



INSIGHTSIAS
SIMPLIFYING IAS EXAM PREPARATION

SECURE SYNOPSIS

MAINS 2019

GS- 3

AUGUST 2019



NOTE: Please remember that following '*answers*' are NOT '*model answers*'. They are NOT synopsis too if we go by definition of the term. What we are providing is content that both meets demand of the question and at the same time gives you extra points in the form of background information.

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Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

The tragic death of Café Coffee Day's founder V.G. Siddhartha earlier this week has a wake-up question for our Startup nation, do you think the system is treating our entrepreneurs fairly? Critically examine. (250 words)

Livemint

Why this question:

CCD is a big brand and Siddhartha's untimely demise reflects poorly on the prevailing business atmosphere, replete with "pressures" mentioned in a letter to the board of CCD and its employees.

Key demand of the question:

The answer must evaluate the atmosphere in the country that is made available to the entrepreneurs.

Directive:

Critically examine – When asked to examine, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When 'critically' is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Discuss the importance of entrepreneurs for the economy in general.

Body:

The answer should mainly talk about the factors of ease of doing business in India. To what extent India has a conducive atmosphere for entrepreneurs.

Throw light on the case of CCD, what must have gone wrong, what are the possible corrections government can take to prevent such incidences.

Conclusion:

Conclude by suggesting way forward.

Introduction:

India recently raised to 77th position in the World Bank's Ease of Doing Business report rankings. However, the ground reality remains different with a lot of unease for doing business. CCD is a big brand and Siddhartha's untimely demise reflects poorly on the **prevailing business atmosphere, replete with "pressures"** mentioned in a letter to the board of CCD and its employees.

Body:

State of India's business atmosphere:

- Foreign investors, Indian entrepreneurs and corporations still find themselves stuck in archaic laws and regulatory red tape.
- Clarity is lacking and piecemeal amendments made to laws haven't helped.
- Major legislative reforms have taken place, led by the goods and services tax (GST) and the new insolvency law, but these, too, have struggled to make a difference due to problems in their implementation.

- Important concepts for Merger and acquisition deals remain shrouded in legalese-driven ambiguities. This pushes Indian entrepreneurs and companies back, despite India jumping 30 places last year in the World Bank's ease of doing business rankings.
- As per the World Bank, the enforcing contracts indicator measures the time and cost for resolving a commercial dispute through a local first-instance court (competent court), and the quality of judicial processes index, evaluating whether the country has adopted a series of good practices that promote quality and efficiency in the court system. India ranks very low in this.
- India's ranking in the 'enforcement of contract' component is 164 .The report says that it takes an average of 1,445 days (or nearly four years) to enforce a contract in India. In this, the distance to frontier (DTF) ranking score is 40.76. The all-told cost to a litigant to recover amounts legitimately due to him is 31% of the value of the claim.
- The judiciary in India is already plagued with pendency of cases and case disposal is slow due to multiple factors like: More appeals; Low judges to cases ratio; Lack of modernisation of courts
- Plenty of grey areas exist, especially on tax matters. Guilt in many cases is a matter of legal interpretation. Such nuances tend to be lost on the public at large, all the more so after the past few years' uproar over black money and unpaid corporate loans.
- Society should change the way it treats entrepreneurs and they should not be called thieves, etc. without proof or substantiation.
- There is a broad anxiety over the vilification and worse that faltering firms and their promoters are often put to by an insensitive financial system.

Measures needed:

- Government is taking measures like Parliament even passed the Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act.
- Labour laws should foster an enabling environment so far as employment practices are concerned.
- Faster reforms in the power sectors, facilitation of entry and exit of firms, level playing field for small and large firms, improvement in access to finance will lead to improvements in ease of doing business norms.
- To secure changes in the remaining areas will require not just new laws and online systems but deepening the ongoing investment in the capacity of states and their institutions to implement change and transform the framework of incentives and regulation facing the private sector. India's focus on 'doing business' at the state level may well be the platform that sustains the country's reform trajectory for the future.
- For attracting new investment, both foreign and domestic, several macroeconomic issues have to be addressed. These include political and economic stability, law and order maintenance, quality physical infrastructure, and buoyancy in financial markets.

- For the tax regime to be effective, India would do well to follow the due, and fair, process of law, especially when the offender is an entrepreneur. Our law enforcers and society will also have to re-examine their attitudes towards business.

Conclusion:

India is at crossroads where it now has to cater to the aspirations of a billion people. Existing frameworks can prove to be inadequate and there is a great need to leverage a billion minds and become a global power. Startups and entrepreneurship is the best way forward in becoming a knowledge superpower.

“Stagnant wages and jobless growth have become a recipe for political instability in the Indian countryside ”, Critically analyse the statement in the backdrop of declining availability of jobs in the Indian economy.(250 words)

Livemint

Why this question:

The article talks about the employment picture and state of Jobs in the country.

Demand of the question:

The answer has to evaluate How serious is the employment problem in India.

What are the issues of economy with respect to jobs and employment scenario?

Directive word:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction

Discuss by quoting facts and highlight the issue.

Body

The article discusses in detail in what way stagnant wages and jobless growth are a recipe for political instability in the Indian countryside.

Take hints from the article and discuss the issues associated and what are the possible solutions/fixes to the same.

Conclusion

Conclude with way forward.

Introduction:

Unemployment has become a chronic problem of India and in the recent years the situation has only worsened. The National Sample Survey Office’s (NSSO’s) report, “**State of Working India, 2018**” data shows a record spike in unemployment in 2017-18. The overall unemployment was at a 45-year high, with youth between the ages of 15 and 29 facing higher rates of joblessness than others

Body:

State of Unemployment in India:

- CMIE database on “**Unemployment Rate in India**” is based on the panel size of over 1,58,000 households in the country.
- The unemployment rate in December 2018 rose to 7.38% from 6.62% in November 2018 and 4.78% in December 2017, highest since September 2016 when it stood at a high of 8.46%, the CMIE data showed.
- The total number of people employed fell by about 1.09 crore, about 83% or 91.4 lakh jobs were lost in rural areas.
- There has been a decline in the estimated Labour Participation Rate—the proportion of working-age people who are willing to work and are either actually working or are actively looking for work, in line with a fall in the unemployment rate.
- The estimated labour participation rate also dropped from 43.57 in December 2017 to 42.47 in December 2018. The rate was at 45.15 in December 2016 and at 47.84 in September 2017, the data showed.

The **reasons for issue of unemployment** in contemporary India:

- The labour force is the sum of the employed and those unemployed who are seeking employment.
- A shrinking of the labour force is most unusual in an economy with a growing population, and thus a growing working age cohort.
- **Low education and lack of skills** lead to loss of many job opportunities.
- **Discouraged-worker effect:** A section of those hitherto willing to work may have simply dropped out of an already challenged labour market.
- **Demonetization** has caused demoralisation among a section of the already unemployed who may have given up all hope of finding employment.
- About **90% of Indian Workforce is in the unorganized sector** which was majorly affected during Demonetization and GST introduction.
- **Declining Capital formation** which is not backed by Public and Private Investment.
- **Low female LFPR to the tunes of 24%** also adds to high unemployment rate.
- **Automation and IR4.0** is a looming threat to many jobs which have repeated work or sequential work.
- Socially disadvantaged groups do not get enough exposure in the job market like the general castes and Other Backward Classes.
- Labour laws in India are complex and relatively strict. Employment protection legislation is restrictive, compared with other emerging economies and OECD countries. Thus, corporates in

India tends to rely more on **temporary contract labour**, stay small or substitute labour for capital to avoid strict labour laws.

Impacts:

- The problem of unemployment gives rise to the problem of poverty.
- Young people after a long time of unemployment indulge in illegal and wrong activities for earning money. This also leads to increase in crime in the country.
- Unemployed persons can easily be enticed by antisocial elements. This makes them lose faith in democratic values of the country.
- It is often seen that unemployed people end up getting addicted to drugs and alcohol or attempts suicide, leading losses to the human resources of the country.
- It also affects economy of the country as the workforce that could have been gainfully employed to generate resources actually gets dependent on the remaining working population, thus escalating socioeconomic costs for the State. For instance, 1 percent increase in unemployment reduces the GDP by 2 percent

Way forward:

- There are number of labour intensive manufacturing sectors in India such as food processing, leather and footwear, wood manufacturers and furniture, textiles and apparel and garments. Special packages, individually designed for each industry are needed to create jobs.
- Public investment in sectors like health, education, police and judiciary can create many government jobs.
- Decentralisation of Industrial activities is necessary so that people of every region get employment.
- Development of the rural areas will help mitigate the migration of the rural people to the urban areas thus decreasing the pressure on the urban area jobs.
- Entrepreneurs generate employments to many in a country; therefore government needs to encourage entrepreneurship among the youth.
- Concrete measures aimed at removing the social barriers for women's entry and their continuous participation in the job market is needed.
- Government needs to keep a strict watch on the education system and should try to implement new ways to generate skilled labour force.
- Effective implementation of present programs like **Make in India, Skill India, Start up and Stand-Up India**.
- There is a need for **National Employment Policy (NEP)** that would encompass a set of multidimensional interventions covering a whole range of social and economic issues affecting

many policy spheres and not just the areas of labour and employment. The policy would be a critical tool to contribute significantly to achieve the goals of the 2030 Agenda for Sustainable Development.

Analyse in what way helping farmers produce solar energy can help realise the government's target of doubling farmers' incomes.(250 words)

Indianexpress

Why this question:

The article discusses how solar energy can help the farmers realise doubling their income.

Demand of the question:

One has to analyse and suggest in what way harnessing the solar plant potential can help farmers augment their income.

Directive word:

Analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary.

Structure of the answer:

Introduction

Discuss the initiatives taken on this front by the government recently.

Body

With the latest Budget mentioning how annadata (farmer) can become the urjadata (producer of solar power). Discussion should focus on explaining how alternative model can help farmers produce solar power on their lands. Take hints from the article and substantiate your opinion and establish how solar energy generation along with agriculture can prove to be a game changer for farmers in India.

Conclusion

Conclude with way forward.

Introduction:

The Union Finance Minister (FM) in her maiden budget speech reiterated the idea of farmer being a solar energy producer through solar farming. In the Parliament, the agriculture minister for state, responding to a question on the prime minister's promise of doubling farmers' income (DFI) by 2022, admitted that the existing set of policies cannot double farmers' real incomes by 2022.

Body:

Farmers as solar power producers can help achieve DFI:

- The PM has set a target of producing 100 GW of solar power by 2022.
- He wants to be one of the frontrunners in International Solar Alliance for clean energy.
- So far, the model that has been adopted to develop solar power is inviting bids from large business players and big players did enter.
- Some people who entered early into Power Purchase Agreements (PPA) with state governments had to suffer, when the costs came down.
- Then, the state governments also forced them to revise the costs of PPA downwards, upsetting their economic calculations.

- But, this model of generating solar power was not very inclusive.

Measures needed:

- **Replace all pump sets with solar pumps and the excess power generated can be purchased by the state government.**
- This gives the farmers a good margin over their cost of producing it.
- **Encourage farmers to grow “solar trees” on their lands in a manner that enough sunlight keeps coming to plants below.**
- Here, the farmers can keep growing irrigated crops as they have been doing, but the solar trees generate a lot of excess power that can be purchased by the state government.
- The power generated under this variant is multiple times more than that produced under the first variant, and, the income augmentation can also be several times more.
- **Solar -cum-agricultural farms:** Carrying out expansion of solar power capacity as well as for crop farming together is known as solar-cum-agricultural farm.
- The power produced by the photovoltaic modules installed in the fields can help meet energy needs of the farm operations besides selling the remaining power.
- The rainwater falling over the photovoltaic panels can be collected for irrigation, turning it into solar-cum-agriculture-cum-rainwater harvesting farm.

Economic Survey findings:

- Indian Council for Research on International Economic Relations' (ICRIER) global survey found that it is being practiced in many countries like Japan, China, Germany, etc and India is ripe for this.
- The problem is mobilising enough capital to install these solar trees.
- In one acre, you can have 500 solar trees in such a manner that even tractors can move through them and farmers can keep growing their normal crops.
- It does not affect their productivity as there is ample sunlight coming from the sides for the crops to perform photosynthesis.
- The second precondition is that the state should be ready to sign the power purchase agreement.

Way forward:

- Setting up of such integrated agri-photovoltaic farms is typically a cost-intensive proposition, heavy investments may be unaffordable for most Indian farmers.
- It is advisable to encourage the solar energy entrepreneurs to consider joining hands with the farmers on mutually agreed terms, instead of going in for solo photovoltaic units.

- This will be mutually beneficial for both of them otherwise, agri-solar farms may not proliferate.

Conclusion:

The Indian government should help farmers by providing subsidies and loans to acquire solar powered agricultural tools. Agricultural experts should encourage guiding farmers in operating them. India must exploit the potential of this decentralised technology to achieve the dual national targets of 100 GW of solar and doubling farmer's income by 2022 — setting a world-class example of greening the economy and overcoming its developmental challenges, simultaneously.

"J&K is known for high emotions and low economy", in the context of the statement provide for an analysis of the development aspects in the state and also suggest way forward.(250 words)

Livemint

Why this question:

The article captures the sick picture of the state of Jammu and Kashmir in terms of development status of its economy.

Key demand of the question:

One has to examine and analyse in depth the root causes for such an infant nature of the Kashmir economy, why has the growth stagnated in the valley for decades and suggest what should be the way forward.

Directive:

analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary.

Structure of the answer:

Introduction:

Define the current conditions in the state, the latest happenings of scrapping of article 370 etc.

Body:

Explain that J&K does not have enough private sector avenues and politics hasn't produced enough opportunities and conducive atmosphere owing to insufficient urbanization, lack of finances, formalized economy and industrialization.

Explain the factors that have led to the situation so far.

Discuss what needs to be done? What are the repercussions of the latest move taken by the government etc.

Conclusion:

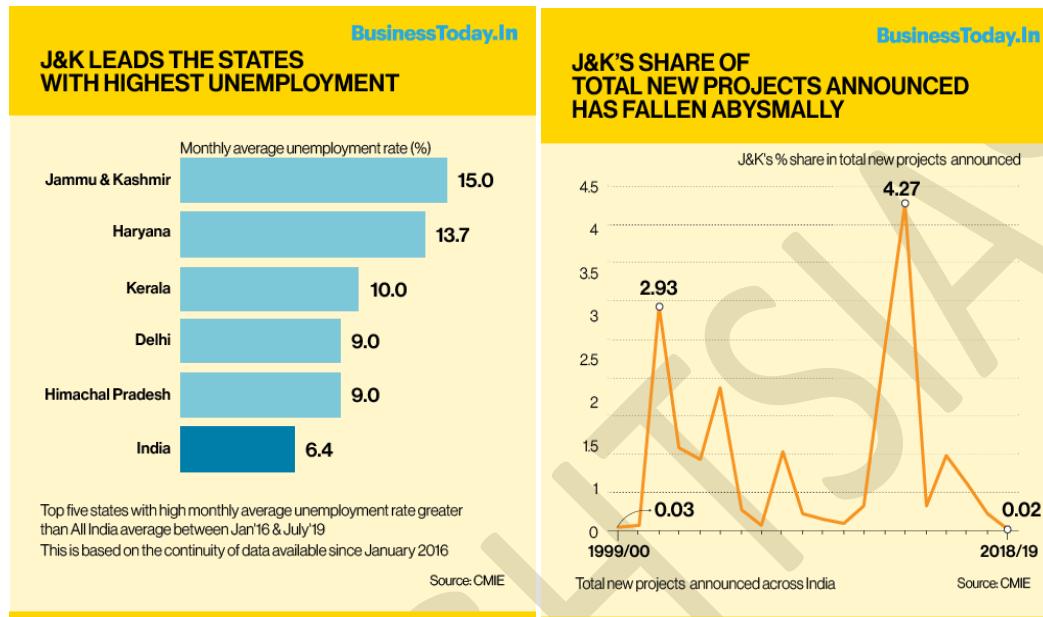
Conclude with way forward.

Introduction:

The government recently introduced a **resolution to remove provisions of Article 370**, which provides special status to Jammu and Kashmir. In addition, Home Minister also introduced a Bill bifurcating the State of Jammu of Kashmir into Union Territory of Ladakh and the Union Territory of Jammu and Kashmir. The Presidential Order has extended all provisions of the Constitution to Jammu and Kashmir, including the chapter on Fundamental Rights. Therefore, the discriminatory provisions under Article 35A are now unconstitutional.

Body:

The economy of Jammu and Kashmir has suffered from disturbed conditions prevailing in the State for almost two decades. J&K does not have enough private sector letters and politics hasn't produced enough vowels because it is insufficiently urbanized, financialized, formalized and industrialized. **Article 370 and 35A created huge regulatory and legislative cholesterol** in land markets and labour markets that created an antibiotic reaction to formal enterprises, institutional capital, and professional workers. The fragile political and security situation has further dissuaded the investors in J&K.



J&K- an economic infant:

- The huge chunk of Kashmir's workforce employed in horticulture and handicrafts gets less than 20% of the final sale price of their goods because of lack of design, distribution and capital.
- The hospitality industry does not have a robust local people supply chain, has less business model diversity, and lower employment elasticity of growth because of weak access to technology, capital, and marketing.
- The state not only has a **lower credit-to- GDP ratio than Bihar**, but its primary banking institution is almost unskilled—it knows how to give money but not how to get it back. Low formalization means no private firm with more than 500 formal employees.
- There is **only one listed company**, and **private investment last year was less than ₹1,000 crore**.
- Given how the potential for professional tourism, horticulture, handicrafts, and manufacturing could combine with how smart the people are, it is not unfair to say that the **J&K economy is a 10-horsepower engine running on one horsepower**.

Measures needed:

- More effective implementation of employment-oriented schemes and programmes.

- Tourism is another area which is a gift of nature to the state. But unless we are able to create the requisite infrastructure and other facilities of high quality of international standard for the tourists, the real benefits will not flow to people in terms of income supplementation and employment generation.
- The state has three distinct niches, while leisure tourism is available in Kashmir valley, Pilgrim in Jammu and Ladakh has the potential to after adventure tourism
- Human resource development through education and health is not only a pre-requisite for better human living but is also critical in determining the pace of economic development of a society.
- There is a need to give **fillip to the economic activities** that have traditionally been the mainstay of the State's economy and continue to hold significant potential for growth and employment.
- Such activities include **Agriculture (including Horticulture), Food Processing, Handicrafts and Handlooms, and Livestock and Poultry farming** on modern lines.
- It would be equally necessary to **ensure diversification of the State economy**, especially expanding the industrial base by generally have a traditional bent of mind. Diversification of agricultural activities is the need of the hour to keep up with the changed circumstances.
- Jammu and Kashmir has unexploited capacity to produce products which have value demand and ready for attractive markets both in India and Overseas. E.g. bio aromatics, medical herbs, organic specialty vegetables etc.
- The **potential of Horticulture** in J&K is high, given the rich diversity in its flora and fauna and varied agro-climatic situation. The state enjoys monopoly in certain fruits, vegetables and medicinal plants and there is an immense scope for increasing the production of other horticulture produce that are marketed in rich and export markets.
- Jammu and Kashmir is **rich in handicrafts**, so state Government must promote handicrafts industries by increasing shopping arcade in their existing properties and provide space for handicrafts industry to display their products.

Conclusion:

The significant move, in theory, opens up potential opportunities for development-led economic growth in the Union Territories of J&K and Ladakh. Thus, the move is bound to have a significant impact on the demography, culture, and politics of J&K. Whatever its intent in enabling the full integration of Jammu and Kashmir with India, this decision to alter the State's status could have unintended and dangerous consequences.

Discuss the recent liquidity crisis that the NBFCs are facing in the country and its impacts on various financial aspects of the economy. Throw light upon the steps taken by the government in this regard and suggest way forward to address the problems that have contributed to the crisis.(250 words)

The hindu

Why this question:

The Reserve Bank of India (RBI) has announced new measures to increase credit flow to the Non-Banking Finance Companies (NBFCs) so as to overcome the on-going liquidity crunch in the sector. Thus, it is important to examine the environment of NBFCs in the country.

Key demand of the question:

The answer must discuss in detail the liquidity crisis facing the NBFCs and the role of government in dealing with the crisis.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Define what are NBFCs.

Body:

Students must first bring out in brief the worsening credit situation of NBFCs and the causes for it, then explain the recent measures taken by the RBI to deal with the same – RBI has increased the cap on a bank's exposure to a single NBFC to 20% of its tier-I capital from 15% now.

Bank lending to registered NBFCs (other than MFIs) for on-lending to Agriculture up to ₹10.0 lakhs; Micro and Small Enterprises up to ₹ 20.0 lakh and housing up to ₹ 20.0 lakh per borrower to be classified as priority sector lending.

Also explain the measures taken in the last year and its effect on NBFCs.

Conclusion:

Conclude with way forward.

Introduction:

A **Non-Banking Financial Company (NBFC)** is a company registered under the **Companies Act, 1956** engaged in the business of loans and advances, acquisition of shares/ stocks/ bonds/ debentures/ securities issued by Government or local authority or other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business. However, it does not include any institution whose principal business is that of agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property.

Body:

How the NBFC crisis has panned out

Aug 2018: IL&FS crisis becomes public. With a debt of ₹91,000 crore, it defaults several times in Sep.

Sep: Crisis leads to sell-off in shares of several NBFCs. This leads to redemption pressure on many MF schemes.

Jan 2019: Essel Group's debt troubles become public. MFs and NBFCs enter into a "standstill agreement" with the promoter family to not sell the pledged shares of Zee Entertainment Enterprises.

Feb: Reliance group and its lenders and MFs enters into an Essel-like pact.

Apr: CARE Ratings downgrades debt programme of Reliance Capital and two of its arms, Reliance Commercial Finance and Reliance Home Finance.

May: Icra downgrades ratings on long-term bonds of Yes Bank with a negative outlook.

NBFC crisis:

- NBFC is passing through a turbulent period following a **series of defaults by Infrastructure Leasing and Financial Services (IL&FS)** and the **subsequent liquidity crunch**.
- Several corporates, mutual funds and insurance companies had invested in short-term instruments such as commercial papers (CPs) and non-convertible debentures (NCDs) of the IL&FS group that has been defaulting on payments since August.
- This has stoked fears that many of them could have funds stuck in IL&FS debt instruments which, in turn could lead to a liquidity crunch in their own backyard.
- There are rising fears that the funding cost for NBFCs will zoom and result in a sharp decline in their margins.
- Higher borrowing costs and narrowing options to raise funds will pose challenges for retail non banking finance companies (NBFCs) in the fiscal year ending March 2019.
- The bond yields have gone up sharply to around the 8% mark. That is making borrowing costlier even at the short end of the yield curve.
- NBFCs are likely to witness higher pricing pressure as competition in the retail segment intensifies going forward this is expected to be accentuated by narrowing funding avenues and higher systemic rates.
- Higher fuel prices, weaker dollar and the trade war could hit the SME sector badly. This would mean defaults by SMEs, which have been a traditional market for NBFC lending.
- Investors are worried about a credit downgrade backlash on NBFCs. That could mean huge write-offs for investors.
- Mutual funds who have invested in market instruments of NBFCs have faced increased redemption pressures.
- A kind of contagion then spread to other financial stocks, and the benchmark indices crashed, creating wider impacts.

- Following the credit crunch after IL&FS crisis, RBI provided special incentives to banks to enable the flow of funds to NBFCs.

Government steps to fight NBFC liquidity crisis:

- The RBI has decided to increase the cap on a bank's **exposure to a single NBFC to 20% of its tier-I capital from 15% now.**
- RBI has decided to give '**priority sector**' tag for banks lending to NBFCs, for on-lending to farm, small and medium enterprises and housing sector.
- The RBI has asked the non-banking financial companies (NBFCs) with assets of more than ₹5,000 crore to appoint a **chief risk officer (CRO).**
- The Reserve Bank of India (RBI) has extended the coverage of **Ombudsman Scheme for Non-Banking Financial Companies (NBFCs), 2018** to eligible Non Deposit Taking Non Banking Financial Companies (NBFC-NDs).
- The Reserve Bank of India (RBI) has decided to merge three categories of Non Banking Financial Companies (NBFCs) into a single category to provide greater operational flexibility to non-banking lenders. NBFCs categorized as Asset Finance Companies (AFC), Loan Companies (LCs) and Investment Companies (ICs), will be merged into a new category called NBFC – Investment and Credit Company (NBFC-ICC).
- The Reserve Bank of India has permitted banks to grant partial credit enhancement (PCE) to bonds issued by NBFCs and housing finance companies recently.

Way forward:

- Given the growing size and dominance of the NBFC sector, it is important that the threshold capital levels for entry be substantially increased. It may be prudent for RBI to evaluate the need to shore up minimum capital requirements for various NBFCs.
- While RBI has identified systemically important NBFCs, it needs to step up the monitoring of NBFCs which belong to large, diversified groups. Checks and balances are needed to ensure that risks do not build up in the sector due to structures which are too-complex-to-manage.
- RBI could consider re-visiting some of the unimplemented recommendations of the Working Group on Issues and Concerns in the NBFC Sector chaired by Usha Thorat in 2011.
- One such recommendation was the introduction of a liquidity coverage ratio for NBFCs. The objective was to ensure that NBFCs have cash balances and holdings of government securities which may fully cover gaps between cumulative outflows and cumulative inflows for the first 30 days. This would be the buffer in times of stress.

Rural tourism not only contributes to tourism industry but also creates local economic growth and overall sustainable development. Discuss.(250 words)

Chapter 2. Rural Tourism in India, Kurukshestra: April 2019 Issue

Why this question:

The question is based on the theme of rural tourism.

Key demand of the question:

The answer must capture the concept of rural tourism in India and in what way it brings sustainable development along with rural local economic growth.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In brief define rural tourism.

Body:

Rural development is a necessity for India and any strategy/ policy in this direction is a welcome step. There is a lot of scope of rural tourism, given the vast rural hinterland of India and growing connectivity between urban and rural centers.

Explain opportunities in rural tourism and also discuss what benefits it could provide. E.g Desire for escape from the monoculture of city living. Increasing Interest in Outdoor Recreation, Eco-Tourism and Special Interest Tourism. Rural locations are ideal for relaxation and rejuvenation. Over-familiarity and Congestion with traditional tourist resorts Increased Interest in alternative and off-beat attractions Curiosity for rural India and its culture, customs and heritages Accessibility of Rural Areas. Growing number of special interest tourists etc.

Conclusion:

Conclude with way ahead and reassert that rural tourism holds huge potential in transforming rural society of India in terms of growth and development.

Introduction:

Rural tourism is, “experience oriented, the locations are sparsely populated, it is experience oriented, the locations are sparsely populated, it is pre-dominantly in natural environment, it meshes with and local events and is based on preservation of culture, heritage and tradition.”

Body:

Rural tourism contributing to rural development:

• **Reduces migration:**

- Rural Tourism facilitates the declining areas to be developed with basic infrastructure facilities and provides the host community alternative ways of employment and side by side it reduces out-migration.
- It fosters a closer relationship between city dwellers and rural communities.

• **Alternative Way of Earning:**

- Most of the rural dwellers in India are dependent on traditional agricultural activities to maintain their livelihood.

- In this connection, rural tourism can be a potential tool to reduce their over-dependency on cultivation and it contributes to the overall economic development of an area that would otherwise be deprived.
- **Employment:**
 - Rural tourism creates a large number of semi-skilled jobs for the local population in not only local hotels and catering trades but also in other fields like transport, retailing, heritage interpretation etc.
 - Moreover, it ensures revival of traditional arts, crafts, building art etc. and brings marketing opportunity for rural producers to sell their products directly to the tourists.
 - Rural performers are hired for cultural programs where they can exhibit talent and also can earn money.
 - It allows alternative sources of earning opportunities from non-agricultural sectors that improve living standards of the rural dwellers to some extent.
- **Job Retention:**
 - Cash flows generating from rural tourism can assist job retention in services such as retailing, transport, hospitality, medical care etc. It provides additional income for farmers, local fishermen and local suppliers
- **Alternative Business Opportunities:**
 - Rural Tourism generates new business opportunities even those rural businesses, not directly related to tourism can also gain benefit from tourist activity through developing close relationships with tourist facilities.
 - For example, a number of tourists love to taste local cuisines of different tourist spots. Therefore any restaurant serving ethnic foods can also attract tourists though many of these restaurants are not directly related to tourism business.
- **Poverty Alleviation:**
 - Rural Tourism is being admired all over the world because such form of tourism can shape up rural society both by economic and social terms.
 - It brings both monetary and social benefits to the rural people.
 - It alleviates poverty by creating alternative sources of earning.
- **Empowerment of Localities:**
 - Rural Tourism cannot be flourished without the involvement of local people in it.
 - Accommodation facilities are being provided by local hotel owners whereas local suppliers supply food and beverages to the local hotels.

- Local producers produce locally made products as per tourists demand and earn money by selling them in the local market.
 - To entertain tourists, local organizers conduct different cultural programmes where local performers exhibit their art and culture through live performance.
 - Not only that, rural people also become engaged in different decision-making processes. All such engagement actually empowers the localites.
- **Entrepreneurial scope:**
 - Rural Tourism has increased career options for these young entrepreneurs.
 - **Arts and Crafts Sale:**
 - Arts and crafts are the evidence of local culture and heritages of a community belonging from any region or any nation. The urban tourists, wherever they go, generally prefer to have a collection of local arts and crafts to make their trip-experience a remembering one.
 - Such tendency motivates them to purchase local arts and crafts from the local producers and artists.
 - Side by side it encourages the local community to sell their products in local market. Such practice opens an alternative way of earning to the rural people.
 - **Environmental Improvement:**
 - Environmental improvements such as village paving and traffic regulation schemes, sewage and litter disposal can be assisted by tourism revenues and political pressures from tourism authorities.
 - These help develop pride of place, important in retaining existing population and businesses, and in attracting new enterprises and families.
 - **Heritage Preservation:**
 - Rural Tourism brings a strong sense of emotion in everyone's (both community and tourists) mind to preserve and reserve the local culture and heritages to make any place attractive for the tourists to visit it and also for the host community to live in.
 - Such sense is maintained through rural museums that play a significant role in local heritage preservation.

Way forward:

- **Resources mapping** brings to the fore what rural India has to offer to tourists.
- Traditionally Indian society is known for its hospitality; however some **basic training on soft skills** to engage the tourists will certainly be helpful.

- The **education and awareness at community level** will be very crucial for developing sustainable tourism practices in villages.
- **Panchayats, NGOs and community organisations** have an important role to play here by way of engaging both communities and tourists to promote responsible tourism.
- There is a need to develop the **Accessibility, Accommodation, Attractions and Amenities (4A's)**.
- Encouraging local entrepreneurs, private enterprises, investors and other tourism stakeholders to come under a common umbrella for basic rural infrastructure development activities is also essential.
- Better implementation of the Government schemes viz. **Swadesh Darshan, PRASAD, Special Tourism Zones and Promotion of e-Tourist Visa facilities**.
- Promotion of **non-intrusive rural tourism with preservation of traditional cultures** should be done.

"Ease of living should be the ultimate aim of the country, while ease of doing business is merely one of the pathways to achieve it." Elucidate.(250 words)

Prime minister's speech for 73rd Independence Day from the Red fort.

The hindu

Why this question:

The phrase has been picked up from Prime minister's speech for 73rd Independence Day from the Red fort, it aims to throw light upon ease of living in the country and dire need of the same.

Key demand of the question:

Discuss the concept of ease of living, significance of ease of doing business.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

Define what is ease of living and ease of doing business.

Body:

Prime Minister Narendra Modi has reiterated that the priority of Central Government is to ensure Ease of Doing Business and Ease of Living, the Digital India Campaign has ensured Ease of Living for common people.

Discuss the various aspects of policies of the govt. that is ensuring ease of living.

Conclusion:

Conclude with way forward.

Introduction:

The individual's ease of living is **the level of wealth, comfort, material goods and necessities available to them in a certain geographic area**. It includes factors like income, quality and availability of employment, class disparity, poverty rate, quality and affordability of housing, education, growth, environmental quality. The ease of living is closely related to the **quality of life**.

Body:

Need to target ease of living:

- In the recently released **Global Hunger Index (GHI)**, India featured at the 100th position among 119 countries, lagging behind even North Korea and Iraq.
- **About 40 per cent of city's population** is compelled to live in slums, and municipal authorities have failed consistently to come up with affordable housing schemes for people with low income.
- A census report states that 64 million people live in India's slums. The problem becomes more severe with urban India, where 17 per cent people live in slums. Over 70 per cent of slum households get their water from a tap, but just half of them get water in their homes.
- With burgeoning urban population, existing urban infrastructure, both institutional and physical, is being tested.
- From demands of reservations for locals in educational institutes and hospitals, to permanent damage to eco-systems, drainage networks and water-tables, side effects of poorly thought out and badly regulated urbanisation are beginning to show

How ease of doing business leads to ease of living:

- The reforms undertaken to ease of doing business helps in **removing excess influence of the governments from people's lives**.
- The people would have the freedom of **pursuing their aspirations**.
- It **reduces the policy paralysis** and strengthens the confidence of business environment.
- With better policies in lieu of attracting business, it helps in **more job creations** reducing the unemployment rate and in turn **increases the per capita income**.
- With ease of doing business, many **job seekers would turn into job-givers**, thereby spurring the economy by investment.
- The **infrastructure- physical and socio-economic** will be rejuvenated to **ensure faster connectivity** which enhances business and in turn the lives of people in rural areas.
- The ease of doing business would **help attract foreign investments** into India, providing the necessary capital to start new ventures.
- It could help **foray into new avenues** from food processing to fibre optics thereby diversifying the business chains horizontally.
- With introduction of the state of the art science and technology features, it can lead to spin-off effects helping the socio-economic development of society.

Way forward:

- Efficiency, Productivity, quality, speedy implementation and execution of upgraded scheme with help achieve the targets.

- Economic growth and job creation addresses Ease of Living to an extent.
- Role of society in it is imperative.
- Need to adopt holistic approach like industries can be created with manpower intensive since growth does not always translate into jobs.
- Decentralised and universal coverage of health and education to the lowest rung of the society should be ensured.

