

SYSTEMATICALLY DESIGNED UPSC MAINS

NOTES

GENERAL STUDIES - 03

INDIAN ECONOMY (SUB-TOPIC LISTING) (SYSTEMATICALLY ARRANGED NOTES)

GENERAL STUDIES - 03

NOTES

Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Indian Economy

- Introduction
- Indian Economy- Then And Now
 - Indian Economy in Pre-independence Period
 - Indian Economy During British Rule
 - Indian Economy after Independence

- Planning Strategy
- The Goals of Five Year Plans
- FYPs Period & Performance
- The Shortcoming In The Planning Process:
- Why Planning Commission Was Abolished?
- NITI Aayog

Planning

- Economic Planning
 - What Type of Economy Is India?
 - Reasons For Adoption of Mixed Economy
 - Meaning of "PLAN"
 - Types of Economic Planning
 - Planning before Independence
 - Planning Commission
 - Features of Indian Planning
 - Objectives of Planning

GENERAL STUDIES - 03

NOTES

Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Mobilization Of Resources

- Introduction
- Mobilization Of Resources
 - What Is Mobilization Of Resources -01?
 - What Is Mobilization Of Resources -02?
 - Why Is Resource Mobilization So Important?
- Types Of Resources Of India
 - Mobilization of Natural Resources
 - Mobilization of Human Resources
 - Mobilization of Financial Resources
- Sources Of Resource Mobilization In India
 - Role Of Various Sectors
 - Role of Fiscal Policy in Resource Mobilization
 - Role of Tax in Resource Mobilization
 - Role of Agricultural Taxation in Resource Mobilization
 - Role of Capital/ Financial Markets in Resource Mobilization
 - Role of Banking/ Banks in Resource Mobilization

- Issues With Resource Mobilisation
- What Needs To Be Done?
 - Steps to be Taken to address Issues of Resource Mobilization
 - The National Development Council
 - Finance Commission: Article 280 of Indian Constitution
 - State Finance Commission
 - For Human Resource Mobilization
 - For Financial Resource Mobilization
 - For Natural Resource Mobilization

GENERAL STUDIES - 03

NOTES

Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Growth & Development

- Basic Definition
 - Economic Growth
 - Economic Development
 - Difference between Economic Growth & Economic Development
 - Economic Growth Occurs When
 - Economic Development Occurs When
 - Economic growth without development
 - Is GDP good economic indicator?
 - Indicators of Economic development
 - Factors Affecting the Economic Growth
 - Measures Taken to ensure Economic Growth
- Millennium Development Goals and India
- Sustainable Development Goals and India

Employment

- Introduction
 - Importance of Employment
 - What is Unemployment?
 - Unemployment in India
- Unemployment
 - Types of Unemployment
 - Measurement of Unemployment in India
 - Causes of Unemployment in India:
- Jobless Growth
 - Definition
 - Past Trends in Job Creation in India
 - Various Reasons For Jobless Growth
 - Measures to Reduce Jobless Growth
- Government's Initiatives

GENERAL STUDIES - 03

NOTES

Inclusive Growth and issues arising from it.

Inclusive Growth And Issues Arising From It.

- Concept And Definition
 - What Is Inclusive Growth?
 - Salient Features of Inclusive Growth
- Components / Vision of Inclusive Growth
- Elements of inclusive growth
- Challenges in Achieving Inclusive Growth
- Measuring Inclusive Development
- Inclusive Growth and 12th Five Year Plans:
- Policy Approaches to Inclusive Growth
- Government's Initiatives
- What needs to be done?

GENERAL STUDIES - 03

NOTES

Government Budgeting.

Government Budgeting

- Government Budgeting
 - What is Government Budgeting?
 - Constitutional Provisions
 - Objectives of Government Budget
 - Components of Government Budget
 - Types of Budgets
 - Measures of Government Deficit
- Changes in Budgetary Process in 2017
 - Changes are as follow-
- Changes in Budgetary Process in 2021
 - Introduction
 - Key observations and recommendations of the Committee include:
 - Budget advancement:
- Fiscal Policy
 - Introduction

- What is Fiscal Policy?
- Objectives of Fiscal policy
- Tools of Fiscal policy regulations
- Components of Fiscal Policy
- Fiscal Consolidation
- Deficit Financing in India
- Fiscal Responsibility and Budget Management (FRBM)
 Act
 - What is FRBM Act?
 - FRBM Act Background
 - Objectives of the FRBM Act
 - Key features of the FRBM act
 - Recommendations of N.K.Singh Committee
 - Escape Clause in FRBM Act
 - Latest Changes in FRBM Act with Union Budget 2022-23

GENERAL STUDIES - 03

NOTES

Land Reforms in India..

