

CIVIL SERVICES MAINS TEST SERIES 2017

FULL TEST 02 - GENERAL STUDIES - III

(SUGGESTED ANSWERS)

Q1. What do you understand by fiscal consolidation? Do you agree that fiscal consolidation is the need of the hour for the Indian economy? Substantiate. Identify the avenues that have to be focussed on by the Union government to reach the objectives of mobilisation of resources under fiscal consolidation?

(12.5 marks / 200 Words)

Fiscal consolidation is a process where government's fiscal health shows improvement through reduced fiscal deficit. It involves mobilisation of financial resources like tax-receipts, on one side, and minimising and rationalising the public expenditure like subsidies, on the other side.

Fiscal consolidation is the need of the hour because excess fiscal deficit increases interest burden of Government, and also causes inflation leading to hike in interest rates by the Central Bank.

Understanding its significance, Parliament has passed FRBM act which aims at eliminating the revenue deficit and reducing the fiscal deficit to 3% of GDP by 2019.

The avenues the government can concentrate upon for achieving the objectives of fiscal consolidation are: increasing tax revenue, disinvestment, sale or licensing of natural resources, and checking black money.

1. Higher tax revenue can be realised by increasing efficiency of tax administration leading to enhanced tax compliance.
2. Tax GDP ratio can be enhanced by widening the tax base and minimising tax concessions and exemptions.
3. With respect to in-direct taxes, the GST reform is expected to improve revenues.
4. **Disinvestment:** Many of the PSEs which are categorised as 'sick' industries should be considered either for strategic sale or disinvestment as suggested by the NITI Aayog's advisory group.

5. **Sale or licensing of natural resources** : Our government should consider garnering additional revenue by effective management of resources like real estate land, coal, gas fields, etc
6. **Black money**: The recent IDS (Income declaration scheme) of government generated revenue of around Rs 25000 crores as punitive taxation. Doubtful deposits made after Demonetisation have to be scrutinised so that they may yield some more revenue. More Benami properties have to be seized so that they may yield more revenue. Assets disproportionate to known sources of income have to be subjected to intense scrutiny so that they may yield additional revenue.

Thus, augmentation of revenue is necessary to bring fiscal consolidation as there are limits for reducing government expenditure in India.

Q2. " Instead of spending such large sums to deal with the recurring problem of farm loan waivers, the government would be better off by devoting resources to stepping up investment in agricultural infrastructure and price support. " Comment.

(12.5 marks / 200 Words)

Recently a few States like Andhra Pradesh, Uttar Pradesh, Maharashtra, Punjab and Karnataka have responded to farm distress by rolling out farm

loan waiver schemes as a measure of immediate relief. However, there are several concerns associated with the farm loan waiver:

- i. **Non-inclusion**- According to 2012-13 National Sample Survey and Situation Assessment Survey of Agricultural Households (NSS-SAS), 48% of the agricultural households did not have any outstanding loan. Further, out of the indebted agricultural households, about 39% borrowed only from non-institutional sources. Also about half of the institutional borrowing of a cultivator is for non-farm purposes.
- ii. **Partial Relief**- One household has multiple loans either from different sources or in the name of different family members, which entitles it to multiple loan waiving.
- iii. **Moral Hazard**-In the expectation of a waiver, even those who can afford may not pay. Such measures can erode credit discipline and may make banks wary of lending to farmers in the future.
- iv. **Fiscal burden reducing investment capacity of states** - Such schemes have serious implications for other developmental

expenditure like agriculture infrastructure. For instance, loan waiver may cost Uttar Pradesh at least 36,000 crore. It thus perpetuates the vicious cycle of unproductive farming causing loan dependency leading to loan waiver.