Conclusion:

It is more important of looking at people at large. People at ground level should feel happiness, change, providing them opportunity to lead life with dignity. If people's life is comfortable and if they are happy automatically the productivity increases because "Happy society is a flourishing society".

What are Differential Voting Rights? Discuss the role played by them in the growth and expansion of start-up ecosystem in India.(250 words)

Reference

Why this question:

The article talks about the concept of DVRs and applicability to start-ups.

Key demand of the question:

The answer must discuss the significance of DVRs and their role in promoting start-ups.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Describe what are DVRs.

Body:

Discuss the concept of DVR – A DVR share is like an ordinary equity share, but it provides fewer voting rights to the shareholder.

Why do companies issue DVR? – Companies issue DVR shares for prevention of a hostile takeover and dilution of voting rights. It also helps strategic investors who do not want control, but are looking at a reasonably big investment in a company.

At times, companies issue DVR shares to fund new large projects, due to fewer voting rights, even a big issue does not trigger an open offer.

Explain in what way they can contribute to start-ups.

Conclusion:

Conclude with way forward.

Introduction:

Differential Voting Rights (DVRs), which do not follow the common rule of one share-one vote, enable promoters to retain control over the company even after many new investors come in, by allowing shares with superior voting rights or lower or fractional voting rights to public investors. The Ministry of Corporate Affairs has amended the provisions relating to Differential Voting Rights (DVRs) under the Companies Act.

Body:

In the past, companies such as Tata Motors, Pantaloons and Jain Irrigation issued DVRs having fractional voting rights of 1/10th of the ordinary shares to public investors. These shares offer higher dividend compared to the ordinary shares in lieu of the voting rights taken away.

But the issuance of DVRs with superior voting rights was prohibited by the SEBI. This was to prevent the possible misuse of power by the promoters detrimental to the interests of small shareholders.

Role played by DVRs in expansion of start-up:

- The ministry of corporate affairs (MCA) has raised the existing cap of 26 per cent of the total post issue paid up equity share capital to 74 per cent of total voting power in respect of shares with DVRs of a company.
- To make capital available to Indian start-ups and to encourage listing on the country's exchanges, SEBI recently permitted Initial Public Offering (IPO) of unlisted companies with shares of superior rights.
- Start-ups and technology companies will be able to issue shares with differential voting rights (DVRs) with the government amending the Companies Act provisions to help entrepreneurs retain control even as they raise equity capital from global investors.
- This will surely help promoters, especially start-ups, in raising capital without diluting their control over the company
- It strengthens the hands of Indian companies and their promoters who have lately been identified by deep pocketed investors worldwide for acquisition of controlling stake in them to gain access to the cutting edge innovation and technology development being undertaken by them

Conclusion:

This move is aimed at enabling promoters of Indian companies to retain control of their companies in their pursuit for growth and creation of long-term value for shareholders, even as they raise equity capital from global investors.

Despite the Microcredit system that has a great scope in alleviating socio-economic problems, existing systems require restructuring in several areas to allow for long lasting benefits. Comment.(250 words)

Indianexpress

Why this question:

The article explains the current conditions of Microcredit and its scope to alleviate socio-economic problems and in what way these conditions alone can not fix all the economic problems.

Key demand of the question:

The answer must evaluate the impact of micro credit systems and the need for restructuring existing systems for better economic conditions in the country.

Directive:

Comment—here we have to express our knowledge and understanding of the issue and form an overall opinion thereupon.

Structure of the answer:

Introduction:

Begin with what you understand by microcredit systems – Microcredit refers to the granting of very small loans to impoverished borrowers, with the aim of enabling the borrowers to use that capital to become self-employed and strengthen their businesses. Loans given as microcredit are often given to people who may lack collateral, credit history, or a steady source of income.

Body:

Discussion should include the following:

Explain first in what way microcredit has gained much traction as a tool for ensuring the welfare of the most impoverished in the society but there are certain flaws in the model.

Discuss what is the core idea of microcredit, how has it helped improve the socio-economic conditions of the poor in the country.

Explain what more restructuring is envisaged or required to better the conditions of economy apart from microcredits.

Conclusion:

Conclude with way forward.

Introduction:

Microcredit refers to the **granting of very small loans to impoverished borrowers, with the aim of enabling the borrowers to use that capital to become self-employed and strengthen their businesses**. Loans given as microcredit are often **given to people who may lack collateral, credit history, or a steady source of income**. It has gained much traction as a **tool for ensuring the welfare of the most impoverished in the society** but there are certain flaws in the model.

Body:

Potential of Microcredit:

- The core idea of microcredit is that a small loan will provide access to the larger economy to people who typically live outside the scope of the institutions on which the mainstream economy rests.
- Such a loan is meant to enable them to commence with productive activities, and will give them the initial boost required to gain entry into an industry, after which production will be able to sustain itself, and the loan will gradually be repaid.
- Microcredit agreements frequently do not require any sort of collateral, and sometimes may not even involve a written agreement, as many recipients of microcredit are often illiterate.
- When borrowers demonstrate success in paying their loans on time, they become eligible for loans of even larger amounts, allowing them to finance expansion.

Case study: An example of a microcredit institution is the Grameen Bank in Bangladesh, founded in 1976 by Mohammed Yunus. The Grameen Bank offers small loans to the impoverished without asking for collateral, and was the pioneering institution in the realm of microfinance. The bank has 8.4 million followers, 97% of whom are women, and the bank has repayment success rates between 95 to 98 percent.

Challenges faced:

- The primary reason for the **lackadaisical effects of microcredit is the stringent repayment schedule** offered by most microcredit institutions.
- Since most borrowers to whom microcredit is given have **little to no credit history** as a result of their exclusion from traditional systems of credit, institutions offering microcredit are unable to judge the risk associated with lending to certain borrowers, and cannot be sure what the risk of them defaulting will be.
- To lower the risk of defaulting, microcredit lenders therefore **resort to repayment schedules** that demand an initial repayment that is almost immediate, after which borrowers must adhere to an inflexible weekly schedule for repayments.
- The effect of this is that borrowers are unable to use the loans on investments that will take some time to be fully realised, and instead are forced to use the loans they receive on short term investments that only boost production to an extent, and the overall growth of their incomes remains meager.
- A study found that having access to microcredit made very little difference to changing the lifestyles of borrowers, based on six indicators: household business profits, business expenditures, business revenues, consumption, consumer durables spending, and spending on temptation goods. These indicators only saw a 5% impact when microcredit was available.

Measures needed:

- There is a need for microcredit to consider adopting more flexible operating models, providing skills training and offering services such as portability of accounts to provide greater access for a longer duration of time.
- A diversified menu of micro loan products linked to sustainable income generation activities via micro enterprises or a creation of community-based pooled enterprise could possibly make it more attractive and compatible with the requirements of women.
- In addition, linking such developmental initiatives to an institution to nurture, monitor and handhold those activities in the formative stages is crucial for sustainability.

Conclusion:

Microcredit has a vast range of applications for poverty alleviation and general development, but existing systems require reform in multiple areas to allow for unfettered benefits that last. Furthermore, in areas where the application of microcredit is relatively new, microcredit systems must be carefully evaluated before they are put into place, so as to enable the greatest benefit from such institutions.

What is Development Finance Institution? In what way is it different from commercial banks? Discuss the need for India to have DFIs to Fund Infrastructure.(250 words)

The hindu

Why this question:

Recently The government has proposed to set up a development financial institution (DFI) to solve the infrastructure financing needs of the country.

Key demand of the question:

The question is straightforward and is about discussing the significance of development financial institution (DFI) and how it is different from commercial banks and its relevance in infrastructure funding.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You must give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In short explain DFI.

Body:

Explain what is DFU, what are the advantages of having DFI.

Discuss in what way they are different from commercial banks.

Then move onto discuss why India needs DFIs to Fund Infrastructure?

Conclusion:

Conclude with the significance of DFI for Indian infrastructure sector.

Introduction:

A Development Financial institution (DFI) is defined as “an institution endorsed or supported by Government of India primarily to provide development/Project finance to one or more sectors or sub-sectors of the economy. The first DFI was the **Industrial Financial Corporation of India (IFC)** that was launched in 1948. **IDBI, UTI, NABARD, EXIM Bank, SIDBI, NHB, IIFCL** etc are the other major DFIs.

Body:

The government has proposed to set up a development financial institution (DFI) to solve the infrastructure financing needs of the country.

DFI vis-à-vis banks:

- The institution differentiates itself by a thoughtful balance between commercial norms of operation, as adopted by any financial institution like commercial bank and developmental
- It emphasizes the long term financing of a project rather than collateral based financing apart from provision of long-term loans, equity capital, guarantees and underwriting functions, a development institution normally is also expected to upgrade the managerial and the other operational requirements of the assisted
- Its association with its clients is of an on-going nature and of being a companion in the project than that of a plain lender like banks.
- The basic stress of a DFI is on long-term finance and support for activities to the sectors of the economy where the risks may be higher that may not be feasible for commercial banks to finance them.

- Role of DFIs is not just long term financing but more of development of significant sectors of our economy for hastening growth.

DFI and Infrastructure Funding:

- To boost economic growth which would increase capital flows and energise capital markets.
- To improve long term finances.
- To provide credit enhancement for infrastructure and housing projects
- As India does not have a development bank, DFI would fulfil the need for us to have an institutional mechanism.
- Debt flow towards infrastructure projects would be improved.

Conclusion:

The RBI had also specified in 2017 that specialised banks could cater to the wholesale and long-term financing needs of the growing economy and possibly fill the gap in long-term financing. Thus, it would be wise to revive the concept of DFI if the government wishes to keep societal, cultural, regional, rural and environmental concerns intact.

Diversification of jobs from agriculture to other sectors is inevitable for the stability of rural economy in India. Discuss with suitable justifications.(250 words)

Reference

Why this question:

The question is about evaluating the need for diversification of Agri related jobs to bring stability in the rural economy of the country.

Key demand of the question:

Explain the need for diversifying the agricultural setup in the rural regions of India into other sectors for better stability of the country.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In short explain the current context of the question.

Body:

One must explain in detail the need for Diversification of jobs from agriculture to other sectors. First explain why should there be an encouragement to shift in the rural agrarian economy to other sectors.

Contrary to the common perception about predominance of agriculture in rural economy, about two third of rural income is now generated in nonagricultural activities.

Similarly, it looks amazing to find that more than half of the value added in manufacturing sector in India is contributed by rural areas. However, the impressive growth of non-agricultural sector in rural India has not brought significant employment gains or reduction in

disparity in worker productivity. This underlines the need for a new approach to direct the transition of rural economy.

Conclusion:

Conclude with way ahead.

Introduction:

Agriculture is the primary source of livelihood for about 58 per cent of India's population. Gross Value Added by agriculture, forestry and fishing is estimated at Rs 17.67 trillion. Yet Indian agriculture faces multiple issues like small and marginal landholdings, lack of access to agricultural credit, environmental degradation, low value addition etc, which in turn affect the agricultural income.

Body:

Need for diversification of jobs:

- Recent survey by the **National Bank for Agriculture and Rural Development (All India Rural Financial Inclusion Survey)** shows that the average monthly income of rural households is Rs. 8,059, with agricultural households deriving only 43% of their income from agriculture. Most of it is from providing **daily wage labour and government jobs**.
- Reducing the dependence of rural masses on agriculture will help improve the overall income of the rural population
- The government has sought to double farmer income by raising minimum support prices, but such initiatives would apply directly only to 48% of rural India, with non-agricultural households being left behind
- Diversification, away from marginal farming, helps to **overcome land constraint** to income growth, while allowing farmers to cope with exogenous shocks through additional income.
- It even allows them to **reinvest in productivity enhancing agricultural technologies**.
- Conversation on raising farmer income needs to embrace non-farm diversification, an important pathway for empowering landless labourers and marginal farmers.
- It helps overcome the **disguised unemployment** which has raised the labour cost in other sectors due to poor supply of labour.
- According to the National Sample Survey Office's (NSSO's) periodic labour force survey (PLFS) report showed a collapse in agricultural jobs as a key reason behind rising unemployment, particularly in the rural parts of the country.
- The proportion of people, in the working age group, employed in agriculture fell by 8 percentage points for rural men and 9.3 percentage points for rural women, an analysis of the NSSO's PLFS report for 2017-18.
- The share of agriculture in rural output is 39%, whereas the rest is contributed by the **manufacturing, construction and services sectors**.

Benefits of Rural Non-Farm sector:

- When the economic base of the rural economy extends beyond agriculture, **rural-urban economic gaps** are bound to get narrower along with salutary effects in many other aspects associated with the life and aspirations of the people.
- Rural industries are generally less capital-intensive and more labour absorbing.
- Rural industrialization has significant spin-offs for agricultural development as well.
- Rural income distribution is much less unequal in areas where a wide network of non-farm avenues of employment exists; the lower strata of rural societies participate much more intensely in non-farm activities, though their involvement is much less remunerative as compared with that of the upper strata.

Measures needed for diversification of jobs:

- The livestock sector, which contributes around 4% to India's gross domestic product (GDP), is particularly critical. India has a mixed crop livestock farming system, with livestock becoming an important secondary source of income.
- There are immense possibilities for diversification in agricultural sector towards more value added activities such as food processing.
- This is an area, which has by and large remained unexploited, because reforms in agriculture sector having been very slow, resources have not yet started flowing into **food processing industries**.
- A strong push to sectors like **food processing, warehousing and logistics** will be very beneficial as it will help push up farmer incomes, reduce the wastage of perishable agriculture commodities and provide employment to rural workers.
- Besides diversification of agriculture there is a strong need to restructure the rural economy by way of **promotion of nonfarm activities in rural areas**.
- Whatever nonfarm activities are being carried out in the rural areas now are more out of desperation to eke out a living rather than an informed choice of a vocation, backed by infrastructural and institutional facilities.
- A **massive improvement in infrastructure** is required to promote growth of rural industries on a sustainable basis.
- This will go a long way in generating good quality employment and meeting many of the consumption requirements of rural people.
- Many steps have been taken in regard to village connectivity, e.g., Prime Minister Gram Sadak Yojana (PMGSY) and telecommunication.
- **Services sector growth** in rural areas could also play a critical role in improving rural income. Sectors like **transport and storage** have recorded reasonable growth in the rural area.

Conclusion:

India's rural development policies should increasingly focus on developing markets, infrastructure and institutions that can help sectors like manufacturing especially small scale industries. While India's post-Independence rural policy has primarily been about driving people away from agriculture and towards cities, India must now incentivise job creation at their doorstep.

Write a note on Bimal Jalan committee that was put in place to review the economic capital framework of the Reserve Bank of India.(250 words)

Indianexpress

Why this question:

The Reserve Bank of India (RBI), in consultation with the government, had set up a six-member committee headed by the former RBI Governor Bimal Jalan to review the economic capital framework of the Reserve Bank of India.

Key demand of the question:

One must discuss in detail the recommendations made by the committee.

Structure of the answer:

Introduction:

In short provide for the background that The RBI Board, which met recently decided to accept the Jalan Committee report and decided to transfer Rs 1.76 lakh crore to the government.

Body:

Explain the key recommendations of the Bimal Jalan committee –

While giving a clearer distinction between the two components of economic capital — realized equity and revaluation balances — the committee recommended that realised equity could be used for meeting all risks/ losses as they were primarily built up from retained earnings, while revaluation balances could be reckoned only as risk buffers against market risks as they represented unrealised valuation gains and hence were not distributable.

As proposed by the panel and approved by the RBI, the entire net income can be transferable to the government only if realised equity is above its requirement. If it is below the lower bound of requirement, risk provisioning will be made to the extent necessary and only the residual net income (if any) transferred to the Government.

Conclusion:

Conclude with significance of the recommendations made.

Introduction:

Reserve Bank of India (RBI) has approved the transfer of record Rs 1.76 lakh crore dividend and surplus reserves to the government. The excess reserve transfer is in line with the recommendation of former RBI governor Bimal Jalan-led panel constituted to decide size of capital reserves that the central bank should hold.

Body:

The Bimal Jalan panel, which was set up to examine the Reserve Bank of India's (RBI) economic capital framework (ECF), would recommend the transfer of the central bank's excess reserves to the government over a period of three-five years

RBI economic capital framework:

- Economic capital framework refers to the risk capital required by the central bank while taking into account different risks.

- The economic capital framework reflects the capital that an institution requires or needs to hold as a counter against unforeseen risks or events or losses in the future.
- The framework the government is talking about is basically about how much capital RBI needs for its operations and how much of the surplus it should pass on to the government.

RECORD SURPLUS

2012-13	33,010	Surplus (Rs cr)
2013-14	52,679	
2014-15	65,896	
2015-16	65,876	
2016-17	30,659	
2017-18	50,000	
2018-19	1,23,414+52,637	

► Largest surplus in history of RBI. Also, **first time RBI is transferring surplus reserves**

► Rupee intervention and open market operations helped RBI generate record earnings

► Bimal Jalan committee recommended that RBI maintain 5.5% to 6.5% of its assets as surplus

► At 6.5%, surplus reserves would be Rs 11,608cr; at 5.5%, figure would be Rs 52,637cr

► Board decided to maintain surplus at the lower end of recommendations

► Transfer of surplus had been a bone of contention between RBI and govt in the past

Suggestions of Bimal Jalan committee:

- The panel recommended a **clear distinction between the two components of the economic capital of RBI i.e. Realized equity and Revaluation balances**.
- Revaluation reserves comprise of periodic marked-to-market unrealized/notional gains/losses in values of foreign currencies and gold, foreign securities and rupee securities, and a contingency fund.
- Realized equity, which is a form of a contingency fund for meeting all risks/losses primarily built up from retained earnings. It is also called the Contingent Risk Buffer (CBR).
- The Jalan committee has given a range of 5.5-6.5% of RBI's balance sheet for Contingent Risk Buffer.
- Adhering to the recommendations, the RBI has decided to set the CBR level at 5.5% of the balance sheet, while transferring the remaining excess reserves worth ₹52,637 crore to the government.
- If CBR is below the lower bound of requirement, risk provisioning will be made to the extent necessary and only the residual net income (if any) transferred to the Government.

- However keeping CBR at a lower range of 5.5% will reduce RBI's space to manoeuvre monetary policy.

Conclusion:

The committee's recommendations were based on the consideration of the role of central banks' financial resilience, cross-country practices, statutory provisions and the impact of the RBI's public policy mandate and operating environment on its balance sheet and the risks involved.

Discuss the key features of e-commerce presently witnessed in India, in what way do you think e-commerce 2.0 could significantly expand India's online market and make it truly inclusive?(250 words)

Livemint

Why this question:

The article captures a discussion on e-commerce 2.0 and its significance.

Key demand of the question:

One must discuss in detail the coming of more and more people in terms of mobile usage and in what way it could significantly impact India's online market and make it inclusive.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In brief state facts to justify the rising online presence of the people online.

Body:

Explain that by 2022, half a billion Indians are expected to come online through their mobile phones, a population we refer to as India's Next Half Billion (NHB). Their internet journey starts with them gaining internet access, then moving forward step by step to eventually making commercial transactions online.

Briefly discuss the coming of e-commerce in the country, differentiate how e-commerce 1.0 is different from the upcoming e-commerce 2.0.

Discuss the role played by it in expanding the Indian online markets.

Conclusion:

Conclude with significance.

Introduction:

Electronic commerce (e-commerce) is burgeoning as a means to doing business at a very rapid rate and is also showing every sign of continuing to expand. The rise of this new medium is attracting increasing attention by both private and public sector in order to remain upgraded and competitive so as to give 100 per cent services to their customers efficiently and effectively. India's new e-commerce policy came into effect on February 1, 2019.

Body:

Current e-Commerce scenario in India:

- The existing customer base of e-commerce 1.0 is relatively small about 40-50 million.

- Existing e-commerce platforms are better suited to sell structured and branded products (mostly electronics like mobile phones, televisions and air-conditioners).
- They mainly appeal to relatively sophisticated shoppers, for whom convenience and selection are important.
- Their English-first approach and user interfaces are constraints for the Next half billion segment.
- Moreover, the format does not enable an important mechanism for building trust, such as information on what others are doing on the platform.
- For sellers too, e-commerce is designed to cater to larger, organized players, whereas most sellers in India, even online, are small.
- Overall, online shopping is at present more about price discovery than product discovery.
- E-commerce has made important strides, but its penetration is still low in India.

e-Commerce 2.0 and its potential:

- E-commerce 2.0 will expand the market beyond the e-commerce 1.0.
- However, the new version will look, feel, and operate differently from the first wave of online shopping.
- It is expected by 2022, half a billion Indians are expected to come online through their mobile phones, a population we refer to as India's **Next Half Billion (NHB)**.
- The NHB differs considerably from the initial waves of internet users. They have very different income profiles, education levels, language skills, and social/cultural milieus.
- In the last 18-24 months, there has been considerable progress in addressing various barriers they face in their internet journey, due to efforts by entrepreneurs and various government initiatives.
- Consequently, the NHB is now at an **inflexion point for online shopping**.

Vision of e-Commerce 2.0:

- **Value consciousness:** E-commerce 2.0 will be dominated by smaller, unbranded items catering to value-conscious buyers.
- **Trust and confidence:** this is best built by social validation. To achieve this, e-commerce 2.0 players will leverage social communities and influencers on WhatsApp, Facebook, Instagram, and YouTube.
- **Resonance with the NHB context:** Products will be “pushed” to users instead of being discovered through search. This replicates the NHB’s offline shopping experience of being actively assisted and served by shop assistants on retail premises.

- The second wave of e-commerce could change the way Indians shop online, which will evolve from being a **hobby to a habit**.
- A **significant rise in women shoppers** in smaller cities is expected.
- Most importantly, e-commerce 2.0 could significantly expand India's online market and make it **truly inclusive**.

Enablers of e-Commerce 2.0:

- Affordable data to access the various e-Commerce websites and portals.
- Frugal innovation is helpful as well, with low-cost digital payment infrastructure as the prime example.
- Leveraging the communities on social media will help generate trust and confidence in the internet.
- Relatable language and creating inclusive user experiences such as mobile number-based log-ins, apart from simple navigation and purchase recommendations.
- Vernacular platforms and videos have recently emerged as the dominant mode of content consumption

Conclusion:

e-commerce 2.0 will differ from its earlier version in many ways. It will be intent and “impulse-driven”, rather than being only intent-driven; make product discovery easier by offering a curated selection instead of a wide selection; focus on smaller and unbranded items instead of larger, branded ones; prioritize value over convenience; leverage influencers and social media; offer bulk-buying for better pricing; use Hinglish and Indic languages with a user interface built for India, and use the viral nature of content and social media platforms to drive customer acquisition.

The idea of merging banks has become a practice in the recent past. In this context, discuss the issues and potential benefits associated with merging of Public Sector Banks. To what extent, it would help to address the burgeoning of Non-Performing Assets?(250 words)

The hindu

Introduction:

Public Sector Banks (PSBs) in India are fragmented, with some of them reeling under the mounting pressures of Non Performing Assets (NPAs). Economic Survey points out that constant failure of banks to provide credit to both emerging and existing industries has resulted in stagnation in the economic growth of the nation. The government plans to merge 10 public sector banks into four. This would take the number of banks in the country from 27 in 2017 to 12.

Body:

Narasimham committee (1991 and 1998) suggested merger of strong banks both in public sector and even with the developmental financial institutions and NBFCs. **PJ Nayak Committee in 2014** had also suggested that government either merge or privatize state-owned banks.

Benefits of mergers of bank:

- **For Banks:**

- **Small banks can gear up to international standards** with innovative products and services with the accepted level of efficiency.
- PSBs, which are geographically concentrated, can **expand their coverage beyond their outreach.**
- A better and optimum size of the organization would help PSBs offer more and more products and services and help in integrated growth of the sector.
- Consolidation also helps in **improving the professional standards.**
- This will also end the unhealthy and intense competition going on even among public sector banks as of now.
- In the global market, the Indian banks will gain greater recognition and higher rating.
- The volume of inter-bank transactions will come down, resulting in **saving of considerable time in clearing and reconciliation of accounts.**
- This will also **reduce unnecessary interference by board members** in day to day affairs of the banks.
- After mergers, bargaining strength of bank staff will become more and visible.
- Bank staff may look forward to better wages and service conditions in future.
- The wide disparities between the staff of various banks in their service conditions and monetary benefits will narrow down.

- **For economy:**

- **Reduction in the cost of doing business.**
- **Technical inefficiency reduces.**
- The size of each business entity after merger is expected to **add strength to the Indian Banking System in general and Public Sector Banks in particular.**
- After merger, Indian Banks can **manage their liquidity** – short term as well as long term – position comfortably.
- **Synergy of operations and scale of economy** in the new entity will result in savings and higher profits.

- A great number of posts of CMD, ED, GM and Zonal Managers will be abolished, resulting in savings of crores of Rupee.
 - Customers will have access to fewer banks offering them wider range of products at a lower cost.
 - Mergers can **diversify risk management**.
- **For government:**
 - The **burden on the central government to recapitalize** the public sector banks again and again **will come down substantially**.
 - This will also **help in meeting more stringent norms under BASEL III**, especially capital adequacy ratio.
 - From regulatory perspective, monitoring and control of less number of banks will be easier after mergers.

Challenges associated with mergers:

- A **complex merger with a weaker and under-capitalized PSB** would stall the bank's recovery efforts as the weaknesses of one bank may get transferred and the merged entity may become weak.
- Bigger banks may follow **monopolistic behavior with increased market power** – resulting in neglect of local needs.
- Amalgamation of balance sheet of PSBs will only impact NPA cosmetically, without actually working on NPA recovery. This will further **divert the process of NPA resolution**.
- **Without addressing the governance issues in the banks**, merging two or three public sector banks may not change the architecture.
- Unless there is a change in the operating structures, mergers may not deliver the desired results in the long run.
- Problems to adjust top leadership in institutions and the unions.
- Mergers will result in shifting/closure of many ATMs, Branches and controlling offices, as it is not prudent and economical to keep so many banks concentrated in several pockets, notably in urban and metropolitan centres.
- Mergers will result in **immediate job losses** on account of large number of people taking VRS on one side and slow down or stoppage of further recruitment on the other.
- This will **worsen the unemployment situation further** and may create law and order problems and social disturbances.
- Mergers will result in **clash of different organizational cultures**. Conflicts will arise in the area of systems and processes too.

- When a big bank books huge loss or crumbles, there will be a big jolt in the entire banking industry. Its repercussions will be felt everywhere.

Way forward:

- Giving the **PSBs autonomy along with accountability**.
- Merged entity will require **capital support from the government**, otherwise such a merger would not improve their capitalisation profile.
- Dual regulation by the Ministry of Finance and RBI on PSBs often results in paralysis in decision making – which makes consolidation of banks a redundant measure if they are not given power to act swiftly, as pointed by **PJ Nayak**.
- **Governance of public banks needs to be improved** before making any significant change in any emerging architecture.
- Bigger banks offer more resilience to the banking sector but overlooking bigger red flags like strong credit appraisal and risk control system would do little help in creating robust banks.
- Therefore due focus on ensuring **strong foundation of PSBs is important**.
- RBI should continue to give banking licences for **more small finance banks as well as universal banks** along with bank mergers
- Government on its part would do well to start **infrastructure development banks to fund infrastructure projects** and relieve PSBs of this task.

Conclusion:

Merger is a good idea. However, this should be carried out with right banks for the right reasons. Merger is also tricky given the huge challenges banks face, including the bad loan problem that has plunged many public sector banks in an unprecedented crisis.

With the acceptance of the Bimal Jalan committee's report, the Reserve Bank of India (RBI) agreed to transfer one lakh seventy six thousand to the government. Suggest the ways through which government can prudently utilize these funds?(250 words)

The hindu

Introduction:

The central board of the Reserve Bank of India (RBI) recently decided to transfer a **surplus of Rs 1.76 lakh crore to the government**-its highest transfer ever-sparking a fierce debate. The government was, it must be noted, acting on the **recommendations of a committee chaired by former RBI governor Bimal Jalan, on capital transfer**.

Body:

Bimal Jalan committee Recommendations:

- The surplus from the central bank comprised two components—**Rs 1.23 lakh crore of surplus for the year 2018-19 and an additional Rs 52,637 crore of excess provisions** that was made available as per the revised economic capital framework recommended by the Bimal Jalan committee.
- It suggested that **the framework may be periodically reviewed after every five years.**
- It recommended **to align the central bank's accounting year with the financial year**, which could reduce the need for paying interim dividend.
- The panel recommended **clear distinction between the two components of economic capital, realised equity and revaluation balances**. This is because of the volatile nature of the revaluation reserves.
- **Only realised equity built from profits must be distributed.**
- The panel recommended that the **Contingency Fund be maintained within a range of 6.5% to 5.5% of RBI's balance sheet.**
- Hence, the excess from the pre-decided 5.5% level or Rs. 52,637 Cr has been written back, that is transferred to the Centre.
- Revaluation gains from market fluctuations on foreign currency, gold or other assets must be retained. **Revaluation balances were not distributable.**
- Hence, **bulk of RBI's legacy reserves are ring-fenced from transfer demands.**
- The Bimal Jalan committee should also be complimented for **clearly specifying that the revaluation reserve cannot be used to bridge shortfalls in other reserves.**

Ways through which the fund can be used prudently:

- The amount could either be used to **provide a fiscal stimulus to the economy**—which is in the grip of a slowdown—
- It could be used to **reduce off-balance sheet borrowings.**
- The other option is to **use it to meet an expected shortfall in revenue collections.**
- In the Union budget, the government had presented an optimistic scenario of raising Rs 4.76 lakh crore in additional resources to meet budget expenses.
- However, since there is a clear slowdown ahead, this revenue target may not be met, in which case the surplus from the RBI would be used to bridge the shortfall.
- Normally, the money is transferred to the **Consolidated Fund of India** from which salaries and pensions to government employees are paid and interest payments done, besides spending on government programmes.
- The large pay-out can help the government **cut back on planned borrowings and keep interest rates relatively low.**

- If the government manages to meet its revenue targets, the windfall gain can lead to a **lower fiscal deficit**.
- The other option is to **earmark these funds for public spending or specific projects**, which could lead to a **revival in demand in certain sectors and boost economic activity**.
- If the tax revenue growth picks up, then the government can use the additional money to **clear the dues of the Food Corporation of India and fertiliser companies** to minimise spillover of deficits to the next year.
- The additional funds can also be used to spend on **much-needed capital expenditure**.

Views of Economists:

- Some economists have welcomed the move as it will help the government counter the shortfall in revenue and tax collection.
- Since inflationary pressure is low, economists believe that the move will not have a negative impact in the long run.
- Another group of economists which include the likes of Raghuram Rajan and former RBI governor Urjit Patel said earlier that the move could put RBI in a vulnerable position apart from diminishing its autonomy.

Conclusion:

The decision of the RBI Board must be welcomed as it has not come a day sooner and should help the government in combating the economic slowdown and to conform to the fiscal targets. It is hoped that the government will be prudent in using these funds.

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

Organic Farming in India is an established age-old practice in India, but its ability to redress the grievances of farmers seems to be limited. Critically analyse. (250 words)

Downtoearth

Why this question:

The question aims to examine the success/achievements that organic farming can bring to farmers and to their income and in what way it has certain limitations.

Key demand of the question:

The answer must discuss the merits and demerits of organic farming.

Directive:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Describe what is organic farming.

Body:

The answer must justify how India has the highest number of organic farmers globally, but most of them are struggling.

Discuss the factors involved, quote facts such as – India is home to 30 per cent of the total organic producers in the world, but accounts for just 2.59 per cent (1.5 million hectares) of the total organic cultivation area of 57.8 million hectares, according to the World of Organic Agriculture 2018 report. Explain the issues involved, why farmers are unable to harness the full potential. What needs to be done etc.

Conclusion:

Conclude with way forward.

Introduction:

Organic farming is a technique, which involves cultivation of plants and rearing of animals in natural ways. This process involves the use of biological materials, avoiding synthetic substances to maintain soil fertility and ecological balance thereby minimizing pollution and wastage. FAO suggested that Organic agriculture enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity.

Body:

Status of Organic farming in India:

- India is home to **30 per cent of the total organic producers in the world, but accounts for just 2.59 per cent (1.5 million hectares) of the total organic cultivation area of 57.8 million hectares**, according to the **World of Organic Agriculture 2018 report**.
- India is the largest exporter of organic cotton worldwide.
- More than 30% of world's organic producers are in India
- India exporting over 300 products in 20 different categories.
- India exported 1.35 million metric tons of "certified organic" food in the year of 2015-16.
- Oilseeds comprised half of India's overall organic food export, followed by processed food products at 25%.
- Current Indian organic market is estimated at more than Rs. 4000 crore and it is likely to increase to 10,000 to 20,000 crore by 2020.
- Indian organic market has a combined annual growth rate of 25% compared to 16% global growth rate.
- Most organic farmers are struggling due to poor policy measures, rising input costs and limited market, says a study by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) and global consultancy firm Ernst & Young.

Challenges:

- Due to relatively small volumes, the costs of organic food products are relatively high. According to the Indian Council of Agricultural Research, productivity on an average **dips by 6.7 per cent in the first year**, and the government needs to have a plan in place to support farmers during the transition.
- The cost of cultivation increases as it takes more time and energy to produce than its chemical-intensive counterpart.
- **High demand and low supply** has further created an inflationary pressure on organic food products.
- **Pest attack on organic crops** is another reason cited by the farmers for low productivity and demanded education and training to deal with it.
- **Specialised farmer training costs, higher processing and inventory holding costs, and increased packaging, logistics and distribution costs** add to the price of end products.
- The absence of organic food products across all segments in the market is a concern
- There is **low awareness at the producer level** on the difference between conventional farming and organic farming.
- At the consumer level, there is confusion between natural and organic products and limited understanding of the health benefits of organic food products
- Consumers are faced with a plethora of decisions around brands —imported or domestic, product quality, authenticity of claims and certifications.
- Even as farmers are struggling to find a better market, the **existing certification systems for organic food are making things difficult for them**. The certification systems are not only cumbersome and time-consuming, but also expensive.