Introduction

- What Are Land Reforms?
- Need For Land Reforms
- Why Was Right To Property Removed From The Fundamental Rights?

(A) Land Reform (1947- 70)

- Agrarian Structure
- Difference Between Agrarian Reform And Land Reform:
- Agrarian Structure
- 1. Why Land Reform Needed?
 - Background:
 - Objectives Of Agrarian Reforms:
- 2. Land Reform Measures:
 - Agrarian Reforms Committee:

- Land Reform And States:
 - Components Of Land Reform:
- Bhoodan And Gramdan Movement:
- Legal Obstacles In Land Reform:
- Pattern Of Landholder:

(B) Land Reform (After 1970)

- Various Measures Taken In Land Reforms
- Land Reform In 12th Five Years Plan:
- Analysis Of Land Reforms In India
- What Lies Ahead?

GENERAL STUDIES - 03

NOTES

Effects of Liberalization on the Economy, Changes in Industrial Policy and their Effects on Industrial Growth.

Effects of liberalization on the economy, Changes in industrial policy and their effects on industrial growth

- What Is Liberalisation
- What Is Economic Liberalisation
- What Was The Need For Economic Reforms?
- Why India Waited Till 1991 To Open Its Doors?
- Economic Liberalisation In India
 - Macroeconomic Stabilisation Measures
 - Structural Reform Measures
- Features of Liberalisation
 - Industrial Sector Reforms under Liberalization:
 - Financial Sector Reforms (major reforms since 1991):
 - Tax Reforms (major reforms since 1991):
 - Foreign Exchange Reforms:
 - Trade and investment policy reforms:
 - Disinvestment
- Process of Liberalisation
- Liberalization In India-Pros/Cons
 - Advantages:

- Disadvantages:
- Effects of Liberalization On The Indian Economy
 - Impact on Indian GDP growth rate
 - Removing Barriers to International Investing
 - Industrial Growth Rate
 - Unrestricted Flow of Capital
 - · Impact on Small Scale in India
 - Impact on Agriculture
 - Impact on Services Sector
 - Impact on Information Technology industry
 - Impact on Banking Sector
 - Impact on Stock Markets Sector
 - Impact on Telecom Sector
 - Impact on Education and Health Sector
- Positive And Negative Impact of Liberalisation
 - Positive Impact in long run-
 - Negative Impact in long run-
- Definition of Privatisation
- Definition of Globalisation

GENERAL STUDIES - 03

NOTES

Effects of Liberalization on the Economy, Changes in Industrial Policy and their Effects on Industrial Growth.

Changes in industrial policy and their effects on industrial growth

- What are Industrial Policies?
- What is Industry?
- What is Manufacturing?
- Evolution of Industries
- Phases of Industrialization (Evolution of Industries) In India
 - Phase I (Abortive Phase)- 1818 to 1854
 - Phase II (Incipient Phase)- 1854 to 1907
 - Phase III (Premature Phase)- 1907 to 1955
 - Phase IV (1955-1985)- Early Mature Phase and 2nd FYP
 - Phase V (1985 to present): Mature Phase
- New Industrial Policy, 1991
- National Manufacturing Policy, 2011

GENERAL STUDIES - 03

NOTES

Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Infrastructure: Energy, Ports, Roads, Airports, Railways etc..

