



General Studies-III

(Technology, Economic Development, Bio-diversity, Environment, Security and Disaster Management)

- Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.
- Inclusive Growth and issues arising from it.
- Government Budgeting.
- 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; E-technology in the aid of farmers.
- 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.
- Food Processing and Related Industries in India- Scope' and Significance, Location, Upstream and Downstream Requirements, Supply Chain Management.
- Land Reforms in India.
- Effects of Liberalization on the Economy, Changes in Industrial Policy and their Effects on Industrial Growth.
- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.
- Investment Models.
- Science and Technology- Developments and their Applications and Effects in Everyday Life.
- Achievements of Indians in Science & Technology; Indigenization of Technology and Developing New Technology.
- Awareness in the fields of IT, Space, Computers, Robotics, Nano-technology, Bio-technology and issues relating to Intellectual Property Rights.
- Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.
- Disaster and Disaster Management.
- Linkages between Development and Spread of Extremism.
- Role of External State and Non-state Actors in creating challenges to Internal Security.
- Challenges to Internal Security through Communication Networks, Role of Media and Social Networking Sites in Internal Security Challenges, Basics of Cyber Security; Money-Laundering and its prevention.
- Security Challenges and their Management in Border Areas - Linkages of Organized Crime with Terrorism.
- Various Security Forces and Agencies and their Mandate.

ECONOMIC DEVELOPMENT

Indian Economy & Issues Relating to Planning, Mobilization of Resources, Growth, Development & Employment	
Planning ▪ Meaning of Planning	▪ Determinants of Growth & Development ▪ Importance & Limitations of Economic Growth

▪ Need for Planning in Economic Development ▪ Imperative Vs. Indicative Vs. Structural Planning ▪ Objectives of Planning ▪ Indian Planning History ▪ Techniques of Indian Planning ▪ Achievements & Failures of Indian Planning ▪ Shortcomings of Planning in India ▪ NITI Aayog Vs. Planning Commission Mobilisation of Resources ▪ Types of Resources – Financial, Human, Natural etc. ▪ Need for Resource Mobilisation ▪ Role of Savings & Investment ▪ Government Resources – Tax & Non-Tax (or Fiscal & Monetary Policy) ▪ Banking Sector & NBFCs ▪ Capital Market ▪ External Sources – FDI, ODA etc. ▪ Public Borrowing & Management of Public Debt ▪ Challenges in Mobilising Resources for Development ▪ Steps That Can Be Taken Growth & Development ▪ Meaning of Development & Growth ▪ Difference between Development & Growth	▪ Jobless Growth ▪ Pro-Poor Growth ▪ Balanced & Unbalanced Growth ▪ Dimensions of Development ▪ Measurement & Indicators of Development ▪ Approaches to Development: ◦ Market-Based Approach ◦ Role of State and Planned Approach ◦ Mixed Economy Approach ▪ Challenges to Development & Growth Employment ▪ Nature – Rural vs. Urban, Formal Vs. Informal ▪ Terms Related to Employment – Labour Force Participation Rate, Employment Rate, Working Age Population etc. ▪ Sectoral Distribution of Employment ▪ Quality of Employment ▪ Causes of Lack of Employment ▪ Restructuring of Workforce ▪ Government Initiatives for Generating Employment
Inclusive Growth & Issues Arising From It	
▪ What is Inclusive Growth? ▪ Elements of Inclusive Growth ▪ Need for Inclusive Growth	▪ Indicators of Inclusive Growth ▪ Challenges in Achieving Inclusive Growth in India ▪ 12th FYP & Inclusive Growth
Government Budgeting	
Need for Government Budgeting Components of the Government Budget ▪ Revenue Account – Revenue Receipts & Revenue Expenditure ▪ Capital Account – Capital Receipts & Capital Expenditure Changes in Budgetary Process in 2017 Measures of Government Deficit ▪ Revenue Deficit	▪ Fiscal Deficit ▪ Primary Deficit Fiscal Policy Deficit Reduction FRBM Act Other Types of Budgets – Outcome, Zero-Based, etc.
Land Reforms in India	
▪ Rationale for Land Reforms	▪ Success of Land Reforms