Way forward:

- Supply-demand mismatch can be eased fundamentally by making organic production mainstream with location-specific hybrid production strategies
- Investments in achieving operations excellence by companies will facilitate lowering the cost of organic food products
- In order to sustain consumer trust, maintaining an accurate audit stream, and preventing cross-contamination with conventional goods would be crucial.
- Consumers should consume responsibly and stakeholders should prevent wastage along the supply chain.
- The Government must rope in agricultural scientists and international research institutions to develop organic herbicides.

- It is critical for companies involved in the organic food business to increase awareness among consumers in non-metro cities
- People across all income groups should have access to organic food.
- Establishing community-supported agricultural farms or with “grow your own food” programmes

Conclusion:

Organic agriculture is the **best insurance policy** that India can have with better performance on productivity, environmental impact, economic viability and social well-being. Focusing only on higher yields at the expense of other sustainability pillars (economics, environment and society) is not the food production system that India needs. What India needs is an integrated system that gives equal importance to all sustainability dimensions across the value chain and thus helps establish a healthy and well-fed society.

Do you think Big data analytics holds potential to bring revolutionary change in Agricultural Industry of the country? Discuss in detail the Role of data analysis in agriculture. (250 words)

Downtoearth

Why this question:

The role of big data analytics in agricultural industry.

Key demand of the question:

The answer must explain the possible role that big data analytics can play in revolutionizing agricultural industry in the country.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Begin with brief on what is Big data analytics.

Body:

Discussion should include the following:

Explain that in agriculture, big data is often viewed as a combination of technology and analytics that can collect and compile novel data and process it in a more useful and timely way to assist decision making.

Relate the relevance of it to different practices such as precision agriculture, organic farming, ZBNF etc.

Conclusion:

Conclude with way forward.

Introduction:

“Big data” often refers simply to the use of predictive analytics, user behavior analytics, or certain other advanced data analytics methods that extract value from data, and not just to a particular size of data set. Data tools can help determine changes required to maintain yields and meet food demands

Body:

Potential of Big Data in agriculture:

- The availability of data is on the grow because they are increasingly gathered by cheap and numerous information-sensing mobile devices, aerial (remote sensing), software logs, cameras, microphones, radio-frequency identification (RFID) readers and wireless sensor networks.
- In agriculture, big data is often viewed as a combination of technology and analytics that can collect and compile novel data and process it in a more useful and timely way to assist decision making.
- Real-time insights to help performance optimisation advance analytics can show how farmers are utilising their inputs and what adaptations are required to take account of emerging weather events or disease outbreaks.
- For instance, if Black Grass becomes problematic in a given region, suppliers can deploy big data techniques such as real-time micro-segmentation of customers to target promotional and marketing activities, thus facilitating better utilisation of marketing spends.
- Benefits include faster unearthing of valuable insights and the ability to develop and adapt products that meet specific customer needs on an ongoing basis.
- In this range, we can encounter autonomous vehicle devices farmers place in the ground to measure soil moisture and nutrient, predictive weather stations and image-capturing satellites and drones mapping out land and measuring crop health.
- These insights are extremely important since they tell the farmer when and how much to irrigate a field, crop health, weather predictions, pest infestations and even drought conditions.
- Considering the increasing labour shortages in the sector the capacity for big data analysis that lessens the need for physical manpower is of great advantage for agriculture.

Role of Big data in Agriculture:

- **Development of new seed traits:** Access to the plant genome with new ways to measure, map and drive information betters products.
- **Seed Selection:** Big-data businesses can analyse varieties of seeds across numerous fields, soil types, and climates and select the best.
- **Crop disease:** Similar to the way in which Google can identify flu outbreaks based on where web searches are originating, analysing crops across farms helps identify diseases that could ruin a potential harvest.
- **Irrigation:** Precision agriculture aids farmers in tailored and effective water management, helping in production, improving economic efficiency and minimising waste and environmental impact.

- **Weather:** Advanced analytics capabilities and agri-robotics such as aerial imagery, sensors help provide sophisticated local weather forecasts can help increasing global agricultural productivity over the next few decades.
- **Climate change:** Since, climate change and extreme weather events will demand proactive measures to adapt or develop resiliency, Big Data can bring in the right information to take informed decisions.
- **Food tracking:** Use of sensors and analytics to prevent spoilage and food-borne illnesses
- **Food processing:** They help in streamlining food processing value chains by finding the core determinants of process performance, and taking action to continually improve the accuracy, quality and yield of production. They also optimise production schedules based on supplier, customer, machine availability and cost constraints.
- **Effect on supply chains:** Seismic shifts in the supply chain of seed, crop inputs and food driven by the democratisation of technology and information
- **Loss control:** In India, every year 21 million tons of wheat is lost, primarily due to scarce cold-storage centres and refrigerated vehicles, poor transportation facilities and unreliable electricity supply. Big Data has the potential of systematisation of demand forecasting thus reducing such losses.
- **Pricing:** A trading platform for agricultural commodities that links small-scale producers to retailers and bulk purchasers via mobile phone messaging can help send up-to-date market prices via an app or SMS and connect farmers with buyers, offering collective bargaining opportunities for small and marginal farmers.

Conclusion:

The big data revolution is in its early days and most of the potential for value creation is still unclaimed. But it has set the industry on a path of rapid change and new discoveries. Stakeholders committed to innovation will likely be the first to reap rewards. If the farmers would have been concerned about the infirmities in terms of data-based farming, production could be increased.

Palm oil easily constitutes over two-third of India's burgeoning vegetable oil import and amidst such huge demand sustainability of palm oil Industry in India lingers to face many tests. Analyse.(250 words)

Financial express

Why this question:

The question is based on the theme of sustainable palm oil industry and the challenges it is facing in the country.

Key demand of the question:

The answer must discuss the challenges being faced by the palm oil industry in the country and what needs to be done to overcome them.

Directive:

analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary.

Structure of the answer:

Introduction:

Describe with statistics the palm oil growing regions of the country.

Body:

In recent years, rising incomes, expanding population and extant low per-capita availability have combined to boost India's edible oil consumption.

Then discuss the key problems associated.

Explain in what way with industry backing and consumer awareness, eco-friendly palm oil can find a lucrative market in the country.

Conclusion:

Conclude with way forward.

Introduction:

India is perhaps the biggest market for edible oil. In value terms vegetable oil imports are next only to crude and gold. It is the highest for any food commodity. India's import dependence in this has worsened to over 70%.

Body:

State of Indian Palm Oil:

- Oil palm crop is one of the highest oil (palm oil) yielding crops among the all perennial crops. Oil palm tree produces edible palm-oil as well as palm kernel-oil.
- In cooking oil, India depends on imports for two-thirds of its requirement.
- Domestic production meets three quarters of its annual requirement of 32 million tonnes because of initiatives taken by the present and previous governments
- Annual imports during the past three years have averaged 14.82 million tonnes at \$9.43 billion.
- Though palm oil has a high proportion of unhealthy saturated fats-45% compared to 6% in mustard oil-there is no way India can affordably meets its growing needs without relying on it.
- Annual imports of crude palm oil during the past three years have averaged 6.76 million tonnes, giving it a 46% share of the commodity's imports.
- Soybean and sunflower oils follow at some distance.

Issues facing palm oil industry in India:

- Self-sufficiency is almost impossible with oilseeds because there is **not enough land available**.
- Currently, it covers 3.45 lakh hectares out of a potential area of 19.33 lakh hectares, nearly half of it in Andhra Pradesh.
- Uncertainty of income deters smallholder farmers from investing in a long-gestation crop, which yields fruit after three years of planting for 27 years.

- **Instable prices:** The current monthly price of Fresh Fruit Bunches (FFB) in Andhra and Telangana varies between Rs 7,200 and Rs 8,000 a tonne. A year ago, it went down to Rs 6,000. For farmers to make a profit, the price should be Rs 9,500 a tonne
- **Low productivity** also haunts the industry. India produces five tonnes of FFB per hectare on average.
- **Low yields translate into low capacity utilisation** of the processing plants, which adds to the cost.
- India's **average palm oil yield** is 0.88 tonnes per hectare, compared to Malaysia's four tonnes and Andhra's two tonnes.
- The East Asian country has the advantage of daily rainfall. In India, **irrigation is a big cost**.
- As in sugarcane, oil palm farmers are required to supply to a mill in the vicinity which must pay the price fixed by state governments.
- In the north-east, the **condition of the roads** is such that FFB often cannot be brought to the mills within 24 hours and there is much oozing of oil owing to bumpy rides.

Measures needed:

- To make a dent in the import bill, India must increase palm oil production because oil palms have the highest productivity at 4,000 kg of oil per hectare. In contrast, mustard, which has a high oil content of 35-42%, yields 440-500 kg of oil per hectare at current levels of productivity.
- The government must pay farmers the difference between the normative cost and the actual purchase price.
- Support to farmers for planting materials, inter cropping & maintenance cost for gestation period (4 yrs), bore well, drip irrigation, harvesting tools.
- **Corporations should be allowed** to do oil palm cultivation as they can bear financial risks and do farming scientifically.
- Oil palm would have to be **declared a plantation crop**. This would lift the bar on companies from buying agricultural land.
- The **Commission on Agricultural Costs and Prices (CACP)**, which fixes minimum support prices, had recommended a **mix of smallholder farms and corporate plantations** in 2012.
- Small farmers can give the palms better care. Processing companies should do a better job of extending services to them
- A **ceiling on other vegetable oil import** will reduce the quantum of arrivals and support domestic producers. Ceiling should come with the provision to review it every 6 months, depending on the exigencies of the situation.

- **Import duties should be varied dynamically.** It should be fixed in a way so that imported oils are not cheaper than the MSP for domestic oils.
- **Special focus for promotion of oil palm in all NE states.**
- To meet the planting materials requirement for new plantation both from indigenous and imported sources.
- Capacity building of farmers and extension officials.
- **Assured procurement** of FFBs through processors.
- Supporting oil palm growers through **Market Intervention Scheme (MIS)** to provide remunerative prices of FFBs as and when international CPO price fall below \$ 800 per MT.

Conclusion:

Oil palm crop provides the excellent substitute of importing the oil. There is a need to help farmers of the country to achieve self-sufficiency in pulses and hope that they would repeat the “success” in oilseeds.

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.

“Providing portability of food security benefits all across the nation through One Nation One Ration Card can prove to be a game changer in the public distribution aspects of the country”. Comment.(250 words)

Newindianexpress

Why this question:

In a major boost to National Food Security, Government of India launched the One Nation-One Ration Card scheme on a pilot basis in four States namely Telangana, Andhra Pradesh, Maharashtra and Gujarat.

Key demand of the question:

Discuss the key features of the scheme and how it is helping in augmenting the PDS in the country.

Directive:

Comment— here we have to express our knowledge and understanding of the issue and form an overall opinion thereupon.

Structure of the answer:

Introduction:

Discuss the concept of one nation one card.

Body:

Discuss the following –

Features: Families who have food security cards can buy subsidized rice and wheat from any Fair Price Shop in these states. Their ration cards should be linked with Aadhar Number to avail this service.

Way ahead: The Centre is intended to extend the programme to all states by August next year so that the portability of the food security card implemented. There will also be creation of a Central Repository of all Ration Cards to help national level de-duplication.

Benefits: The national portability of Ration cards will ensure all beneficiaries especially the migrants in getting access to Public Distribution System (PDS) across the nation from any PDS shop of their own choice.

This will provide freedom to the beneficiaries as they will not be tied to any one PDS shop and reduce their dependence on shop owners and curtail instances of corruption.

Conclusion:

Conclude with way forward.

Introduction:

One Nation One Ration Card Scheme which will allow portability of food security benefits will be available across the country from 1st July, 2020. This means poor migrant workers will be able to buy subsidized rice and wheat from any ration shop in the country.

Body:

Highlights of the scheme:

- The poor migrant workers will be able to buy subsidised rice and wheat from any ration shop in the country but for that their ration cards must be linked to Aadhaar.
- Migrants would only be eligible for the subsidies supported by the Centre, which include rice sold at Rs. 3/kg and wheat at Rs. 2/kg, It would not include subsidies given by their respective state government in some other state.
- This scheme will ensure that no poor person is deprived of subsidised grains.
- The scheme can be implemented as already 77% of the ration shops across the country have PoS machines and more than 85% of people covered under the National Food Security Act (NFSA) have their cards linked to Aadhaar.
- For remaining beneficiaries, all the States have been given one more year to use point of sale (PoS) machines in the ration shops and implement the scheme.

Significance of Scheme:

- **For migrant labourers:**
 - India has had food security benefit schemes which have domicile based access.
 - 36 crore people or 37% of the population is that of migrant labourers. The scheme is therefore important for anyone who is going to move from one place to the other.
 - It happens that when one moves from one place to the other (for e.g. a government employee being transferred from one place to another), it takes about two to three months to get a ration card at that next place and then further more time to start getting commodities against the same.

- After the implementation of the scheme, it would be ensured that a migrant is able to access the benefits which are due to him in any part of the country.
 - This would be ensured on the basis of Aadhaar authentication and a validated data.
- **For Women:**
 - ONORC will be particularly beneficial for women and other disadvantaged groups, given how social identity (caste, class and gender) and other contextual factors (including power relations) provide a strong backdrop in accessing PDS.
- **Provides Choice:**
 - ONORC will give the beneficiaries the opportunity to opt for the dealer of their choice. If any dealer misbehaves or misallocates, the beneficiary can switch to another FPS shop instantly.
 - ONORC lets the beneficiaries choose the PDS shop that best delivers on the attributes.
- **Curbing corruption:**
 - In ONORC Scheme, the fundamental prerequisite is de-duplication so that it is ensured that the same person does not figure as a beneficiary in two different locations of the country.
 - With the help of the scheme, the government would be able to rightly target the beneficiaries to provide them with the foodgrains under the PDS. The scheme is linked with Aadhaar and biometrics, this removes most possibilities of corruption.
 - The government is creating a **central data repository** to get all the details of ration card which are being maintained by states so that the repository acts as a clearing house or a server to do the cross checking on the basis of Aadhaar authentication.
 - This ensures that there is no corruption or duplication of the benefits that are being passed on to the beneficiaries. The government will ensure all these things with the help of technology.

Challenges:

- Since the scheme is based on technology, the government may face some technical challenges during the implementation of the scheme.
- The scheme will increase the woes of the common man and, the middlemen and corrupt PDS shop owners will exploit them.
- Tamil Nadu has opposed the proposal of the Centre, saying it would result in undesirable consequences and is against federalism.
- Within some states issue of intra state portability.
- Different states have different rates and these mismatching rates will be a big challenge.

- Few regional parties have expressed apprehensions on bearing the cost of additional ration cards. This is a matter which is to be settled between the states and the Government of India.
- One of the apprehensions mentioned by few states is the cost of additional food grain to be supplied to the migrant workers.
- However, the whole system is based on the entitlements mandated under the NFSA and this prevents the charges of additional cost. Beneficiaries will continue to pay the same issue prices that are fixed under the NFSA.
- The quality of services is markedly inferior for the subaltern groups with latent methods of discrimination such as lack of information, mixing of inferior grains, longer waiting time and, at times, even verbal abuse.

Way Forward:

- The food security scheme under the NFSA costs more than Rs 1 lakh crore per year. It is very expensive but is highly needed. There is a need to ensure that subsidized food grains ultimately go to the person or the family that is entitled to.
- The ONORC should also include access to health and other things.
- At the principal level, within the government, there is broad consensus on having a unified kind of service delivery system based on technology and identity.
- A unified service platform combining all the citizen centric services on the basis of few parameters of identity and other indicators of technology, is the need of the hour.
- ONORC combined with a rating system based on the experiences akin to the Uber/Ola system, the government can improve PDS by closer monitoring and control. Those PDS dealers who perform better could be rewarded.

Conclusion:

While ONORC has the potential to improve outcomes particularly for the subaltern groups, like any delivery mechanism, the entire value chain of making the system work needs to be closely monitored and backed by infrastructure. The availability of point of sale (PoS) systems at PDS shops, and its functioning needs to be ensured to check compromises in the entitlements.

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

As India becomes a large domestic and international aviation market, the need to create a local leasing community has gained significance. In this context examine the merits and demerits of the move taken by the government for creating a rupee-based leasing industry.(250 words)

Financial express

Why this question:

The Finance Minister, in her maiden budget, laid the foundation of building an important component of the aviation sector following the release of the ‘Rupee Raftaar’ report at the Global Aviation Summit in Mumbai in January earlier this year.

Key demand of the question:

The answer must discuss in detail the nuances of the aircraft leasing industry and the potential it holds for India.

Directive:

Examine – When asked to ‘Examine’, we have to look into the topic (content words) in detail, inspect it, investigate it and establish the key facts and issues related to the topic in question. While doing so we should explain why these facts and issues are important and their implications.

Structure of the answer:

Introduction:

Discuss the facts /current scenario of Aviation industry.

Body:

The answer must discuss the advantages and disadvantages of creating rupee-based leasing industry in the country.

Explain what all factors would it address, what will be the key objectives etc.

Creating a rupee-based leasing industry will address many objectives: (1) high-skill job creation in financing and across the value chain, (2) retaining economic value in India, (3) offering local savers a new investment class, (4) creating a product more-suited to the needs and requirements of the local industry.

Conclusion:

Conclude with way forward and its significance.

Introduction:

The Finance Minister, in her maiden budget, laid the foundation of building an important component of the aviation sector. As the world’s third largest domestic aviation market, the time is ripe for India to enter into aircraft financing and leasing activities from Indian shores. The announcement of this policy statement in the Budget follows the release of the **‘Rupee Raftaar’ report** at the Global Aviation Summit in Mumbai in January earlier this year.

Body:

Need for rupee-based lending industry:

- In the view of increasing demand and non-availability of own sources of aircraft financing, it is essential for India to set up its own structures for the same.
- Moreover, civil aviation sector is an important sector for development of the economy.
- In the civil aviation industry, aircraft financing is the most profitable segment and there are no entities in the country exploring this line of business.
- All the benefits from this gap are being enjoyed by foreign entities

Merits of Rupee-based lending industry:

- This is critical to the development of a self-reliant aviation industry, creating aspirational jobs in aviation finance, besides leveraging the business opportunities available in India’s financial Special Economic Zones (SEZs), namely, International Financial Services Centre (IFSC).

- high-skill job creation in financing and across the value chain
- retaining economic value in India
- offering local savers a new investment class
- creating a product more-suited to the needs and requirements of the local industry.
- Helps create a lot of direct and indirect jobs in the aviation sector.
- Rupee-based lending offers local savers, depositors and investors an opportunity to access aircraft financing which is a liquid and low-default asset class. The local currency leases allow airlines to create a natural hedge on their leasing expenses.

Demerits:

- The development of this industry requires significant contribution from various stakeholders.
- For instance China, in order to attract business away from Ireland, created a specific low-tax dispensation.
- India imposes a wide variety of taxes (stamp duty, import duty, GST, income and capital gains taxes, among others) that require rationalisation.
- Local regulators need to allow long-term financing entities like insurance companies, mutual funds and pension funds to invest in securities of entities engaged in rupee-based leasing.
- Starting an NBFC or an investment trust in the GIFT City will require specific approvals from RBI.

Conclusion:

As India becomes a large domestic and international aviation market, the need to create a local leasing community will increase in importance. With more than a thousand planes on order, India is expected to import more than \$40 billion of equipment (at an average price of ~\$40 million per narrow-body aircraft) over the next decade or so. These numbers are expected to be higher—both on account of growth which will propel further orders and also the inclusion of more wide-body planes as more Indian airlines start their long-haul international operations.

Discuss the significance of Ocean energy as a potential renewable energy in India. (250 words)

The hindubusinessline

Why this question:

The Ministry of New and Renewable Energy has declared Ocean Energy as renewable energy. Thus, it is important from the point of view of GS paper III to examine the merits of ocean energy and its potential.

Key demand of the question:

The answer must write a short note on ocean energy as a potential renewable energy.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Begin with brief introduction on ocean energy.

Body:

The question is straightforward and nothing much to deliberate. One must categorically discuss ocean energy as the renewable energy.

Discuss the significance of such an energy – vastness, ease of use etc. Oceans cover more than 70% of Earth's surface, making them the world's largest solar collectors.

The sun's heat warms the surface water a lot more than the deep ocean water, and this temperature difference creates thermal energy. Just a small portion of the heat trapped in the ocean could power the world.

Ocean energy is currently under-utilized and as on date, India does not have any installed ocean energy capacity. It is mostly exploited through a few technologies including wave, tidal, current energy and ocean thermal energy.

Conclusion:

Conclude with way forward.

Introduction:

Oceans cover 70 percent of the earth's surface and represent an enormous amount of energy in the form of **wave, tidal, marine current and thermal gradient** known as Ocean energy. A variety of different technologies are currently under development throughout the world to harness this energy in all its forms. The government has approved a proposal to declare ocean energy as Renewable Energy.

Body:

Potential of Ocean Energy in India:

- Total identified potential of **Tidal Energy** is about **12455 MW**, with potential locations identified at **Khambat & Kutch regions**, and large backwaters, where **barrage technology** could be used.
- The total theoretical potential of **wave energy in India** along the country's coast is estimated to be **about 40,000 MW** – these are preliminary estimates. This energy is however less intensive than what is available in **more northern and southern latitudes**.
- **Ocean Thermal Energy Conversion** has a theoretical potential of **180,000 MW** in India subject to suitable technological evolution.

Various means of Ocean Energy:

- Oceans are literally throbbing with energy.
- There are at least several sources of energy in the seas.
- One is the **bobbing motion of the waters**, or **ocean swells** — you can place a flat surface on the waters, with a mechanical arm attached to it, and it becomes a pump that can be used to drive water or compressed air through a turbine to produce electricity.

- Another is by tapping into **tides**, which flow during one part of the day and ebb in another. You can generate electricity by channelling the tide and place a series of turbines in its path.
- One more way is to keep turbines on the sea bed at places where there is a **current** — a river within the sea.
- Yet another way is to get the **waves dash against pistons** in, say, a pipe, so as to compress air at the other end.
- Sea water is dense and heavy, when it moves it can punch hard — and, it never stops moving.

Significance of Ocean Energy:

- The world today needs more energy than it ever required. The growing population along with the growing industries requires more and more sources of energy.
- They have become inevitable in our daily life. However we also need to take care of the fact that this consumption should not affect much of the ecological balance of the planet.
- Given fluctuating fuel prices and the impact of global warming, Ocean Energy is now in a very strong position to commercialise the vast body of research and development it has invested in over the past 10 years.
- The sea is a limitless source of power and is a challenging environment, so in order to exploit wave energy commercially there are a number of key components required.
- Unlike wind, solar and other ocean energy sources such as wave power, tides and ocean currents are almost 100 percent predictable. The endless flows create reliability of the future energy availability.
- Moving water is 832 times denser than moving air, which multiplies the kinetic energy by the same factor, making oceans a energy-rich source.
- In many regions, land is a scarce resource. Therefore, on-shore solutions such as wind and solar compete with other users. Subsea ocean energy technologies are hidden in the depth of the ocean, out of sight and do not compete for land space.
- However, the deployment is currently limited but the sector has the potential to grow, fuelling economic growth, reduction of carbon footprint and creating jobs not only along the coasts but also inland along its supply chains.

Conclusion:

Ocean energy is renewable energy sector that surely needs more research to satisfy condition of cost-effectiveness which is at this point its biggest flaw. Since oceans cover almost two thirds of earth's surface, they truly present renewable energy source with extreme potential and one worth of further exploration.

Do you think a cooperative federalism framework can provide the required impetus to the civil aviation sector in the country? Examine.(250 words)

The hindu

Why this question:

The article discusses the significance of cooperative federalism to Indian civil aviation industry.

Key demand of the question:

One must discuss in detail the current problems facing civil aviation industry in India and in what way cooperative federalism framework can bring impetus to it.

Directive:

Examine – When asked to ‘Examine’, we must look into the topic (content words) in detail, inspect it, investigate it and establish the key facts and issues related to the topic in question. While doing so we should explain why these facts and issues are important and their implications.

Structure of the answer:

Introduction:

In short define what is cooperative federalism.

Body:

Explain that civil aviation is a Central subject and one that barely got significant attention from the States until recently. It is evident from the fact that very few States in India have active civil aviation departments. This is also due to the reason that States have had a passive role, invariably, having had to look up to the Central government for the development of airports and enhancing air connectivity. However, in the last four years, the situation has changed considerably.

The cooperation of States is seen as a major factor in the growth of the civil aviation sector. The Regional Connectivity Scheme, Ude Desh ka Aam Naagrik (UDAN), has become a game changer as this flagship programme has a built-in mechanism to develop stakes of State governments in the growth of the sector.

Conclusion:

Conclude with significance of cooperative federalism and the impetus that it can bring.

Introduction:

Cooperative federalism, also known as **marble-cake federalism**, is a concept of federalism in which federal, state, and local governments interact cooperatively and collectively to solve common problems, rather than making policies separately but more or less equally. It reflects the relationship between centre and state where they both come together and resolve the common problems with each other's' cooperation.

Body:

Current status of Civil Aviation in India:

- **Civil Aviation**, being a **central subject**, gets little attention from states.
- It is evident from the fact that very few States in India have active civil aviation departments.
- The **Regional Connectivity Scheme, Ude Desh ka Aam Naagrik (UDAN)**, has become a game changer as this flagship programme has a built-in mechanism to develop stakes of State governments in the growth of the sector.
- The **penetration of aviation market** in India stands at **7%**. There is potential to be among the global top three nations in terms of domestic and international passenger traffic.

Challenges faced by civil aviation sector:

- **High VAT on ATF:** States have very high rates of value-added tax (VAT) on Aviation Turbine Fuel , sometimes as high as 25%, which has dampened the growth trajectory of civil aviation. For any airline in India, the cost of Aviation Turbine Fuel (ATF) forms about 40% of the total operational cost.
- **Acquisition of land:** Land involves huge capital and is a scarce resource.
- Policy reluctance due to **financial non-viability** of the models to connect remote areas.
- **Capital intensive nature** of airline industry disincentivises the airlines to start operations in such areas where there is **lack of enough passenger traffic** to make them profitable.
- **Fundraising for Viability Gap Funding (VGF)** poses a major challenge.

Key policy interventions necessary to jump-start the aviation market:

- **Relief on ATF:** The airline industry is capital-intensive and works on very thin profit margins. Therefore, relief on ATF is a major incentive for airlines to augment their operations.
- For States, it would be a notional revenue loss which can be offset by enhanced economic activities as a result of increased air connectivity to the region.
- **Development and management of airports:** There are many regional airports which can be developed by States on their own or in collaboration with the Airports Authority of India (AAI).
- **PPP model:** There have been different models of public-private-partnership which can be leveraged to develop infrastructures.
- **Create ‘no-frill airports’:** Innovative models can be explored to create viable ‘no-frill airports’. These functional airports can open up regions and change the way people travel.
- **Linking the hinterland:** States and the Central government can play a crucial role in supporting airlines to develop air services in the remote regions.
- Considering the infrastructural constraints and difficult terrain, small aircraft operators need to be encouraged.
- Areas which cannot be connected meaningfully by road or rail have to be linked by air.
- States can **converge their relevant schemes** relating to tourism, health, and insurance for supporting air connectivity to supplement the objectives of regional connectivity.
- For this States need to create a conducive business environment to facilitate the strong aspirations of a burgeoning Indian middle class to fly at least once a year.

Conclusion:

Developing airports, incentivising airlines and pooling resources of both the Union and State governments can accelerate the harmonised growth of the Indian civil aviation sector which would be equitable and inclusive.

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.

What is a cryptocurrency? Discuss the feasibility of a national cryptocurrency in India.(250 words)

The hindu

Why this question:

Recently, a government panel headed by senior bureaucrat Subhash Chandra Garg placed in the public domain a draft bill calling for a complete ban on private cryptocurrencies in India. The panel recommended a fine of up to ₹25 crore and a jail term of up to 10 years for anyone found to be owning or handling private cryptocurrencies. Thus, the question.

Key demand of the question:

The question aims to analyse the concept of cryptocurrency and its feasibility as a national currency.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Begin with brief on what is a cryptocurrency – “any information or code or number or token not being part of any official digital currency, generated through cryptographic means or otherwise, providing a digital representation of value which is exchange with or without consideration, with the promise or representation of having inherent value in any business activity which may involve risk of loss or an expectation of profits or income, or functions as a store of value or a unit of account and includes its use in any financial transaction or investment, but not limited to, investment schemes.”

Body:

Discussion should include the following:

Explain the context of the question – Inter-Ministerial Committee on Virtual Currencies headed by finance secretary Subhash Chandra Garg has submitted its report to the government. The committee set up by Centre has also proposed a draft bill ‘Banning of Cryptocurrency & Regulation of Official Digital Currency Bill, 2019’.

Discuss what are the key recommendations made, discuss pros and cons and form a fair and balanced opinion as to whether the currency should be allowed or banned completely.

Conclusion:

Conclude with way forward.

Introduction:

A cryptocurrency is a digital or virtual currency that uses cryptography for security. Cryptocurrencies use decentralized technology to let users make secure payments and store money without the need to use their name or go through a bank. They run on a distributed public ledger called blockchain, which is a

record of all transactions updated and held by currency holders. The most common cryptocurrencies are Bitcoin, Ethereum, Ripple, and Litecoin.

Facebook has announced a digital currency called **Libra** that will roll out for use in 2020 and allow the platform's billions of users across the globe to make financial transactions online.

Body:

Current state of Cryptocurrencies:

- Experts and central banks across the world are slowly arriving at the conclusion — written about in various research papers but not yet implemented in policy — that cryptocurrencies are here to stay.
- The world's premier cryptocurrency is within sniffing distance of \$9,000 apiece, and investors still seem bullish on it.
- The current value—at \$8,918 on 29 May—is below its peak of \$19,600-plus in late 2017, which was achieved after an exponential rise all through that year.
- That ascent took online traders by storm and stoked fears of a tulip mania-like “bubble” just before it crashed dramatically; by the end of 2018, it had slid to about one-fifth of its peak value.
- Bitcoin's market capitalization is now over \$150 billion, reportedly.
- India banned crypto-currencies in 2018, shortly after a Chinese clampdown.

Cryptocurrency is a disrupter to traditional notions of currency:

- The government is wary that regulation will provide legitimacy to “what is currently ambiguous,” and may lead to further rise in its valuation and end up contributing “to the investment bubble”.
- A currency that is not based on any real economic activity, unlike a sovereign currency whose value is based on the relative value of a tradeable basket of goods and services, cannot *prima facie* inspire much comfort.
- Bitcoin's value, astronomical even now at about \$8,300 but much below January 2018's stratospheric levels, is based on demand for a fixed supply of Bitcoins in the future it cannot exceed 21 million in number, of which 18 million has already been mined.
- The security offered by encryption of cryptocurrency may be breached by hackers who are always lurking for any point of weakness. This may end up costing investors huge amounts of money because prices are attached to the currencies.
- Cryptocurrency exists only in essence such that there are no physical coins and notes. As a result, there is, therefore, no central place where the currency can be deposited for safe keeping.

- Lack of regulation of cryptocurrency means it is not under any control or supervision. This attracts more investors thereby increasing their chances of investing in this technology.
- Cryptos are feared not just for their sheer speculative propensities, but also for their capacity to undermine sovereign currencies (the latter is an exaggerated apprehension).
- Virtual currency is being traded anonymously over the Internet and used for a host of anti-national and illegal activities, from terror funding to illicit trade of arms and drugs and so on.
- The online use of this currency, was without any border restrictions or geographical constraints, resulting in danger to the integrity and sovereignty of the nation.
- However, it does not make sense to go overboard and criminalise merely adventurous crypto speculators. There are no official or other data available that point towards misuse of cryptocurrencies for illegal ends

However, there are a few advantages of cryptocurrencies:

- One of the reasons why cryptocurrencies have gained global appeal is because of their secure nature. Cryptocurrencies are encoded into a database.
- Cryptocurrency trading draws its legitimacy from the unanimity of the participants in its network. It has gained global approval by most leaders as a legal medium of payment.
- No transaction fees are usually charged for transactions involving cryptocurrency.
- Cryptocurrency does away with the need for a regulator.
- By making everything public, cryptocurrency negates the need for a middleman.
- According to bitcoin.org, no individual or organisation can manipulate Bitcoins because it is cryptographically secure and do not contain customers' personal information.

Measures needed:

- Governments the world over have banned cryptocurrencies as a medium of exchange, and India is no exception.
- Yet in India, an estimated 30 lakh Bitcoins are reportedly in circulation. From a value of a little over ₹60,000 at the start of 2017, the Bitcoin now commands a value of nearly ₹6 lakh, with a global market cap of \$10.2 trillion. Cryptos are recognised in the US as an asset class.
- Firms like Paypal, Uber, Visa and Mastercard have all signed up as part of the consortium to control it. Each has invested \$10 million.
- Criminalising possession of cryptocurrencies will impact such investments.
- Bankers and investors now consider the cryptocurrency market at par with derivatives. The NYSE plans Bitcoin futures through a platform called **Bakkt**.

Conclusion:

Underlying the crypto movement is a libertarian belief: Cryptos are an alternative asset to fiat currencies; controlled by none, they cannot be manipulated by governments with vested interests. Legalising the cryptomarket can help beneficiaries emerge from the shadows and make productive investments in an economy witnessing a digital transformation. Crypto conduct calls for regulation, but not outright criminalisation.

Discuss the significant contributions of Vikram Sarabhai in building India's space program.(250 words)

The hindu

Why this question:

12th August was 100th birth anniversary of scientist and innovator Vikram Sarabhai. Dr. Sarabhai is considered as the father of India's space program, and his centenary comes just weeks after India's Chandrayaan-2 mission to the moon.

Demand of the question:

Explain in depth the contributions made by Dr. Sarabhai.

Directive word:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction

Bring out importance of such personalities in bringing space technology to the current conditions and stature in India.

Body

From the article take cues and discuss the specific contributions made by Dr Vikram Sarabhai to the Indian space technology – Dr. Sarabhai established the Indian National Committee for Space Research in 1962, which was later renamed the Indian Space Research Organization (ISRO). He helped set up the Thumba Equatorial Rocket Launching Station in Thiruvananthapuram, with its inaugural flight in November 1963. He pioneered the setting up of several institutions, such as the Indian Institute of Management in Ahmedabad, Community Science Centre etc.