Infrastructure

- Introduction
- Infrastructure sector has following characteristics:
- Infrastructure Category
- Benefits of getting "Infrastructure Status" to any sector:
- Relation Between Infrastructure & Economic Development:

Energy

- Introduction
- Energy Resources in India
- Conventional Energy
- Non-Conventional Sources of Energy
- Energy Consumption in India
- Energy Resources Conservation and Management
- India Energy Outlook 2021

- Energy Sector: Performance
- Energy Sector: Challenges
- Energy Sector: Government Initiatives

Ports

- Introduction
- Ports Infrastructure in India: An Overview
- Types of the port according to cargo handled
- Types of port on the basis of location
- List of Important Ports in India
- Major ports in India
- Significance of port development and port connectivity for India
- Governance of ports in India
- Service port model vs. Landlord port model
- Issues and challenges in India's port connectivity
- Major Committees and Recommendations:
- Way ahead

GENERAL STUDIES - 03

NOTES

Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Infrastructure: Energy, Ports, Roads, Airports, Railways

Roads

- Introduction
- · National Highways (NH),
- State Highways (SH),
- Major District Roads
- Rural Roads.
- Other Roads Border roads and international highways
- Areas factors influence in roadways
- Importance of Roads
- Government push towards Road Infrastructure
- Bharatmala Project Components
- Challenges
- Way forward

Airports

- Introduction
- India Aviation Industry An overview
- Recent Developments
- Significance of Air transport
- Challenges
- Way Forward
- Current Schemes related to aviation sector

Railways

- Introduction
- Indian Railways An Overview
- Growth and Development of Indian Railways
- · Significance of Railways in India
- Factors Affecting Railways
- Privatisation of Railways

GENERAL STUDIES - 03

NOTES

Investment Models.

Investment Models

- Introduction
 - What is an Investment?
 - What is an Investment Model?
 - What is the Need for an Investment?
- Types of Investment Models- DOMESTIC
 - Public Investment Model.
 - Private Investment Model
 - Public Private Participation Investment Model (PPP)
- Types of Investment Models-FOREIGN
 - Foreign Direct Investment (FDI)
 - Foreign Institutional Investor (FII)
- Types of Investment Models-SECTOR SPECIFIC

- Types of Investment Models- CLUSTER BASED
- Investment Models In India
 - Introduction
 - Phase 1 (1951-69)
 - Phase 2 (1970-73)
 - Phase 3 (1974-90)
 - Phase 4 (1991 onward)
- Investment Models Followed by India
 - Harrod Domar Model
 - Solow Swan Model
 - Feldman–Mahalanobis model
 - Rao ManMohan Model. Etc.

AGRICULTURE (SUB-TOPIC LISTING) (SYSTEMATICALLY ARRANGED NOTES)

GENERAL STUDIES - 03

NOTES

Major Crops – Cropping Patterns in various parts of the country,
Different Types of Irrigation and Irrigation Systems; Storage, Transport and
Marketing of Agricultural Produce and Issues and Related Constraints; Etechnology in the aid of farmers.

Cropping Pattern And Cropping System

- Intensive Cropping
- Types Of Cropping Systems
- Factors Affecting Cropping Pattern In India
- Diversification Of Cropping Patterns In India
- Changes In The Cropping Patterns
- Emerging Problems In Cropping Patterns
- Long-Run Effects Of Current Trend
- Current Cropping Patterns
- Concept Of Base Crop
 - The Kharif Season Cropping Patterns
 - Rabi-Season Cropping Patterns
 - The Zaid Season Cropping Patterns
- Sustainable Agriculture
- Integrated Farming System (IFS)

Major Food Crops

- Rice
- Wheat
- Millets (Nutri-Cereals)
- Maize
- Pulses

Major Cash Crops

- Sugarcane
- Oil Seeds

Plantation Crops

- Tea
- Coffee
- Rubber

Fibre Crops

- Cotton
- Jute

GENERAL STUDIES - 03

NOTES

Major Crops – Cropping Patterns in various parts of the country,
Different Types of Irrigation and Irrigation Systems; Storage, Transport and
Marketing of Agricultural Produce and Issues and Related Constraints; Etechnology in the aid of farmers.

