		
Paper	GS I	CSAT II
Total marks	200	200
Number of questions	100	80
Duration	2 hours	2 hours
Negative marking	1/3 marks deduction per question	1/3 marks deduction per question
Type	Objective	Objective
Nature	Screening	Qualifying

### Subject-Wise Weightage & IAS Prelims Marks Distribution

The Subject-wise weightage for the number of questions in General Studies I from 2011 are as shown in the graph and table below:

	Current Affairs	History	Geography	Polity	Economy	Science & Technology	Environment
2011	13	11	11	12	19	19	15
2012	1	19	17	20	17	9	17
2013	0	16	18	16	19	14	17
2014	8	20	14	14	10	16	18
2015	22	17	16	13	13	8	11
2016	27	15	7	7	18	8	18
2017	15	14	9	22	16	9	15
2018	14	22	10	13	18	10	13
2019	22	17	14	15	14	7	11
2020	18	20	10	17	15	10	10

As you can see, the current affairs portion is one of the most important elements in the UPSC Civil Services Prelims examination followed by history and polity. Let us look at the preparation strategy for each of these subjects briefly:

1. **History:** It is clear from the subject-wise trend of prelims that history is one of the major favorites of UPSC and a lot of questions are asked from this subject. Questions from heritage, art & culture are also a part of ancient history that is asked in UPSC prelims. NCERTs and other basic books like Art & Culture by Nitin Singhania can be really helpful for the preparation of history.
2. **Geography:** Questions from the physical geography of India and the world are asked in the Prelims examination. NCERTs from Class VIII to XII are a must-read for the preparation of Geography. In addition to that, you can also refer to Certificate Physical and Human Geography by GC Leong.
3. **Polity:** Indian constitution is at the heart of Indian polity, and is an extremely important subject for the preparation of UPSC CSE. For the UPSC CS Prelims examination, a thorough reading of Indian Polity by M. Laxmikant would suffice. You can use NCERTs and IGNOU materials to strengthen your foundation before reading the book authored by M. Laxmikant.
4. **Economy:** Economy is also one of the important segments of the UPSC syllabus. Questions from topics like national income, inflation-deflation, fiscal and monetary policies, fiscal deficit, taxes, etc are asked every year. You do not need to delve deep into economics preparation for UPSC CS Prelims. A thorough reading of NCERTs along with basic books authored by Uma Kapila or Misra Puri would suffice for the preparation of economics for UPSC CS(Prelims).
5. **Science & Technology:** Questions related to recent developments in science & technology are asked from this subject. Have a good hold over current affairs specific to this portion to ace this section. .



6. **Environment:** Questions related to environment and biodiversity, ecology, climate change that are in the current discourse are asked. NCERT books, as well as IGNOU/NIOS notes of this particular subject, can be really helpful for the preparation of this portion of UPSC CSE Prelims.
7. **Current Affairs:** Questions related to science & tech, government initiatives, defense, security issues, and international relations are asked from the current affairs. Hence, you need to prepare it well.