Conclusion

Conclude with reassertion of the extraordinary contributions made by him.

Introduction:

Dr. Vikram Sarabhai is widely credited as the father of India's space programme. But the dashing scientist was so much more – some of India's most celebrated institutions today, from the Indian Institute of Management-Ahmedabad to the Indian Space Research Organisation, stand testament to his enduring legacy.

Body:

Contributions of Dr. Sarabhai:

- By 1962, with the aim to formulate India's space programme, he had been appointed the **founding chair of INCOSPAR**, which became the Indian Space Research Organisation (ISRO) in 1969.

- He successfully convinced the government of the importance of a space programme for a developing country like India after the Russian Sputnik launch.
- **Homi Jehangir Bhabha**, widely regarded as the **father of India's nuclear science program**, supported Dr. Sarabhai in setting up the first rocket launching station in India. This center was established at Thumba near Thiruvananthapuram on the coast of the Arabian Sea, primarily because of its proximity to the equator.
- As a result of Dr. Sarabhai's dialogue with NASA in 1966, the **Satellite Instructional Television Experiment (SITE)** was launched during July 1975 – July 1976.
- Sarabhai started a project for the fabrication and launch of an Indian Satellite. As a result, the first Indian satellite, **Aryabhata**, was put in orbit in 1975 from a Russian Cosmodrome.
- Sarabhai was very interested in science education and founded a Community Science Centre at Ahmedabad in 1966. Today, the Centre is called the **Vikram A Sarabhai Community Science Centre**.

Some of the most well-known institutions established by Dr. Sarabhai are:

- Physical Research Laboratory (PRL), Ahmedabad
- Indian Institute of Management (IIM), Ahmedabad
- Community Science Centre, Ahmedabad
- Darpan Academy for Performing Arts, Ahmedabad (along with his wife)
- Vikram Sarabhai Space Centre, Thiruvananthapuram
- Space Applications Centre, Ahmedabad (This institution came into existence after merging six institutions/centres established by Sarabhai)
- Faster Breeder Test Reactor (FBTR), Kalpakkam
- Variable Energy Cyclotron Project, Calcutta
- Electronics Corporation of India Limited (ECIL), Hyderabad
- Uranium Corporation of India Limited (UCIL), Jaduguda, Bihar

Conclusion:

Dr. Sarabhai emphasized the importance of a space program in his quote: "**There are some who question the relevance of space activities in a developing nation. To us, there is no ambiguity of purpose. We do not have the fantasy of competing with the economically advanced nations in the exploration of the moon or the planets or manned space-flight.**"

For his visionary work in the field of space science, this scientist was decorated with two of India's most honourable awards: **the Padma Bhushan (1966) and the Padma Vibhushan (awarded posthumously in 1972).**

In times when man has sent rovers to Mars and sent Spacecrafts beyond our solar system, why is there a resurgent interest in the moon? Discuss. (250 words)

Indianexpress

Why this question:

The article discusses in detail the reasons for resurgent interest in the moon.

Key demand of the question:

One must list down the possibly causes of Why is there a resurgence in interest in Moon.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In brief explain the significance of space missions.

Body:

Take hints from the article and list down causes as to despite multiple efforts made by the world countries the mission to moon have remained an unfinished agenda and thus there is dire need to resurge upon.

Conclusion:

Conclude with way forward.

Introduction:

July 20, 2019 marked the fiftieth anniversary of man's first landing on the Moon, "a giant leap for mankind", as Neil Armstrong described it. After the discovery of water on Lunar surface by Chandrayaan-1, there is a renewed surge of interest in moon travel is both an indication of the complexities of lunar missions and a future foretold.

Body:

Earlier Lunar missions:

- The Apollo missions to the moon were hardly guided by science objectives. They were driven mainly by geo-political and nationalistic considerations.
- The Apollo landing so early in our space age was, no doubt, **an outcome of Cold War rivalry**. It was all about seeking dominance in space. Resources were mobilised on a war-scale.
- There was huge amount of scientific information that came out of those missions. The rocks and other samples that the astronauts returned with were a wealth of information.
- One after the other, NASA landed six Apollo spacecraft on the moon, each carrying two astronauts with it, before abandoning the extremely expensive programme in 1972.
- Beaten in the race, the USSR, which was preparing feverishly to take a man to the moon, too, lost interest in just emulating the US and dropped its plans.
- All information about the moon at that time, gleaned from the rock samples brought back by the astronauts, as well as from other studies, pointed to moon having a bone-dry surface, **bereft of any water**.

- If human beings had to build a permanent scientific station on the moon, they would have to carry not just all their material from the earth, but also water.

Resurgence in Lunar missions:

- The scientists' perception of the moon changed considerably once traces of water molecules were discovered.
- In the 1990s, both the Clementine and the Lunar Prospector, the two NASA missions that restarted lunar exploration, picked up signals of water on moon. So did the Cassini mission in 1998, which flew by the moon on its way to Saturn.
- But the **conclusive evidence of the presence of water on the moon was delivered by two instruments on board Chandrayaan-1 — the Moon Mineralogy Mapper** placed by NASA, and ISRO's own **Moon Impact Probe** that was made to crash on the moon's surface.
- The discovery of water changes everything. It gives rise to a host of possibilities. It is this discovery of water that has triggered all the space faring nations to start looking at moon again
- In addition to the sustenance of life, water could also be utilised as a fuel to power rockets for deep interplanetary missions.

Potential outcomes of future lunar missions:

- **Fuel:** Water can be broken into hydrogen and hydroxide molecules. Hydrogen can be used for power generation as well as a propellant to in rockets.
- **Launch pad:** In the long run, if we are to use moon as a launch pad for going further into space, then we would need to develop technologies to extract hydrogen from the water on the moon and use it as a fuel.
- **Creation of New objects:** We have technologies that now make it possible to build in-situ, on the surface of the moon, using materials found there. We have 3-D printing technologies to achieve this.
- **Nuclear fusion fuel:** It is also very much in the realm of possibility to extract and use hydrogen as an energy source, or even the Helium-3 which is abundantly available on the moon, as a source of immense energy in nuclear fusion reactors.
- **International lunar space station:** to create a permanent space station, like the ISS, on the surface of the moon in the next 10 years. The ISS that serves as a permanent laboratory in space, about 400 km above the earth's surface, is due to retire latest by 2028, and no replacement for it has been decided as yet.

Conclusion:

The stage is now set again for a race to the moon over the next decade, and, this time, it is likely to be markedly different from the earlier one. In all probability, it will **involve multiple participants, be more collaborative than competitive**, and will be **guided by the overall objective of utilising the resources of**

the moon, setting up permanent facilities for scientific explorations and using it as a launch pad to take humans deeper into space.

What are Biosimilars? How are they different from Generic drugs? Discuss the possible prospects they hold for the Indian pharma industry.(250 words)

Why this question:

Pharma major Dr. Reddy's Laboratories Ltd has launched 'Versavo (bevacizumab)', a biosimilar of Roche's Avastin in India. The drug is for the treatment of several types of cancers.

Key demand of the question:

The answer must detail upon the concept of Biosimilars, compare them with Generic drugs and discuss the potential they hold for Indian Pharma Industry.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Introduce by explaining what are Biosimilars – A biosimilar is exactly what its name implies — it is a biologic that is "similar" to another biologic medicine (known as a reference product).

Body:

Discussion should include the following:

Biosimilars are 'similar biologic drugs', clinically equivalent, in terms of safety and efficacy, to biologic medicines. When the patent surrounding an original biologic's formula is no longer protected, others companies can release cheaper biosimilars with no clinically meaningful differences.

Biosimilars v/s Generics – Nature of the drug, Manufacturing and testing, functioning etc.

Discuss significance – first explain issues plaguing Indian pharma industry and in what way Biosimilars can aid to fix issues.

Both Biosimilars and generic drugs are hugely important for affordable healthcare, and in recognition of this, Indian patent laws provide stringent protections against the practice of 'evergreening' by original drug manufacturers.

Conclusion:

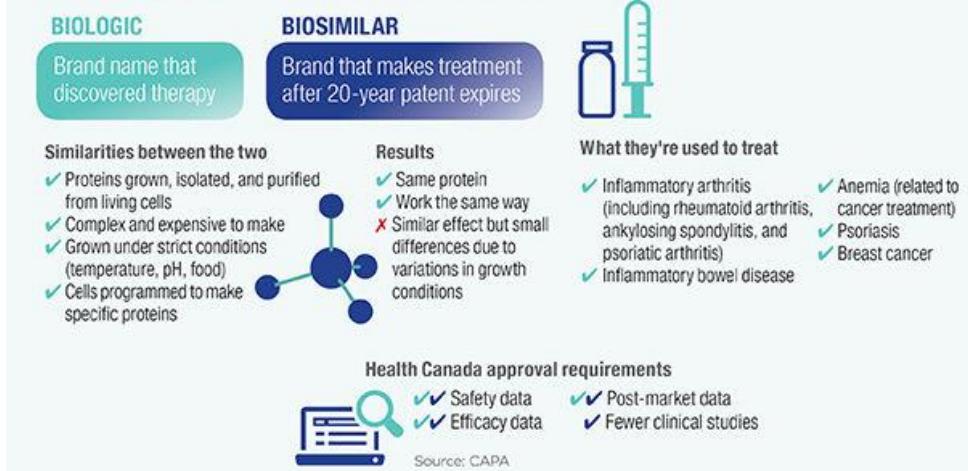
Conclude with way forward.

Introduction:

A biosimilar is a **biologic medical product that is almost an identical copy of an original product that is manufactured by a different company**. Biosimilars are **officially approved versions of original "innovator" products** and can be **manufactured when the original product's patent expires**. Biosimilars are the generic versions of biologics medicines made from animal or plant proteins as opposed to chemicals.

Body:

Biologics and Biosimilars



Difference between biosimilars and generics:

- **Biosimilars** involve developing **equivalent of biological entity** while **generics** involve developing **equivalent of a chemical entity-the Active Pharmaceutical Ingredient**.
- In case of biosimilars, biological entities being some ward different (and not as it is of replica), every organism has to be engineered to produce the same therapeutic effect while in generics, the copies of API can be generated
- Bio-similars differ from generics – in complexity, in the manufacturing processes and in the data needed to demonstrate similarity for approval. The structure of Generic Simple and well-defined whereas for Bio-similar its Complex with potential structural variations.
- Regulatory procedure to get approval for biosimilars is complex as compared to that of a generic.

Prospects of Biosimilars:

- The growth of the biologics market for the treatment of cancer (monoclonal antibodies), diabetes (insulin) and many other auto-immune diseases has in turn resulted in creating a global opportunity for biosimilars also.
- Many Indian pharma companies are now making substantial investments into biosimilar development and production for gaining the first mover advantage.
- In 2014, Zydus Cadila became the first company in the world to launch the biosimilar of Adalimumab patented by the US drug major AbbVie, which is being used to treat rheumatoid arthritis and other auto immune disorders.
- As the biologics are priced very high, it is necessary for countries to reduce prices through biosimilars.

- The growth in the biosimilars market is welcome from a human development standpoint because they are more affordable than biologics, the high cost of which often puts them out of reach of many patients.
- In recent times, patents of some biologics have expired and more will expire before 2020. So moving towards biosimilars can fill the gap.
- Targeted towards Non-communicable diseases (cancer, asthma, and arthritis):
 - There is an alarming spike across developing countries in the prevalence of non-communicable diseases.
 - Therefore, promoting the production of complex generics and biosimilars can have a positive development impact given how targeted they are toward treating non-communicable diseases such as cancer, asthma, and arthritis.
- Biosimilars industry can act as a springboard for the pharma companies to innovate, excel and earn profit

Challenges faced:

- The development is itself lengthy and expensive, and could cost more than Rs 100 crore and take up to six or seven years.
- It is hard to generate investor interest if a product hits the market only after seven years. So, India is unlikely to see startups in biosimilars, which could also drive consolidation of some players.
- Expertise in biology is essential, and this subject does not yet have critical mass in India. India has fewer research labs in biology than a big state in Europe or the US. And, yet, things have improved in the last ten years, as experience has built up in technology and regulation.

Way forward:

- Governments can support growth in this segment by clarifying the regulatory framework for them, which is still evolving in many countries. China is a recent example, where the government has identified biopharma, including biosimilars, as a priority area for the country.
- India has to expand the biology research ecosystem by investing in education and fundamental research.
- At the same time, a regulatory mechanism needs to be put in place and appropriate monitoring needs to be done to ensure that unfair and unethical practices are abstained from in preparation of biosimilars.

The evolution of the mobile phone to smartphone has brought about a radical change in our everyday life, discuss how much more, and how much quicker can social robots shift societal paradigms? How should we prepare ourselves to meet the AI and social robotics revolution? Examine.(250 words)

Livemint

Why this question:

The question is based on the theme of societal effects that the robotics and AI are bringing into the society of today.

Key demand of the question:

One must discuss in detail the impact of social robots on the world society in detail.

Directive:

Examine – When asked to ‘Examine’, we must look into the topic (content words) in detail, inspect it, investigate it and establish the key facts and issues related to the topic in question. While doing so we should explain why these facts and issues are important and their implications.

Structure of the answer:

Introduction:

Set the context of the question briefly.

Body:

Explain that the question “man or machine?” has been replaced with “man and machine”.

Discuss and opine whether humanoids can go beyond the industrial world to become part of our personal lives.

Discuss the case studies of humanoid robots – Sophia and Han.

Explain in what way robots can impact the society. Give case studies from the article and substantiate to form a stand.

Conclusion:

Conclude with significance of AI and robotics and its potential and that however the ethical concerns related to it remain a grey area that require diligence.

Introduction:

Advances in artificial intelligence (AI), machine learning (ML) and natural language processing (NLP) have enabled humans to create humanoid news anchors, psychologists, personal assistants, and more. While we are yet to see a fully-functional humanoid robot become mainstream, the day is not far away.

Body:

The question “man or machine?” has been replaced with “man and machine”. The interesting possibility, however, is whether humanoids can go beyond the industrial world to become part of our personal lives.

Social robots and shift in societal paradigms:

- **Geriatric care:** The Japanese government has moved in early on this possibility, and is funding the development of care robots for the elderly. Tokyo’s Shin-tomi nursing home already deploys 20 types of robots for such care.
- **Personal use: Samsung’s Bot Care**—enables users to check their blood pressure, heart rate and sleep patterns. It also reminds them to take medications, alerts family members in case of emergencies. Bot Air assesses air quality and takes remedial measures.

- **Shopping: Bot Retail** offers support to customers while shopping. **Piaggio's Gita** is a cargo bot that can be used as an autonomous shopping trolley
- **Help for disabled:** The **GEMS (Gait Enhancing and Motivating System)** exoskeleton supports people who have trouble walking, running or standing up, and prevents overworking of their muscles.
- non-humanoid social robots are crossing the experimental stage to mass production. MiRo is one of the world's first robots that has a brain-inspired biomimetic operating system.

Humanoids influence on Humans:

- Research strongly indicates that as humans we can be influenced by robots, much like we are by fellow humans.
- True, we develop robots with our knowledge and mastery over the human mind.
- The recent instance of Facebook having to shut down its AI engine (after it was found it had developed its own language that could not be understood by humans) does venture into the grayer and darker side of AI.
- The fear of loss of jobs due to increased robotization.
- AI powered bots have also been used to influence humans perceptions, views and opinions. Such activities are rampantly being promoted through social media platforms for various ulterior purposes using fake news, unethical advertisements, etc which then have huge negative consequences.
- AI based weapons are fast gaining currency. Since humans can be replaced by such machines, declaring war would become more convenient. These machines can wreck havoc if uncontrolled endangering the human race itself.
- AI is being used for extensive surveillance as in China which violates right to privacy. Such intelligence can be even used to selectively target and eliminate opponents which instil deep fear among people who would like to raise voice against injustice.
- Humans can pass on their limitations to robots. E.g.: biases, prejudices, discrimination, etc. A recent report in USA revealed that robot can be racist

Measures needed to meet the AI and social robotics revolution:

- With the proliferation of AI, it is important for us to know the ethical basis of every AI system that we use or is used on us.
- Sometimes, even an inclusive intention may need careful scrutiny.
- Ethical norms regarding uses of AI and our ability to regulate them in an intelligent and beneficial manner should keep pace with the fast changing technological capabilities.
- Understanding and discussing the ethical basis of AI is important for India.

Conclusion:

The transformative capability of AI in India is huge, and must be rooted in an egalitarian and humanitarian basis. Any institutional framework for AI should have a multidisciplinary and multi-stakeholder approach, and have an explicit focus on the ethical basis.

The idea of providing Biometric Seafarer Identity Document (BSID) by Government of India is an accomplishment in the field of science and technology and is valuable on multiple fronts. Discuss.(250 words)

Livemint

Why this question:

India recently became the first country to launch world's first facial biometric-based ID for seafarers.

Key demand of the question:

One must discuss in detail the achievement India has made through the launch of such a technology that can have positive impacts in multiple dimensions.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

First explain the importance of identification to Indian seafarers.

Body:

Explain that in a move to boost employment in the coastal shipping sector, India has become the first country in the world to issue a Biometric Seafarer Identity Document (BSID) to its seafarers.

Discuss the key features of BSID – The BSID has the dimensions of a smart ID card. It introduces modern security features like an embedded biometric chip, as well as optical security features such as micro prints/micro texts and Unique Guilloche pattern. The security of the BSID card is ensured at various levels and through different methods. At the time of data capturing the live face is cross matched through passport photo using a face matching software. A software has been developed for capturing the facial biometrics and its authentication through the public key infrastructure.

Explain how the technology is a major boost in various ways to the seafarers.

Conclusion:

Conclude with significance.

Introduction:

India recently became the first country to launch **world's first facial biometric-based ID for seafarers (BSID)**. The new document will give a **foolproof identification to Indian seafarers** which will facilitate their movement and help in identifying them from any location in the world. The new card is in confirmation of the Convention No. 185 of the International Labour Organisation on BSID. India ratified the Convention in October 2015.

Body:

BSID project:

- In India the BSID project has been taken up in collaboration with Centre for Development of Advanced Computing (CDAC), Mumbai.

- The Government notified the **Merchant Shipping (Seafarers Bio-metric Identification Document) Rules** in 2016.
- Every Indian seafarer who possesses a valid Continuous Discharge Certificate issued by the Govt. of India will be eligible for issue of a BSID.
- Nine data collection centers have been setup at Mumbai, Kolkata, Chennai, Noida, Goa, New Mangalore, Kochi, Vizag & Kandla for issue of BSID.

Working of BSID:

- It introduces **modern security features**.
- It will have a **biometric chip embedded in it**.
- The security of the BSID card is **ensured at various levels and through different methods**.
- At the time of data capturing, the live face is cross matched through passport photo using a face matching software.
- The card has **two optical security features- Micro prints/micro texts and Unique Guilloche pattern**.
- A software has been developed for capturing the facial biometrics and its authentication through the public key infrastructure.

Significance of BSID:

- The BSID with new facial biometric technology is a marked improvement over the two finger or iris based bio-metric data, with modern security features.
- It will make the identification of the SID holder more reliable and efficient, while **protecting their dignity and privacy**.
- It will give a **foolproof identification to our seafarers which will facilitate their movement, provide ease of getting jobs and help in identifying them from any location in the world**.
- A record of each SID issued will be maintained in a national database and its **related information will be internationally accessible**.
- The total number of Indian seafarers who were employed on Indian or foreign flag vessels increased from 154349 in 2017 to 208799 this year, showing an unprecedented increase of 35%

Conclusion:

With Sagarmala on the anvil and security of the long coastline of India, BSID will help secure the seafarers as well as safety of India from transgressors.

Conservation, environmental pollution and degradation, environmental impact assessment

A combination of increased urbanization, climate change and weak infrastructure is rapidly depleting water supply in cities across the country, discuss the various causes leading to such a crisis in Indian cities along with suggestions to overcome the same. (250 words)

livemint

Why this question:

The article discusses in detail in what way the Indian cities are dealing with water crisis.

Key demand of the question:

Discussion should be about the problems in Indian cities related to water crisis.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Quote the recent incidences depicting the water crisis situations in the cities.

Body:

The article very well captures how and why Indian cities are facing water issues and if not addressed in time the situation may get even worse.

Explain the interlinkages between water crisis and other factors that are contributing to it.

Take hints from the article and organize your answer according to the context of the question.

Conclusion:

Conclude with suggesting solutions to the problem.

Introduction:

The NITI Aayog report on **Composite Water Management Index** (CWMI) said that India is facing its ‘worst’ water crisis in history. Taps in Shimla went dry in summer of 2018, posing an unprecedented water crisis in the hill town. According to a forecast by the Asian Development Bank, India will have a water deficit of 50% by 2030. Recent studies also ranked Chennai and Delhi at the top of the 27 most vulnerable Asian cities in terms of low per-day water availability Mumbai and Kolkata follow close.

Body:

India’s water crisis is more serious than its energy crisis:

- The water crisis in India is more dire than imagined.
- The annual per capita availability of water continues to decline sharply from about 5,177 cubic metres in 1951 to about 1,720 cubic metres in 2019.
- The NITI Aayog in its report on Composite Water Management Index (2018) has underlined that currently 600 million people face high to extreme water stress.
- Twenty-one cities, including Delhi, Bengaluru, Chennai and Hyderabad will run out of groundwater by 2020, affecting 100 million people.

- Apart from mega cities, many fast-growing small and medium cities such as Jamshedpur, Kanpur, Dhanbad, Meerut, Faridabad, Visakhapatnam, Madurai and Hyderabad also figure in this list.
- The demand-supply gap in most of these cities ranges from 30 per cent to as much as 70 per cent.
- About two lakh die every year due to inadequate access to safe water, about three-fourths of the household do not get drinking water at their premise and about 70 per cent of water is contaminated.
- The rate of groundwater extraction is so severe that NASA's findings suggest that India's water table is declining alarmingly at a rate of about 0.3 metres per year.
- At this rate of depletion, India will have only 22 per cent of the present daily per capita water available in 2050, possibly forcing the country to import water.
- About 81 per cent of India's ultimate irrigation potential, estimated at 140 million hectares, has already been created and thus the scope for further expansion of irrigation infrastructure on a large scale is limited.
- Climate experts have predicted that there will be fewer rainy days in the future but in those days it would rain more.

Causative factors for water crisis:

- A combination of population explosion, unplanned growth of the city and its expansion to some traditional catchment areas (a region from which rainfall flows into a river, lake, or reservoir) have led to a reduction in the natural flow of water, and large-scale deforestation.
- Climate change, leading to much lower precipitation during the winter months. As a result, the natural flow and recharge of water in the region has fallen sharply
- Failure of State governments to check unplanned development and exploitation of water resources. There is no attempt at the central or state levels to manage water quantity and quality
- The vegetation pattern has changed, tree cover is shrinking and unscientific dumping of debris in water streams is rampant.
- The debris blocks the natural course of water bodies.
- Increasing number of tube wells resulting in depletion of groundwater.
- Changes in farming patterns lead to consumption of more water for irrigation and also change the soil profile because of the use of fertilizers
- The states ranked lowest like Uttar Pradesh, Haryana and Jharkhand – are home to almost half of India's population along with the majority of its agricultural produce.

- There is also a **lack of interest in maintaining India's traditional water harvesting structures.**

Measures needed:

- **Structural measures:**

- Putting in place an efficient piped supply system (without leakage of pipes) has to be top on the agenda.
- Ancient India had well-managed wells and canal systems. Indigenous water harvesting systems need to be revived and protected at the local level. Examples: Karez, Bawli, Vav etc
- Digging of rainwater harvesting pits must be made mandatory for all types of buildings, both in urban and rural areas.
- **Treating the Greywater and reusing it** needs to be adopted by countries like Israel (upto 85%). It could be used to recharge depleted aquifers and use on crops.
- Initiatives such as **community water storage and decentralized treatment facilities, including elevated water towers or reservoirs and water ATMs**, based on a realistic understanding of the costs involved, can help support the city's water distribution.
- Technologies capable of converting non-drinkable water into fresh, consumable water, offering a potential solution to the impending water crisis are needed.
Example: Desalination technologies in Coastal areas, Water-sterilization in polluted water areas.

- **Non-structural measures:**

- The **World Bank's Water Scarce Cities Initiative** seeks to promote an integrated approach, aims at managing water resources and service delivery in water-scarce cities as the basis for building climate change resilience.
- Groundwater extraction patterns need to be better understood through robust data collection
- Decentralisation of irrigation commands, offering higher financial flows to well-performing States through a **National Irrigation Management Fund**.
- **Public awareness campaigns, tax incentives for water conservation and the use of technology interfaces** can also go a long way in addressing the water problem. **Example**, measures such as water credits can be introduced with tax benefits as incentives for efficient use and recycling of water.
- A collaborative approach like the adoption of a public-private partnership model for water projects can help. **Example**, in Netherlands, water companies are incorporated as

private companies, with the local and national governments being majority shareholders.

- Sustained measures should be taken to prevent pollution of water bodies and contamination of groundwater.
- Ensuring proper treatment of domestic and industrial waste water is also essential.

Conclusion:

Primarily water is not valued in India. "People think it is free". In order to meet the future urban water challenges, there needs to be a shift in the way we manage urban water systems. An **Integrated Urban Water Management approach** must be adopted which involves managing freshwater, wastewater, and storm water, using an urban area as the unit of management.

The recently released IPCC report has inferred that reduction in global heating would require transformation of food production and land management, in the light of the above statement discuss the interlinkages of climate change and land management and recommend what needs to be done. (250 words)

Indianexpress

Why this question:

The article discusses the findings of the recently released IPCC report and its inference.

Demand of the question:

The answer must discuss the interlinkages of climate change and land management and recommend what needs to be done.

Directive word:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction

In brief quote the key highlights of the IPCC report.

Body

Intergovernmental Panel on Climate Change special report on climate change and land, released in Geneva on Thursday, found limiting global heating to below 2 degree Celsius can only be achieved by reducing emissions from all sectors – including land and food.

It finds the climate crisis is affecting all aspects of food security – including availability, price and nutrition – but that coordinated action to cut global emissions could simultaneously improve land resources, food security and nutrition and help to address hunger.

Discuss the aspect of land; Land use has always been part of conversations on climate change and activities like afforestation have held an important place in the fight against global warming.

Suggest solutions as what needs to be done.

Conclusion

Conclude with significance of the findings and need for urgent action.

Introduction:

The **Intergovernmental Panel on Climate Change's (IPCC) report** on 'Climate Change and Land' reveals the relation between climate change and land use pattern. It presents the most recent evidence on how

the different uses of land like forests, agriculture, and urbanization are affecting and getting affected by climate change.

Body:

Key findings of report:

- The report talks about the contribution of land-related activities to global warming.
- It also talks about the manner in which even existential activities like food production contributes to global warming and is also affected by it.
- If pre-production and post-production activities are taken into account, food production could contribute as much as 37% of all greenhouse gas emissions (GHG) every year.
- It points out that nearly 25% of all food produced is either lost or wasted. And even the decomposition of the waste releases emissions.

Linkage between land use and climate change:

- Land use, and changes in land use, has always been an integral part of the conversation on climate change.
- That is because land acts as both the **source as well as a sink of carbon**.
- Activities like agriculture, cattle rearing, etc are a major source of methane and nitrous oxide, which are more dangerous than CO₂.
- Soil, trees, plantations and forests absorb CO₂ for photosynthesis, thus reducing the overall CO₂ content in the atmosphere.
- This is the reason why large-scale land use changes like deforestation, urbanisation or change in cropping pattern, have a direct impact on the overall emissions of greenhouse gases.

Impact on Food security:

- Climate change is affecting food security through increasing temperatures, changing precipitation patterns, and greater frequency of some extreme events.
- Agricultural Production: Increasing temperatures are affecting agricultural productivity in higher latitudes, raising yields of some crops (maize, cotton, wheat, sugar beets), while yields of others (maize, wheat, barley) are declining in lower-latitude regions.
- Nutritional Quality: Increased atmospheric CO₂ levels can lower the nutritional quality of crops.
- Livestock Production: Future climate change could affect livestock production.
- An increase in desertification and heatwaves could have a direct impact on animal morbidity, mortality and distress that in turn could adversely affect the food security.

- Higher Prices: Report states that cereal prices could increase by 1-29% by 2050 as a result of climate change, leading to higher food prices and increased risk of food insecurity and hunger

Measures needed:

- The measures include a major re-evaluation of land use including agricultural practices.
- Increasing land productivity, wasting less food, changing dietary habits of people from cattle meat to other types of meat.
- The report notes that, if proper changes to the land use pattern in agriculture and animal is implemented, 2.3 to 9 billion tonnes of CO₂ equivalent can be avoided by 2050.
- Also with changes to the people's dietary habits CO₂ equivalent of 8 billion tonnes can be avoided by 2050.

Conclusion:

India's action plan on climate change gives due recognition to the above fact. It has a very important component of forests. Under INDCs, India has pledged to create an additional carbon sink of about 2.5 billion to 3 billion tonnes by the year 2032 by increasing its forest cover and planting more trees.

"Large parts of India have been facing calamitous floods, the frequency of such disasters has been on the rise. How disastrous they prove, however, would depend on how prepared we are." Critically analyse in the light of recent incidents. (250 words)

livemint

Why this question:

The article paints a dismal picture of the flood conditions facing the country and the reasons underlying for their impact.

Demand of the question:

The answer must discuss in detail the need and necessity of disaster preparedness and how this aspect alone has much to decide on the nature of disaster and its impact.

Directive word:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When 'critically' is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction

Brief about the recent flood situation in the country.

Body

Point out to the causes of the occurrence of the disasters; explain in what way the impact of the floods has been huge and impulsive owing to lack of preparedness.

Discuss that How well a country mobilizes resources to tackle disasters, natural or otherwise, is a sign of how advanced it really is. India has made progress, but our efforts need to be stepped up.

Quote case studies, discuss examples where preparedness for disasters have proved to be a solution.

Conclusion

Conclude with way forward.

Introduction:

In an unnerving reminder of last year's devastating floods, **Kerala's** worst in about 100 years, incessant precipitation has deluged many districts, causing havoc, snapping communication lines and claiming several lives. Rains have battered **Karnataka and Maharashtra**, too, leaving many dead and several missing. Meanwhile, dramatic visuals from **Madhya Pradesh, Rajasthan and Gujarat** have revealed widespread distress. Parts of **Bihar and Assam** are also reeling under torrential rainfall, with a large number of people left battling grim circumstances.

Body:

Factors causing floods:

- **More than average rainfall:**
 - India's western coast has received above-average rainfall on account of sustained low-pressure conditions.
- **Land use:**
 - Injudicious use of land is responsible for making states more prone to floods and landslides.
 - However, other factors such as a change in land use patterns and climate change could have contributed to the situation on the ground.
- **Deforestation:**
 - Unfettered development activity had increased the chances of landslides, a major cause of casualties during the floods.
- **Wetlands** have been lost to development projects, construction of roads, and buildings at places too close to rivers.
- Other issues mentioned such as **encroachment and unplanned construction** are self-evident priorities when development is viewed using the lens of climate-resilient water management (CRWM).
- **Mismanagement of dams:**
 - For dams to truly tame floods, experts say dam reservoirs need to be relatively empty before the onset of rain. This was not the case in many states.
 - Local officials have been blamed for exacerbating the situation by failing to gradually open the dams dotting the state's complex river network, waiting instead until they were already full before unleashing the excess water.
 - More flooding was caused by emergency releases from dams that were full. Despite forecasts of more rain, there were no controlled releases.

- **World Bank analysis** while preparing the National Hydrology Project (NHP) in 2015 showed that although weather forecasts are more accurate now, dam managers (especially bureaucrats) are reluctant to authorise advance controlled releases.
- **Roads, railway lines and housing colonies** being laid and built without regard for natural water ways, but with formal planning permission.
- The State Department of Inland Waterways focuses on large waterways while district and local panchayats have no mandate or interest in maintaining these to reduce flood risk.
- The State Disaster Management Agency also ignores them.
- Despite India being a signatory to the UN's Sendai Framework for Disaster Risk Reduction, little has changed on the ground.
- Most modern cities have elaborate flood management plans .But India cannot even protect known flood-plains, tank foreshores and lakes peripheries from encroachment and illegal construction.

Current Flood management programmes in India:

- **Flood Management Programme (FMP)** during XII Plan for providing central assistance to States to the extent of Rs. 10,000 crore for taking up works related to river management, flood control, anti-erosion, drainage development, flood proofing works, restoration of damaged flood management works, anti-sea erosion and catchment area treatment.
- **Flood forecasting** has been recognized as one of the most important, reliable and cost-effective non-structural measures for flood management. Recognizing the crucial role it can play, Central Water Commission, Ministry of Water Resources has set up a network of forecasting stations covering all important flood prone interstate rivers.
- **Flood Management and Border Areas Programme (FMBAP):** The aim of the Scheme is to assist the State Governments to provide reasonable degree of protection against floods in critical areas by adopting optimum combination of structural and non-structural measures and enhancing capabilities of State/ Central Government officials in related fields.
- **Deploying relief and rescue operations like National Disaster Response Force, State Disaster Response Force and Seema Sashastra Bal** to mitigate the disaster caused by floods.

Measures needed:

- **Jal Shakti ministry** needs to boost water storage and attendant catchment area flood management works not just nationally but beyond the nation's borders as well. Due to **technological upgradation** the meteorology experts have of late been predicting monsoon and other weather conditions with near perfection.
- Efforts made by the Centre and the state governments to check deforestation should be intensified. The tree plantation drives at all levels are steps in the right direction.