- Components of Land Reforms - Impact of Land Reforms - Problems in Implementaion of Land Reforms	Recent Initiatives - Land Leasing, Land Acquisition, Rehabilitation & Resettlement Act, etc.
Effects of Liberalization on the Economy	
Phase of Liberalisation	Impact on Different Sectors of the Economy
Changes In Industrial Policy & their Effects on Industrial Growth	
- Industrial Policy Before 1991 - Industrial Policy After 1991 - Phases of Industrial Growth - Linkage Between Economic Reforms and Economic Outcomes	- Weaknesses and Failures of Industrial Policies - National Manufacturing Policy - SEZs - Make in India
Infrastructure	
- Energy - Ports - Roads	- Airports - Railways
Investment Models	
Need for Investment Sources of Investment Types of Investment Models - Domestic Investment Models - Public Investment Model - Private Investment Model - Public Private Participation Investment Model	- Foreign Investment Models: - FDI - FII, etc. - Sector Specific Investment Models - Cluster Based Investment Models Investment Models Followed by India

AGRICULTURE

Major Crops Cropping Patterns in Various Parts of the Country	
- Importance of Cropping Pattern - Types of Cropping Pattern - Reasons Why Cropping Pattern Differ	- Factors Influencing Cropping Pattern - Emerging Trends in Cropping Pattern - Long-Run Effects of Current Trends in Cropping Pattern
Different Types of Irrigation & Irrigation Systems Storage	
- Modes of Irrigation - Sources of Irrigation - Choosing an Irrigation System - Problems Associated with Irrigation	- Progress of Irrigation Under Five Year Plans - Environmental Effects of Irrigation - Need for Systemic Irrigation Reforms - Need for a National Water Policy
Transport & Marketing of Agricultural Produce & Issues & Related Constraints	
- Process of Agricultural Marketing - Marketing Channels, Functionaries, Costs, etc. - Role of FCI	- APMCs - National Agricultutral Market (NAM) - Farmer Producer Organisations (FPO) - Contract Farming

- Regulated Markets - Warehousing - Cooperative Marketing - Shortcomings of Current Agricultural Marketing Process	Futures Trading in Agricultural Commodities
E-Technology in the Aid of Farmers, Technology Missions	
Issues Related to Direct & Indirect Farm Subsidies & Minimum Support Prices	
- Agricultural Pricing Policy - Rationale for Subsidies - Types of Subsidies	- Effectiveness, Extent & Problems of Subsidies - Clash with WTO Agreements
Public Distribution System Objectives, Functioning, Limitations, Revamping	
- Objectives/Significance - Functioning - Fair Price Shops, FCI, Ration Cards, Aadhar Linking, etc. - Shortcomings or Problems Associated with PDS	- Need to Improve the Working of PDS - Measures to Improve the Loopholes & Lacunae Associated with PDS - Steps Taken by Government in this Regard
Issues of Buffer Stocks & Food Security	
- Buffer Stock - Objectives & Norms in India - Impact of Government Procurement & Distribution	- Need for Food Security - NFSM And other Food Security Related Government Initiatives
Economics of Animal-Rearing	
Food Processing & Related Industries in India	
- Scope & Potential in India - Significance - Location - Constraints and Challenges	- Upstream & Downstream Requirements - Supply Chain Management - Government Policies and Initiatives - SAMPADA, 12th FYP, etc.

SCIENCE & TECHNOLOGY

Developments & their Applications & Effects in Everyday Life	
Chemicals in Food - Artificial Sweetening Agents - Food Preservatives	Anti-Fertility Drugs, etc.
Drugs - Antacid - Antihistamines - Neurologically Active Drugs - Tranquilizers - Analgesics - Antimicrobials - Antibiotics - Antiseptic and Disinfectant	Cleansing Agents - Soaps - Synthetic detergents Glass Water Softener Water Purification/Disinfection Microwave Oven, etc.
Achievements of Indians in Science & Technology	
- Chandrasekhara Venkata Raman - Acharya Jagadish Chandra Bose - Satyendra Nath Bose - Meghnad Saha	- A.P.J. Abdul Kalam - Vikram Sarabhai - Mokshagundam Visvesvaraya - Har Gobind Khorana

