



VEDHIK

DAILY NEWS ANALYSIS

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FOREWORD

We, at Team Vedhik is happy to introduce a new initiative - "Vedhik - Daily News Analysis (DNA)_The Hindu" compilations to help you with UPSC Civil Services Examination preparation. We believe this initiative - "Vedhik - Daily News Analysis (DNA)_The Hindu " would help students, especially beginners save time and streamline their preparations with regard to Current Affairs. A content page and an Appendix has been added segregating and mapping the content to the syllabus. It is an appreciable efforts by Vedhik IAS Academy helping aspirants of UPSC Civil Services Examinations. I would like to express my sincere gratitude to Dr. Babu Sebastian, former VC - MG University in extending all support to this endeavour. Finally I also extend my thanks to thank Ms. Shilpa Sasidharan and Mr. Shahul Hameed for their assistance in the preparing the compilations.

We welcome your valuable comments so that further improvement may be made in the forthcoming material. We look forward to feedback, comments and suggestions on how to improve and add value for students. Every care has been taken to avoid typing errors and if any reader comes across any such error, the authors shall feel obliged if they are informed at their Email ID.

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Fossil and time

Absolute vesting of powers in the GSI may impede palaeontological research

Sporadically, but surely, palaeontologists report intriguing discoveries from India. In January, a team discovered 92 dinosaur nesting sites with 256 fossilised eggs of the titanosaurus – among the largest of its kind, from 100-66 million years ago, when ‘India’ was a continent and yet to merge into the Eurasian land mass. Similarly, the deserts of Kutch, Gujarat and the Deccan traps in Maharashtra bear witness to the forces that shaped the diverse geography, and tangentially history, of the most populous country. Unlike the quest to preserve cultural history and man-made artefacts from archaeology, there has been limited effort to preserve and communicate at large this natural ‘geo-history’ such as rock formations, sediment and fossils. For decades now, researchers have been warning that this neglect is leading to an erasure of this history from the public mind and a destruction as well as appropriation of this natural wealth. To that end, the draft Geo-heritage Sites and Geo-relics (Preservation and Maintenance) Bill, 2022, piloted by the Ministry of Mines, is seen as a step to give the process of such conservation firmer footing.

The Bill’s provisions give the Director General of the Geological Survey of India (GSI), a subordinate body of the Ministry of Mines, the power to declare sites as having ‘geo-heritage’ value, take possession of relics (fossils, rocks) that rest in private hands, prohibit construction 100 metres around such a site, penalise – with fines of up to ₹5 lakh and possibly imprisonment – vandalism, defacement, and violations of directives by the Director General of the GSI. This has rankled experts who work outside the GSI-fold in central and State universities, institutes of national importance and private organisations who fear that such absolute vesting of powers in the GSI alone may impede palaeontological research. They demand a more inclusive body, on the lines of a National Geoheritage Authority, that can, more democratically, decide on declaring sites as being of ‘geohistorical’ importance and how best to preserve artefacts and finds. The government, it is learnt, is still far from introducing the Bill in Parliament and deliberating on several aspects. While there are merits and demerits to either approach on governance, it is important to keep in mind that legislation, while acting as a ring fence, ought not to become a tool for suppressing independent investigation. Given the premium for land and India’s economic needs, there will be conflict over questions of preservation and livelihood, but any legislation must endeavour to balance these forces and enable consensus.

Leveraging J&K's lithium reserves

What is the significance of the new 5.9 million tonnes inferred resources of lithium discovered in Jammu & Kashmir? What are the environmental concerns around its extraction procedure? What are the geostrategic implications considering the geopolitical sensitivity of the area?

EXPLAINER

Prakash Kashwan
Dhanasree Jayaram

The story so far:

News of the discovery of "5.9 million tonnes inferred resources of lithium" in the Salal-Haimana area of Reasi district, Jammu & Kashmir, by the Geological Survey of India has been received as a game-changer in India's impending transition to a green economy. The term 'inferred' refers to the 'preliminary exploration stage', the second of a four-step process, according to the Mines and Minerals (Development and Exploration) Act 1957.

Why is this significant?