- Cleaning of drains and rivulets near the cities should be accorded top priority.
- Construction of embankments, flood walls, ring bunds, flood control reservoirs should be scientifically carried on.
- Improvement of river channels and surface drainage and most importantly checking erosion of land on river banks are other measures that could help checking the spread of flood.
- Advance town planning and yearly preparations should be done to mitigate the effects of urban planning.
- Flood control as a subject has no clear-cut legislative marking. As a subject it is not included in any of the legislative lists of the country that is the Union, the State or the Concurrent lists.
- **River-basin specific flood inundation modelling** with climate change simulations is a necessary first step to understand the full impact of potential unprecedented flooding. This includes worst-case scenarios such as twice the maximum historical rainfall, as was recently done by a Department for International Development, U.K.-supported project for the Mahanadi in Chhattisgarh.
- The **local community to co-manage water resources** with the government (by planning intermediate storage, drainage and emergency responses).
- There must be **massive awareness generation**, to ensure that buildings are not extended into river floodplains ,that road culverts let storm water through without hindrance, and that excess water is not blocked but allowed to saturate the soil strata so that it does not cause mudslides
- Need to **use the best-available information for decision-making**. This means improved hydromet systems and weather forecasts, robust modelling of catchment water flows with simulations of different climate-related scenarios, international norms for safety factors and building codes.
- Flood control can be made effective through an **Integrated Dam Management System**, which is totally computerised and automated, the only exception being lifting and lowering of shutters which has to be done manually.

Conclusion:

Given the perils upon us, India has little option but to pay special attention to its institutional capacity for disaster mitigation and relief, the nodal agencies for which need to be kept well-funded. How well a country mobilizes resources to tackle disasters, natural or otherwise, is a sign of how advanced it really is. India has made progress, but our efforts need to be stepped up.

The Jal Jeevan Mission will be a major step towards improving our people's ease of living and meeting their aspirations of a New India. Analyse.(250 words)

Indianexpress

Why this question:

On August 15, during the first Independence Day speech of his second tenure, Prime Minister Narendra Modi announced the Jal Jeevan Mission, which plans to supply water to all households by 2024.

Key demand of the question:

Directive:

Analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary.

Structure of the answer:

Introduction:

Brief on the concept of Jal Jeevan Mission.

Body:

Discuss the key features of the Jal Jeevan Mission

Mission Objective: To ensure Har Ghar Jal (piped water supply) to all rural households by 2024 under the Jal Jeevan Mission.

Executing agency: Department of Drinking Water and Sanitation under the Jal Shakti Mantralaya.

Strategy: This Mission will focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture.

The Mission will converge with other Central and State Government Schemes to achieve its objectives of sustainable water supply management across the country.

Conclusion:

Conclude with in what way Jal Jeevan Mission will be a major step towards improving ease of living and meeting aspirations of a New India.

Introduction:

The Prime Minister in the Independence Day speech announced the **Jal Jeevan Mission**, which plans to supply water to all households by 2024. It will be a **decentralised, community-managed and sustainable water management scheme**.

Body:



Objectives:

- This Mission will focus on **integrated demand and supply side management of water at the local level**, including **creation of local infrastructure** for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture.
- The Mission will **converge with other Central and State Government Schemes** to achieve its objectives of sustainable water supply management across the country.

Current Scenario of water supply in rural areas:

- For many years, the central and state governments have been making efforts to increase access to safe and adequate drinking water.
- The provision of a basic quantity of drinking water in rural India has been achieved through hand pumps, dug wells, household water supply (HWS), etc.
- Thus, while states like Sikkim managed to achieve high levels of HWS, a relatively low percentage of rural Indian households have access to this.

Challenges faced:

- In rural drinking water service delivery, there is inadequate attention given to taking measures to sustain the source of the water, in most cases groundwater is a challenge.
- This proposed mission will make source sustainability measures mandatory prior to pumping and distributing water to households.
- Another issue with the traditional approach to service delivery was that the provision of drinking water was viewed primarily as an engineering solution, with schemes being planned and executed by the public health and engineering departments.
- However, water is an ideal sector for the applicability of the principle of subsidiarity, performing only those tasks which cannot be performed effectively at a more immediate or local level.

Jal Jeevan mission – a solution:

- With adequate capacity building and training, water can be most efficiently managed at the lowest appropriate level.
- Adopting this principle, the Jal Jeevan Mission's first preference will be to have **community-managed single village ground water-based schemes**, wherever sufficient quantity and good quality of groundwater exists.
- Wherever adequate quantity of safe groundwater is not present, or where it may be technically not feasible to have **single-village schemes, surface water-based multi-village schemes** will be promoted.

- Further, in some remote regions, where it may not be techno-economically feasible to have **household water supply schemes, local innovations, such as solar-based schemes** will be encouraged.
- It is not commonly known that household waste water from HWS amounts to about 75% of the amount of water supplied.
- With the rural households to get HWS under the proposed mission, huge quantities of household waste water will be generated across the country, therefore making its effective management critical.
- There is a plan to include a mandatory provision under the mission for the effective channelling and treatment of household waste water, through appropriate and low cost drainage and treatment systems.
- Once appropriately treated, this waste water can be used for both recharge of groundwater as well as for irrigation purposes.

Way forward:

- An **extensive information, education and communication** will be needed to create a people's movement for water management.
- The **ongoing Jal Shakti Abhiyan** will help in creating awareness about the importance of integrating source sustainability and water reuse.
- This **integrated approach to decentralised, community managed, and sustainable water management** is the backbone of the government's plan to ensure that every household gets the benefits of water supply.

Conclusion:

The Jal Jeevan Mission will be a major step towards improving our people's ease of living and meeting their aspirations of a New India.

India has reached a long way in reducing plastic waste but a lot more needs to be done yet. Elucidate.(250 words)

Downtoearth

Why this question:

In response to Prime Minister's call on India's 73rd Independence day, to make India free of single use plastics, a massive public campaign will be launched engaging all stakeholders.

Key demand of the question:

The answer must evaluate the need for reducing plastic waste in the country.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

State few facts depicting plastic pollution scenario in the country.

Body:

Discussion should include the following:

Explain first the past and present India's efforts to beat plastic pollution.

How far has the country gone?

Discuss why the steps aren't alone enough to tackle the menace and what more needs to be done.

Conclusion:

Conclude with way forward.

Introduction:

The Prime Minister delivering his 2019 Independence Day speech at Red Fort, pitched for freedom for India from single-use plastic. This was the incumbent government's second strong position against single-use plastic. The then Union minister for environment, forest and climate change, said on World Environment Day 2018 (June 5) that the country would try to "phase out" single-use plastic by 2022.

Body:

India's efforts towards reducing plastic waste:

- The **Plastic Waste Management (PWM) Rules 2011**, introduced under the Environment Protection Act, 1986, established a framework that assigned responsibilities for plastic waste management to the urban local body (ULB) and set up a state level monitoring committee.
- The 2011 rules were succeeded by the **PWM Rules 2016**, which tightened the rules (for example, banning plastic bags of less than 50 microns thickness), and also lay the foundation for accountability across the value-chain.
- The new rules **require producers and brand-owners to devise a plan** in consultation with the **local bodies to introduce a collect-back system**.
- The **extended producers' responsibility (EPR)** would assist the municipalities in tackling the plastic waste issue.
- The rules also state that the manufacture and use of multi-layered plastics that are hard to recycle must be phased out.
- Under the Good and Service Tax (GST), plastic waste was put under a 5 per cent bracket, hurting the informal sector, which already lacks a concrete action plan.
- **Latest amendments to plastic management rules 2016:**
 - Rule 15 (Explicit pricing of carrying bags) has been omitted in the amendment. It earlier required every vendor, who sold commodities in a carry bag, to register with their respective urban local body and pay a minimum fee of Rs 48,000 annum (4000/month) after the announcement of the bye-laws.
 - Other minor amendments include the addition of two more definitions: one on 'alternate use' and one on 'energy recovery'.

- The section 13 (2) now requires all brand owners and producers to register or renew registration with the concerned State Pollution Control Board (SPCB) or Pollution Control Committee if operational only in one or two states or union territories.
 - They have to do the same with the Central Pollution Control Board (CPCB), if the producers/brand owners are operating in more than two states or union territories.
- Some states like Telangana, Maharashtra, Tamil Nadu, and Himachal Pradesh banned plastic bottles and Tetra packs, single-use straws, plastic/Styrofoam tea cups/containers, etc. But many like Bihar banned only polythene bags.
- The most detrimental single-use plastics are multi-layered sachets for packing products like tobacco. The Plastic Management Waste 2016 rules prohibit their use for storing and selling gutka / tobacco and paan Masala.

Shortcomings in the efforts:

- There is **no central and comprehensive definition for single-use plastic**, crucial for any ban to be successful. Governments currently use various definitions.
- The Plastic Management Waste 2016 rules are hardly enforced. Implementation of the rules has been poor in all aspects and the amendment says nothing to strengthen it.
- Packaging for snacks like chips and fries, chocolates, beverages, etc are equally harmful. These ubiquitous packages are not recycled.
- Section 9 (3) of the latest amendment to plastic management rules 2016 gives plastic producers a scope to argue that their products can be put to some other use, if not recycled.
- This move tantamount to revoking a complete ban, which it had implied earlier.
- This type of plastic was supposed to be banned by March 2018, but it is nowhere near a phase-out.
- The idea of extended producer responsibility (EPR), which was introduced in the rules of 2016, still remains nowhere close to being implemented even after two years.
- EPR targets have to be accounted for at the national level, irrespective of which state the products are sold or consumed in. The amendment does not address these issues. Moreover, no example of deposit refund scheme system has been implemented in any state.
- Lack of adequate infrastructure for segregation and collection is the key reason for inefficient plastic waste disposal.
- Most municipal corporations still do not have a proper system of collection and segregation, given their lack of access to technology and infrastructure, which are needed to dispose of plastic waste in a cost- and resource-efficient way.

- The Solid Waste Management Rules, 2016, mandate ULBs to set up facilities for processing sorted dry waste. However, the implementation has been rather bleak, owing to available land/space concerns.
- Source separation of waste, coupled with segregated collection and transportation, has been weak links in the waste supply.
- Imposing penalties or fines is easier said than done in a democratic setup.
- Plastic in oceans and forests are choking flora and fauna. In fact, plastic trash is expected to exceed the fish population in 2050.
- Microplastics has ability to enter food chain with the highest concentration of the pollutants

Way forward:

- ULBs could take cue from cities like Bangalore where dry waste collection centres have not only been established but also have a self-sustainable business model.
- Municipalities must develop waste collection plans, coupled with outreach activities, to sensitise citizens on waste segregation.
- It is imperative to develop a phase-wise implementation of the EPR programme with yearly targets and a system of nationwide offsets and credit to ensure effective implementation of the rules.
- **International best practices:**
 - The success of imposing a plastic bag fee has also been established in cities like Chicago and Washington, showing that such interventions could be effective in shaping behaviour change.
 - The European Union is mulling new laws to ban some everyday single-use plastic products including straws, cutlery and plates citing plastic litter in oceans as the concern prompting the action.
 - **Encouraging plogging:** Picking up litter while jogging or strolling was kick-started on a small scale in a small part of Stockholm about a year ago, it has spread across the globe and India can adopt this as well.
 - Countries such as the U.S., Canada and the Netherlands have already put in place regulations to stop the use of microbeads in personal-care products. The sooner India adopts such regulations, the better
- Recycling has to ensure that wastes are converted into products of the same quality, if not better, compared to the original product.
- **Stop using single use plastic:**

- The Government of the state of Maharashtra has announced an ambitious ban of plastic bags, water bottles and other disposable plastic items in the state after the state civic bodies started facing serious problems on garbage disposing and its management.
- Fine for violating the ban will be Rs 5,000 for the first offence, Rs 10,000 for the second and Rs 25,000 for the third offence or a three-month jail term or both.
- With a worldwide crisis due to plastic waste, India has to involve all the stakeholders take the responsibility of ensuring minimisation, reuse and recycling of plastic to the maximum.
- Sensitise people to stop littering and segregate their waste. Nowadays the most popular eco-conscious effort is participating in beach cleanups.
- Sanitary napkins made from biodegradable material, menstrual cups should be promoted.

Indian Monsoon's increasing unpredictability calls for greater efficiency in rainwater storage and use. Do you agree? Elucidate with suitable justifications. (250 words)

Indianexpress

Why this question:

The article discusses the urgency of focusing on storage and use of rainwater efficiently to address the water crisis facing the country.

Key demand of the question:

The answer must relate the unpredictability of the Indian monsoon and relevance of rainwater storage and use.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

Describe the recent unpredictable nature of Indian Monsoons.

Body:

The answer must explain the issue of Indian monsoon – fewer rainy days and more extreme precipitation, explain its impact on agriculture etc.

Discuss the monsoonal vagaries and how it has impacted the Indian economy and life.

Take hints from the article and debate over and form a balanced opinion and justify with examples the urgent need to press on storage and harvest of rainwater.

Conclusion:

Conclude with importance of conserving water.

Introduction:

It is said that “agriculture is the backbone of Indian economy.” To an agriculturist, water is more valuable. In many ways, the monsoon is the lifeblood of India’s farm-dependent economy. The Monsoon’s increasing unpredictability calls for greater efficiency in rainwater storage and use.

Body:

Unpredictability of Monsoon in India:

- In **June**, rainfall was **8 per cent deficient on an average** across India and the prospect of a monsoon failure loomed large.
- And with the dry spell extending from September in many parts, the return of food inflation, it seemed, would present the re-elected government with its first big challenge.
- But in **July**, the rains turned out **6 per cent more than the average**.
- In this month, till August 17, they have been a **whopping 34.9 per cent above normal**.
- As a result, cumulative rainfall for the southwest monsoon season (June-September), which was **almost one-third deficit till June-end**, has now become **9 per cent surplus**.
- Such a dramatic turnaround is, perhaps, unprecedented.
- The current revival has also helped substantially close the gap in kharif crop plantings: Till July 5, the total area sown by farmers was 26.7 per cent lower than last year's corresponding coverage.
- That has since narrowed to just 5.3 per cent, which should considerably assuage food inflation fears.

The monsoon's increasing unpredictability, with fewer rainy days and more extreme precipitation. For the farmer, this is a nightmare. When the rains don't come on time, pour when they do, or take extended breaks, it disrupts the entire cropping cycle from the sowing, vegetative and reproductive growth stage right up to harvesting. Agriculture is a gamble in the best of times; but now it becomes a game of pure chance embodying risk as well as uncertainty. And blaming it all on climate change is hardly helpful.

Rainwater harvest and storage – a potential solution:

- India has some 107 major reservoirs with over 166 billion cubic meters' active storage capacity.
- A time-bound programme for lining of irrigation channels — or even better, replacing all open canals with pressurised HDPE/PVC piped distribution networks — will enable the water filled in these dams during the monsoon to be used for a longer period.
- The same water can be further conveyed to farmers' fields through drip/sprinkler irrigation.
- Harvesting of rainwater, whether in large reservoirs or farm ponds, and which can take place any time during the monsoon season, will give farmers greater flexibility in their cropping operations.

Challenges in the above approach:

- **Dam safety issues:** Most dams are old and pose grave threat to the people living downstream.
- **Evaporation:** India has more than 300 sunny days and reservoir storage can lead to evaporation.
- **Issues with states:** The storage of water in reservoirs in one state can lead to shortage of water in other states leading to tussle between states.

- **Lack of education:** Huge storage levels could lead to reckless usage of water

Thus, only water storage is not the panacea. There is need for other measures too:

- In rainfed areas, **water security** primarily depends upon rainwater harvesting and the efficient use of the available water through techniques like drip irrigation, and the appropriate choice of farming systems.
- **Groundwater augmentation and management** is an important method of ensuring adequate and timely availability of water for crops. Fortunately, the concept of 'more crop per drop' is being promoted by the government.
- The government must resolve to address the structural issues and there is a need to give farmers not just a better, but also more stable, return on their crops.
- The monsoon-dependent Indian economy needs **climate-sensitive budgeting**.
- The excessive dependence on monsoon may be mitigated by the construction of modern irrigation canals, afforestation, and diversification of Indian industries.
- Farmers, especially smallholder farmers, need advance warning of emergent weather conditions at a local level.
- Develop **climate-smart agriculture practices**.
- Build adaptive capacities to climate variability and strengthen the sustainability of farming systems.
- Preventive measures for drought that include growing of pulses and oilseeds instead of rice.
- **Mobile telecommunication systems** are increasingly cost-effective and an efficient way of delivering weather-based agro-advisories to farmers at a large scale.
- **Allied agricultural practices like Agroforestry, Apiary, Fisheries, Animal husbandry** should be promoted which can act as economic alternative in times of Monsoon failure.

In the recent times Microplastics evidently have compelling populace to look at plastics in a different way. Critically examine.(250 words)

Indianexpress

Why this question:

The question is based on the theme of microplastics.

Key demand of the question:

The answer must capture in what way the menace of microplastics has alarmed the people across the world and compelled to rethink over the use of plastics.

Directive:

Critically examine – When asked to 'Examine', we have to look into the topic (content words) in detail, inspect it, investigate it and establish the key facts and issues related to the topic in question. While doing so we should explain why these facts and issues are important and their implications. When 'critically' is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Begin with definition of what are microplastics.

Body:

Discussion should include the following:

Microplastics, which are defined as shreds of plastic less than 5 mm in length.

A study published in June estimated that the average human ends up consuming at least 50,000 particles of microplastics in food every year.

Quote facts similar to the above to justify the urgency to acknowledge the menace posed by the microplastics.

Explain in what way the use of microplastics can disrupt life.

Discuss what needs to be done to tackle the problem.

Conclusion:

Conclude with way solutions to address the issues.

Introduction:

Microplastics are small plastic particles in the environment that are **generally smaller than 1mm down to the micrometer range**. The researchers found huge amounts of them in the Arctic snow; their study claims to be the first that contains data on contamination of snow by microplastics.

Body:

Microfibres from washing of textiles, microbeads used in cosmetics and even paint from land run-offs can dump microplastics in the ocean. Plastic bottles, bags, fishing nets, and food packaging are some examples of the larger pieces that break down into microplastics, eventually finding their way into the soil, water and the air we breathe. According to a **2017 International Union for Conservation of Nature (IUCN) report**, microplastics are estimated to constitute up to **30% of marine litter polluting the oceans**.

Concerns posed by Microplastics:

- Microplastics escape the filtration and treatment processes for waste water and end up in sites of nature.
- This is resulting in significant global impacts on wildlife from marine environment pollution.
- Microplastics are killing the fish before they reach reproductive age, stunted growth and altering the behaviour in some fishes.
- Microplastics are found in the viscera of dead sea birds, reptiles like turtles, whales etc.
- World's coastal countries currently do not have the concerned recycling policies or the technical capabilities, and so large quantities of plastic are not recycled and enter landfill.
- The durable properties of plastics make them persistent and slow to degrade in the environment entering the food chains.
- It holds the potential for both bioaccumulation and biomagnification.
- Once the microplastics enter foodchain, they carry synthetic chemical compounds such as PCBs and PAHs, which are carcinogenic.

- Unlike POPs (Persistent Organic Pollutants) or chlorofluorocarbons (CFCs), Plastic pollution has received little attention in terms of international agreements.
- **Microplastics make up 94 percent** of an estimated 1.8 trillion pieces of plastic in the patch. But that only amounts to eight percent of the total tonnage

Measures needed:

- Local actions are required for mitigating plastic pollution, using mechanisms such as bans on plastic bags, maximum daily limits for emissions into watersheds, and incentives for fishing gear retrieval.
- Microbeads in cosmetics, daily use items must be banned globally.
- Countries should come together to establish measurable reduction targets for plastic waste. A meaningful international agreement—one with clearly defined waste reduction targets is the need of the hour.
- Effective policies must take into account all stages of the lifecycle of plastic—connecting producers to users and ultimately to waste managers.
- Nonprofits like 5 Gyres are now pushing an agenda toward public awareness, corporate responsibility and the idea of a circular economy — an economy that focuses on keeping waste to a minimum while maximizing materials' use.
- Fossil fuel subsidies incentivise the plastic market. Hence, Countries should end fossil fuel subsidies. Annually, 4–8% of oil is used to produce raw plastic.
- India has a major problem dealing with plastics, particularly single-use shopping bags that reach dumping sites, rivers and wetlands along with other waste.
- The most efficient way to deal with the pollution is to control the production and distribution of plastics.
- Banning single-use bags and making consumers pay a significant amount for the more durable ones is a feasible solution.
- Enforcing segregation of waste will retrieve materials and greatly reduce the burden on the environment.
- Waste separation can be achieved in partnership with the community, and presents a major employment opportunity.
- Eco-friendly substitutes (cloth/paper/jute bags, leaves/areca leaf plates, paper straws) should be developed. For this, scientific and financial support (soft loans and subsidies) is required.

Conclusion:

Marine plastic pollution is a “planetary crisis,” and we should hope for a “Paris-style” global treaty aimed at tackling it. We cannot transform our world into a ‘plastic planet’. What is needed is collective public effort to stop plastic pollution and safeguard our ecosystem/biodiversity.

Man-made fires in the Amazon rainforest have sent smoke to populated cities and the Atlantic coast. Why does it bring focus on President Bolsonaro’s policies? What impact can it have on the environment? Critically analyse. (250 words)

Indianexpress

Why this question:

The question is in the context of recent forest fires witnessed by the Amazon forests.

Key demand of the question:

The answer must evaluate the underlying causes for the forest fires and the impact it can have on the environment.

Directive:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

First explain in short what are forest fires.

Body:

The article best explains the causes owing to which the Amazon forests are facing forest fires. One must explain the significance that these rainforests hold for the health of the world environment.

Explain the recent policies of the President Bolsonaro that have led to such alarming conditions that may become irreversible if policies are not put in place to conserve the forests.

Explain what needs to be done

Conclusion:

Conclude with way ahead.

Introduction:

The Amazon rainforest, covering much of northwestern Brazil and extending into Colombia, Peru and other South American countries, is the world’s largest tropical rainforest, famed for its biodiversity. The Amazon rainforests also called the ‘**lungs of the earth**’ account for **10% of the world’s terrestrial primary productivity** and serves as a **major carbon sink for nearly 20% of the total emissions**. Climate change, largely induced by increasing anthropogenic activity is instrumental in the rapid degradation of these forests.

Body:

Effects of Policies:

- Over the last several days, the Amazon rainforest has been burning at a rate that has alarmed environmentalists and governments worldwide.
- Mostly caused by farmers clearing land, the fires have thrown the spotlight on Brazil President Jair Bolsonaro’s policies and anti-environment stance.

- The environmentalists are blaming Brazilian President Jair Bolsonaro for the forest fires.
- When Bolsonaro was running for president, he had promised to restore Brazil's economy by exploring the economic potential of the Amazon rainforest.
- As per environmentalists, Bolsonaro has encouraged the farmers and ranchers to exploit and burn the rainforest like never before.
- According to the data from Brazil's National Institute for Space Research (INPE), the Amazon Forests in Brazil has experienced **74,155 fires since January 2019**.
- Amazon deforestation began in earnest in the 1970s, reaching its peak rate at the end of the 1990s and the start of the 2000s.
- In 2004, about 28,000 square km of forest had been cleared in Brazil alone (the Amazon spreads over nine countries, but 60 per cent of the rainforest is in Brazil).
- The thousands of fires burning in the Amazon don't look like the major forest fires of Europe or North America — instead, they are fuelled mainly by branches, vegetation and other by-products of deforestation in cleared areas.

Impact on Environment:

- The Amazon rainforest is a repository of rich biodiversity and produces approximately 20% of oxygen in the Earth's atmosphere.
- It is home to many indigenous communities, their life depends on the forests.
- Additional Carbon Emissions: Carbon intake by the Amazon basin matches the emissions released by nations in the basin. The burning of forests, therefore, implies additional carbon emissions.
- Further deforestation could lead to Amazon's transformation from the world's largest rainforest to a savannah, which would reverse the region's ecology.
- Savannah is a vegetation type that grows under hot, seasonally dry climatic conditions and is characterized by an open tree canopy (i.e., scattered trees) above a continuous tall grass understory (the vegetation layer between the forest canopy and the ground).
- The largest areas of savannah are found in Africa, South America, Australia, India, Myanmar (Burma)—Thailand region in Asia, and Madagascar.
- Impact on Water Cycle: Amazon rainforest has the ability to produce at least half of the rain it receives. The rain produced by the Amazon travels through the region and even reaches the Andes mountain range.

Measures needed:

- Reduce the use of wood and wood by-products in daily life to save trees and earth

- The government in the concerned countries should take measures to stop slash and burn agriculture
- Forest fires can be reduced if farmers reduce the burning of stubble in the area

Conclusion:

Amazon rainforests are unique and irreplaceable units. Its destruction is worrisome because it affects the lifeblood for entire Amazon region, we all should strive for protecting the rainforests in our best capability.

Beyond health costs, air pollution can also hurt the economy in other ways. Elucidate in the backdrop of alarming air pollution issue in the country.(250 words)

Livemint

Why this question:

The article provides for a detailed coverage of the ongoing air pollution crisis the country is witnessing.

Key demand of the question:

One must elaborate as to how the problem of pollution no more is only about the health but is also about the cost it bears on the economy in multiple other ways.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

In short define air pollution, explain with facts how it affects in multiple fronts.

Body:

Explain that Beyond health costs, air pollution can also hurt the economy in other ways. In a 2018 study, Jamie Hansen-Lewis of Brown University finds that air pollution hurts productivity in India's labor-intensive industries.

It estimates that bringing the country's air to global standards would lead to a small increase in profits of 0.3% across manufacturing companies with more pronounced effects in labor-intensive firms.

Similarly, pollution is also hurting agriculture by stifling crop productivity. One 2014 study estimated that air pollutants were responsible for 19% of the loss in yields in wheat production in India in 2010. Discuss that air pollution is also linked inextricably to climate change. Some of the same particles that clog up the lungs can clog up the atmosphere and contribute to the changing weather patterns.

Suggest solutions to tackle the problems.

Conclusion:

Conclude that India's air pollution policy needs to be more systematic and solutions need to be put in place with a multi-pronged approach.

Introduction:

According to WHO, of the 20 most polluted cities in the world, the top 14 are Indian cities. The problem of air pollution disrupts not only the NCR area but many other prominent urban areas like Allahabad and Ludhiana which figure above Delhi in the pollution ranking across the world. In India, air pollution is the third highest cause of death among all health risks, ranking just above smoking.

Body:

Impact of air pollution on the economy:

- Beyond health costs, air pollution can also hurt the economy in other ways.
- According to a report by the **United Nations Environment Programme (UNEP)**, India had the highest share of welfare costs (or a loss of income from labour), of about \$220 billion (about ₹1.4 trillion), in South and South-East Asia of a combined total of \$380 billion from mortality due to air pollution.
- In addition to human lives lost, there's an estimated global cost of \$225 billion in lost labour, and trillions in medical costs, Greenpeace report says.
- Government is keen to ascend the World Bank's "ease of doing business" chart, but images of people walking around Delhi in safety masks do little to attract investment.
- In a 2018 study, Jamie Hansen-Lewis of Brown University finds that air pollution **hurts productivity** in India's labour-intensive industries.
- She estimates that bringing the country's air to global standards would lead to a small increase in profits of 0.3% across manufacturing companies with more pronounced effects in labour-intensive firms. Similarly, pollution is also hurting agriculture by stifling crop productivity.
- A 2014 study estimated that air pollutants were responsible for 19% of the loss in yields in wheat production in India in 2010.

Government efforts in dealing with air pollution:

- The government acknowledged air pollution as a pan-India problem with the drafting of the **National Clean Air Programme (NCAP)**, which was intended to build and strengthen the institutional capacity to monitor air quality across India, carry out indigenous studies to understand the health impacts of air pollution and create a national emission inventory.
- Banning the use of private vehicles from November 1 onwards in Delhi, although drastic, will definitely not be enough to curb pollution.
- **Odd-even schemes** and, recently, the allowance by the Supreme Court (SC) for only green or zero-emission firecrackers, are the episodic measures that have been used, and still continue to be, to combat this methodical pollution.
- There have also been instances of **ban on construction activities**.
- States have got nearly Rs.650 crore to help farmers buy subsidised equipment such as **Happy Seeder, Paddy Straw Choppers and Zero Till Drill**.
- There is a **50% subsidy to farmers**, and a **75% waiver to cooperative societies, agencies** that rent out equipment, farmers' interest groups or gram panchayats to buy such machines.

Way forward:

- Short term measures should be accompanied by measures that **increase the forest cover** of the land and provide farmers with an alternative to burning the remains of their crops.
- An innovative approach could be to **use climate change funds to turn farm residues into a resource**, using technological options such as converting them into **biofuels** and **biofertilizers**.
- **Proactive engagements are necessary to persuade and reassure farmers.**
- It is important to find other uses for stubble such as biomass, which may encourage farmers to look for **alternative sources of income**.
- India should at least now give high importance to the **WHO warning about air pollution being the new tobacco**. Sharply escalated, deterrent parking fees can be implemented.
- From an urban development perspective, large cities should reorient their investments to **prioritise public transport, favouring electric mobility**.
- **Incentives** for adoption of **alternate mobility technologies** should be promoted.
- The **World Bank** has said it is keen to enhance its lending portfolio to tackle air pollution, opening a new avenue for this.
- Governments should make the **use of personal vehicles in cities less attractive** through **strict road pricing mechanisms** like **Congestion tax, Green-house Gas tax**
- Need to speed up the journey towards **LPG and solar-powered stoves**.
- **Addressing vehicular emissions** is within India's grasp but requires a multi-pronged approach. It needs to combine the already-proposed tighter emission norms (in form of BS VI), with a push for shared mobility and public transport and adoption of alternate mobility technologies.
- NCAP should take precedence from emerging practices in the country—**pollution cess in Delhi on truck entry, big diesel cars, and diesel fuel sales and the coal cess**—to generate dedicated funds to finance clean air action plan.
- **Tackle road dust by mechanised sweeping and water-sprinkling** but what would be more beneficial is if the sides of the roads could be paved or covered with grass that holds the soil together and stops the production of the dust in the first place.
- Attention to non-technological aspects such as **urban planning, to reduce driving, and to increase cycling, walking, and use of public transport** are needed.

In your opinion do you agree that grass-roots governance is the urgent call for safeguarding the bio-diversity of the Western Ghats region? Discuss.(250 words)

The hindu

Why this question:

The article highlights the significant arguments that were made by the Western Ghats Ecology Expert Panel (WGEEP) to preserve and conserve the ecology of the region.

Key demand of the question:

The answer must envisage upon the significance that grass root governance would hold in bringing in conservation and preservation of the ecology of the western Ghats to the forefront.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You must give reasons for both for and against arguments.

Structure of the answer:

Introduction:

In short explain the significance of western Ghats and its ecology in general.

Body:

Explain first the importance of democratic devolution.

Discuss the need for full advantage of powers and responsibilities conferred on citizens under provisions such as the 73rd and 74th Amendments to the Constitution, and the Biological Diversity Act, 2002.

Discuss the need to assert that conservation prescriptions should not be merely regulatory, but include positive incentives such as conservation service charges.

Explain that we must hand over economic activities like quarrying to agencies like the Kudumbashree groups that are accountable to local communities.

Conclude with significance of grass root empowerment.

Conclusion:

Conclude with significance of grass root empowerment.

Introduction:

In 2018, many people thought that the floods and landslides in Kerala that caused huge financial losses and manifold human tragedies marked a once-in-a-century calamity. But again, in 2019, a repeat of the **shocking trail of intense floods, landslides, financial losses and manifold human tragedies** has not just left the same set of people stunned but also made them realise that it is unwise to continue business as usual, and that we must think afresh of the options before us.

Body:

The Western Ghats is a **biological treasure trove** that is endangered, and it needs to be “**protected and regenerated, indeed celebrated for its enormous wealth of endemic species and natural beauty**”.

Democratic devolution and Western Ghats:

- **Decentralized water management plans** to be developed at least for the next 20 years. Water resource management plans with **suitable watershed measures, afforestation, eco-restoration of catchments, rainwater recharging and harvesting, recycling and reuse** should be built into the plans.
- **Basin level management plans:** These water management plans should integrate into basin level management plans. The objective is to **reduce the dependence on rivers and external sources and to improve recharge**.
- **Encourage use of organic manures:** Self-help groups/ local entrepreneurs should be supported to set up units for the manufacture of organic farming material such as **good quality organic manure, oil cakes, and bio-fertilizers** so that good quality manure can be assured on time and reduces ground water pollution

- **Agro-biodiversity conservation with local participation:** A **participatory plant breeding and crop improvement programme** needs to be launched at the Panchayat level with farmers, including women, to restore traditional varieties and develop good varieties suitable for each locality. **Conserving locally adaptive varieties** may also become extremely relevant in the context of climate change
- **Legislations:** **Joint Forest Management (JFM)**, **Extension of Panchayat Raj to Scheduled Areas (PESA)**, **Protection of Plant Variety and Farmers' Rights Act (PPVRFA)**, **Biological Diversity Act (BDA)** and the **Scheduled Tribes and other Traditional Forest Dwellers (Rights over the Forest) Act (FRA)** have conferred substantial rights over natural resources to local communities and governments should devolve the powers as mentioned in these acts.
- **Environmental Impact Assessment:** For mining within the Western Ghats, cumulative EIAs must be made mandatory rather than entertaining EIAs for individual leases in the same areas.
- **Sustainable energy generation:** **Micro and mini hydel projects** in eco sensitive areas in the Ghats should be designed more to meet local power demand and not to feed to the grids as power lines are needed to evacuate power from these plants
- **Transportation:** All future proposals for railway lines and roads should undergo a thorough environmental and wildlife impact assessment. There should be a **subcommittee (comprising all relevant stakeholders and local communities and tribes)** to assess the environmental and ecological impacts of constructing any transport infrastructure through rich forests, wildlife habitats and wildlife corridors.

Way forward:

- It is necessary to use this vast experience and existing policies to formulate and implement appropriate policies, including transfer of financial powers, and institutions to promote sustainable and participatory forestry under the emerging programmes and mechanisms.
- We should assert that conservation prescriptions should not be merely regulatory, but include positive incentives such as conservation service charges.
- We must hand over economic activities like quarrying to agencies like the **Kudumbasree groups** that are accountable to local communities.
- We must take full advantage of powers and responsibilities conferred on citizens under provisions such as the 73rd and 74th Amendments to the Constitution, and the Biological Diversity Act, 2002.
- We, the sovereign people, are the real rulers of India and must engage ourselves more actively in the governance of the country and lead it on to a path of people-friendly and nature-friendly development.