Sustainable Solutions

- i. Dairy is a dependable source of livelihood for farmers. Supply side and demand side constraints have to be tackled so that dairy brings regular income to farmers as in Gujarath through Anandh Cooperative.
- ii. Har Keth ki Pani programme has to be pursued vigorously by providing more resources
- iii. Almost all crops should be brought under MSP, and infrastructure for its implementation has to be established
- iv. Private contract farming should be encouraged by giving loans at lower rates of interest. Wherever it is not possible, Government should take up contract farming or provide input subsidies

Although in the short run, loan waiver was taken up due to extreme conditions, creating infrastructure to provide water security, and implementation of the above said measures is essential.

Q3. India adds around 1 million people to workforce every month on an average. In the light of this challenge, suggest measures to enhance job creation in India.

(12.5 marks / 200 Words)

India is a over populated country with huge young population. Hence, job creation has been an important challenge in recent years. We can enhance job creation in India by taking the following measures

1. Business promotion

1) India ranks 130 in World Bank's Ease of doing Business rankings. India can take steps to make it easier to establish and run businesses in India. Government's recent initiatives of Bankruptcy and Insolvency code, tax incentives for startups are right steps in this direction.

2) India has to intensify its efforts to attract investments and to create new markets for India. For instance, Saudi Arabia has huge sovereign wealth funds which can be attracted for investment in India. Similarly, Free Trade Agreements with Europe can help India's strong textile and garments market gain access thereby creating jobs.

3) India should invest heavily in creating physical infrastructure and power. Indian government's recent initiatives like UDAY scheme and Sagarmala scheme connecting ports to hinterland are right steps in this direction.

II. Education and skill promotion

4) Improving quality of higher education is crucial for creating jobs in the modern world because they require skills. For achieving these skills, apprenticeship in industry is essential, in addition to the training in schools and Colleges. Hence, IT companies and industries should provide facilities for apprenticeship.

5) Vocational education should be promoted from school level itself.

6) In the modern world when industries' skill requirements are changing rapidly, it is essential to constantly upgrade one's skills. Government of India's Skill India initiative is helpful in this regard.

Q4. Recent reports have suggested that since 1920s, income inequality is highest in India. Analyse the causes for rising income inequality in India.

(12.5 marks / 200 Words)

A report by famous French economist Thomas Piketty has suggested that income inequality in India currently is highest since 1920s. There are several causes for this situation.

1. Lack of quality public education: Education is one of the great equalisers. With poor quality of education system, only some are able to get opportunities.
2. Service oriented economy: Indian economy is heavily service based, with more than 50% of GDP coming from services. Service sector requires people with higher degrees and skills, which excludes many who did not have quality education.
3. Liberalisation: The poor quality of education and service oriented economy are compounded by liberalisation which increased the incomes of top few, thus increasing the income inequality.
4. Lack of good health system: Every year around 4 crore people fall into poverty out of which 60% people do so because of the medical expenses. Huge medical expenses can have long-lasting effects on the incomes of household.

5. Caste discrimination and prejudices exclude certain communities from fully participating in the economy.
6. Gender discrimination restricts women to household work, thereby reducing their scope for full economic participation
7. Education in mother tongue: Most of India's public education is in mother tongue. But, English is essential in modern day world to access good paying jobs. Thus, this factor contributes to income inequality

Income inequality can be addressed if government focuses on ensuring equality of opportunities to everyone by providing quality education in English medium, and by providing good public health services and free health insurance for tertiary health services.

Resources for meeting the cost of these measures can be met by taxing luxuries.

Education through educational institutions and media should play an important role in overcoming caste and gender prejudices.

Q5. Comment on the merits of changing the beginning of financial year from March to January.

(12.5 marks / 200 Words)

India's current financial year is from 1st April to 31st March. This practice is a remnant of British administration. The Union Budget is generally presented in February or March. Monsoons start in June.

In case of monsoon deficit, government has to alter its spending plans thereby disturbing the original plans made in February.