Different Types Of Irrigation And Irrigation Systems Storage

- Irrigation
- Irrigation In India
- Different Irrigation Systems
 - Well And Tube Well Irrigation
 - Tube Well
 - Canal Irrigation
 - Tank Irrigation:
- Micro-Irrigation Or Localized Irrigation
 - Drip Irrigation
 - Sprinkler Irrigation
- Other Types Of Irrigation
 - Furrow Irrigation
 - Surge Irrigation
 - Ditch Irrigation
 - Sub-Irrigation Or Seepage Irrigation

- Problems Associated With Irrigation
- Progress Of Irrigation Under Five Year Plans
- Environmental Effects Of Irrigation
- National Water Policy

Transport & Marketing Of Agricultural Produce & Issues & Related Constraints

- Marketing Of Agricultural Produce
- Government Policy Instruments In Agricultural Marketing
- Various Platforms For Marketing Of Agricultural Produce
- Major Challenges To Agriculture Marketing

GENERAL STUDIES - 03

NOTES

Major Crops – Cropping Patterns in various parts of the country,
Different Types of Irrigation and Irrigation Systems; Storage, Transport and
Marketing of Agricultural Produce and Issues and Related Constraints; Etechnology in the aid of farmers.

E-Technology In The Aid Of Farmers

- Introduction
- Need Of E-Technology Intervention For Agriculture:
- Role Of It In Agriculture
- Significance Of Adopting Technology:
- Advantages Of E-Technology In Empowering Farmers
- Major Challenges In The Spread Of E-Technology To Farmers:
- What Needs To Be Done?
- Schemes And Projects Of Government And Its Agencies
 - National Mission On Agricultural Extension And Technology (Nmaet)
 - National Policy For Farmers, 2007
 - Agricultural Technology Management Agency (A T M A)
 - Village Knowledge Centre (Vkc)
 - Village Resource Centres (Vrcs)
 - Mkisan Sms Portal
 - Kisan Call Centres
 - Sandesh Pathak
 - Kisan Credit Card
 - Sanchar Shakti Scheme & Kissan Kerala

- Agropedia Icar Initiative
- Vkvk: Voice Krishi Vigyan Kendra
- Agriclinic And Agribusiness Centre: (Not Directly Related To E-Technology)
- Private Sector Initiatives In E-Technology For Farmers
 - Mkrishi
 - Iffco Kisan Sanchar (Iksl)
 - E-Choupal
 - Mobile Fisher Friend Project
 - Aaqua Mini
 - Farm Advisory Through Mobiles Green Sim:
 - Esagu It Based Personalized Agro Advisory System:
 - Facebook For Farmers And Extension Workers:
 - Aasyasree:
- Upcoming Advanced Technologies In Aid Of Agriculture & Farmer
 - Big Data From Agriculture Bda
 - Internet Of Things (lot)
 - · Artificial Intelligence
 - Blockchain Technology For Agricultural Value System
 - Robots And Sensors In Agriculture

GENERAL STUDIES - 03

NOTES

Issues related to Direct and Indirect Farm Subsidies and Minimum Support Prices; Public Distribution System – Objectives, Functioning, Limitations, Revamping; Issues of Buffer Stocks and Food Security; Technology Missions; Economics of Animal-Rearing..

Issues Related To Direct And Indirect Farm Subsidies

- Introduction
- Need For Farm Subsidies:
- Types Of Agricultural Subsidies
 - Explicit Input Subsidies
 - Implicit Input Subsidies
 - Output Subsidies
 - Direct Subsidies
- Direct Farm Subsidies
 - Advantages Of Direct Farm Subsidies:
 - Issues Of Direct Farm Subsidies:
- Indirect Farm Subsidies
 - Advantages Of Indirect Subsidies:
 - Issues/Challenges Of Indirect Farm Subsidies:
- Extent And Effectiveness Of Subsidies
- WTO Subsidies Categorization:

- WTO Agreement On Agriculture (Aoa):
- What Are The Issues Related To Subsidies?
- What Needs To Be Done?

Minimum Support Prices

- What Is MSP?
- Why Support Price?
- Importance Of Minimum Support Price:
- Fixation Of MSP
- Challenges And Problems Associated With MSP
- What Needs To Be Done- MSP?
- Legalising MSP
 - What Is The Rationale Behind The Demand For Legalisation Of MSP?
 - What Are The Challenges With The Legalisation Of MSP?

GENERAL STUDIES - 03

NOTES

Issues related to Direct and Indirect Farm Subsidies and Minimum Support Prices; Public Distribution System – Objectives, Functioning, Limitations, Revamping; Issues of Buffer Stocks and Food Security; Technology Missions; Economics of Animal-Rearing..