Case study: Kerala – A leader in devolution:

- *Kerala leads the country in democratic devolution.*

- *The Kerala High Court had ruled in favour of Plachimada Panchayat that cancelled Coca-Cola's licence because the company polluted and depleted groundwater reserves, drying up wells and adversely impacting agriculture and livelihoods.*
- *While doing so, the panchayat invoked its constitutional rights, arguing that it had the duty to protect the well-being of its citizens and had the right to cancel — or refuse permission for — anything that affected its citizens adversely.*
- *The company's counterargument was that the panchayat was subordinate to the State government, which had granted it the licence.*
- *The Kerala High Court rejected this contention, affirming that grass-roots institutions have the authority to decide on the course of development in their own locality.*
- *Furthermore, the Kerala legislature unanimously passed a law asking Coca-Cola to pay Plachimada Panchayat due compensation for losses inflicted on them.*
- *Kerala had also been at the forefront of the country's Literacy Mission of the late 1980s; it pioneered Panchayat Level Resource Mapping involving neo-literates and followed it up with the People's Planning campaign that attempted to involve every panchayat in the preparation of a Panchayat Development Report*

Disaster and disaster management.

“River linking projects for the country are a great challenge and at the same time an opportunity to address the water issues arising out of climate change.” Critically analyse the statement in the light of recent floods witnessed across the country.(250 words)

Reference

The Big Picture- floods and river linking

Why this question:

The debate captures in depth analysis of river linking projects for India and in what way they are a boon and a bane at the same time.

Demand of the question:

The answer must analyse in detail the pros and cons of the river interlinking projects in the backdrop of recent floods witnessed across the country.

Directive word:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction

Start with key facts depicting the uneven distribution of rains across the country.

Body

The interlinking project aims to link India’s rivers by a network of reservoirs and canals that will allow for their water capacities to be shared and redistributed.

According to some, this is an engineered panacea that will reduce persistent floods in some parts and water shortages in other parts besides facilitating the generation of hydroelectricity for an increasingly power-hungry country.

Discuss in brief the history of interlinking projects in India.

Then explain the positives of such a policy.

Discuss the demerits – financial viability, physical viability, will adversely affect land, forests, biodiversity, rivers and the livelihood of millions of people etc.

Discuss examples of successes and failures and suggest what should be done.

Conclusion

Conclude with a fair and balanced opinion.

Introduction:

The river interlinking project aims **to link India's rivers by a network of reservoirs and canals that will allow for their water capacities to be shared and redistributed**. Some experts claim that this is **an engineered panacea that will reduce persistent floods in some parts and water shortages in other parts** besides facilitating the generation of hydroelectricity for an increasingly power hungry country.

Body:

Opportunities arising out of River linking projects:

- India receives most of its rain during monsoon season from June to September, most of it falls in northern and eastern part of India, the amount of rainfall in southern and western part are comparatively low. It will be these places which will have shortage of water. Interlinking of rivers will help these areas to have water throughout the year.
- This will cut farmers dependence on monsoon rains by bringing millions of hectares of cultivatable land under irrigation.
- Crop productivity would increase and so would revenues for the State.
- Even one bad monsoon has a direct and debilitating economic impact.
- The river linking project will ease the water shortages in western and southern India while mitigating the impacts of recurrent floods in eastern India.
- The Ganga Basin, Brahmaputra basin sees floods almost every year. In order to avoid this, the water from these areas has to be diverted to other areas where there is scarcity of water. This can be achieved by linking the rivers. There is a two way advantage with this – floods will be controlled and scarcity of water will be reduced.
- Simultaneous floods and droughts continue to wreak havoc, destroying the lives and livelihoods of millions.
- India needs clean energy to fuel its development processes, and river water can be leveraged for this.
- Fulfilling water needs impact socio-economic life of people which will help end poverty.
- Need for interlinking of rivers to prevent inter-state water disputes.

- Potential benefits to transportation through navigation, as well as broadening income sources in rural areas through fishing.

Challenges posed:

- The idea that river linking would allow us to cope with flood in the north east and shortage of water in the Deccan is the positive aspect as pointed earlier but misleading one too.
- These floods come at the time when most parts of the country run short of water, we need to hold the water somewhere to use it in dry season but the amount of flowing in the short period of time in Brahmaputra and Ganga is so huge to store and use it later.
- **Variability in rainfall** is high which is the main source in the country, flood and drought simultaneously within the states of Bihar and Maharashtra.
- Irrigation potential from interlinking rivers will have limited impact. The net national irrigated area from big dams has decreased and India's irrigated area has gone up primarily due to groundwater.
- Interlinking of rivers is a **very expensive proposal**. The amount required for these projects is so huge that government will have to take loans from the foreign sources which would increase the burden on the government and country will fall in a debt trap.
- The river interlinking project will **adversely affect land, forests, biodiversity, rivers and the livelihood of millions of people**.
- The Ken-Betwa link threatens about 200 sq. km of the Panna tiger reserve.
- Interlinking of rivers will lead to **destruction of forests, wetlands and local water bodies**, which are major groundwater recharge mechanisms.
- Less than positive experience that other countries have, like diversion of Amu Darya and the Syr Darya or the Australia's experiments in its Murray Darling basin.
- It causes massive **displacement of people**. Huge burden on the government to deal with the issue of rehabilitation of displaced people.
- Due to interlinking of rivers, there will be decrease in the amount of fresh water entering seas and this will cause a serious threat to the marine life.
- The Shah committee pointed out that the linking of rivers will affect natural supply of nutrients for agricultural lands through curtailing flooding of downstream areas.

Way forward:

- To look at water as a strategic resource for development.
- Environment is one issue where anyone of us should be concerned about.
- Best practices done by China and neighbouring countries needs to be looked upon.

- The biggest, cheapest, most benign, possibly fastest and most decentralized storage option for India is the groundwater
- Invest in water conservation, more efficient irrigation and better farm practices.
- Recycling of water for internal usage as that of Israel.
- We need a mandatory enforceable river policy aimed at treating rivers as national treasure.
- Accumulation of silt in huge quantities, particularly the Ganga and its tributaries. These rivers need to be desilted.
- River linking in the south and other parts which was undertaken in the past has been going well so such model needs to be taken forward.
- Planting trees on the river banks is one way of bringing life back to the rivers.
- Forest catchments will need to be restored, wastewater from industries and towns will need to be treated, sand mining need to be stopped.
- Need to build the responsibility, capability and accountability in our water management institutions to revive our rivers.
- The judicious use of canal water, growing crops that are appropriate to a region, encouraging drip irrigation and reviving traditional systems such as tanks.

Conclusion:

The river linking project is a great challenge and an opportunity to address the water issues arising out of climate change. The long-term solution to water scarcity lies in making the IRL project work by building a network of dams and canals across the length and breadth of the country. However, interlinking has to take place after a detailed study so that does not cause any problem to the environment or aquatic life.

The recent floods of catastrophic dimensions have ravaged many states in the country, don't you think this has proved the rejection of Gadgil panel report to be a costly error for people and environment? Critically analyse.(250 words)

Livemint

Why this question:

Gadgil panel report on rapid erosion of Western Ghats is back in focus amid floods.

Demand of the question:

The answer must analyse the key findings of the report and in what way the recommendations of the report were ignored and such an ignorance has actually led to intensification of the disasters marring the western Ghats.

Directive word:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When

'critically' is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction

Explain what is the issue.

Body

First explain what was Gadgil report all about? What were its key recommendations? Why was the report rejected and on what basis?

Then discuss its implications. Relate it to the current conditions of the western Ghats and associate it with the causative factors of the recent floods.

Conclusion

Conclude with solutions and way ahead.

Introduction:

The Centre constituted the 14-member **Western Ghats Ecology Expert Panel (WGEEP)** in 2010 under the chairmanship of noted **ecologist Madhav Gadgil**. It was tasked to look into **measures to arrest the ecological devastation from human activities in the Western Ghats**. The Gadgil panel report (2011) had **recommended controls on mineral extraction and mining**. It recommended **against building new large-scale dams and inter-basin diversions of rivers**.

Body:

Key recommendations:

- The Gadgil Committee divided the Western Ghats into **three ecologically sensitive zones (ESZ) the highest (ESZ1), high (ESZ2) and moderate sensitivity (ESZ3) zones**.
- This is in addition to the Protected Areas managed under acts such as the Wildlife Protection Act.
- It suggested that **ESZ1 and ESZ2 would be largely 'no-go' zones** implying mining, polluting industries as well as large-scale development activities, including new railway lines are restricted.
- It also objected to new dams, thermal power stations or massive windmill farms or new townships in ESZ1.
- The panel however gave **importance to the local communities and gram sabhas**, where they were given a larger say in deciding on matters relating to the ecology of these regions.
- **No more new hill stations, no change of land-use from forest to non-forest use, or public to private ownership and no more inter-basin diversions** of rivers in the Western Ghats
- It also called for **stricter regulation on tourism; phasing out of plastics and chemical fertilisers; a ban on diversion of forest land into non-forest applications; a ban on conversion of public lands into private lands**.

The Gadgil Panel report was rejected by the then Union Environment Minister and was also unacceptable to any of the six Western Ghats States. The recommendations, which have been ignored

by state governments, are back in focus as the states face monsoon fury with floods and landslides killing hundreds across Kerala, Karnataka and Maharashtra.

Implications of rejection of report:

- Most of the rivers in the Western Ghats are either dammed or diverted. West-flowing rivers have been virtually made into east-flowing rivers by violating all natural laws.
- Kerala has a total 5,924 quarries, an average of six quarries per panchayat, of which 3,332 are in the ecologically sensitive zones identified by Gadgil.
- The vibrations from these blasts are shaking the hills. **Sound waves go fastest in diamonds, and the next in granites.** The density variations arising out of quarrying are destroying millennia-old forests in the Western Ghats
- Most sites where landslides took place, in fact, fall into the zones which would otherwise have been marked ecologically sensitive, had the key recommendations of the report been adopted.
- Referring to the region, as the “**Protector of the Indian Peninsula**”, the report had raised alarm on the rapid erosion of natural capital for man-made capital in the Western Ghats, which has led to “excessive, unnecessary environmental damage”.
- Both the **Athirappally project in Kerala and Gundia hydel project in Karnataka** fall in ESZ1 zone, these projects should not be accorded environmental clearance.
- There is **premature silting up of reservoirs** due to the massive encroachment and deforestation of catchments consequent to dam construction. **Idukki dam** is a classic case wherein the entire catchment was encroached along with dam construction
- The large-scale shift to cultivation of soil-eroding monoculture plantations of tea, coffee, cardamom, rubber, banana, pineapple and timber on steep slopes, leading to increased surface run-off and low seepage deep into the soil.
- Land-use changes mapped by Kerala Forest Research Institute shows Wayanad has lost a forest cover of 1086 square km, an area larger than all of Delhi.
- The fragmentation of forests is also reflected in human-animal conflict that has been on a rise.
- Wayanad has also witnessed a change in temperature of 2-3 degrees, that otherwise happens over centuries, over a short span of years

Way forward:

- The Western Ghats States need to reconsider their stand in view of the recent calamity.
- The “environment vs development and livelihoods” debate should not be used to shield vested interests.
- **A different governance regime**, as suggested by the Gadgil panel, may be required to administer the Western Ghats.

- However, Kasturirangan panel's observation that results are better achieved through incentives than policing is valid.
- Indeed, the challenge is to set up decentralised, participatory institutions to manage hilly regions and river basins.
- The Centre should urge the States to accept the best in both the reports.
- It should not entertain any further reduction of ecologically sensitive areas, for nature's and hence people's sake.

Conclusion:

A policy shift is urgently warranted curtailing the environmentally disastrous practices and switching over to a more sustainable farming approach in the Western Ghats. **Decommissioning of dams and thermal projects** that have crossed their viable life span of 30-50 years in a phased manner is need of the hour.

In the backdrop of recent floods that deluged most parts of the country, don't you think the water footprint needs to be reinstated, and the relationship with water resources rebuilt to face a future of changing weather patterns? Elucidate.(250 words)

The hindu

Why this question:

The article captures the policy level lacunae and the lack of proper planning with respect to existing water resources that has led to the current conditions of floods in the country.

Key demand of the question:

The answer must discuss and detail upon need of conscious efforts in terms of planning and effective ways to rebuild the relationship with the water resources.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

Describe the current flood situation being witnessed across the country.

Body:

The answer must discuss in detail the issue – causes of the flood situation; Large-scale urbanization, Dilution of laws, lack of planning etc.

Then discuss what should be done essentially to overcome the problem, take clues from the article and detail on the aspects that need focus.

Conclusion:

Conclude with way ahead.

Introduction:

In an unnerving reminder of last year's devastating floods, **Kerala's** worst in about 100 years, incessant precipitation has deluged many districts, causing havoc, snapping communication lines and claiming several lives. Rains have battered **Karnataka and Maharashtra**, too, leaving many dead and several missing. Meanwhile, dramatic visuals from **Madhya Pradesh, Rajasthan and Gujarat** have revealed

widespread distress. Parts of **Bihar** and **Assam** are also reeling under torrential rainfall, with a large number of people left battling grim circumstances.

Body:

The water footprint is a measure of humanity's appropriation of fresh water in volumes of water consumed and/or polluted. It helps us understand for what purposes our limited freshwater resources are being consumed and polluted.

Factors causing floods:

Natural factors:

- **More than average rainfall:**
 - India's western coast has received above-average rainfall on account of sustained low-pressure conditions.

Anthropogenic factors:

- **Land use:**
 - Injudicious use of land is responsible for making states more prone to floods and landslides.
 - However, other factors such as a change in land use patterns and climate change could have contributed to the situation on the ground.
- **Deforestation:**
 - Unfettered development activity had increased the chances of landslides, a major cause of casualties during the floods.
- **Uncontrolled urbanization:**
 - The linear development which has been along major road networks, has completely ignored the varying and ecologically sensitive landscape.
 - Substantial portions of revenue lands in the State are wetlands and forests, which has resulted in a shortage of buildable land parcels.
 - This in turn is creating huge pressure on these ecologically fragile areas for conversion to government-supported infrastructure projects as well as private profit-making enterprises.
- **Poor planning:**
 - The State Action Plans on Climate Change elucidate measures for disaster-risk reduction in the wake of an increasing frequency of heavy rainfall in turn leading to more flooding and landslides.

- Though plans and laws such as Integrated Water Resources Management or Coastal Regulation Zone Notification hold key solutions to natural disasters that are linked to water management, most of them are not implemented or followed to the letter.
 - A lack of holistic and coordinated measures within planning departments has resulted in further problems
 - **Roads, railway lines and housing colonies** being laid and built without regard for natural water ways, but with formal planning permission.
- **Dilution of laws:**
 - The need of the hour is for a review and revision of building bye-laws for urban and rural areas in accordance with bettering environmental sustainability.
 - For instance, in 2017, a judgment of the High Court of Kerala mandating the inclusion of a clause in building rules, and which said that 'natural drains and streams shall not be obstructed by this development/building permit', has yet to come into effect.
 - Further, the Kerala Conservation of Paddy Land and Wetland Act, 2008 — it has immense potential to preserve such land as natural watershed buffers — has suffered too many dilutions even as rampant reclamation of paddy lands continues.
- **Mismanagement of dams:**
 - For dams to truly tame floods, experts say dam reservoirs need to be relatively empty before the onset of rain. This was not the case in many states.
 - Local officials have been blamed for exacerbating the situation by failing to gradually open the dams dotting the state's complex river network, waiting instead until they were already full before unleashing the excess water.
 - More flooding was caused by emergency releases from dams that were full. Despite forecasts of more rain, there were no controlled releases.
 - **World Bank analysis** while preparing the National Hydrology Project (NHP) in 2015 showed that although weather forecasts are more accurate now, dam managers (especially bureaucrats) are reluctant to authorise advance controlled releases.

Measures needed for flood management:

- The dire need is for **watershed-based master planning and development legislated guidelines** for each major river basin, especially those that impact densely populated settlements.
- There must be a demarcation of ecologically sensitive zones using existing village survey maps and public participation.

- There must be clear land use plan for these zones specifying flood plains, protected forest areas, agricultural and plantation zones, with details of the types of crops, building usages permitted and the density of buildings permitted.
- To compensate owners in non-buildable areas, there must be strategies such as Transfer of Development Rights to buildable zones in cities.
- The master plan should focus on permitting only ecologically sensitive building strategies for these areas by proposing new construction techniques.
- Controlled development can be proposed using building height rules, floor area ratio control, and restrictions on cutting and filling natural land.
- Strategies to make sure that all infrastructure projects are carried out in a scientific manner with strict scrutiny must be specified.
- This should include roads built on difficult terrain and all public infrastructure projects in wetlands and the High Ranges.
- Copenhagen in Denmark, which faces a similar problem of repeated flooding, has come up with active cloudburst responsive planning as a process to develop the city in line with climate change needs.

Conclusion:

A complete overhaul of processes to hire technical expertise which allows access to necessary skills, and with a long-term vision of capacity building of local agencies, is the way forward.

Role of external state and non-state actors in creating challenges to internal security.

Discuss the important initiatives and laws taken by government of India to deal with Left wing extremism effected areas. (250 words)

Livemint

Why this question:

The question is straightforward and is about discussing the important initiatives and laws taken by government of India to deal with Left wing extremism effected areas.

Key demand of the question:

The answer must discuss important initiatives and laws taken by government of India to deal with Left wing extremism effected areas.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

One can start by pointing out the regions effected by LWE in India.

Body:

Explain that in order to holistically address the LWE problem in an effective manner, Government has formulated National Policy and Action Plan adopting multi-pronged strategy in the areas of security, development, ensuring rights & entitlement of local communities etc.

Brief upon the various schemes undertaken – Security Related Expenditure (SRE) Scheme, Special Central Assistance (SCA) for 30 most LWE affected districts, Scheme of Fortified Police stations etc.

Conclusion:

Conclude that an ideology based on violence and annihilation is doomed to fail in a democracy which offers legitimate forums of grievance redressal. Thus steps are required to tackle the issue in the right direction.

Introduction:

Left Wing Extremism (LWE) movement has its roots in the Naxalbari area W.Bengal in the 1960's. These Maoists insurgents started running a parallel system of administration in parts of central and Eastern India. They kill civilians, destroy public buildings and extract ransom from businessmen. In the recent years, however, LWE movement is showing decline, because of the shift in the approach of the successive Governments

Body:

Government approach on security front:

- In the past operations like **Operation Steeplechase, Operation Greenhunt and Operation Greyhound (Andhra Pradesh)** were used to tackle the Naxalites. The **Combat Resolute Action force (COBRA)** is still in place which performs combing actions against Naxal Spread and influence.
- Government would try to bring the insurgents on negotiation table, and offer ceasefire. But the insurgents would misuse the ceasefire to mobilize more weapons and troops.
- Central Armed Police Forces (CAPF) would conduct “Area domination exercises”, But when insurgents feel strong presence of CRPF, they would simply vanish, and the moment CRPF retreated, they would come back in the area.
- Because of the above constraints government changed the strategy. Instead of offering ceasefire or conducting area domination exercises, it focused on (surgical) strikes based on hard intelligence. As a result, many of the key leaders have been arrested or eliminated, and the armed insurgent camps have been decimated.
- **Security Related Expenditure (SRE) Scheme** Under this scheme funds are provided to states for meeting the recurring expenditure relating to insurance, training and operational needs of the security forces, rehabilitation of Left Wing Extremist cadres (who surrender in accordance with the surrender and rehabilitation policy of the State Government concerned), community policing, security related infrastructure for village defence committees and publicity material
- **Scheme of Fortified Police Stations:** Some 400 police stations in 9 LWE affected States at a unit cost Rs. 2 crores were sanctioned under this scheme Civic Action Programme Under this scheme financial grants are sanctioned to CAPFs to undertake civic action in the affected states.

- **Surrender Policies by State Governments:** Naxal-affected states have also announced surrender policies whereby they offer cash assistance, land and other benefits in lieu of surrender. However, there is no effective intelligence mechanism to identify Naxal cadres.
- **Special Infrastructure Scheme (SIS)** to construct fortified police stations.
- 2016's **demonetization drive** also affected the LWE-funding
- Further, in 2017, Home Ministry launched '**SAMADHAN**' doctrine. It involves:
 - Controlling arms supply to Maoist using GPS trackers and Unique Identification number (UID) for Gelatin sticks and explosives manufacturers.
 - Each CRPF battalion deployed in the Maoist hotbed is given atleast one UAV.
 - More helicopter support for operations, including private helicopter services.
 - Joint Task Forces along inter-State boundaries, better inter-state coordination and intelligence sharing.
 - Stricter implementation of Prevention of Money Laundering Act (PMLA) to choke funding to LWE groups.

Government approach on Development front:

- In 2014: Ministry of Tribal Affairs launched **Vanbandhu Kalyan Yojana** for holistic development of the tribal people by targeting their education, employment, healthcare, infrastructure and connectivity.
- In 2015: Mines and Minerals (Development and Regulation) Act was amended to setup District Mineral Foundation (DMF). Through this fund, all mining districts receive portion of the mining royalties. The money is spent on the development activities decided by the local people.
- **Civic Action Plan:** Each CRPF company is given Rs.3 lakh for holding medical camps, sanitation drives, sports meets, distribution of study material to children, minor repairs of school building, road, bridges to build confidence among the locals.
- **Media Action Plan:** Each district is given Rs.7 lakh to advertise Government schemes.
- Union Government is organizing extensive training and capacity building programs for of the state service officials for **implementation of Forest Rights act and PESA Act**.
- **Additional Central Assistance' (ACA) for LWE affected districts** for creating public infrastructures and services such as school, hospital, road and rail connectivity, mobile connectivity, and electricity network.
- Schemes employment, skill development, ITI construction etc. have special funds earmarked for LWE with Key Performance Indicators (KPI).

- Union Government implemented the 14th Finance Commission report due to which LWE State Governments have more funds at their disposal to carry out tailor-made developmental schemes as per their requirements.
- In order to holistically address the LWE problem in an effective manner, Government has formulated National Policy and Action Plan adopting multi-pronged strategy in the areas of security, development, ensuring rights & entitlement of local communities etc.

Conclusion:

The issues of internal armed rebellion are sensitive and needs a strategic multi-pronged approach of deterrence and development. Militarization against own countrymen will not bring any solution. The government has to reach out to the local people and ascertain them of their good intent of bright futures for their children in education and peace.

The Maoist insurgency doctrine often glorifies violence as the primary means to overwhelm the existing socio-economic and political structures. Critically analyse the statement with examples.(250 words)

Reference

Why this question:

The question is based on the theme of Maoist insurgency, its spread, causes and repercussions.

Key demand of the question:

Explain in detail the Maoist insurgency doctrine, its philosophical basis and in what way it can be overcome.

Directive:

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Explain the background of the question.

Body:

Explain the dynamics Of Maoist Insurgency in India.

Discuss what are the factors responsible for the growth and spread of Maoism in India. In areas under Maoist domination, the absence of governance becomes a self- fulfilling prophecy since the delivery systems are extinguished through killings and intimidation. This is the first step in the strategy of the Maoists to seek to control the countryside. Explain how they stridently take up issues like ‘displacement of tribals’, ‘corporate exploitation’, ‘human rights violations’ by security forces etc. and often make fantastic claims in this regard which get reported even by the mainstream media etc.

Suggest what needs to be done.

Discuss few initiatives taken by the government to tackle the issue.

Conclusion:

Conclude with way forward.

Introduction:

The Naxalite–Maoist insurgency is an ongoing conflict between Maoist groups known as Naxalites or Naxals and the Indian government. Maoism is a form of communism developed by Mao Tse Tung. It

is a doctrine **to capture State power through a combination of armed insurgency, mass mobilization and strategic alliances**. Since its inception at Telangana in the 1930s, the insurgent movement has become one of the major threats to the democratic structure and internal security of the Indian nation.

Body:

Glorification of Violence as solution to problems:

- Some sections of the society, especially the younger generation, have romantic illusions about the Maoists, arising out of an incomplete understanding of their ideology. The central theme of Maoist ideology is violence.
- The Peoples Liberation Guerilla Army (PLGA), the armed wing of CPI (Maoist), has been created with this purpose in mind. In the first stage of the insurgency, the PLGA resorts to guerrilla warfare, which primarily aims at creating a vacuum at the grass-roots level of the existing governance structures.
- This is achieved by **killing lower-level government officials, police-personnel of the local police stations, the workers of mainstream political parties and the people's representatives of the Panchayati Raj system**.
- After creating a political and governance vacuum, they **coerce the local population** to join the movement. A strident propaganda is also carried out against the purported and real inadequacies of the existing state structure.
- In areas under Maoist domination, the **absence of governance becomes a self- fulfilling prophecy** since the delivery systems are extinguished through killings and intimidation.
- Most of the Front Organisations are led by well-educated intellectuals with a firm belief in the Maoist insurgency doctrine. These ideologues function as masks to cover the violent nature of the CPI (Maoist) ideology. They also form the propaganda/disinformation machinery of the party.
- They stridently take up issues like 'displacement of tribals', 'corporate exploitation', 'human rights violations' by security forces etc. and often make fantastic claims in this regard which get reported even by the mainstream media.
- The Front Organisations also skilfully use state structures and legal processes to further the Maoist agenda and weaken the enforcement regime. The important functions of these Organisations include **recruitment of 'professional revolutionaries', raising funds for the insurgency, creating urban shelters for underground cadres, providing legal assistance to arrested cadres and mass- mobilisation by agitating over issues of relevance/ convenience**.
- In a nutshell, the CPI (Maoist), the main LWE outfit in India, aims to overthrow the existing democratic state structure with violence as their primary weapon, and mass mobilization and strategic united fronts as complementary components and plans to usher in So-called 'New Democratic Revolution' in India.

However, the socio-economic underdevelopment is the naked truth which has driven Naxalism to its work. Government has taken many initiatives to step up the development in the underdeveloped areas.

- In 2014: Ministry of Tribal Affairs launched **Vanbandhu Kalyan Yojana** for holistic development of the tribal people by targeting their education, employment, healthcare, infrastructure and connectivity.
- In 2015: Mines and Minerals (Development and Regulation) Act was amended to setup District Mineral Foundation (DMF). Through this fund, all mining districts receive portion of the mining royalties. The money is spent on the development activities decided by the local people.
- **Civic Action Plan:** Each CRPF company is given Rs.3 lakh for holding medical camps, sanitation drives, sports meets, distribution of study material to children, minor repairs of school building, road, bridges to build confidence among the locals.
- **Media Action Plan:** Each district is given Rs.7 lakh to advertise Government schemes.
- Union Government is organizing extensive training and capacity building programs for of the state service officials for **implementation of Forest Rights act and PESA Act.**
- **Additional Central Assistance' (ACA) for LWE affected districts** for creating public infrastructures and services such as school, hospital, road and rail connectivity, mobile connectivity, and electricity network.
- Schemes employment, skill development, ITI construction etc. have special funds earmarked for LWE with Key Performance Indicators (KPI).
- Union Government implemented the 14th Finance Commission report due to which LWE State Governments have more funds at their disposal to carry out tailor-made developmental schemes as per their requirements.
- In order to holistically address the LWE problem in an effective manner, Government has formulated National Policy and Action Plan adopting multi-pronged strategy in the areas of security, development, ensuring rights & entitlement of local communities etc.

Conclusion:

It is imperative that government instead of being reactionary goes after them proactively. But it has herculean challenge of doing it in democratic way. It is obvious that there is and should be two pronged approach to counter it, one at ideological level and other at physical level. In former case, good governance by government and delivering good results in fields of Education, Health and overall standard of living will be instrumental.

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

Discuss the most prominently witnessed internal security threats due to social media also discuss the Existing laws for regulation over electronic media in India.(250 words)

The hindu

Why this question:

The question is directly from the static portions of GS paper III.

Key demand of the question:

Explain in detail the prominent internal security challenges/threats that have been witnessed or being witnessed due to social media and one must explain the laws and regulations in place to curb the same.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Body:

Explain how Spread of social media and cell phones has created the phenomenon of 'flash crowds' at the site of encounters. In addition, media like Facebook and YouTube are being used to great advantage to carry out propaganda.

One can discuss recent examples/incidences to substantiate the possible threats posed by social media on the internal security aspects of the country.

Then move on to detail upon the Existing laws for regulation over electronic media in India.

Conclusion:

Conclude that a serious and clear debate on the issue of freedom of expression, social responsibility, anonymity and data security is the need of the hour. And social media needs to be managed with proper and strict regulations in place.

Introduction:

Social Media can be defined as any web or mobile based platform that enables an individual or agency to communicate interactively and enables exchange of user generated content and it is explained by a number of tools, which includes blogs, Wikis, discussion forums, micro-blogs, twitter and social networking sites. Social Media in recent times has become synonymous with Social Networking sites such as Facebook or Micro Blogging sites such as Twitter.

Body:

Social media threat to nation's internal security

- The advantages of Social media are so many but they are posing threat to Internal Security in various forms like Cyber Terrorism, Fraud, crime, spreading violence, etc.
- According to the Cisco 2013 Annual Security Report, the highest concentration of online security threats is on mass audience sites, including social media. The rapid spread of false information

through social media is among the emerging risks identified by the World Economic Forum in its **Global Risks 2013 Report**.

- With limited government oversight, industry standards or incentives to educate users on security, privacy and identity protection, users are exposed to identity theft and fraud.
- Additionally, these platforms have huge confidential user information, and are likely vulnerable to outside or inside attack which is detrimental to Internal Security.
- **Radicalization: In Recruitment from other countries:**
 - ISIS is using the network of their recruiters around the world & paying them \$2000 to \$10000 depending upon who is recruited. Recruiters are using social media platform.
 - They are releasing videos of to target individuals who are susceptible to its message of violence and adventure.
 - ISIS has also benefited from “disseminators”, individuals who are sympathetic to their cause but not fighting for them.
- **Fake News:**
 - Competition among websites and social media platforms has sometimes resulted in the generation of fake news.
 - Everyone is in hurry to LIKE/SHARE/COMMENT rather than checking the authenticity of the news.
 - The most common fake stories revolve around politics and the attempt is to polarise society, particularly during political events.
- **Cyber Terrorism:**
 - The biggest challenge for internal security of nation through social networking site is cyber terrorism.
 - Today terrorists select Social Media as a practical alternative to disturb the function of nations and other business activities because this technique has potential to cause huge damage. It poses enormous threat in international system and attracts the mass media, the security community, and the information technology corporation.
 - At the same time, due to the convenience, affordability and broad reach of social media platforms like YouTube, Facebook and Twitter, terrorist groups have increasingly used social media to further their goals and spread their message.
 - Social Media became a platform for coordination of plans of attack, communication with cells, or propaganda and information and spread of hate campaign or messages that can hurt the sentiments of people.

- Chat rooms and electronic forums enable the insurgent and extremists groups to communicate with members and supporters all over the world, to recruit new followers and to share information at little risk of identification by authorities.
- **International users:**
 - The other national and international users such as the political parties, NGO's, hackers pose a serious threat using the social media. For example, during the civil turmoil in the Arab Spring Uprising, the various governments were threatened through the social media.
- **To Bring Revolution:**
 - Some countries in the world feel threatened by the fact that social media can bring the people together and thus, create a revolution. This in turn can cause political instability
- **Communal Violence and Fanning Tensions:**
 - Importantly, social media also seems to be playing a significant role in polarising different communities in India and compounding India's Security challenges. The viral videos and false updates of communal clashes, riots and terrorists attack have created a massive impact in the life of public.
 - Mobile and social network interface was used to send offensive clips and hate messages that triggered panic and mass exodus of north east Indians from large parts of India in the aftermath of the ethnic clashes in Assam in 2012.
 - In September 2013, a morphed video on YouTube was used to fan communal riots in Muzaffarnagar in Uttar Pradesh and led to mass panic.
- **Virtual Community:**
 - Popular social networking websites are another means of attracting potential members and followers. These types of virtual communities are growing increasingly popular all over the world, especially among younger demographics. This can build Anti-national Sentiments among Society.
- **Fraud:**
 - Social networking sites also invite fraudsters to take excellent opportunity to become wealthy by applying deceiver schemes.
- **Criminal Activity and Money laundering:**
 - Social networking sites also pose major challenge in financial and organized crime which destabilizes the system. It creates threat to a company's security because of what employees might disclose and they are on prime target for cyber criminals.

Existing laws for regulation over electronic media in India

- Information Technology Act 2000
- Draft Data Protection Bill

Way forward:

- Institutionalise the blueprint for a National Social Media Policy:
 - The Indian establishment needs to recognise the medium and grant it a legal status if it needs to deal with the multitude of challenges that rise out of it effectively.
 - The National Cyber Security Policy needs to be revised to include social media challenges which are distinct from the cyber security threats.
- Replicate “Social Media Labs” across the country.
- Serious and clear headed debate on the issue of freedom of expression, social responsibility, anonymity and data security is the need of the hour.

Meticulous co-operation and intelligence-sharing are needed between the countries to fight the new age terrorism which has global reach and sophisticated tools at its disposal.

Discuss.(250 words)

Reference

Why this question:

Key demand of the question:

Explain in detail the need for Meticulous co-operation and intelligence-sharing are needed between the countries to fight the new age terrorism.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

State the present challenges or the ones faced in the past on this front.

Body:

Briefly define terrorism and state with examples of how a new version of terrorism has evolved. Discuss the reasons that led to the emergence of new age terrorism. Suggest way forward how countries should tackle this threat and conclude suitably.

Conclusion:

Conclude by suggesting solutions to the issue.

Introduction:

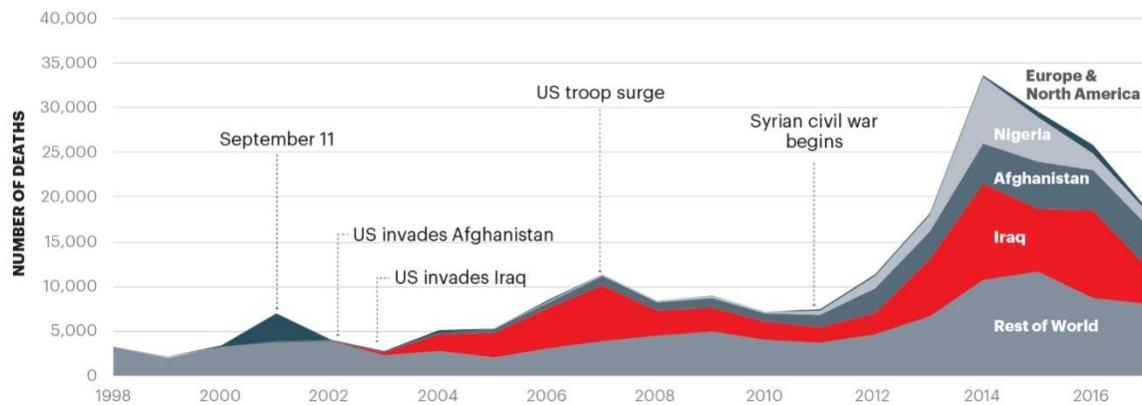
International terrorism poses an increasingly dangerous and difficult threat to world. Today's terrorists seek to inflict mass casualties, and they are attempting to do so across globe. They are less dependent on state sponsorship and are, instead, forming loose, transnational affiliations based on religious or ideological affinity and a common hatred. This makes terrorist attacks more difficult to detect and prevent.