Lithium-ion batteries are used in wind turbines, solar panels, and electric vehicles, all of which are crucial in a green economy.

A World Bank study suggests that the demand for critical metals such as lithium (Li) and cobalt is expected to rise by nearly 500% by 2050. While "the global electric vehicle market is projected to reach \$823.75 billion by 2030, registering a compounded annual growth rate (CAGR) of 18.2% from 2021 to 2030," India's market is projected to register a CAGR of 23.76% by 2028. India is seeking to secure its critical mineral supplies and build self-sufficiency in this sector.

As India currently imports all of its Li from Australia and Argentina and 70% of its Li-ion cell requirement from China and Hong Kong, the lithium reserves in J&K could boost the domestic battery-manufacturing industry. If the perceived size of the mineral reserves in J&K is borne out by further exploration, India could jump ahead of China vis-à-vis its Li stockpile.

The J&K reserves will also help advance the Indian government's ambitious plan of "30% EV penetration in private cars, 70% for commercial vehicles, and 80% for two and three-wheelers by 2030 for the automobile industry." They will strengthen India's National Mission on Transformative Mobility and Battery Storage as well.

What are the geostrategic concerns?

Critical mineral dependencies constitute a major geostrategic concern in the transition to net-zero carbon energy systems. In the present scenario, as countries seek to avoid dependencies and vulnerabilities related to critical minerals, the latter are likely to be at least as important as oil and gas in the near future. A high level of dependence on China for Li and other crucial metals and their derivatives are also perceived to be sources of energy security risks.

China currently controls 77% of the global lithium-ion battery manufacturing capacity and is home to six of the world's 10 manufacturing companies. As a result, the EU, the U.S., Canada, India, and other major economies have been trying to leverage alternative supplies that can challenge China's geopolitical dominance in this area. For example, responding to perceived national security concerns, the Canadian government has asked Chinese companies to divest from Canadian lithium-mining companies.

The growing geopolitical rivalry with China makes India's security considerations more immediate as well, especially also in light of the longstanding, and recently escalating, territorial and border disputes. To reduce dependence on China, the Indian government and industry are pushing for a "Rare Earths Mission" to exploit the country's critical mineral reserves,



Glimpse of the future: Villagers show lithium stones in Reasi district of Jammu and Kashmir on Sunday. PTI

which account for 6% of the world's rare-earths' reserves prior to the discovery of Li in J&K.

The new discovery has more geopolitical implications considering the geopolitical sensitivity of its wider location. Although Reasi is in the relatively more stable Jammu region, the Union territory of J&K has been the site of historical cross-border tensions between India and Pakistan, domestic insurgency, and terrorism. If the local populace isn't meaningfully engaged in the impending Li extraction project, the resulting tension could introduce new frontiers of socio-environmental conflict.

What are the environmental effects?

The applications of Li in renewable energy infrastructure often obscures its significant environmental consequences. Extracting Li from hard rock mines, similar to what has already been proposed in J&K, entails open-pit-mining followed by roasting the ore using fossil fuels. Industry estimates suggest that this process consumes 170 cubic metres of water and releases 15 tonnes of CO₂ for every tonne of Li extracted.

Open-pit-mining, refining, and waste disposal from these processes substantially degrade the environment, including depleting and contaminating waterways and groundwater, diminishing biodiversity, and releasing considerable air pollution. This said, the geological context of mining in J&K differs from Australia, which has the largest Li stock in hard rock mines, in one major way.

In Australia, Li-bearing pegmatite deposits are found in the ancient geological regions of Pilbara and Yilgarn cratons, whose continental rocks have been stable for over a billion years. The Himalaya on the other hand is the youngest mountain range in the world and is much more unstable (as evidenced by the ongoing tragedy in Joshimath). Incidents of land sinking have also been reported from a village in Doda district in Chenab valley, which extends to some parts of Reasi.

In the densely populated context of India, the socio-environmental effects of mining are likely to be far worse than they have been in Australia and likely comparable to lithium extraction in South America.

What can we learn from South America?