Public Distribution System- Objectives, Functioning, Limitations, Revamping

- What Is PDS?
- Evolution Of PDS In India
- How PDS System Functions?
- Importance Of PDS
- How Does TPDS Function?
 - Procurement Of Foodgrains:
 - Storage Of Food Grains
 - Allocation Of Foodgrains
 - Transportation Of Food Grains To Fpss
- Issues In Implementation
- Steps Taken By Government
- Revamping The PDS

Issues Of Buffer Stocks

- What Are Buffer Stocks?
- The Objective Of Maintaining Buffer Stocks:
- Advantages Of Maintaining Buffer Stocks
- Challenges In Maintaining Buffer Stocks
- What Needs To Be Done?

Issues Related To Food Security

- What Is Food Security?
- Challenges Faced By Food Security
- India's Efforts To Ensure Food Security
- Solutions To Problems In Food Subsidy Delivery
- International Organisations Ensuring Food Security

GENERAL STUDIES - 03

NOTES

Food Processing and Related Industries in India- Scope' and Significance, Location, Upstream and Downstream Requirements, Supply Chain Management.

Food Processing And Related Industries In India

- Introduction
- Food Processing And Related Industries In India
- Scope And Significance
- Location,
- Upstream And Downstream Requirements,
- Supply Chain Management
- Its Importance
- Challenges
- **Food Processing-SWOT Analysis**
 - Strengths
 - Weaknesses

- Opportunities
- Threats
- Unlocking India's Food Processing Potential
 - Industry Scenario:
 - Steps Taken By The Government
 - Role Of Good-Governance

SCIENCE & TECH. (SUB-TOPIC LISTING) (SYSTEMATICALLY ARRANGED NOTES)

GENERAL STUDIES - 03

NOTES

Science and Technology- Developments and their Applications and Effects in Everyday Life.

Science And Technology-Developments

- Introduction
- Development Of Science In Ancient India
 - Astronomy
 - Mathematics
 - Medicine
 - Metallurgy
 - Geography
- Science And Technology In Medieval India
 - Biology
 - Mathematics
 - Chemistry
 - Astronomy
 - Medicine
 - Agriculture

Science And Technology In Modern India

- Agriculture
- Industry
- Nuclear Energy
- Space Technology
- Electronics
- Medical And Health Sciences
- Ocean Development
- Other Areas
- Evaluation Of Progress Of Science And Technology

Science And Technology- Their Applications And Effects In Everyday Life

Introduction

- Role Of Science, Technology And Innovation
- Role Of Science, Technology And Innovation In Everyday Life
- Role Of Science, Technology And Innovation In Future Development
- Role Of Science, Technology And Innovation In Long-Term
- Role Of Science, Technology And Innovation In Industrialisation
- Role Of Science, Technology And Innovation In **Urbanisation**
- Role Of Science, Technology And Innovation In The Urban Context

GENERAL STUDIES - 03

NOTES

Achievements of Indians in Science & Technology; Indigenization of Technology and Developing New Technology.

Achievements Of Indians In Science & Technology

- Introduction
- Achievements Of Indians In Science And Technology In Ancient And Medieval India
- Achievements Of Indians In Science And Technology In Modern India

Indigenization Of Technology And Developing New Technology

- Introduction
- Importance Of Indigenization Of Technology:
- Significance Of Indigenization Of Technology And Developing New Technologies
- Development Of New Technology.

GENERAL STUDIES - 03

NOTES

Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

Awareness in the fields of IT & Computers

- Introduction
 - Introduction
- History of Information Technology
 - Pre-Mechanical Age:
 - Mechanical Age:
 - Electromechanical Age:
 - Electronic Age:
 - Age of Information (and the internet):
- Components of Information Technology
 - Computer Technology
 - Communication and Telecommunication Technology
 - Optical Communication Systems:
 - Satellite Communication Systems:
- Digital infrastructure in India
 - Introduction
 - Key components of digital infrastructure for

Government

- Data Localisation:
 - Introduction
 - Need for data localization
 - Challenges associated with data localization
 - Measures towards data localization
 - Global Practices
 - What needs to be done?
- Super-computing in India:
 - Introduction
 - Application of Super-computing
 - Challenges to Supercomputing in India
 - Government Initiative: National Supercomputing Mission
 - What needs to be done?