Body:

Trends in Terrorism:

44% Since peaking in 2014, deaths from terrorism have fallen 44%.

60 Since 2012, more than 60 countries experience at least one fatal terrorist attack each year.



Source: START GTD, IEP Calculations

The increase in attacks and deaths across more countries has meant that the impact of terrorism is becoming more widespread, even as deaths from terrorism are decreasing. As the intensity of terrorism has increased over the last two decades, its impact has also spread to more countries around the world.

Measures need to tackle global terrorism:

- A comprehensive and multidimensional strategy for the “War on Terror” must involve an integrated view of these strategic military and economic domains, among others.
- Addressing UN High-Level conference on Heads of Counter Terrorism, India extended a five-point formula –
 - Exchange of timely and actionable intelligence.
 - Prevention of misuse of modern communication through collaboration with the private sector.
 - Building capacities for improved border controls.
 - Sharing of info related to the movement of passengers.
 - Designation of Counter-Terror focal points to fight global terror.
- In addition, there should be a concerted effort from the countries affected by the scourge of terrorism to pressurize countries who engage in state-sponsored terrorism.
- It is necessary for countries fighting terrorism **to learn more closely from their differences, rather than try to generalise from experience.**

- The success or failure of each of these approaches must be studied & applied to smaller countries suffering from global terrorism based on applicability.
- **United Nations must become the global Centre to fight global terrorism.** For such, Comprehensive Convention on International Terrorism must be agreed upon on basis on common definition of terrorism.
- The functioning **UNSC 1267 Committee** should be strengthened.
- The complete implementation of **UN Global Counter-Terrorism Coordination Compact** that was agreed upon in 2018.
- **Intelligence sharing between countries** needs to be strengthened and countries currently not affected by global terrorism need to take the threat seriously.

Conclusion:

India should play a proactive role to neutralize any threat of terrorism. There is a need for the world to join hands and take concrete multilateral initiatives to ensure that terror groups are dealt with a heavy hand. Accepting and ratifying the Comprehensive Convention on International Terrorism (CCIT) proposed by India would be good first step.

What do you understand by Cyber warfare? Outline and discuss the cyber threats which India is vulnerable to and bring out the state of the country's preparedness to deal with the same. (250 words)

Economictimes

Why this question:

The question is based on the concept of cyber warfare.

Key demand of the question:

The answer must explain what is cyber warfare, India's preparedness aspects in detail.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Define what is cyber warfare.

Body:

Discussion should include the following:

Discuss the concept of cyber warfare – Cyberwarfare is a broad term describing the use of technological force within cyberspace.

Then move on to discuss the preparedness aspect of India.

Conclusion:

Conclude with need for preparedness and readiness in terms of policies, force and laws.

Introduction:

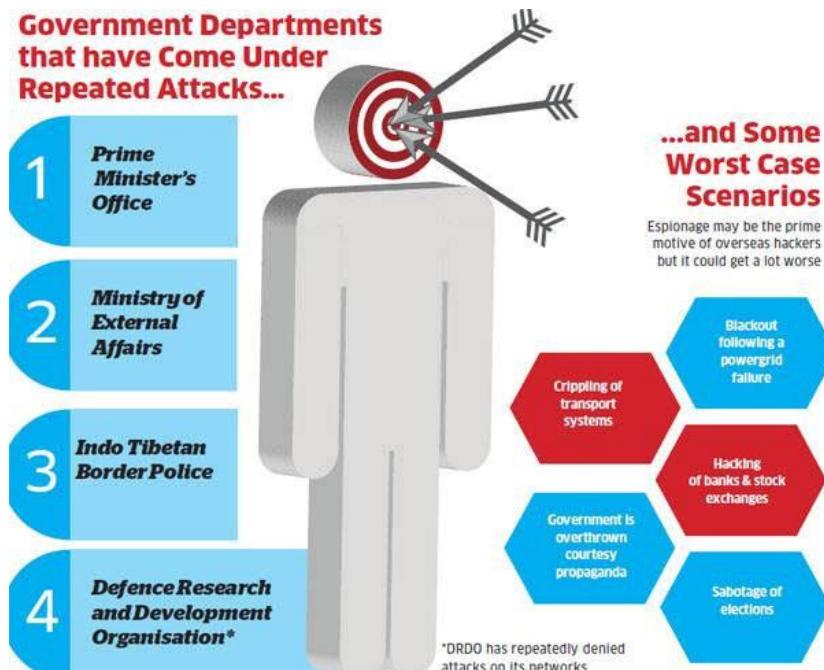
Cyber warfare is computer- or network-based conflict involving politically motivated attacks by a nation-state on another nation-state. In these types of attacks, nation-state actors attempt to disrupt

the activities of organizations or nation-states, especially for **strategic or military purposes and cyber espionage**.

Body:

It involves the actions by a nation-state or international organization to attack and attempt to damage another nation's computers or information networks through, for example, computer viruses or denial-of-service attacks.

India's vulnerabilities to cyber threats:



India's preparedness and challenges faced:

- The attacks can be more tangible causing damage to physical or digital infrastructure.
 - This includes a country's water system or electric grid.
 - Cyber tentacles can spread to political parties, universities and private businesses and Citizens.
 - Potentially worrisome cyber incidents include interference in political affairs, leaks and espionage and the compromising of critical national infrastructure.
- A 2017 study conducted by Symantec found that India ranked fourth in online security breaches, accounting for over 5 per cent of global threat detections. In the beginning of 2017, the newly launched Bharat Interface for Money application (BHIM app) reportedly faced spam threats.
- The real danger to India lies in targeted cyber attacks coming from adversarial nation states.

- Countries like China can bring immense assets to bear in carrying out sophisticated cyber attacks. The success of Stuxnet, which damaged the Iranian centrifuge facility at Natanz is an example.
- Cyber warfare is characterised by an absence of clarity.
 - India can never be certain about the capability of the other side and also the chances of success if we launch a cyber counterstrike.
- There is a push towards greater digital dependence with demonetisation a cashless system is being propagated. Aadhaar and the wider platforms such Digital India and Smart Cities will push things further along. India is the world's second largest digital nation with more than 350 million Indians are online and millions more will be getting connected in the years to come.
- India is not even a signatory to some of the basic international frameworks on Cybersecurity like the Convention of Cybercrime of the Council of Europe which not only European nations but Japan, US, South Africa have become signatories to, except India.
- Indian laws are not in tandem with the ever-changing global cyberspace.
 - The laws are old and hence need to be more dynamic in nature to deal with issues like cyber-espionage, data theft and so on.
 - The Information Technology Act, 2000 (IT Act 2000) is the sole law that deals with cyberspace in India and was passed way back in 2000.
 - Also, the Cyber Law of India has been subject to amendments on various occasions but hasn't served the changing dynamics and the growing threats and manifestations of cyberwar.

Measures needed:

- **A Defence Cyber Agency** could be the first step the government plans to for critical infrastructure and military networks that are increasingly becoming dependent on the Internet, thus increasing vulnerabilities.
- The Defence Cyber Agency will work in coordination with the National Cyber Security Advisor. It will have more than 1,000 experts who will be distributed into a number of formations of the Army, Navy and IAF. According to reports, the new Defence Cyber Agency will have both offensive and defensive capacity.
- Equally important is **cyber propaganda**. During the Doklam conflict, China tried its best to unleash cyber propaganda on India and indulged in complex psy-ops
- **Critical cyber infrastructure** needs to be defended and the establishment of **the National Critical Information Infrastructure Protection Centre(NCIIPC)** is a good step in this direction
- Individual ministries and private companies must also put procedures in place to honestly report breaches. It is only then that the NCIIPC can provide the requisite tools to secure these

networks. This partnership must be transparent and not mired in the usual secrecy of intelligence organisations.

- The **upgrading of the Defence Cyber Agency to a Cyber Command** must be implemented at the soonest.
- A robust ecosystem must be built to secure India from acts of state and non-state actors, including protocol for grievance redressal in international forums.
- Better capabilities must be built to detect and deflect attacks.
- The **computer emergency response team (CERT)** must be strengthened and aligned with military and foreign affairs operations.
- Building a joint task force between the government and key technology players will be crucial.
- The government should push for the creation of a **global charter of digital human rights**.
- **A national gold standard** should be created, which ensures that Indian hardware and software companies adhere to the highest safety protocols
- Impart cybercrime investigation training and technological know-how to the various law enforcement agencies.
- **Cyber awareness** must be spread and there should be multi-stakeholder approach- technological inputs, legal inputs, strengthening law enforcements, systems and then dealing with transborder crime involves lot of international cooperation.

Conclusion:

Most of the Indian banking industry and financial institutions have embraced IT to its full optimization. Reports suggest that cyber-attacks are understandably directed toward economic and financial institutions. With innovative, technology led programmes such as AADHAAR, MyGov, GeM, Digital Locker the new India is the land of technological prowess and transformation. Government and the private sector jointly have to give cyber security some priority in their security and risk management plan.

Proactive participation of state governments is one of the best possible ways to battle Maoist insurgency in the country. Analyse.(250 words)

Indianexpress

Why this question:

The question aims to analyse the role of state govt. in tackling the problem of Maoist insurgency.

Key demand of the question:

The answer must discuss in what way the long-standing internal national security threat can be handled with active participation of state governments.

Directive:

analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary.

Structure of the answer:

Introduction:

Begin with brief on the current situations of Maoist insurgencies in the country.

Body:

Discussion should include the following:

First explain the scenario of insurgency in the country and expanse, in what way can the insurgency be handled through proactive engagement of government. Take hints from the article and discuss the same with suitable illustrations.

Conclusion:

Conclude with way forward.

Introduction:

In 2006, then Prime Minister Manmohan Singh named Maoist insurgency as “the single biggest internal-security challenge” the country has ever faced. While security forces have made continuous inroads, the Central Committee of the CPI (Maoist) has repeatedly admitted in various reports and meetings that their base area has shrunk, fresh recruitment almost dried up, and desertions increased.

Body:

States' response to Maoist insurgency:

- States' response to the Maoist insurgency has evolved over the years, influenced by both the intensity of threat and the nature of political dispensation at the Centre and the affected states.
- While the previous United Progressive Alliance (UPA) government laid the foundation for the country's Counter-Insurgency (COIN) strategy, the current National Democratic Alliance (NDA) government has accelerated the pace and enhanced the effectiveness.
- Various COIN initiatives have been an amalgamation of both population-centric and enemy-centric approaches, combining law-and-order mechanisms and development instruments.
- Given that law and order is under the purview of the states or provinces, the most crucial counterinsurgency efforts are in the hands of state-level leadership.
- The federal government supported these efforts with joint strategies, resources, intelligence and coordination.
- **Andhra Pradesh and Chhattisgarh:**
 - Different states have pursued different strategies with different levels of effectiveness. For example, while **Chhattisgarh** has struggled to clean up its part of the so-called **“Red Corridor”**, **Andhra Pradesh’s Greyhounds**, an elite anti-Maoist military unit raised in 1989, have done a stellar job of not just chasing the Maoists out of the state but of keeping them out as well.
 - The Andhra Pradesh state succeeded in stamping out left-wing extremism by **combining police action with socio-economic programmes** implemented by an **effective service delivery mechanism**.

- The Greyhounds have also inspired similar units raised specifically to fight asymmetric wars in jungle terrain, including the **CRPF's Commando Battalions for Resolute Action (CoBRA)**.
 - In fact, CoBRA is part of the Union government's anti-Maoist campaign launched in 2009, commonly referred to as **Operation Green Hunt**—a search-and-destroy campaign to clear out the jungles—which prompted massive retaliatory attacks on security forces.
 - The state governments took proactive steps by deploying additional resources and are trying their best to check Maoists' expansion.
 - In **Chhattisgarh**, many new police stations and security camps have been established. The SP, Kabirdham, organised a number of awareness campaigns in remote areas which are most vulnerable to Maoist influence. He made arrangements for villagers' training and facilitated government employment for hundreds.
 - Counter-insurgency strategy involved the nurturing and strengthening of a vigilante group, popularly called **Salwa Judum (or Purification Hunt)**. The Chhattisgarh state government supported the Salwa Judum movement by creating a local militia called Special Police Officers (SPOs) comprising former rebels and local youth.
 - The state government also adopted a **Surrender and Rehabilitation policy** and passed the **Chhattisgarh Special Public Securities Act, 2006**, which dramatically expanded the ambit of "unlawful" activities including verbal or oral communications.
 - The game-changer seems to have been the **improved road connectivity**: 11 key road projects were finished by 2018, connecting the Sukma, Bijapur and Jagdalpur districts.
 - In addition, **enhanced combat capability of local police through modernisation and fortified police stations and improved coordination between Centre and state** in intelligence and paramilitary support are resulting in palpable decrease in Maoist threat.
- **Jharkhand & Odisha:**
 - The most crucial operation for Jharkhand's state forces was the ambitious plan to recapture the forested region of Saranda, which has been a Maoist stronghold since the early 2000s.
 - Together with central forces, the state launched **Operation Anaconda** to weed out Maoists from Saranda and succeeded in 2011. The Central government immediately framed the Saranda Development Plan in 2012.
 - In Odisha, the hotspots of Maoist activities were the most backward and forested, mineral-rich districts with huge adivasi populations—i.e., **Koraput, Malkanagiri, Nabarangapur, Rayagada, Gajapati, Kandhamal and Ganjam and Keonjhar**.
 - State response to left-wing extremism in Odisha was not very different from that of other Maoist-affected states: **from loud denial to grudging acceptance**.

- The State also opened a **training school** in each of the seven police ranges, supplemented by 17 battalions of Central forces stationed in key Naxal-affected districts.
- One of these measures was the **allotment of patta (land entitlements) to adivasis** across several Naxal-infested districts.
- The State also came out with a **model Resettlement and Rehabilitation Policy** to address some of the core issues related to land acquisition and displacement.
- There were also efforts to **conduct food rationing, implement a job scheme, construct roads, and undertake livelihood and entitlements-based programmes.**
- **Bihar, Madhya Pradesh, Maharashtra and West Bengal** too has intensified anti-Maoist operations on the above lines in LWE affected areas.

Way forward:

- Though, Maoists have weakened in states, and their expansionist policy is under check, security forces cannot afford to ignore their protracted war strategy.
- The mobile war (capability to attack at will in base areas and escape unscathed) has to be reversed and the areas of security vacuum (where there is no presence of the security forces) plugged.
- Better technologies, including **Ground Penetration Radar**, are required to detect and defuse IEDs.
- Security forces also need to learn from previous tactical errors and adhere to time-proven SOPs.
- The information network should improve with better road and telecom connectivity in far-flung areas. Surrender and rehabilitation policies must be implemented in letter and spirit.
- The administrative and political vacuum in remote areas must be filled.
- '**The Forest Rights Act**' should be interpreted in favour of forest dwellers. The root cause of the problem that is exploited by the Maoists —socio-economic deficits — must be bridged.
- The human rights of the local populace must be protected by the administration and security forces if the credibility of efforts so far is to be established.

Conclusion:

- . The states aimed, and succeeded to a significant degree, to puncture the **Maoist narrative of “an exploitative state run by the bourgeoisie”**. In a show of cooperative federalism—evident from **institutional coordination and the implementation of joint mechanisms**—both Centre and states have exhibited a clear common purpose in counterinsurgency and reducing LWE violence.

What is money laundering? Examine the recent policy efforts by the Government of India to tackle the problem.(250 words)

Livemint

Why this question:

The CBI's case is that the INX Media allegedly flouted the conditional FIPB approval, and brought in over ₹305 crore of FDI against the approved inflow

CBI alleges that INX Media engaged Karti Chidambaram, the promoter director of Chess Management, to resolve the issue.

Key demand of the question:

The question aims to evaluate in detail about money laundering- definition, purpose, means etc. It also wants us to discuss the available policies such as PMLA to tackle the same.

Directive:

Examine – When asked to 'Examine', we must investigate the topic (content words) in detail, inspect it, investigate it and establish the key facts and issues related to the topic in question. While doing so we should explain why these facts and issues are important and their implications.

Structure of the answer:

Introduction:

Write a few lines about the meaning of money laundering- e.g Money laundering is the process of creating the appearance that large amounts of money obtained from criminal activity, such as drug trafficking or terrorist activity, originated from a legitimate source. The money from the illicit activity is considered dirty, and the process "launders" the money to make it look clean.

Body:

Discuss the steps in money laundering- Placement-criminally derived funds are introduced in the financial system; Layering-the property is 'washed' and its ownership and source is disguised; Integration- 'laundered' property is re-introduced into the legitimate economy; This three staged definition of money laundering is highly simplistic. The reality is that the so-called stages often overlap and, in some cases, for example in cases of financial crimes, there is no requirement for the proceeds of crime to be 'placed'.

Briefly explain how globalization impacts money laundering.

Examine the recent policy efforts taken by the government – India is a full-fledged member of the Financial Action Task Force (FATF), PMLA 2002, Financial intelligence unit -IND etc.

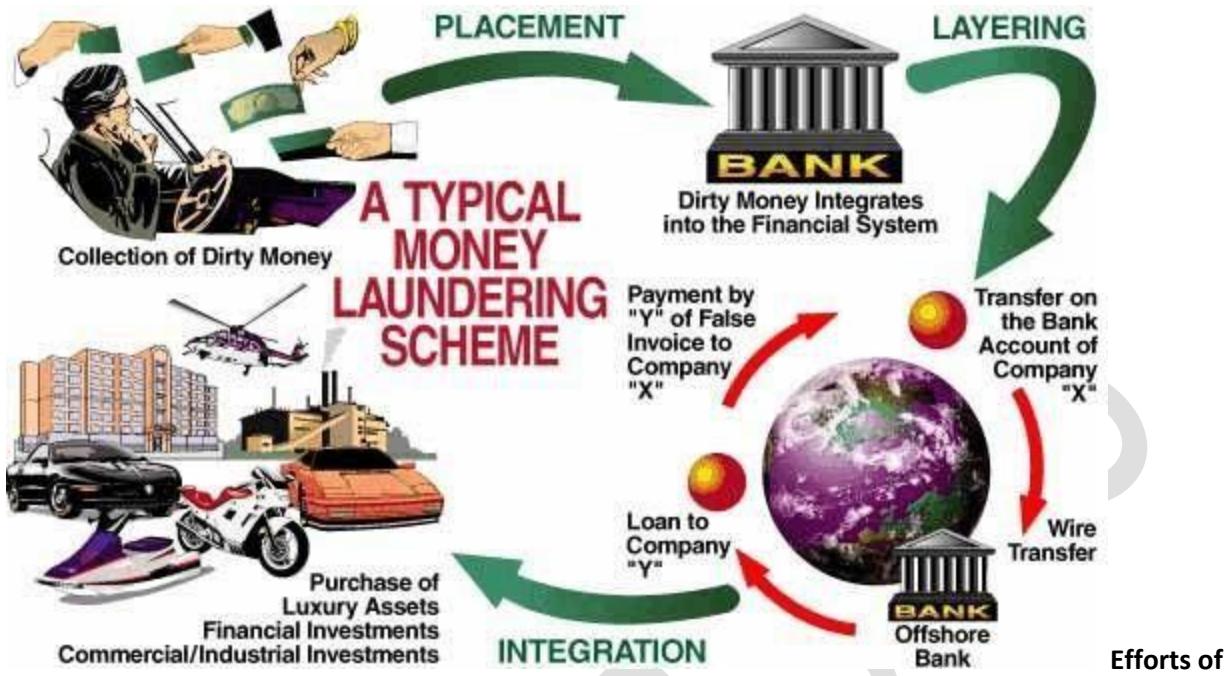
Conclusion:

Conclude with way forward.

Introduction:

Money laundering is a process where the proceeds of crime are transformed into apparently legitimate money or other assets. It is the processing of criminal proceeds to disguise its illegal origin. In simple words, it can be defined as the act of making money that comes from one source to look like it comes from another source. Money laundering is a single process however, its cycle can be broken down into three distinct stages namely, placement stage, layering stage and integration stage.

Body:



Government of India to address money laundering:

In India, before the enactment of Prevention of Money Laundering Act, 2002 (PMLA) the major statutes that incorporated measures to address the problem of money laundering were:

PMLA Act:

- It prescribes obligation of banking companies, financial institutions and intermediaries for verification and maintenance of records of the identity of all its clients and also of all transactions and for furnishing information of such transactions in prescribed form to the Financial Intelligence Unit-India (FIU-IND).
- It empowers the Director of FIU-IND to impose fine on banking company, financial institution or intermediary if they or any of its officers fails to comply with the provisions of the Act as indicated above.
- PMLA envisages setting up of an Adjudicating Authority to exercise jurisdiction, power and authority conferred by it essentially to confirm attachment or order confiscation of attached properties.

The Black money (undisclosed foreign income and assets) and Imposition of Tax Act, 2015:

- To deal with the menace of the black money existing in the form of undisclosed foreign income and assets by setting out the procedure for dealing with such income and assets.

Benami Transactions (Prohibition) Amendment Bill, 2015:

- It aims to expand the definition of Benami Transactions and specifies the penalty to be imposed on a person entering into a Benami transaction.

Institutional framework:

Enforcement directorate:

- PMLA empowers certain officers of the Directorate of Enforcement to carry out investigations in cases involving offence of money laundering and also to attach the property involved in money laundering.

Financial Intelligence Unit:

- It was established in India in 2004 as the central national agency responsible for receiving, processing, analyzing and disseminating information relating to suspect financial transactions.
- FIU-IND is also responsible for coordinating and strengthening efforts of national and international intelligence, investigation and enforcement agencies in pursuing the global efforts against money laundering and related crimes.
- FIU-IND is an independent body reporting directly to the Economic Intelligence Council (EIC) headed by the Finance Minister.

Way forward:

- Make common people more aware about the problem- The poor and illiterate people, instead of going through lengthy paper work transactions in Banks, prefer the Hawala system which needs to be stopped.
- Fulfilling the purpose of KYC Norms by doing proper KYC.
- Establishment of comprehensive enforcement agencies
- Promote cashless digital transaction

In most cases, Data deprivation makes cybercrime difficult to tackle. While privacy and data protection are necessary, and data localization may pose its own business challenges, India needs to work out a way to crack cyber frauds and crimes. Elucidate.(250 words)

Livemint

Why this question:

The question is based on the theme of rising cyber crimes and cyber frauds being witnessed across the country.

Demand of the question:

Explain the changes in Sino-Indian relations, the causes and affect it has on the global politics.

Directive word:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction

Discuss the recent controversies pos abrogation of article 370.

Body

One must explain the recent stances where the India and China had a face off, discuss the causes leading to such changing relations and explain what needs to be done to overcome it.

Such answers are best explained with examples to substantiate.

Conclusion

Conclude with what should be India's stand, what needs to be done to ensure peace and security of its borders and peaceful relations with neighborhood country.

Introduction:

Cybercrime is a criminal action that encompasses mobile phones, laptop, network, and computer. It is a threat to country's external and internal security and monetary status. Bengaluru registered the most number of cybercrime cases in 2018. The country's technology capital saw a whopping 5,035 FIRs registered

Body:

Instances of cybercrimes in recent times:

- there have been many instances of the hard-earned money of Indians being taken out of bank accounts and charges loaded onto credit cards through online frauds.
- Another emerging casualty of such cybercrimes is the emerging "startup" ecosystem.
- We are beginning to see multiple cases where customers of genuine startups, unicorns and Indian businesses have been subjected to online fraud.
- These customers initially presume that it is the customer care departments of the companies that have conned them, as we see in many of the cases that get filed.
- This is a dangerous trend. Not only does it shake people's faith in digital systems, the scepticism vis-à-vis online transactions also hurt the potential of emerging companies.

Data Localization – need and prospects:

- Data localization can broadly be defined as 'any legal limitation on data moving globally and compelling it to remain locally'.
- Data localisation laws refer to regulations that dictate how data on a nation's citizens is collected, processed and stored inside the country.
- The main intent behind data localisation is to protect the personal and financial information of the country's citizens and residents from foreign surveillance and give local governments and regulators the jurisdiction to call for the data when required.
- Data localisation is essential to national security. Storing of data locally is expected to help law-enforcement agencies to access information that is needed for the detection of a crime or to gather evidence.
- Where data is not localised, the agencies need to rely on mutual legal assistance treaties (MLATs) to obtain access, delaying investigations.

- On-shoring global data could also create domestic jobs and skills in data storage and analytics, as the Justice SriKrishna report had pointed out.

Challenges of Data localization:

- **Facebook's** Mark Zuckerberg recently expressed **apprehension about nations wanting to store data locally**. According to him, it gave rise to possibilities where authoritarian governments would have access to data for possible misuse.
- The US Electronic Communications Privacy Act bars US-based service providers from disclosing electronic communications to law enforcement agencies of any country unless US legal requirements are met.
- The U.S. criticised India's proposed norms on data localisation as 'most discriminatory' and 'trade-distortive'.
- EU termed data localisation as **unnecessary and potentially harmful** as they would create unnecessary costs, difficulties and uncertainties that could hamper business and investments.
- The **bilateral mechanism of the India-US Mutual Legal Assistance Treaty is a bit outdated** and does not seem to work.
- The US Cloud (Clarifying Lawful Overseas Use of Data) Act, however, enables law enforcement authorities in India to request electronic content directly from US service providers under an executive agreement with the US government.
- Data Localization **could affect expression rights** in a number of ways given that the Internet is built on the principle of easy transfer of information across borders.
- Localization may also permit **greater censorship of domestic dissident or political voices** and affect the extent to which Indian content is accessible abroad.
- One of the main arguments against mandatory localization stems from the **cost** that it is likely to impose on businesses and consequently, their consumers and the economy as a whole.

Way forward:

- **Data localisation is a critical necessity** for law enforcement.
- **Access to data by Indian law agencies**, in case of a breach or threat, cannot be dependent on the whims and fancies, nor on lengthy legal processes of another nation that hosts data generated in India.
- India urgently needs a **legally-backed framework** for a collaborative trigger mechanism that would bind all parties and enable law enforcers to act quickly and safeguard Indian citizens and businesses from a fast-growing menace.
- The customer also has a responsibility to **maintain basic cyber hygiene**, which includes following practices and taking precautions to keep one's sensitive information organized, safe and secure.

- **Real-time intelligence** is required for preventing and containing cyber attacks.
- **Periodical ‘Backup of Data’** is a solution to ransomware.
- Using **Artificial Intelligence (AI)** for predicting and accurately identifying attacks.
- Using the knowledge gained from actual attacks that have already taken place in building effective and pragmatic defence.
- Increased awareness about cyber threats for which **digital literacy** is required first.

Conclusion:

All the players involved, including banks, telecom companies, financial service providers etc. and the government, need to play a responsible role in ensuring innocent citizens do not undergo the trauma of suffering losses. As a nation making a huge transition to a cashless economy, public faith in the digital system needs to be consistently reinforced.

Security challenges and their management in border areas; linkages of organized crime with terrorism

Border administration/ management is a multifaceted task due to difficult topography and challenging relations with some countries. Elucidate the challenges and approaches for effective border management.(250 words)

Why this question:

The question expects us to discuss the challenges of border management and the strategies India has employed to tackle such challenges.

Key demand of the question:

The answer must discuss the issues faced by the country in managing its borders owing to hostile relations with neighbours or other countries and in what way it should manage and handle.

Directive:

Elucidate – Give a detailed account as to how and why it occurred, or what is the particular context. You must be defining key terms where ever appropriate, and substantiate with relevant associated facts.

Structure of the answer:

Introduction:

Begin with brief introduction stating the context of the question.

Body:

Discussion should include the following:

Explain the existing issues India is facing on border security fronts.

Explain challenges – Unilateral actions by some nations to change the status quo in their favour.

Misuse of borders (especially porous open borders) for smuggling, illegal migration, etc.

Little or no support from counterparts of neighbouring nations and in some cases active support by cross border elements to illegal activities.

Cultural, ethnic and linguistic affinity across borders and clan loyalties

Multiple agencies are involved in border management, lack of Inter agency cooperation and coordination

Support of state and non-state actors to aid infiltration, smuggling, trafficking.

Then discuss the measures that can be taken.

Conclusion:

Conclude with way forward.

Introduction:

India has one of the longest and most varied of international borders. Historical and political reasons have left India with an artificial unnatural border. Border Management is an integral approach towards borders in which along with security enhancement, infrastructure & human development is undertaken. The challenge of coping with long-standing territorial and boundary disputes with China and Pakistan, combined with porous borders along some of the most difficult terrain in the world, has made effective and efficient border management a national priority.

Body:

India has had to deal with **numerous challenges** with respect to border management such as:

- India's rate of growth has far outpaced that of most of its neighbours and this has generated peculiar problems like mass migrations into India.
- **Current fence:**
 - The present one has a high rate of degradation due to snow and has to be repaired after every season which costs about Rs. 50-60 crore every year
 - Over time infiltrators have devised ways to cross it.
- India's internal security challenges are inextricably linked with border management. This is so because Indian insurgent groups have for long been provided shelter across the nation's borders by inimical neighbours.
- **No real-time coordination:**
 - Due to the lack of understanding of military issues among the decision-making elite, India's borders continue to be manned by a large number of military, paramilitary and police forces
 - Each of which has its own ethos and each of which reports to a different central ministry at New Delhi, with almost no real coordination in managing the borders.
- Border management is designed for a 'fire fighting' approach rather than a 'fire prevention' or pro-active approach
 - It is based on a strategy of 'reaction and retaliation' rather than on a holistic response to the prevailing environment, resulting in stress and decision making problems at the functional level.
- Due to the non-permanent presence of the Myanmar army in that region, the reason primarily being the hostile terrain, ousting the Indian militants remains a challenge.

- Similarly, ethnic rebels from Myanmar have found bases within states like Mizoram. Thus, the 1,643 kilometre long Indo-Myanmar border remains a challenge.
- The border security scenario is marked by
 - increased cross-border terrorism
 - infiltration and ex-filtration of armed militants
 - emergence of non-state actors
 - nexus between narcotics traffickers and arms smugglers
 - left-wing extremism
 - separatist movements aided and abetted by external powers
 - The establishment of madrasas, some of which are potential security hazards.
- Perennial and Seasonal Rivers via which terrorists can infiltrate.
- Un-demarcated boundaries with overlapping claims cause constant friction along borders.
- Mountainous and Hilly terrain especially in North Indian borders which are snow clad and inhabitable during winter season.
- Unilateral actions by some nations to change the status quo in their favour.
- **Little or no support from counterparts of neighbouring nations** and in some cases active support by cross border elements to illegal activities.
- Cultural, ethnic and linguistic affinity across borders and clan loyalties
- Multiple agencies are involved in border management, lack of Inter agency cooperation and coordination
- Support of state and non-state actors to aid infiltration, smuggling, trafficking etc.

Strategies for effective border management have been continuously evolving. Some of them are:

- 24x7x365 day surveillance along Indo-Pak border with **5 layer smart fence**
- Agreement on basic guiding principles and standard operating procedures
- Increasing confidence building measures and communication linkages to avoid unnecessary confrontation and escalation
- Integrated border management by involving and enhancing cooperation with counterparts of neighbouring countries especially along open borders.
- Effective implementation of the recommendations of **One Border One Force** by the Task Force on Border Management to weeds out inter agency frictions.

- **Community measures and awareness** can be deployed along open borders to prevent illegal activities.
- Implementation of **Border Area Development Programme** and other developmental initiatives so that there is no feeling of being left out.

Way forward:

- Infrastructure along with border has to be improved – **rail connectivity along with road connectivity** has to be provided for quick mobilization.
- Building of **additional checkpoints and Border posts** along major and minor trade routes connected with borders
- Building of **floating bridges, walls & electrical fences** where there is high probability of infiltration.
- Taking up of **joint Border management with Countries like Myanmar, Bhutan and Nepal**.
- **Improving healthcare, physical infrastructure and digital connectivity in villages around borders** thus making them stakeholder in Border Management.
- **Madhav Godbole task force** recommendations on border management need to be implemented.
- It had recommended that the **CRPF should be designated as the primary national level counter-insurgency force**. This would enable the other central paramilitary forces like the BSF and Indo-Tibetan Border Police to return to their primary role of better border management.
- It had also recommended that **all paramilitary forces managing unsettled borders should operate directly under the control of the army** and that there should be **lateral induction from the army to the paramilitary forces** so as to enhance their operational effectiveness.
- The **principle of 'single point control' must be followed** if the borders are to be effectively managed.
- The **advances in surveillance technology, particularly satellite and aerial imagery**, can help to maintain a constant vigil along the LAC and make it possible to reduce physical deployment.

Conclusion:

Keeping a strong vigil on its border is very important for any nation to check any kind of illegal activities or intrusion through them. For India, the task becomes difficult where terrain and climate is very complex across some of its border areas. Focussing on improved technology will help in making the task easier for the security forces and make its borders more secure.

Discuss the similarities between the terrorism and organised crime, also discuss what are the various facets of linkages between organized crimes and terrorism.(250 words)

Reference

Why this question:

The question is direct from the static portions of GS paper III.

Key demand of the question:

Explain in detail the linkages of terrorism and organized crime and the similarities between the two, one can discuss how it can be tackled.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Define the terms – terrorism and organized crime.

Body:

Explain there are a number of increasingly similarities between terrorism and organized crime. Both use extreme violence and the threat of reprisals. Both use extreme violence and the threat of reprisals. Both use kidnappings, assassinations, and extortion. Both operate secretly, though at times publicly in friendly territory.