As India embarks on this new journey, it could learn from the experiences of South American countries, especially the 'lithium triangle' of Bolivia, Chile, and Argentina, which contain roughly half the world's known Li. In Bolivia and Chile, Li extraction has been either in the hands of the state or requires mining companies to enter into a contract with state-owned companies.

In April 2022, Mexican lawmakers introduced reforms to create a state-owned entity to extract, process and sell Li and outlaw all direct private investment and production in the Li sector. Even so, Li mining has had adverse socio-environmental consequences in the region, testing its laws meant to protect Indigenous peoples.

In 2019, Chile's environmental regulators approved a \$25-million compliance plan for Li miner SQM, charged with over-drawing Li-rich brine from the Salar de Atacama salt flat. However, the company failed to satisfy authorities, who reversed their decision in 2020. In September 2021, the Atacama Indigenous Council appealed to regulators citing "constant danger" and called for the "temporary suspension" of SQM's environmental approvals.

In August 2022, Chilean regulators approved an updated compliance plan worth \$52 million, in which SQM proposed to work with both the regulator and local communities to address environmental infractions.

Indigenous resistance and increased awareness of the environmental impact of Li-mining has prompted global carmakers, including Mercedes-Benz and Volkswagen, to look for Li mined with the lowest socio-ecological impact. Other corporations are making similar amends. Battery Mineral Resources Corp. recently signed an agreement with the Comunidad Agrícola Potrerillos Alto and the Comunidad Agrícola Punitaqui. Another mining giant, Monumental Minerals, signed an agreement with the Aquina-Turi Indigenous Community in Chile for 40 exploration concessions totaling 8,500 hectares at the Salar de Turi Li project.

While such comparisons must account for inter-regional differences, these developments point to the importance of a strong regulatory apparatus that can address both the environmental and the social consequences of Li mining.

What safeguards does India's mining sector have?

State government officials in J&K have said plans for Li exploration will involve local communities, who will also be prioritised for jobs in exploration and mine development. Yet employment in mining may not fully offset the consequences on local agriculture, animal husbandry, and tourism.

In recognition of the local effects of mining, in 2015, the Lok Sabha amended the Mines and Minerals (Development and Regulation) Act 1957 to establish the 'District Mineral Foundation' (DMF). The DMF is a non-profit statutory 'trust' for every Indian district affected by mining-related operations that should "work for the interest and benefit of persons, and areas affected by mining-related operations". In practice, the DMFs have become sites of centralised bureaucratic control, without meaningful public participation or accountability.

For example, a CAG audit in May 2022 noted that the District Collectors of Bokaro, Dhanbad, and Ranchi incurred an expense of ₹1,568.04 crore from DMF funds, without identifying the areas affected by mining or a list of affected people. Ironically, the auditors were denied access to documents related to the functioning of the State-Level Monitoring Committee.

The general failure of DMFs adds to concerns expressed by environmentalists and concerned citizens about the recent history of weakening of the environmental impact assessment framework.

The geostrategic importance of Li exploration and extraction makes it even more important that the exploration and extraction of resources should be done in the public interest, and must preempt any serious environmental and social problems. Equally importantly, the most effective use of Li reserves should be for the most important parts of the renewable-energy transition, which would also aid the goals of addressing energy poverty and sustainable development.

To these ends, reducing luxury consumption and promoting public transport should also be an important part of the agenda of a just transition.

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THE GIST

▼ The discovery of the 5.9 million tonnes inferred resources of lithium in Reasi in Jammu & Kashmir has been heralded as a game-changer in India's transition to a green economy. India's market for critical metals is projected to register a compounded annual growth rate of 23.76% by 2028. This will also help advance the Indian government's ambitious plan of "30% EV penetration in private cars, 70% for commercial vehicles, and 80% for two and three-wheelers by 2030 for the automobile industry."

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▼ As India embarks on this new journey, it could learn from the experiences of South American countries, especially the 'lithium triangle' of Bolivia, Chile, and Argentina. In these countries point to the importance of a strong regulatory apparatus that can address both the environmental and the social consequences of Li mining.