Changing the commencement of financial year to January has following merits:

1. As the Budget is presented after monsoons, it need not be revised in case of failure of Monsoons.
2. It enables better budgetary planning and spending.
3. It aligns financial year with other countries.
4. It contributes to ease of doing business of the foreign investors

However, this can result in some challenges in short term. CSO needs to update its methods and data collection strategies to report appropriate figures for budgetary planning. This transition can result in short term

problems which can be overcome. CSO has already said that it is prepared to carry out the transition.

Overall, from the above discussion, we can infer that changing financial year is a welcome step. This is an important complementary step to the other initiatives of budget reform like merging of Railway Budget with General Budget.

If government pursues outcome based reporting in budget instead of just outlays, it will be an important step in the budget reform process.

Q6. India's agricultural trade surplus has fallen by 70% during the past 3 years. Analyse the causes.

(12.5 marks / 200 Words)

India's agriculture trade surplus has fallen by 70% causing income shock to farmers due to the following reasons.

1. A relatively strong rupee compared to other currencies led to less profits in rupees to the exporters.
2. Global prices of agricultural commodities have been declining making it less profitable to export.
3. Government has followed a 'consumer focus' approach, where exports are limited due to the fear that it might cause shortages in India, thereby increasing domestic prices.
4. Lack of proper information on demand and supply has resulted in "cobweb spiral" wherein farmers produce high amounts in one year resulting in price crash, followed by low production (based on previous year's experience) causing high prices.
5. India lacks infrastructure like cold storage etc that are crucial in the supply chain of exports. Indian cold chain storages are concentrated only in a few region like Uttar Pradesh which has 50% of total cold storages in the country.
6. Pulses and Oil make up major imports. Pulses account for 17% of total imports.

India can take several steps to address this problem

1. India should invest in cold storage and warehouses. The union government's efforts to increase FDI in this sector is a right step in this direction.
2. As recommended by Arvind Subramaniam committee report on pulses, India should encourage pulses production by providing appropriate Minimum Support Prices (MSP) and increasing procurement of pulses.

If these steps are taken, India can address the issue of trade deficit in agriculture and contribute towards government's long term goal of doubling the farmers income.

Q7. Discuss the significance of animal-rearing in the light of Union government's plan to double farmers' income by 2022.

(12.5 marks / 200 Words)

The government of India has set itself a target of doubling farmer's incomes by 2022. However, the core agriculture sector has several critical issues that may take time to address. In this context, additional income generated by animal rearing achieves significance.

India has largest bovine population with 14% of world cattle and 53% of world buffalos. Income generated through cattle helps farmers in several ways.

1. **Diversifies farmers' income reducing uncertainties:** There are risks in agriculture due to factors such as climate, soil, market prices, etc.. Livestock provides income support in case of failure of crops.
2. **Provides liquidity to farmers:** Income through agriculture is realised once or twice in an year. Hence, farmers may face cash troubles in between. Livestock through milk etc. gives liquidity throughout the year. For example, AMUL cooperatives in Gujarat have enhanced the economic situation of farmers in Gujarat.
3. **Store value for emergencies:** Land cannot be sold easily during emergencies. Cattle can be sold quickly to get money.
4. **Participation of women:** IRDP (Integrated Rural Development Programme) outlined "more effective utilisation of spare time" in the

context of distributing milch cattle helps women turn their free time into productive time.

However, high percentage of non-descript breeds (80%) is a prime challenge. Government has several initiatives in this regard such as

1. **e-pashuhaat portal** connecting breeders and farmers.
2. **Rashtriya Gokul Mission** to conserve and develop indigenous bovine breeds, part of National Programme for bovine breeding and diary development, and
3. **Gokul grams**, indigenous cattle development centres, to develop indigenous breeds including upto 40% non descript breeds.

If these schemes are implemented effectively, animal rearing can play an important role in enhancing farmers' income.

Q8. Discuss the key challenges in implementing land reforms in India.

(12.5 marks / 200 Words)

Land reforms in India have not been implemented as desired, except in West Bengal and Kerala, due to the following reasons.