GENERAL STUDIES - 03

NOTES

Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

Awareness in the fields of IT & Computers (Contd)

- 5G network:
 - Introduction
 - Advantages of 5G
 - Challenges
 - Government Initiatives:
 - What needs to be done?
- Cyber Physical System:
 - Introduction
 - Advantages of CPS technologies
 - Challenges in CPS
 - CPS vs Internet of things:
 - National Mission on Interdisciplinary CyberPhysical Systems:
- Progress of Digital literacy programs in India:
 - Introduction
 - Current Status of Digital Literacy in India
 - Government Initiatives
 - Issues with government schemes

- Challenges in expanding Digital Literacy in India
- Recommendations of the Parliamentary Standing Committee

Awareness in the fields of Space.

- Space Technology
 - Introduction
 - Milestones in India's Space Programme
- Satellites
 - Introduction
 - Geostationary / Communication Satellites
 - Earth Observation Satellites
 - Navigation Satellite
 - Small Satellites
 - Microsat
 - Space Missions
- Black Hole
 - Introduction
 - Significance:

GENERAL STUDIES - 03

NOTES

Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

Awareness in the fields of Space. (Contd)

- Space Debris
 - Introduction
 - Why Space Debris is a concern?
 - Initiatives taken towards Space Debris cleanup:
- Types of satellite orbits
 - Introduction
 - On basis of height:
 - On basis of application:
 - Polar Orbits (PO) and Sun-synchronous orbits (SSO)
- Miscellaneous
 - Important Missions Of Nasa
 - Other Space Agencies
 - Space Observatories On Surface And In Space-important TelescopeS

Awareness in the fields of Robotics

- Introduction
 - Introduction
 - Components and Structure of a Robot
 - History of Robotics
- Types of robots:
 - Industrial Robots:
 - Mobile robots
 - Humanoid robot:
 - Military robots:
 - Indian Military Robots
 - Application of Robotics-01
- Application of Robotics-02
 - Robotics and Old Age
 - · Robotics and Artificial Intelligence
 - · Robotics and its Importance in Agriculture
 - Robotics and its Importance in Pandemics
- Robotics in India
 - Introduction
 - Robotics in India's policies:
 - Impediments:
 - Important private and public robots in India:

GENERAL STUDIES - 03

NOTES

Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

Awareness in the fields of Nano Technology

- Introduction
 - What is Nanotechnology?
 - Fundamentals behind Nanotechnology
- Applications of Nanotechnology
 - Health sector:
 - Food Industry:
 - Electronic components:
 - Energy-efficient:
 - Textile industry:
 - Environment:
 - Transport:
 - Space:
 - Agriculture:
- What are the Concerns?
- Governmental Initiatives to Promote Nanotechnology
 - Nano Science and Technology Mission (NSTM):
 - Nano Science and Technology Initiative (NSTI):

Awareness in the fields of Bio-technology Introduction

- What is Biotechnology?
- History of Biotechnology

Aspects of Biotechnology

- Agro-biotechnology
- Healthcare Biotechnology
- Industrial Biotechnology

Applications of Biotechnology

- Applications of Biotechnology in Agriculture
- Applications of Biotechnology in Medicine
- Applications of Biotechnology in Transgenic Animals
- Applications in Agricultural, Food and Industrial Applications
- Applications of Biotechnology in Environment
- Applications of Biotechnology in Animal Husbandry
- Applications of Biotechnology in Food Processing

Types of Biotechnology

Types

GENERAL STUDIES - 03

NOTES

Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.

Awareness in the fields of Intellectual Property Rights.

- Introduction
 - What are Intellectual Property Rights?
 - Types of Intellectual Property Rights (IPR)
 - What is the need of IPR?
 - International cooperation
- Concerns with the IPR regime in India?
- Intellectual Property Rights Issues
 - Patent Evergreening Prevention
 - Subsidies & IPR Issues
 - The Product Patents Process
 - Protecting traditional knowledge
 - Compulsory Licensing & Drug Price Control Order
 - Some other issues

Government's initiatives

- A) The Traditional Knowledge Digital Library (TKDL)
- B) National IPR Policy
- Achievements under new IPR policy

DISASTER MANAGMENT

(SUB-TOPIC LISTING)
(SYSTEMATICALLY ARRANGED NOTES)

DISASTER MGMT.