Medical assistance worth ₹7 crore given to quake-hit Turkey and Syria: Minister

The Hindu Bureau

NEW DELHI

In the week since two powerful earthquakes hit Turkey and Syria, the Indian government has sent medical assistance worth ₹7 crore to the affected nations, Union Health Minister Mansukh Mandaviya said.

On February 6, when the disaster struck, three truckloads of relief material consisting of life-saving emergency medicines and protective items were arranged at the Hindon airbase within 12 hours. The consignment consisted of 5,945 tonnes of emergency relief material which included 27 life-saving medicines, two kinds of protective items and three categories of critical care equipment, valued at approximately ₹2 crore.

“Trucks started reaching by 10 a.m. on February



When in need: Relief material being loaded in an Indian Air Force aircraft leaving for earthquake-hit Turkey. ANI

7, and handing over of the relief items to the Indian Air Force (IAF) began by 4 p.m. The last truck load reached by 9.30 p.m. and the flight departed for Syria with emergency relief material by 10 p.m. for the relief operation,” Mr. Mandaviya said.

On February 10, a bigger lot of relief materials was arranged for both Turkey and Syria. The consignment for Syria consisted of

72 critical care drugs, consumables and protective items of 7.3 tons, valued at ₹1.4 crore. Relief materials sent for Turkey included 14 types of medical and critical care equipment, valued at ₹4 crore, he added.

These included ECG machines, glucometers, thermometers, ventilators, wheelchairs, oxygen masks, syringes, canulas, paracetamol, among other items.

'Larger Bench must examine subversion of 10th Schedule'

The Hindu Bureau

NEW DELHI

Former Maharashtra Chief Minister Uddhav Thackeray on Tuesday said in the Supreme Court that the “artful” dodges legislators employ to subvert the Tenth Schedule (anti-defection law) to bring down governments and the “sweeping discretion” available to Speakers in deciding cases of disqualification of legislators need a relook by a larger Bench.

Appearing before a five-judge Bench led by Chief Justice of India D.Y. Chandrachud, advocate Kapil Sibal, for Mr. Thackeray, said legislators were using the anti-defection law to “serve the cause of political immorality”. The Bench is hearing petitions on the political crisis that brought down Mr. Thackeray’s government in 2022.

Disturbing dilation

Untamed inflation risks hurting domestic consumption

Just five days after Reserve Bank of India Governor Shaktikanta Das asserted that inflation 'has shown signs of moderation and the worst is behind us', Monday's release of Consumer Price Index (CPI) estimates for January revealed a disconcerting reversal in price gains trend. Headline retail inflation, which had steadily eased over the last quarter of 2022 from September's five-month high of 7.4%, quickened by 80 basis points last month to 6.5%. Propelling the acceleration was a 175 basis-points jump in food prices, with inflation measured by the Consumer Food Price Index, quickening to 5.94%, from December's 4.19%. Adding to the disquiet is the fact that inflation had already been at an elevated 6% in January 2022, implying that the year-on-year increase was sans a favourable base effect and entirely due to an upsurge in the momentum of price gains. Food prices climbed across the board, with vegetables being the solitary item in the CPI's 12-member food and beverages sub-group to post a year-on-year deflation of 11.7% as winter supply outstripped demand. Cereals, which include rice and wheat and carries the heaviest weight of almost 10% in the sub-group, logged a 16.1% jump in prices, and milk and dairy products, the second-heaviest, saw prices gain by 8.79%. Policymakers must be particularly worried about the 2.6% month-on-month dilation in cereal prices, more so because this disproportionately impacts rural households, which spend a larger share of their income on food. With a 12.4% weight in the rural consumption basket, cereal prices fuelled January's overall rural headline inflation at an even quicker 6.85% pace.

The surprise reversal in price trends suggests inflationary expectations in the economy are nowhere near anchored and will necessitate further policy action both from the RBI and fiscal authorities. To be sure, Mr. Das last week not only announced a 25 basis-points interest rate increase but also committed the RBI to enacting policy that ensures a durable disinflation. With core inflation, or price gains that strip out the impact of food and fuel prices, remaining stubbornly stuck above 6% and in fact inching up last month to 6.23%, from December's 6.22%, policymakers face the challenge of targeting the components of the inflationary trend that can be addressed by raising credit costs and tamping down on demand. Given that inflation in several key services categories including health and personal care is running well above the RBI's upper bound of 6%, with prices continuing to harden, the Centre and States must mull measures including rationalisation of GST rates to help ease the inflationary burden on the economy. With overseas demand set to stay weak this year, untamed inflation risks hurting domestic consumption and thereby overall economic growth.