Discuss the challenges posed by them.

Conclusion:

Conclude by suggesting solutions.

Introduction:

Organized crime is described as any group having a corporate structure whose main aim is to obtain money through unlawful activities often surviving on fear and corruption. Terrorism is an act that appears to be intended to terrorise or force a civilian population to influence policy of a government by extortion or to affect the conduct of the government by assassination or abduction.

Body:

Similarities between terrorism and organized crimes:

- First similarity is that **both operate secretly**. Although both terrorist groups and criminal organizations have a strong central leadership, they are mainly based on cell structures to achieve their own goals. Day to day operations are carried out by members of small cells.
- **Both use violence and produce mostly civilian victims.**
- **Intimidation and fear** are characteristics of both groups.
- They use **similar tactics**, such as **kidnapping, assassination, extortion**.
- Terrorist and crime group organizations **use front organizations such as legitimate businesses or charities**.
- Both uses **similar ways to conceal profits and fund raising**.
- The activities of both groups are in cross the **national-regional transnational divide; both groups require safe havens**, and as a result both tend to take advantage of Diaspora communities.

- Both groups are **aided by corrupt officials whose services provide mutual benefits**, such as access to fraudulent documents, including passports and other identification and customs documents to smuggle goods and weapons.

Linkages between Organized crimes and terrorism:

- In general, there appear to be three ways that the crime-terror nexus interact:
 - Through shared tactics and methods;
 - Through the process of transformation from one type of group to the other over time; and JMLC
 - Through short- or long-term transaction-based service-for-hire activities between groups
- In present global climate, high profile crime is committed to gain power and generate huge funds to live lavishly. Researchers have stated that there is strong link between terrorists with criminal organizations.
- Both crime and terrorism have occurred under parallel conditions. These conditions comprise of economic adversity, social stratification, oppressive regimes, weak or limited law enforcement, socioeconomics, and the politics of a particular region.
- Both crime and terrorism allow the marginalised or the subjugated to gain life success by choosing another path that breaks the institutional barriers of entry using innovative, illegal approaches. These methods provide opportunities for ideological wins, financial advantage and vertical movement in a society. .
- Other linkage is through the **spread of fake currency**. Terrorists are the main agent of this currency. Indian mujahidin resorted to crime to raise funds. This includes robberies and kidnapping. Maoists terror movement also uses coercion, robberies of banks and kidnapping to collect huge funds.
- Nexus between organized crime and terrorism increases also due to many factors such as **globalization** in which free flow of trade and human provide opportunity for both to intermingle, communication rebellion through internet, end of cold war that reduce state financing of terrorist therefore terrorist indulge in criminal activities to fill financial needs and lastly, global war on terror.

Conclusion:

In summary, the usual distinction between terrorist and criminal organizations is really a continuum, with purely financial motives at one extreme and purely ideological or political objectives at the other.

"The exponential growth of computer related crime equal with the increasing dependence of computers in our day-to -day lives has posed another tool for terrorists to spread terrorism". Critically examine the statement in light of recent cyber incidences. (250 words)

The hindu

Reference

Why this question:

The question is straight forward and is about discussing the increasing cyber terrorism incidence across the world.

Key demand of the question:

Explain the rising incidences of cyber terrorism across the world, quote examples and examine the issue in detail.

Directive:

Critically examine – When asked to examine, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Define what is cyber terrorism.

Body:

Explain the rising incidences of cyber crimes and interlinkages of it with terrorism. Discuss the causative factors, analyse the security challenges it poses owing to its invisibility.

What needs to be done to address the challenge and control the spread of the same.

Conclusion:

Conclude by suggesting solutions and way forward.

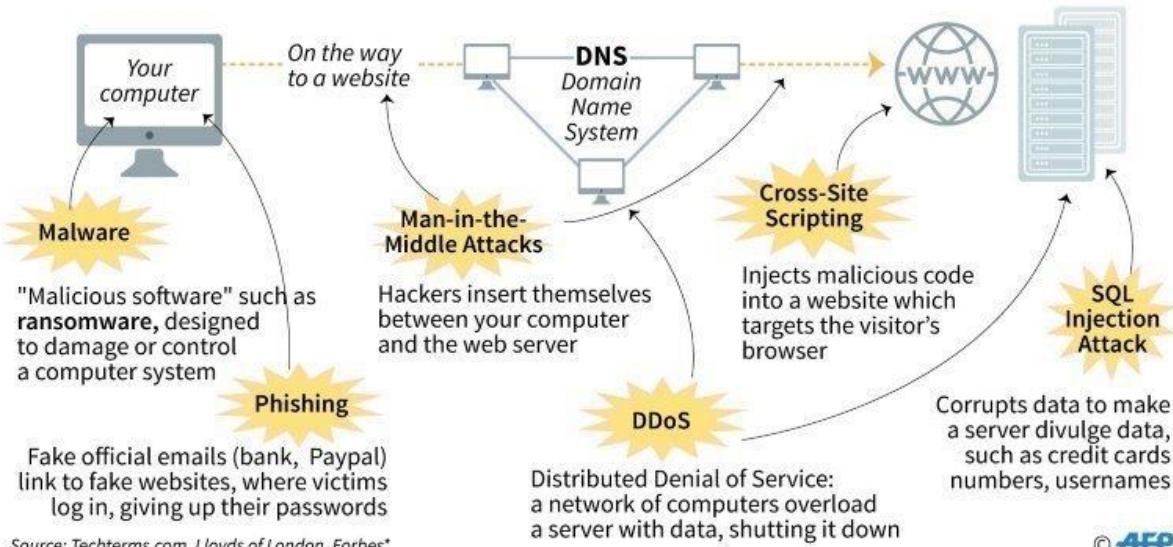
Introduction:

Cyber-attacks have grown in terms of sophistication and reach in the recent times. The countries are witnessing growing cybercrime ranging from fraud calls to malwares that bring banking systems to a standstill. India was one of the worst hit countries by the WannaCry ransomware malware affecting sectors such as banking, finance and manufacturing last year.

Body:

The different types of cyber attacks

Cyber crime worldwide cost \$400 billion in 2015 and is forecast to reach \$2 trillion in 2019*



Source: Techterms.com, Lloyds of London, Forbes*

© AFP

CYBERATTACKS IN INDIA OF LATE

July 2016

UNION BANK OF INDIA HEIST

Through a phishing email sent to an employee, hackers accessed the credentials to execute a fund transfer, swindling Union Bank of India of \$171 million. Prompt action helped the bank recover almost the entire money

May 2017

WANNACRY RANSOMWARE

The global ransomware attack took its toll in India with several thousand computers getting locked down by ransom-seeking hackers. The attack also impacted systems belonging to the Andhra Pradesh police and state utilities of West Bengal

May 2017

DATA THEFT AT ZOMATO

The food tech company discovered that data, including names, email IDs and hashed passwords, of 17 million users was stolen by an 'ethical' hacker—who demanded the company must acknowledge its security vulnerabilities—and put up for sale on the Dark Web

June 2017

PETYA RANSOMWARE

The ransomware attack made its impact felt across the world, including India, where container handling functions at a terminal operated by the Danish firm AP Moller-Maersk at Mumbai's Jawaharlal Nehru Port Trust got affected

State of cyber security in India:

- According to EY's latest Global Information Security Survey (GISS) 2018-19 – India edition, one of the highest number of cyber threats have been detected in India, and the country ranks second in terms of targeted attacks.
- Although Banking and Telecom are the most attacked sectors but Manufacturing, Healthcare, and Retail have also faced a significant number of cyber attacks.
- India ranks 3rd in terms of the highest number of internet users in the world after USA and China, the number has grown 6-fold between 2012-2017 with a compound annual growth rate of 44%. (NITI Aayog)
- India was ranked among the top five countries to be affected by cybercrime, according to a 22 October report by online security firm "Symantec Corp". India was ranked second globally when it comes to spam and phishing (misleading emails, weblink etc.)

- As per a report by Indian Computer Emergency Response Team (CERT-In), more than 53,000 cyber security incidents took place in India in 2017
- As per the data by NCRB (National Crime Record Bureau), 12317 cases related to cybercrime were registered in 2016.

Need for Cyber Security

- **For Individuals:** Photos, videos and other personal information shared by an individual on social networking sites can be inappropriately used by others, leading to serious and even life-threatening incidents.
- **For Business Organizations:** Companies have a lot of data and information on their systems. A cyber attack may lead to loss of competitive information (such as patents or original work), loss of employees/customers private data resulting into complete loss of public trust on the integrity of the organization.
- **For Government:** A local, state or central government maintains huge amount of confidential data related to country (geographical, military strategic assets etc.) and citizens. Unauthorized access to the data can lead to serious threats on a country.

Way forward:

- Real-time intelligence is required for preventing and containing cyber attacks.
- Periodical ‘Backup of Data’ is a solution to ransomware.
- Using Artificial Intelligence (AI) for predicting and accurately identifying attacks.
- Using the knowledge gained from actual attacks that have already taken place in building effective and pragmatic defence.
- Increased awareness about cyber threats for which digital literacy is required first.
- India needs to secure its computing environment and IoT with current tools, patches, updates and best known methods in a timely manner.
- The need of the hour for Indian government is to develop core skills in cyber security, data integrity and data security fields while also setting stringent cyber security standards to protect banks and financial institutions.

Trace the changed security situation in Jammu and Kashmir and discuss the road ahead post the recent landmark political changes. (250 words)

Livemint

Why this question:

The question is in the backdrop of recent scrapping of article 370 and the effect it has on the security front in Kashmir.

Key demand of the question:

The answer must trace the security situation in Kashmir and in what way the dynamics have been changing around the state.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Begin with brief upon what were the issues I the past to current.

Body:

Discussion should include the following:

Explain first that the volatile security scenario in J&K is a manifestation of Pakistan's proxy war with India, combined with the unsettled political issues of the state.

Explain the causative factors of challenges on security on various fronts.

Discuss the possible solutions.

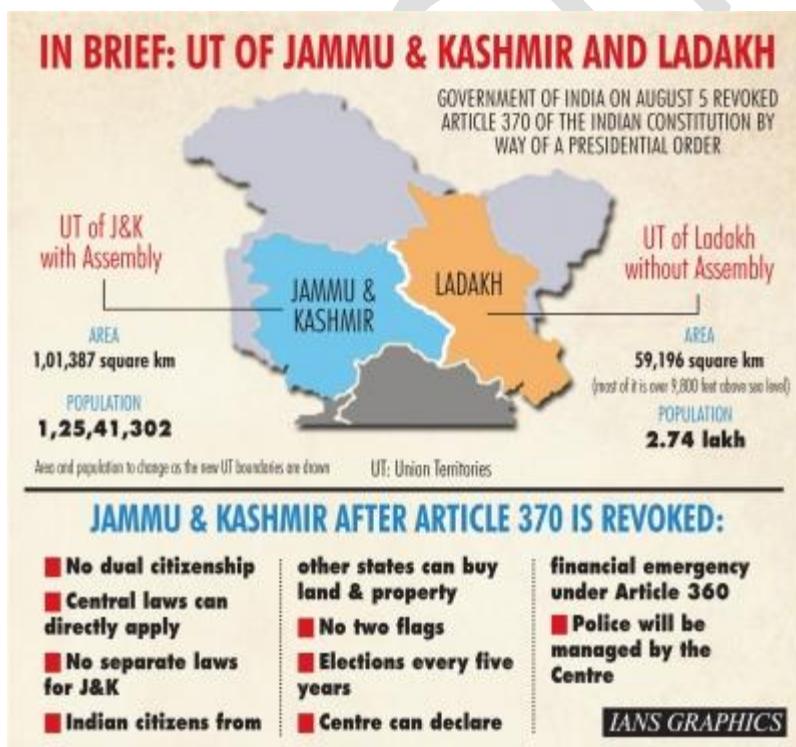
Conclusion:

Conclude with way forward.

Introduction:

The government recently introduced a **resolution to remove provisions of Article 370**, which provides special status to Jammu and Kashmir. In addition, Home Minister also introduced a Bill bifurcating the State of Jammu and Kashmir into Union Territory of Ladakh and the Union Territory of Jammu and Kashmir. The Presidential Order has extended all provisions of the Constitution to Jammu and Kashmir, including the chapter on Fundamental Rights. Therefore, the discriminatory provisions under Article 35A are now unconstitutional.

Body:



Changed security situation in Jammu and Kashmir:

- In effect, the state of Jammu and Kashmir will now cease to exist; it will be replaced by two new Union Territories: Jammu and Kashmir, and Ladakh.
- The UT of Jammu and Kashmir will have an Assembly, like in Delhi and Puducherry.
- The law and order is now under the direct control of Union Government.
- The Government's argument that the continued fragile situation in Kashmir, and the ascendency of the Taliban and fellow jihadists in Kabul as a fallout of the future US withdrawal from Afghanistan made it necessary to make it a UT.
- National security planners have reviewed how Harkat-ul-Ansar (parent of the Jaish-e-Mohammed) and Lashkar-e-Taiba (LeT) camps had shifted to Khost in eastern Afghanistan under the protection of the then Taliban regime.
- The threat of terrorism in Kashmir could increase just as it did after the Taliban took control of Kabul in 1996, the official added. The rise of the Taliban in the past lead to terror attacks by jihadists in Jammu and Kashmir as well as the IC-814 hijacking by the Harkat-ul-Ansar.
- But scrapping 35A has fuelled concerns about whether this is an effort to change the texture of Kashmir, to allow people who weren't part of the permanent resident class in Kashmir to buy land and come in. This could flare up the situation.
- Rejection of the Government move by Pakistan could also lead to further pumping in of state sponsored terrorists to spoil the security situation in JK
- Extremist terrorists may attack vulnerable targets or attack troops as a way of ramping up tensions, forcing the Indian government to respond militarily and creating that spiral of violence that they benefit from.
- The separatists will get a great boost. It gives them a talking point: We've been telling you for all this time that the Indian government doesn't see you as one of them and doesn't respect Kashmiri identity.
- Further, with OBOR running through Kashmir region, it could sour the relations between India and China going forward as India considers it as a intrusion into her sovereignty.

Measures needed:

There is a need for sustained and coordinated efforts of public outreach involving **all the key stakeholders**.

State:

- Non-violent and democratic methods to achieve political aspirations.
- The way out of the deadlock is **to strengthen democracy**.
- **Empowerment of Local Governments** which involves people at the grassroots level.

- Setting aside of the mutual fears of the people of Jammu and of Kashmir and bringing the people of Ladakh into this ambit as well.
- **Socio economic development through various governmental schemes.**
- **Conducting recruitment rallies to employ the youth**, who are in a different state of mind.

Security Forces:

- While the army's **Operation Sadbhavna (a military civic action initiative of 20 years)** has helped in extending marginal outreach, the lack of mass engagement has prevented the development of any perception change and the creation of alternative narratives to counter the propaganda from Pakistan and the separatists.
- **Direct outreach:** conduct of public meetings or "awami sunwais" in the field in areas where the reach of the administration had become marginal. **Example:** Awami Sunwai's of the past.
- Maximum opportunity to the common citizens to **speak, criticise and complain**, so they can realise that there are enough people willing to listen rather than talk down to the common Kashmiri.
- Need to engage the security personnel especially army and CRPF for public outreach and conduct of public meetings and include the politicians and the public officials along with.

Religious heads:

- Involvement of **local clergies** who has substantial hold on the local populace and seek its cooperation in messaging the youth and others on the uniqueness of the Indian system.
- Exploitation of social media, as much as the countering of online propaganda of radicalisation.

Non-State Actors:

- The other major determinant is J&K is the part of Non-State Actors like Separatists, Neighbouring Pakistan and the state sponsored terrorists.
- They have a considerable hold on the people and their opinions.
- Engaging the non-state actors through **interlocutors, Tier-2 diplomacy** should help alleviate the fears and misunderstandings that have cropped up.

Media:

- Media described as the fourth pillar of democracy plays a very vital role.
- They are responsible for reporting of the incidents in a true and uninitiated manner. However, the political patronage and ownership by big media houses has made more one sided views.
- With internet on the surge and ease of access of information at tips, they help in shaping the views and opinions of people.

- Media should be ethical and democratic in its approach. It should spread the message of peace and harmony across people.

Conclusion:

The significant move, in theory, opens up potential opportunities for development-led economic growth in the Union Territories of J&K and Ladakh. Thus, the move is bound to have a significant impact on the demography, culture, and politics of J&K. Whatever its intent in enabling the full integration of Jammu and Kashmir with India, this decision to alter the State's status could have unintended and dangerous consequences.

Various Security forces and agencies and their mandate.

Which forces are responsible for internal security of the country? Discuss their significance in maintaining peace and harmony.(250 words)

IDSA articles

Why this question:

The question is straightforward and is about discussing the forces that are responsible for maintaining internal security of the country.

Key demand of the question:

The answer must detail upon the forces responsible for internal security of the country.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

Begin with brief on need and importance of internal security.

Body:

There are many divisions of Central Armed Police Force, which deal 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) etc. discuss the roles played by each of the forces and use case studies wherever possible to justify the answer better.

Conclusion:

Conclude with significance of the forces and need to keep them strengthened.

Introduction:

Internal security is an act of ensuring and keeping peace within the borders of a nation by maintaining the national law and order and defending its people from internal security threats. Responsibility to maintain it lies with agencies ranging from police to paramilitary forces, and in demanding circumstances, the military itself.

Body:

Home grown challenges and threats from across international borders have taken different shapes, be it ethnic insurgency, militancy or terrorism that have weakened and damaged the nation.

Central Armed Police Forces: There are many divisions of Central Armed Police Force, which deal with internal threats.

- **Assam Rifles (AR):** The Assam Rifles contribution towards assimilation of the people of the North-East into the national mainstream is truly monumental. They perform many roles including the provision of internal security under the control of the army through the conduct of counter insurgency and border security operations, provision of aid to the civil power in times of emergency, and the provision of communications, medical assistance and education in remote areas.
- **Border Security Force (BSF):** Its operational responsibility is spread over 6385.36 kms. of international border along Indo-Pakistan, Indo-Bangladesh borders. BSF is also deployed on LoC in J&K under operational control of the Army.
- **Central Industrial Security Force (CISF):** Raised in the year 1969, CISF is presently providing security cover to important installations like space and atomic energy establishments, sea ports, airports, coal mines, steel plants, thermal and hydel power plants, oil and petrochemicals installations, heavy industries, defence establishments, security presses, museums and historical monuments. The charter of CISF has been expanded to provide security cover to VIPs as well as to provide technical consultancy services relating to security and fire protection to industries in public and private sectors.
- **Central Reserve Police Force (CRPF):** The Force is presently handling a wide range of duties covering law and order, counter insurgency, anti-militancy and anti terrorism operations. The Force plays a key role in assisting States in maintaining public order and countering subversive activities of militant groups.
- **Indo Tibetan Border Police (ITBP):** ITBP plays an important role in organizing the annual Kailash Mansarovar Yatra besides providing assistance in disaster management in the central and western Himalayan regions. New challenging role that has emerged for ITBP is disaster management as it is the first responder for natural Disaster in Himalayas. ITBP is in the forefront of movement for the preservation of Himalayan environment & ecology.
- **National Security Guard (NSG):** National Security Guard was raised in 1984, following Operation Blue Star and the assassination of Indira Gandhi, “for combating terrorist activities with a view to protect States against internal disturbances”. The primary role of this Force is to combat terrorism in whatever form it may assume in areas where activity of terrorists assumes serious

proportions, and the State Police and other Central Police Forces cannot cope up with the situation.

- **Sashastra Seema Bal (SSB):** As a border guarding force and lead intelligence agency (LIA) for Indo-Nepal border and Indo-Bhutan border. To promote sense of security among the people living in the border area. To prevent trans-border crimes and unauthorized entries into or exit from the territory of India. To prevent smuggling and other illegal activities.

Conclusion:

Keeping a strong vigil on its border is very important for any nation to check any kind of illegal activities or intrusion through them. For India, the task becomes difficult where terrain and climate is very complex across some of its border areas. Focussing on improved technology will help in making the task easier for the security forces and make its borders more secure.

Border Security Force plays a vital role in protecting the sovereignty and integrity of the nation. Comment.(250 words)

Reference

Why this question:

BSF is an important security organization which works in varied terrains ranging from the Thar desert to the Jammu Kashmir and in the swamps of eastern India. It is important to know about the role played by this paramount organization in protecting the sovereignty and integrity of the nation.

Key demand of the question:

Explain in detail the role played by the BSF in protecting the borders in terms of sovereignty and integrity of the nation.

Directive:

Comment—here we have to express our knowledge and understanding of the issue and form an overall opinion thereupon.

Structure of the answer:

Introduction:

Explain in few lines the origin and genesis of BSF.

Body:

Discuss the wartime and peacetime role of BSF.

Then move onto explaining the role played by the BSF protecting the sovereignty and integrity of India. e.g. discuss its role in 1971 Indo Pak war and Liberation of Bangladesh; discuss the role of BSF in Tackling the Problem of Insurgency in North-Eastern India; Terrorism in Punjab and the Role of BSF (1989-1993); Kashmir Militancy; BSF in Operation Vijay: Kargil, 1999; Left-Wing Extremism etc.

Conclusion:

Conclude by reasserting significance of such forces in maintaining peace and harmony.

Introduction:

Border Security Force (BSF) is a paramilitary force under home ministry responsible for guarding India's land border during peace time and preventing transnational crime. It is a primary border guarding organisation of India and termed as First Line of Defence of Indian Territories. It is the sentinels of Indian borders with Pakistan and Bangladesh. It came into existence on 1st December, 1965.

Body:

BSF currently stands as the world's largest border guarding force with 186 battalions and 2.57 lakh personnel including an expanding air wing, marine wing, artillery regiments, and commando units.

Role played by the BSF:

Peace time:

- Promote a **sense of security** among the people living in the border areas.
- **Prevent trans border crimes, unauthorized entry into or exit from the territory of India**
- **Prevent smuggling and any other illegal activity.**
- In 2017, Border Security Force (BSF) personnel detected a cross-border tunnel in the forest area of Damala nullah in Jammu's Arnia sub-sector.
- BSF personnel have been performing **Internal Security Duty in Manipur** for the last two years and have been successfully fighting insurgency in those areas.
- During the earthquake in Gujarat in 2001, the BSF was the first to reach out to help the distressed people and during the communal disturbances BSF personnel went all out to restore amity and brotherhood among the people.
- The BSF took over the **erection of the border fencing in Jammu & Kashmir**
- The BSF has been **defending the borders** along with the army and **checking infiltration** on the borders during the current standoff with Pakistan.

War Time:

- Holding ground in less threatened sectors so long as the main attack does not develop in a particular sector
- The BSF units can continue to remain deployed in particular sector even in a war situation to release the Army for offensive tasks. In the event of a major attack developing, which is not within the capacity of the BSF to deal with, the Army can be expected either to reinforce the BSF with Artillery or other support, or relieve the BSF from its role in the particular sector.
- **Protection of vital installations** particularly air-fields against enemy commandoes/para troopers or raids.
- Providing extension to the flanks of main defence line by the holding of strong points in conjunction with other units.
- Limited Aggressive action against paramilitary or irregular forces of the enemy within the overall plan of the Armed Forces.
- Performing special tasks connected with intelligence including raids. These are tasks which might be entrusted to BSF Units by the Army in a war situation according to local necessity. It

would, however, be expected that the state of training and equipment of the particular BSF Units would be kept in view in assessing their adequacy for the tasks.

- Acting as guides in an area of responsibility where routes are known. This is a task which the BSF should be able to perform.
- Maintenance of law and order in enemy territory administrated under the control of Army. Normally, ordinary civil police force would be utilised for this task but the BSF could be used to supplement the civil police or to act in lieu thereof in a situation where civil police is not readily available.
- **Provision of escorts.**
- **Guarding of prisoners of war cages**
- **Assistance in control of refugees.** It is the intention to utilise civil police force and armed Home Guards etc. for these tasks but again depending upon local exigencies, the BSF might be entrusted with these tasks.
- **Anti – infiltration duties** in specified area. This is an important responsibility which will have to be performed by security forces. The exact responsibility of the BSF in this matter is still under consideration and separate instructions are expected to be issued.
- During the Kargil conflict in 1999, the BSF remained on the heights of the mountains and defended the integrity of the country with all the might at its command in unison with the Army

Conclusion:

Thus, with a wide set of responsibilities and variety of roles under its belt, BSF helps in maintaining the integrity and security of India.

Discuss the key mandate carried out by Assam rifles. What are the issues and concerns surrounding the dual control of the same? Critically analyse while suggesting solutions to the same.(250 words)

Reference

Why this question:

The question aims to examine the mandate of the security force – Assam rifles, the issues surrounding it.

Key demand of the question:

The answer must discuss the significance of Assam rifles as an internal security force, the issues and concerns involved in it and solutions to tackle the same.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Critically analyze – When asked to analyse, you have to examine methodically the structure or nature of the topic by separating it into component parts and present them as a whole in a summary. When ‘critically’ is suffixed or prefixed to a directive, one needs to look at the good and bad of the topic and give a fair judgement.

Structure of the answer:

Introduction:

Begin with brief intro on genesis of Assam Rifles.

Body:

Discussion should include the following:

Explain the genesis – The Assam Rifles was established in 1835. It is considered as the oldest of all paramilitary forces.

Significance – This force plays a crucial role in North East India, handling counterinsurgency and border security operations. They are also guarding the 1,643 km long Indo-Myanmar border since 2002.

Though it is classified as a Central Armed Police Force, its tactics, training, equipment and operational mandate closely mirror those of the Indian Army. It is headed by an Army officer of the rank of Lieutenant General. It currently reports to the Ministry of Home Affairs.

Discuss the issues involved with respect to dual control and others.

Conclusion:

Conclude with way forward.

Introduction:

Assam Rifles which is also referred to as the **Sentinels of North East** is the **oldest paramilitary force of India**. The unit can trace its lineage back to a paramilitary police force that was formed under the British in 1835 called **Cachar Levy**. There are currently 46 battalions of AR under the **Ministry of Home Affairs**. The noted anthropologist Verrier Elwin once described Assam Rifles as “friends of the hill people”.

Body:

Key mandate of Assam Rifles:

- They perform many roles including the **provision of internal security** under the control of the army through the **conduct of counter insurgency** and **border security operations**.
- Provision of aid to the civilians in times of emergency
- Provision of communications, medical assistance and education in remote areas.
- In times of war they can also be used as a combat force to secure rear areas if needed.
- Since 2002, they are also guarding the 1,643 km long Indo-Myanmar border.

Issues and concerns:

- **Dual control:** Assam Rifles is under the administrative control of the Ministry of Home Affairs (MHA) while the operational control lies with the Ministry of Defence.
- **High Attrition:** The number of Assam Rifles personnel taking up voluntary retirement in the past three years has increased more than six times. This is due to high level of stress and strain caused by continuous deployment in the remote and insurgency-hit Northeast.
- **Separation from family, problems linked to increased number of nuclear family structure, maintaining higher living standards.**
- **Managing multiple households, children education and related lifestyle diseases.**

- They also struggle with poor roads and communication network, problems in food and safe drinking water and lack of proper channel to air their grievances without disclosing their identity to their commanding officers.

Solutions:

- Quick resolution of the issue of control over the force.
- Better facilities for soldiers in terms of food, stay, safety and security devices.
- Use of technology to reduce the casualties caused to the soldiers.
- Timely vacation by efficient planning of utilization of human resource.
- Developing infrastructure to reduce the deployment and reach time in case of exigencies.
- Grievance redressal mechanism to listen to the woes of the soldiers.

Conclusion:

Given that the Assam Rifles has been deployed in the Northeast since its inception, no other forces in India is more experienced or has a better understanding of the ground scenario. This shows the imperative nature of Assam rifles in guarding our north eastern border.

Discuss the critical role played by National Disaster Response Force (NDRF) in providing a specialist response to a threatening disaster situation or disaster in the country.(250 words)

Reference

Why this question:

The recent disasters ranging from earthquakes to floods have necessitated discussion around the role played by NDRF in the country.

Key demand of the question:

Explain the role played by NDRF.

Directive:

Discuss – This is an all-encompassing directive – you have to debate on paper by going through the details of the issues concerned by examining each one of them. You have to give reasons for both for and against arguments.

Structure of the answer:

Introduction:

The National Disaster Response Force (NDRF) is a specialized force constituted “for the purpose of specialist response to a threatening disaster situation or disaster” under the Disaster Management Act, 2005.

Body:

Explain in brief the composition of the NDRF -is a force of 12 battalions, organized on para-military lines, and manned by persons on deputation from the para-military forces of India: three Border Security Force, three Central Reserve Police Force, two Central Industrial Security Force, two Indo-Tibetan Border Police and two Sashastra Seema Bal.

Discuss the functional parameters- The aim of the National Disaster Management Authority is to build a safer and disaster resilient India by developing a holistic, proactive, multi-disaster and technology driven strategy for disaster management.

This has to be achieved through a culture of prevention, mitigation and preparedness to generate a prompt and efficient response at the time of disasters. This national vision inter alia, aims at inculcating a culture of preparedness among all stakeholders.

Quote the recent case studies where it has played crucial role.

Conclusion:

Conclude by reasserting its importance.

Introduction:

The National Disaster Response Force (NDRF) is a specialised force constituted “for the purpose of specialist response to a threatening disaster situation or disaster” under the **Disaster Management Act, 2005**. The “Apex Body for Disaster Management” in India is the **National Disaster Management Authority (NDMA)**. The Chairman of the NDMA is the **Prime Minister**.

Body:

At present, National Disaster Response Force consists of **12 battalions**, three each from the BSF and CRPF and two each from CISF, ITBP and SSB. Each battalion have **18 self-contained specialist search and rescue teams of 45 personnel each including engineers, technicians, electricians, dog squads and medical/paramedics**. The **total strength of each battalion is 1,149**. All the 12 battalions have been equipped and trained to respond natural as well as man-made disasters. Battalions are also trained and equipped for response during chemical, biological, radiological and nuclear (CBRN) emergencies.

Objectives of NDRF:

- To fight all natural disasters including radiological, biological, chemical and nuclear disasters.
- Conduct search and rescue operations in the event of any natural catastrophe.

Role of NDRF:

Pre-disaster:

- Will impart disaster management training to local police, administration, local bodies and other stakeholders.
- Will organize community awareness and preparedness programme during familiarization and recce of vulnerable areas in the Area of Responsibility.
- Will impart training to teachers and school children in the management of natural disasters.

During-disaster:

- Pro-active deployment at level-III disaster.
- Provide hi-tech specialist response during search and rescue operations.
- Provide immediate relief with available men and material in the affected areas.

Post-disaster:

- To assist states in recovery and maintenance of normalcy at the areas of disaster.

Conclusion:

Since its inception NDRF has continued to win hearts of millions of countrymen, by demonstrating its expertise and compassion while handling disaster situations. The list of such challenges is long. The practice of “**proactive availability**” of this Force to the States and that of “pre-positioning”, in a threatening disaster situations have immensely helped minimise damage, caused due to natural calamities in the country.

The need for a single-point adviser between the government and the armed forces has been a long-standing demand of the defence establishment. In this context, discuss the challenges and strategic advantages of creating The Chief of Defence Staff post in Indian Army.(250 words)

The hindu

Introduction:

The Chief of Defence Staff (CDS) is a **high military office** that oversees and coordinates the working of **the three Services**, and **offers seamless tri-service views and single-point advice to the Executive** (in India's case, to the Prime Minister) on **long-term defence planning and management**, including **manpower, equipment and strategy, and above all, “jointsmanship” in operations**. It shall **provide “effective leadership at the top level” to the three wings of the armed forces**, and to help **improve coordination among them**.

Body:

CDS – the strategic advantages:

- The appointment of the CDS will certainly change the civil-military balance, and, if done correctly, will address some of the grievances of the Armed Forces pertaining to their status vis-à-vis the civil services.
- The underlying rationale for appointing a CDS is to separate management and command of the Armed Forces.
- To take the logic of the CDS to its conclusion, the Armed Forces must be operationally restructured into theatre commands—complete joint war-fighting formations—led by combatant commanders.
- In the years ahead, a combination of climate change, violent non-state actors and volatile politics will increase the demands on the government to deploy military forces beyond the subcontinent.
- Despite a multitude of threats, India's Armed Forces have very limited capacity to operate overseas. Hence, the need for an expeditionary CDS.
- From a defence policy perspective, the CDS presents us with the opportunity to optimize defence economics and make expenditure more effective.

Challenges of CDS:

- The challenge, however, will be **execution and preventing the political apprehensions, bureaucracy-military and inter-service rivalry from scuttling these reforms.**
- **Human capacity deficit:** Each individual service neither understands modern industrial supply chains or economics of scale, but more importantly because their respective leaderships refuse to rationalise and streamline their services.
- Poor leadership and atrocious supply chains because of a heavily-outdated logistics chain, too many different types of ammunition and equipment to bring about economies of scale and general disinterest in logistics is complicating.
- The problem of mass producing cheap precision munitions is still absent in India.
- The heavily army-centric approach of the Indian military as a whole, ignoring the fact that it is air forces and navies that win modern wars.
- Worse still, while armies themselves have moved towards a less manpower-intensive paradigm, the Indian Army continues to invest heavily in manpower, as for example the ill-fated mountain strike divisions.

Way forward:

- To take the logic of the CDS to its conclusion, the Armed Forces should be operationally restructured into theatre commands
- The late strategic thinker K. Subrahmanyam argued that the army and navy chiefs should first hand over their command to theatre commanders, with the air chief doing so at a later stage.
- Three theatres are straightforward: Northern, Western and Southern to address the threats from China, Pakistan and the Indian Ocean, respectively.
- He envisaged doubling the air force to 60 squadrons by 2030 and placing them under theatre commands.
- The solutions are required at the foreign interaction, educational, and industrial level — not at the top, but at the bottom. This is not a macro problem; it is a severe micro problem.

Conclusion:

Most countries with advanced militaries have such a post, albeit with varying degrees of power and authority. The United States Chairman Joint Chiefs of Staff Committee (CJCSC), for example, is extremely powerful, with a legislated mandate and sharply delineated powers. The role of the CDS becomes critical in times of conflict.