1. Lack of political will: Landlords holding huge lands were politically influential and hence tried to stall the process of land reform.
2. Share croppers and agricultural labourers burdened by poverty could not constantly pursue the issue.
3. In the absence of political will, the heavily burdened bureaucracy pursued other priorities, putting land reforms on back burner.
4. Land reform initiatives are constantly challenged in court, which takes a lot of time for delivery of judgments. This has hampered the land distribution process.
5. Absence of correct updated land records also made the job of administrators difficult
6. Lack of funding of land reform initiatives further hampered the programme implementation.

The experience of West Bengal and Kerala have shown that land reforms can be implemented with sufficient political will. Further, land record updation programme should be taken up on Mission mode as it is being currently done in the Telangana state.

Q9. Recently, there has been an increase in railway accidents. Discuss the key recommendations of Kakodkar committee report in this context.

(12.5 marks / 200 Words)

Several incidents of railway accidents were reported in news recently. In this context, the issue of rail safety is of utmost importance.

Kakodkar committee report said that only 15% of all the train accidents are sabotages. The rest 85% of the accidents are due to human or systemic negligence. It recommended the following measures to enhance railway safety.

1. Passenger fares have not been increased in the last decade. All safety margins have been squeezed to save money. This has led to a neglect of infrastructure maintenance. Hence, an independent mechanism has to be established to revise passenger fares.
2. Separation of rule making, operations and regulation of Railway board.
3. Creation of a statutory Railway Safety Authority to oversee operational mode of Railways.
4. Strengthening of Research Design and Standards Organization (RDSO)
5. Adoption of Advanced Signalling System similar to European Train Control System
6. Elimination of all manned and unmanned crossings, and
7. Switch over from ICF design coaches to LHB design coaches.

Indian government has taken several steps to enhance rail safety recently. The institution of Rail Suraksha Kosh, a long term fund of 1 lakh crore, and setting up of a railway research institute in IIT Kharagpur are right steps in this direction. Additionally, government can also levy surcharge on freight to generate money, as recommended by the Sarin committee report.

If all of these measures are implemented, safety in Railways can be enhanced.

**Q10. What is “Swiss challenge method”? How is it different from traditional PPP? Discuss its limitations.
(12.5 marks / 200 Words)**

Swiss challenge method is a form of investment model. Traditional PPP model and Swiss challenge method differ in the process of designing project proposals and inviting bids.

1) Designing proposal: In traditional PPP model, government has to prepare the initial design proposal of a project to invite bids. It requires significant capital and specialised skill. This problem can be taken care of Swiss Challenge.

In Swiss Challenge method, an organisation submits unsolicited proposals to the government on a project that can be done. Government reviews the proposal and takes the decision to pursue it by giving tenders.

2) Bidding procedure: In traditional PPPs, government invites bids for its own proposal. It is slightly different in Swiss challenge method. Bidding in Swiss challenge method can be done in several ways.

- Government can buy the intellectual property rights of the design proposal made by the company and can then invite tenders.
- Government puts the proposal in public domain and requests bids to match the initial proposal. The initial organisation that prepared the proposal can be either given bonus points in the tender process or can be given an opportunity to have the final refusal. Right to final refusal means that the company gets to decide if it wants to match up to the counter proposals. If yes, the initial company gets the bid. If not, others get it.

Examples of Swiss challenge in India are Capital development of Andhra Pradesh, Houses for Pune housing societies, development of 400 Railway stations, and Mega Film Show complex for Jaipur.

Limitations of Swiss Challenge method: It has not shown much success due to the following reasons.

- Initial proposers face uncertainty to invest resources in building proposals because much of it depends on governments.

- Scope for collusion in design of norms.
- Governments can get bad deals when dealing with companies regarding highly technical aspects.
- Court's intervention in the process given the subjectivity involved slows down the process.