Adani says faces no refinancing risk or liquidity issues; AEL turns profit

Adani Enterprises terms group firms' recent stock losses as 'temporary market volatility'; flagship firm posts Q3 net profit of ₹820 crore vs. net loss of ₹12 crore, targets growth with moderate leverage and through strategic opportunities to expand

The Hindu Bureau
MUMBAI/AHMEDABAD

Adani Group flagship Adani Enterprises Ltd. (AEL) on Tuesday said group firms faced no material refinancing risk, or near-term liquidity issues in the wake of "allegations made by a short seller on the parent and some other entities of the Adani Group" and termed the recent rout in the stock prices as "temporary market volatility".

AEL also reported a third-quarter net profit of



Business incubator: Adani Enterprises Ltd. says looking at strategic opportunities to expand and grow. AP

₹820 crore, compared with a net loss of ₹12 crore in the year-earlier period. Total income surged 42% to

₹26,951 crore on account of strong performance by its 'Adani New Industries, Airports and Integrated Re-

source Management businesses', it said in a filing.

'Annuity contracts'

"The success of the Group is due to its strong governance, strict regulatory compliance, sustained performance, and solid financials that balance growth and deleveraging," AEL said in a separate filing, on the financial performance and credit assessment of the group's firms.

It said that the group's businesses operate on long-term annuity contracts generating assured

and consistent cash-flows.

"Our total net debt is at around ₹1,96,000 crore, which translates to a net debt to run-rate EBITDA ratio of 3.21x," it asserted. AEL said since 2013, group EBITDA had grown at a CAGR of 22%, while debt had grown at CAGR of 11%.

"As a classical incubator with a vision of long-term value creation, AEL will continue to work with the twin objectives of moderate leverage and looking at strategic opportunities to expand and grow," Chairman Gautam Adani said.

Wholesale inflation eased to 4.7% in January

Vikas Dhoot

NEW DELHI

India's wholesale price inflation cooled further in January to a two-year low of 4.73% from 4.95% in December, thanks to a slight decline in manufactured products' price rise and fuel and power inflation, even as pace of inflation in food and primary articles hardened sequentially.

January marks the eighth successive month of sequential moderation in wholesale inflation, since it peaked at 16.63% in May 2022. It was helped in no small measure by base effects as January 2022 had recorded a 13.7% surge in wholesale prices.

Cereals inflation at the wholesale level sped to the highest level in nine-and-a-half years to hit 15.5% in January.

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Wholesale inflation eased to 4.7% in January

Paddy inflation stood at 7.2% and wheat price rise at 23.6% (up from 20.7% in December 2022). Fuel and power inflation eased from 18.1% in December to the lowest level in 22 months at 15.2%, while manufactured products inflation eased marginally from 3.4% to 3% over the same time frame. “Within manufacturing, cement has registered high increase of around 8.4% which will add to building costs and can affect the real estate sector. These costs could ease with fuel prices coming down,” said Bank of Baroda chief economist Madan Sabnavis, who expects wholesale inflation to dip further to end up around 4% by March.

“Decline in the rate of inflation in January, 2023 is primarily contributed by mineral oils, chemicals & chemical products, textiles, crude petroleum & natural gas, textiles, and food products,” the Ministry said. This is the second month in a row that retail inflation, which resurged to 6.52% from 5.7% in December, is higher than the wholesale inflation rate, signalling that input cost pressures are easing for producers even as they continue to pass on the burden to consumers. “The wedge between inflation measured by the Consumer Price Index and Wholesale Price Index (WPI) widened sharply to 177 basis points (bps) in January from 75 bps in December 2022,” rating firm ICRA noted.