GENERAL STUDIES - 03

NOTES

Disaster and Disaster Management

- List of All Disasters
- Earthquake
 - Introduction
 - Causes & Consequences
 - Preventive Measure
- Floods
 - Causes & Consequences
 - Preventive Measure
- Landslides
 - Causes & Consequences
 - Preventive Measure
- Avalanche
 - Causes & Consequences
 - Preventive Measure
- Drought
 - Causes & Consequences
 - Preventive Measure
- Heatwave
 - Introduction

Disaster and Disaster Management..

- Causes & Consequences
- Preventive Measure
- Urban flooding
 - Introduction
 - Causes & Consequences
 - Preventive Measure
- Tsunami
 - Causes & Consequences
 - Preventive Measure
- Oil spills
 - Causes & Consequences
 - Preventive Measure
- Biological Disasters
 - Causes & Consequences
 - Preventive Measure
- Nuclear disaster
 - Causes & Consequences
- Industrial and Chemical Disasters
 - Causes & Consequences

ENVIRONMENT

(SUB-TOPIC LISTING)
(SYSTEMATICALLY ARRANGED NOTES)

ENVIRONMENT

GENERAL STUDIES - 03

NOTES

Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment..

Conservation of Environment

- Environment Conservation
 - What is Environment Conservation?
 - Importance of Environmental Conservation
 - Methods of Environmental Conservation
 - Ways of Conserving the Environment
- Conservation of Soil and Land
 - Soil Erosion
 - Soil Conservation:
 - Land Degradation
 - Land Conservation
- Water and Energy Conservation
 - Water Resources
 - Energy Conservation

Biodiversity and Environment Conservation

- Introduction
- Need For Biodiversity Conservation
- Biodiversity Conservation Modes
- Biodiversity Conservation Importance
- Biodiversity Conservation Threats
- Steps Taken
- Historical Citizen Movements

ENVIRONMENT

GENERAL STUDIES - 03

NOTES

Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment..

Environmental Pollution and Degradation

- Environmental Pollution
 - Pollution
 - Air Pollution
 - Noise Pollution
 - Water Pollution
 - Soil Pollution
 - Radioactive Pollution
 - Light Pollution
 - Nitrogen pollution
- Waste Management
 - Solid Waste Management
 - E-Waste Management
- Environmental Legislations
 - Introduction
 - International Legislations
 - National Legislations

Environmental Impact Assessment

- Introduction
- What is EIA (Environmental Impact Assessment)?
- Aims of EIA
- EIA Applicability in India
- Major Stakeholders in EIA India
- EIA Process in India
- EIA Notification 2006
- EIA Notification 2020
- Components of EIA: Importance and Shortcomings
- EIA in the Indian System Drawbacks
- EIA in the Indian System Recommendations

INTERNAL SECURITY

(SUB-TOPIC LISTING)
(SYSTEMATICALLY ARRANGED NOTES)

GENERAL STUDIES - 03

NOTES

Linkages between development and spread of extremism.
Role of external state and non-state actors in creating challenges to internal security.

Linkages Between Development And Spread Of Extremism

- What Is Extremism?
- Origin Of Left Wing In India
- Evolution Of Left-Wing Extremism
- Insurgency In Northeast India
- Factors That Lead To Extremism:
- Impacts Of Rising Left-Wing Extremism In India:
- State's Response
- Counter Actions Against Extremism
- Government Initiatives For Regions Affected By Extremism
- Issues In Government Measures:
- Recommendations From The Arc

For Overcoming Developmental Issues

Role Of External State And Non-State Actors In Creating Challenges To Internal Security

- What Is Internal Security?
- What Is National Security?
- Important Aspects Of Internal Security:
- Challenges To The Internal Security Of Country:
- Challenges Posed By External State Actors
 - Pakistan
 - China
 - Bangladesh
 - Myanmar

- Nepal
- Sri Lanka
- Challenges Posed By Non-State Actors
- Internal Security Problem In The Country:
 - Jammu & Kashmir
 - The North East
 - Punjab
 - Maoist Insurgency
 - Illegal Migrations
 - Other Threats
- What Needs To Be Done?