▪ Homi Jehangir Bhabha ▪ Subrahmanyam Chandrasekhar	▪ Tessy Thomas ▪ C.N.R. Rao
Indigenization of Technology & Developing New Technology	
▪ IT & Computers ▪ Space ▪ Nanotechnology ▪ Biotechnology	▪ Robotics ▪ Defence ▪ Nuclear
Awareness in Different Fields	
▪ IT & Computers ▪ Space ▪ Nanotechnology ▪ Biotechnology	▪ Robotics ▪ Defence ▪ Nuclear
Issues Relating to Intellectual Property Rights	
▪ Need for Intellectual Property Rights ▪ Types of IPR ▪ IPR Regime in India	▪ International Agreements Related to IPRs ▪ Geographical Indicators ▪ Recent Issues - Evergreening, Compulsory Licensing, Prominent Cases etc.

BIODIVERSITY & ENVIRONMENT

Conservation	
What is Biodiversity? Types of Biodiversity - Genetic, Species, Ecosystem, etc. Importance of Biodiversity - Ecosystem Services, Bio Resources of Economic Importance, Social Benefits etc. Reasons for Loss of Biodiversity	Conservation ▪ In-situ & Ex-Situ ▪ Eco-Sensitive Areas ▪ Ecological Hotspots ▪ National Guidelines, Legislations & Other Programmes. ▪ International Agreements & Groupings
Environmental Pollution & Degradation	
Types of Pollution & Pollutants Impact of Pollution & Degradation ▪ Ozone Layer Depletion and Ozone Hole ▪ Greenhouse Gas Effect & Global Warming ▪ Eutrophication ▪ Desertification ▪ Acid Rain ▪ Hazardous Waste, etc.	Causes/Sources of Pollution & Degradation Prevention & Control of Pollution & Degradation National Environment Agencies, Legislations and Policies International Environment Agencies & Agreements
Environmental Impact Assessment (EIA)	
▪ What is EIA? ▪ Indian Guidelines & Legislations ▪ EIA Process	▪ Need & Benefits of EIA ▪ Shortcomings of EIA in India ▪ Measures to Make EIA Effective
Disaster Management	
▪ Types of Disasters ▪ Management of Disasters	▪ Community Level Disaster Management ▪ Government Initiatives on Disaster Management

SECURITY

Linkages Between Development & Spread of Extremism	
- Factors Responsible for Spread of Extremism - Steps that State can Taken to Reduce the Spread of Extremism due to Underdevelopment	Naxalism
Role of External State & Non-State Actors in Creating Challenges to Internal Security	
Threats from Non-State Actors - J&K Separatism - Left Wing Extremism - North East Insurgency - Terrorism in Hinterland & Border Areas - Right Wing Terrorism Reasons for Spread of Terrorism State Sponsored Terrorism	Institutional Framework to Tackle Challenge of Internal Security - NIA - NATGRID - MAC - UAPA - TADA - POTA - NCTC
Challenges to Internal Security Through Communication Networks	
- Role of Media & Social Networking Sites in Internal Security Challenges - Challenges in Managing Social Media	Steps That can be Taken
Basics of Cyber Security	
- Cyber Security - Threats to Indian Cyber Security - Steps taken by India	- International Cooperation on Cyber Security - Cyber Warfare - Terms Associated with Cyber Security
Money-Laundering & its Prevention	
- Process of Money Laundering - Impact of Money Laundering - Challenges to Tackle Money Laundering	- Steps to Counter Money Laundering - Terms Related To Money Laundering
Security Challenges & their Management in Border Areas	
- Challenges in Managing Border Security - Coastal & Terrestrial - Land Boundary Disputes with Neighbours	India's Policy in Border Area Security Management
Linkages of Organized Crime with Terrorism	
- Types of Organised Crime - Challenges in Controlling Organised Crime	Indian Context - Link between Organised Crime & Terrorism
Various Security Forces & Agencies & Their Mandate	
- Central Armed Police Forces - Central Paramilitary Forces	Security & Intelligence Agencies - IB, R&WA, etc.