Food inflation, which had moderated sharply from 2.5% in November to 0.65% in December, rebounded to almost 3%. Primary articles inflation also inched up from 2.4% to 3.9% in January. Within food items, vegetable prices fell year-on-year for the third month in a row. Minerals, which have a weightage of less than 1% in the WPI, reported a 9.3% deflation compared to 30% inflation a year earlier.

Army set to close around 80 deals worth ₹15,000 cr., says Gen. Pande

Army chief says that in terms of overall combat aviation profile, force is looking at having 90-95 light combat helicopters; it is set to receive indigenous light utility helicopters to replace over 200 ageing Cheetah and Chetaks currently in service

Dinakar Peri
BENGALURU

The Army, which is currently executing the fourth tranche of emergency procurements, has identified nearly 80 deals, roughly valued at ₹15,000 crore, the Chief of the Army Staff, General Manoj Pande, said on Tuesday. On the helicopter front, he said the indigenous light combat helicopter (LCH), which the Army just inducted, was more versatile in its manoeuvrability and light weight and so is most suited for the mountains.

As reported by *The Hindu* earlier, the Army moved its first LCH squadron, 351 Army Aviation, to Missamari, Assam, in the

eastern sector near the Line of Actual Control (LAC) last November. The LCH is the first dedicated attack helicopter operated by the Army.

“In terms of the overall combat aviation profile, we are looking at 90-95 LCHs,” Gen. Pande told presspersons on the sidelines of Aero India.

The Army is also slated to receive the AH-64E Apache attack helicopter in February 2024 as reported earlier. However, the LCH is yet to get its anti-tank and air-to-air missiles. One of the weapon systems on the LCH and the advanced light helicopter (ALH) is the HELINA (Helicopter Mounted NAG) being developed by the Defence Research and



The indigenous LCH is more versatile in terms of its manoeuvrability and light weight and so is most suited for the mountains

GEN. MANOJ PANDE
Army Chief

Development Organisation (DRDO). Gen. Pande said HELINA trials had been a success and they were looking at integration of HELINA on the platform.

Indigenous LUH

The Army is also set to receive the indigenous Light Utility Helicopter (LUH), which Gen. Pande said falls in the category of reconnaissance and surveil-

lance. It will replace the over 200 ageing Cheetah and Chetaks in service.

The Army sought some improvements from Hindustan Aeronautics Ltd. (HAL) on the LUH and it was working on it, Gen. Pande said, pointing out that autopilot was one of the requirements. “We are eventually looking at 110 LUHs after the six limited series production variants

are inducted,” Gen. Pande said.

Army Aviation has three Brigades at Leh, Missamari and Jodhpur operating around 145 indigenous ALHs, 75 of which are the Rudra weaponised variants and around 190 ageing Cheetah, Chetak and Cheetal helicopters. Another 25 ALH Mk-III are on order and will be inducted within two years.

The Army is inducting niche technology in a big way and at the same time, looking at right-sizing its manpower. On this, Gen. Pande said once new technology was inducted, it should optimise the manpower, and referred to the induction of, and the cut down on, animal transport in high-altitude areas..

General Studies Paper I	
A	History of Indian culture will cover the salient aspects of art forms, literature and architecture from ancient to modern times;
B	Modern Indian history from about the middle of the eighteenth century until the present-significant events, personalities, issues;
C	Freedom struggle-its various stages and important contributors / contributions from different parts of the country;
D	Post-independence consolidation and reorganization within the country;
E	History of the world will include events from 18 th century such as industrial revolution, world wars, re-drawing of national boundaries, colonization, decolonization,
F	Political philosophies like communism, capitalism, socialism etc.-their forms and effect on the society
G	Salient features of Indian Society, Diversity of India;
H	Effects of globalization on Indian society;
I	Role of women and women's organization;
J	Social empowerment, communalism, regionalism & secularism
K	Salient features of world's physical geography;
L	Geographical features and their location- changes in critical geographical features (including water bodies and ice-caps) and in flora and fauna and the effects of such changes;
M	Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc.
N	Distribution of key natural resources across the world (including South Asia and the Indian subcontinent);
O	Factors responsible for the location of primary, secondary, and tertiary sector industries in various parts of the world (including India);
P	Population and associated issues;
Q	Urbanization, their problems and their remedies
General Studies Paper II	
A	India and its neighbourhood- relations;
B	Important International institutions, agencies and fora- their structure, mandate;
C	Effect of policies and politics of developed and developing countries on India's interests;
D	Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.
E	Indian Constitution, historical underpinnings, evolution, features, amendments, significant provisions and basic structure;
F	Comparison of the Indian Constitutional scheme with other countries;
G	Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein; Inclusive growth and issues arising from it;
H	Parliament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these;
I	Structure, organization and functioning of the executive and the judiciary, Ministries and Departments;
J	Separation of powers between various organs dispute redressal mechanisms and institutions;
K	Appointment to various Constitutional posts, powers, functions and responsibilities of various Constitutional bodies;