GENERAL STUDIES - 03

NOTES

Challenges to internal security through communication networks.

Challenges To Internal Security Through Communication Networks,

- Introduction
- What Are Communication Networks?
- Security Threats Through Communication Networks
 - Information Warfare
 - Cyber Terrorism
 - Crippling The Economy
- Explanation Of Key Terms
- Method Of Attacks On Communication Networks
 - Denial Of Service (Dos)
 - Packet Sniffing
 - Virus And Malware

- Password Attacks
- Pretentious Means
- 4 Steps Plan To Ensure Secure Communication Networks
- Method Of Attacks On Communication Networks.

GENERAL STUDIES - 03

NOTES

Role of Media and Social Networking Sites in Internal Security Challenges,.

Role Of Media And Social Networking Sites In Internal Security Challenges

- Introduction
- Social Media
- Role Of Media In India:
- Variants Of Social Media:
- Importance Of Social Media
- Different Internal Security Threats Due To Social Media Are
 - Cyber Terrorism:
 - Fraud:
 - Criminal Activity And Money Laundering:
 - International Users:

- To Bring Revolution:
- Communal Violence And Fanning Tensions:
- Virtual Community:
- Hacking:
- Surveillance Projects In India
- Challenges In Monitoring Social Media
- Impact Of Social Media On Indian Society
- Social Media And Regulation

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Basics of Cyber Security; Money-Laundering and its prevention...

Basics Of Cyber Security

- Introduction
- What Is Cyber Security?
- Methods Used For Cyber Crime/Cyber Attack:
- Cyber Attacks In India
 - Recent Cyber-Attack In India
- Steps Taken By India
- Challenges
- Way Forward
- Money-Laundering And Its Prevention
- Introduction

Money Laundering:

- How Money Laundering Works?
- Various Forms Of Money Laundering:
- Various Techniques Of Money Laundering:
- Sources Of Terror Financing
 - Internal
 - External
- Impacts Of Money Laundering
 - Economic Impacts:
 - Social Impacts:
 - Political Impacts:
 - Ethical Impacts:
- Challenges
- Its Consequences

- Steps Taken By Government Of India To Prevent Money Laundering
- Steps Taken Globally To Prevent Money Laundering
- What Needs To Be Done?
- FATF's Key Recommendations:
- Prevention Of Money Laundering Act:

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Security Challenges and their Management in Border Areas Linkages of Organized Crime with Terrorism..

Security Challenges And Their Management In Border Areas

- Introduction
- Challenges
- India's Land Boundaries
- Type Of Land Border
- India And Its Border Related Issues
 - India- Pakistan Border
 - India- China Border
 - India-Bangladesh Border
 - India-Nepal Border
 - India-Myanmar Border
 - India-Bhutan Border
- What Needs To Be Done?
- Shekatkar Committee Recommendations
- Coastal Security

Linkages Of Organized Crime With Terrorism

- Introduction
- What Is Organised Crime?
- Growth Of Organised Crime
- Characteristics Of Organised Crime
- Types Of Organised Crime
- Problems In Control Efforts
- Differences Between Organized Crimes And Terrorism:
- Similarities Between Organized Crimes And Terrorism:
- Linkages Between Organized Crimes And Terrorism:
- What Needs To Be Done?

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Various Security Forces and Agencies and their Mandate..

Various Security Forces And Agencies And Their Mandate

- Introduction
- Security Forces Dealing With External Threats
 - Indian Armed Forces
 - Indian Air Force
 - Indian Navy
 - Indian Coast Guard

- Security Forces Dealing With Internal Threats
 - Assam Rifles (Ar)
 - Border Security Force (Bsf)
 - Central Industrial Security Force (Cisf)
 - Central Reserve Police Force (Crpf)
 - Indo Tibetan Border Police (Itbp)
 - National Security Guard (Nsg)
 - Sashastra Seema Bal (Ssb)