



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 <ul style="list-style-type: none">▪ Meaning of Planning	<ul style="list-style-type: none">▪ Determinants of Growth & Development▪ Importance & Limitations of Economic Growth

<ul style="list-style-type: none"> ▪ 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 <p>Mobilisation of Resources</p> <ul style="list-style-type: none"> ▪ 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 <p>Growth & Development</p> <ul style="list-style-type: none"> ▪ Meaning of Development & Growth ▪ Difference between Development & Growth 	<ul style="list-style-type: none"> ▪ Jobless Growth ▪ Pro-Poor Growth ▪ Balanced & Unbalanced Growth ▪ Dimensions of Development ▪ Measurement & Indicators of Development ▪ Approaches to Development: <ul style="list-style-type: none"> ◦ Market-Based Approach ◦ Role of State and Planned Approach ◦ Mixed Economy Approach ▪ Challenges to Development & Growth <p>Employment</p> <ul style="list-style-type: none"> ▪ 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	
<ul style="list-style-type: none"> ▪ What is Inclusive Growth? ▪ Elements of Inclusive Growth ▪ Need for Inclusive Growth 	<ul style="list-style-type: none"> ▪ Indicators of Inclusive Growth ▪ Challenges in Achieving Inclusive Growth in India ▪ 12th FYP & Inclusive Growth
Government Budgeting	
<p>Need for Government Budgeting</p> <p>Components of the Government Budget</p> <ul style="list-style-type: none"> ▪ Revenue Account – Revenue Receipts & Revenue Expenditure ▪ Capital Account – Capital Receipts & Capital Expenditure <p>Changes in Budgetary Process in 2017</p> <p>Measures of Government Deficit</p> <ul style="list-style-type: none"> ▪ Revenue Deficit 	<ul style="list-style-type: none"> ▪ Fiscal Deficit ▪ Primary Deficit <p>Fiscal Policy</p> <p>Deficit Reduction</p> <p>FRBM Act</p> <p>Other Types of Budgets – Outcome, Zero-Based, etc.</p>
Land Reforms in India	
<ul style="list-style-type: none"> ▪ Rationale for Land Reforms 	<ul style="list-style-type: none"> ▪ Success of Land Reforms

<ul style="list-style-type: none"> Components of Land Reforms Impact of Land Reforms Problems in Implementaion of Land Reforms 	<ul style="list-style-type: none"> Recent Initiatives - Land Leasing, Land Acquisition, Rehabilitation & Resettlement Act, etc.
Effects of Liberalization on the Economy	
Phase of Liberalisation	<ul style="list-style-type: none"> Impact on Different Sectors of the Economy
Changes In Industrial Policy & their Effects on Industrial Growth	
<ul style="list-style-type: none"> Industrial Policy Before 1991 Industrial Policy After 1991 Phases of Industrial Growth Linkage Between Economic Reforms and Economic Outcomes 	<ul style="list-style-type: none"> Weaknesses and Failures of Industrial Policies National Manufacturing Policy SEZs Make in India
Infrastructure	
<ul style="list-style-type: none"> Energy Ports Roads 	<ul style="list-style-type: none"> Airports Railways
Investment Models	
Need for Investment Sources of Investment Types of Investment Models <ul style="list-style-type: none"> Domestic Investment Models <ul style="list-style-type: none"> Public Investment Model Private Investment Model Public Private Participation Investment Model 	<ul style="list-style-type: none"> Foreign Investment Models: <ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Importance of Cropping Pattern Types of Cropping Pattern Reasons Why Cropping Pattern Differ 	<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Modes of Irrigation Sources of Irrigation Choosing an Irrigation System Problems Associated with Irrigation 	<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Process of Agricultural Marketing - Marketing Channels, Functionaries, Costs, etc. Role of FCI 	<ul style="list-style-type: none"> APMCs National Agricultutral Market (NAM) Farmer Producer Organisations (FPO) Contract Farming