L	Statutory, regulatory and various quasi-judicial bodies;
M	Mechanisms, laws, institutions and bodies constituted for the protection and betterment of these vulnerable sections;
N	Salient features of the Representation of People's Act;
O	Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential;
P	Citizens charters, transparency & accountability and institutional and other measures;
Q	Issues relating to poverty and hunger,
R	Welfare schemes for vulnerable sections of the population by the Centre and States, Performance of these schemes;
S	Issues relating to development and management of social sector / services relating to education and human resources;
T	Issues relating to development and management of social sector / services relating to health
General Studies Paper III	
A	Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment;
B	Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth;
C	Inclusive growth and issues arising from it;
D	Infrastructure Energy, Ports, Roads, Airports, Railways etc. Government budgeting;
E	Land reforms in India
F	Major crops, cropping patterns in various parts of the country, different types of irrigation and irrigation systems;
G	Storage, transport and marketing of agricultural produce and issues and related constraints;
H	e-technology in the aid of farmers; Technology Missions; Economics of Animal-Rearing.
I	Issues of buffer stocks and food security, Public Distribution System- objectives, functioning, limitations, revamping;
J	Food processing and related industries in India – scope and significance, location, upstream and downstream requirements, supply chain management;
K	Issues related to direct and indirect farm subsidies and minimum support prices
L	Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology;
M	Indigenization of technology and developing new technology;
N	Developments and their applications and effects in everyday life;
O	Issues relating to intellectual property rights
P	Conservation, environmental pollution and degradation, environmental impact assessment
Q	Disaster and disaster management
R	Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security;
S	Money-laundering and its prevention;
T	Various forces and their mandate;
U	Security challenges and their management in border areas;
V	Linkages of organized crime with terrorism;
W	Role of external state and non-state actors in creating challenges to internal security;

X	Linkages between development and spread of extremism.
General Studies Paper IV	
A	Ethics and Human Interface: Essence, determinants and consequences of Ethics in human actions;
B	Dimensions of ethics;
C	Ethics in private and public relationships. Human Values - lessons from the lives and teachings of great leaders, reformers and administrators;
D	Role of family, society and educational institutions in inculcating values.
E	Attitude: Content, structure, function; its influence and relation with thought and behaviour;
F	Moral and political attitudes;
G	Social influence and persuasion.
H	Aptitude and foundational values for Civil Service , integrity, impartiality and non-partisanship, objectivity, dedication to public service, empathy, tolerance and compassion towards the weaker sections.
I	Emotional intelligence-concepts, and their utilities and application in administration and governance.
J	Contributions of moral thinkers and philosophers from India and world.
K	Public/Civil service values and Ethics in Public administration: Status and problems;
L	Ethical concerns and dilemmas in government and private institutions;
M	Laws, rules, regulations and conscience as
N	sources of ethical guidance;
O	Accountability and ethical governance; strengthening of ethical and moral values in governance; ethical issues in international relations and funding;
P	Corporate governance.
Q	Probity in Governance: Concept of public service;
R	Philosophical basis of governance and probity;
S	Information sharing and transparency in government, Right to Information, Codes of Ethics, Codes of Conduct, Citizen's Charters, Work culture, Quality of service delivery, Utilization of public funds, challenges of corruption.
T	Case Studies on above issues.