Q11. "India has enormous economic potential with its 7500 km long coastline and strategic location in the international trade routes." In this context, discuss the 'Sagarmala initiative' of the Government of India and challenges it faces.

(12.5 marks / 200 Words)

India has large coastline of around 7500km with a huge untapped economic potential and the strategic location of Indian peninsula in the Indian ocean region. More than 2/3rd of global oil trade takes place through the Indian ocean region. Taking this enormous potential into account, the government of India initiated the Sagarmala programme.

Sagarmala and its objectives:

- To promote port-led direct and in-direct development and to provide infrastructure to transport goods to and from ports quickly, efficiently and cost-effectively.
- Establishing CEZ (Coastal Economic Zones) as a component of port led direct development which has various benefits like development of fishing industry, manufacture and export of goods near the ports which reduces delay in the shipment of our goods.
- Modernisation of the existing port infrastructure and development of new ports along the coast enhances the over-all capacity of the ports in India.
- Efficient and integrated development of connectivity from the ports to the hinterland by laying of railway lines, freight friendly express road-ways, development of inland waterways, etc.
- Development of skills of local fishermen and other coastal and island communities to make them a crucial component of this initiative.

However, the implementation of this scheme has various challenges to be addressed like:

- **Geographical/ topographical;** In the eastern coast, there is a huge problem of consistent siltation of the existing ports requiring large-scale dredging operations frequently.

- **Administrative challenges;** multiplicity of agencies involved like various central ministries and state governments and the need of effective co-ordination and co-operation among these agencies. And, there is need for continuous and consistent flow of credit for financial stability.
- **Development led displacement;** majority of the fishermen and their families who live around the coast belong to BPL families and effective rehabilitation and integration of these people in the development process is necessary.
- **Environmental concerns;** the coastal areas of India support large scale bio-diversity like the the Gulf of Mannar marine bio-sphere reserve, and the Bhitarkanika mangroves of Odisha. Any disturbance to this ecology will lead to environmental problems.
- **Security concerns;** even though coastal security has increased post 26/11 terrorist attacks, there are still some voids which are yet to be filled like licenses for fishing boats, growing piracy issues in the neighbourhood of Indian west coast, etc.

In spite of these many challenges, the prospects of port-led development in India are enormous. Tackling these challenges with a multi-pronged strategy involving greater Centre and States cooperation (co-operative federalism), and speedy and timely clearances would accelerate the sustainable development of Indian economy.

Q12. “ Privatisation of Air India is a long overdue step and a significant structural reform in Indian aviation.” Analyse the reasons for privatisation and precautions that should be kept in view.

(12.5 marks / 200 Words)

Air India has about 17% share of traffic on routes linking India to international destinations and 13% of the domestic market. But it has huge debts of about 52000 crores, in spite of repeated attempts to revive it by the government of India.

In a highly competitive Indian aviation industry, Air India cannot continue to be funded by taxpayers to fight private capital. The arguments made for its privatisation are the following.

1. Fragile finances of Air India

2. Private sector has evolved in a much better and stronger manner during the last 2 years, so much so that the air travel is cheaper than roadways in domestic fares.
3. Excessive Government and bureaucratic control
4. Unviable management practices
5. Unlike railways, it does not have any national social service mandate. Hence, it shall aim at profit.
6. Aviation sector will become more competitive

Precautions that should be kept in mind-

Mode of privatisation must be fair and transparent so that right price is realised.

As Air India's current condition requires the government to give a cash incentive to the future buyer, government should make best deal. For this, NITI Aayog recommended that the airline's half liability should be written off and aircraft-related loans, as well as the working capital, should be transferred to the new owner.

Employees interests should also be taken care of.