<ul style="list-style-type: none"> Regulated Markets Warehousing Cooperative Marketing Shortcomings of Current Agricultural Marketing Process 	<ul style="list-style-type: none"> Futures Trading in Agricultural Commodities
E-Technology in the Aid of Farmers, Technology Missions	
Issues Related to Direct & Indirect Farm Subsidies & Minimum Support Prices	
<ul style="list-style-type: none"> Agricultural Pricing Policy Rationale for Subsidies Types of Subsidies 	<ul style="list-style-type: none"> Effectiveness, Extent & Problems of Subsidies Clash with WTO Agreements
Public Distribution System Objectives, Functioning, Limitations, Revamping	
<ul style="list-style-type: none"> Objectives/Significance Functioning - Fair Price Shops, FCI, Ration Cards, Aadhar Linking, etc. Shortcomings or Problems Associated with PDS 	<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> Buffer Stock - Objectives & Norms in India Impact of Government Procurement & Distribution 	<ul style="list-style-type: none"> Need for Food Security NFSM And other Food Security Related Government Initiatives
Economics of Animal-Rearing	
Food Processing & Related Industries in India	
<ul style="list-style-type: none"> Scope & Potential in India Significance Location Constraints and Challenges 	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Artificial Sweetening Agents Food Preservatives Drugs <ul style="list-style-type: none"> Antacid Antihistamines Neurologically Active Drugs <ul style="list-style-type: none"> Tranquilizers Analgesics Antimicrobials <ul style="list-style-type: none"> Antibiotics Antiseptic and Disinfectant 	<ul style="list-style-type: none"> Anti-Fertility Drugs, etc. Cleansing Agents <ul style="list-style-type: none"> Soaps Synthetic detergents Glass Water Softener Water Purification/Disinfection Microwave Oven, etc.
Achievements of Indians in Science & Technology	
<ul style="list-style-type: none"> Chandrasekhara Venkata Raman Acharya Jagadish Chandra Bose Satyendra Nath Bose Meghnad Saha 	<ul style="list-style-type: none"> A.P.J. Abdul Kalam Vikram Sarabhai Mokshagundam Visvesvaraya Har Gobind Khorana

<ul style="list-style-type: none"> ▪ Homi Jehangir Bhabha ▪ Subrahmanyam Chandrasekhar 	<ul style="list-style-type: none"> ▪ Tessy Thomas ▪ C.N.R. Rao
Indigenization of Technology & Developing New Technology	
<ul style="list-style-type: none"> ▪ IT & Computers ▪ Space ▪ Nanotechnology ▪ Biotechnology 	<ul style="list-style-type: none"> ▪ Robotics ▪ Defence ▪ Nuclear
Awareness in Different Fields	
<ul style="list-style-type: none"> ▪ IT & Computers ▪ Space ▪ Nanotechnology ▪ Biotechnology 	<ul style="list-style-type: none"> ▪ Robotics ▪ Defence ▪ Nuclear
Issues Relating to Intellectual Property Rights	
<ul style="list-style-type: none"> ▪ Need for Intellectual Property Rights ▪ Types of IPR ▪ IPR Regime in India 	<ul style="list-style-type: none"> ▪ 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 <ul style="list-style-type: none"> ▪ 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 <ul style="list-style-type: none"> ▪ 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)	
<ul style="list-style-type: none"> ▪ What is EIA? ▪ Indian Guidelines & Legislations ▪ EIA Process 	<ul style="list-style-type: none"> ▪ Need & Benefits of EIA ▪ Shortcomings of EIA in India ▪ Measures to Make EIA Effective
Disaster Management	
<ul style="list-style-type: none"> ▪ Types of Disasters ▪ Management of Disasters 	<ul style="list-style-type: none"> ▪ Community Level Disaster Management ▪ Government Initiatives on Disaster Management

SECURITY

Linkages Between Development & Spread of Extremism	
<ul style="list-style-type: none"> Factors Responsible for Spread of Extremism Steps that State can Taken to Reduce the Spread of Extremism due to Underdevelopment 	<ul style="list-style-type: none"> Naxalism
Role of External State & Non-State Actors in Creating Challenges to Internal Security	
Threats from Non-State Actors <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> NIA NATGRID MAC UAPA TADA POTA NCTC
Challenges to Internal Security Through Communication Networks	
<ul style="list-style-type: none"> Role of Media & Social Networking Sites in Internal Security Challenges Challenges in Managing Social Media 	<ul style="list-style-type: none"> Steps That can be Taken
Basics of Cyber Security	
<ul style="list-style-type: none"> Cyber Security Threats to Indian Cyber Security Steps taken by India 	<ul style="list-style-type: none"> International Cooperation on Cyber Security Cyber Warfare Terms Associated with Cyber Security
Money-Laundering & its Prevention	
<ul style="list-style-type: none"> Process of Money Laundering Impact of Money Laundering Challenges to Tackle Money Laundering 	<ul style="list-style-type: none"> Steps to Counter Money Laundering Terms Related To Money Laundering
Security Challenges & their Management in Border Areas	
<ul style="list-style-type: none"> Challenges in Managing Border Security - Coastal & Terrestrial Land Boundary Disputes with Neighbours 	<ul style="list-style-type: none"> India's Policy in Border Area Security Management
Linkages of Organized Crime with Terrorism	
<ul style="list-style-type: none"> Types of Organised Crime Challenges in Controlling Organised Crime 	<ul style="list-style-type: none"> Indian Context – Link between Organised Crime & Terrorism
Various Security Forces & Agencies & Their Mandate	
<ul style="list-style-type: none"> Central Armed Police Forces Central Paramilitary Forces 	<ul style="list-style-type: none"> Security & Intelligence Agencies – IB, R&WA, etc.