Q13. "Emerging technologies like industrial robots, artificial intelligence and machine learning have a potential to displace workers on a large scale. In this context, it has been proposed that robots which take human jobs should pay taxes." Critically analyse. (12.5 marks / 200 Words)

The field of robotics is fast developing and is finding applications in every sector of economy. Robots are reliable, flexible, efficient, effective and obedient which improves industrial productivity. However, it can displace the human labour in large numbers leading to unemployment. In this context, the idea of 'Robot Tax' is proposed.

Arguments for -

1. We will be able to spend the money to finance jobs for which humans are particularly suited such as caring of children or the elderly
2. Taxing robots would, in reality, be a tax on businesses that use them.
3. Taxing robots might also help to counteract tax avoidance, because the tax would be calculated by taxing a notional salary paid to the robot, and the company would be allowed to deduct this notional payment for the purpose of corporation tax.?

4. Further, taxing robots will not discourage innovation because the loss is small compared to the gains like efficiency and profits.

6 To allay the fears of unemployment, better way is to tax users of robots than banning them because tax revenue could be used for generating jobs without losing the benefits of robots.

Arguments against -

1. A tax on robots risks **squeezing innovation** out of the system. A high tax on robots would prevent them from being produced.
2. Taxing **technologies is not good as** there are a number of technologies that already make it easier for a human to work, or to work more effectively—for instance, Microsoft Word, mobiles, etc.

Q14. "3D printing is a rapidly developing technology which comes with its set of inherent benefits, but also lags behind traditional manufacturing processes" Explain.

(12.5 marks / 200 Words)

3D Printing is an additive manufacturing process that creates a physical object from a digital design. In an additive process an object is created by laying down successive layers of material until the entire object is created. 3D printing brings a host of benefits than the traditional methods of manufacturing, such as-

1. **Customisation-** 3D printing allows for easy customisation; one only needs to change the design digitally to make changes. Thus it allow for mass customisation — the ability to personalise products according to individual needs and requirements.
2. **Complexity** - 3D printing lets designers create complex shapes and parts – many of which cannot be produced by conventional manufacturing methods.
3. **Tool-less** - Additive manufacturing can eliminate the need for tool production thereby costs, time and labour associated with it.
4. **Sustainable / Environmentally Friendly** - 3D printing is also emerging as an energy-efficient technology that can provide environmental efficiencies because of its manufacturing process.
5. **Less waste** - 3D printing is an additive process; you create an object from the raw material layer by layer. Hence the less waste

However there are a few disadvantages

- 1. Higher cost** - Despite all of the benefits of manufacturing through additive methods, 3D printing is not yet competitive with conventional manufacturing processes when it comes to large production runs.
- 2. Limited strength and endurance** - strength is not uniform due to the layer-by-layer fabrication process.
- 3. Less material choices, colours, finishes** - With 3D printing materials available today – most of which are plastics and metals – the choices are still limited compared to conventional product materials

Q15. "It is a well-established fact that no nation aspiring great power status can expect to achieve it without being substantively self-reliant in defence production." Explain the importance of indigenisation of defence technologies from Indian perspective. Critically examine India's achievements in this regard. (12.5 marks / 200 Words)

Indigenisation refers to replacing an imported item with one that is manufactured within the country. Further, the local manufacturer is expected to understand the technology underlying the product, so as to be able to change, modify, improve or re-design the item as and when he likes.

Indigenisation of technologies is one of the major thrust areas of government

- 1. Cost effective:** Some technology imports are costly and high cost repair and maintenance.
- 2. Inflating Import Bills: increases** outflow of foreign exchange thus increasing the balance of payment liabilities, CAD, exchange rate.
- 3. Earnings through Exports**
- 4. Employment creation**
- 5. Avoids Scams-** Agusta Westland, Bofors, etc.
- 6. Independence in Foreign Policy**
- 7. Matter of National Pride**
- 8. National Security**

Achievements of indigenisation in Defence sector are as follows:

1. **Tejas** - a fourth-generation light combat aircraft taken more than two decades and costed crores of rupees. Even after the completion, armed forces were not enthusiastic about induction of these aircrafts because it does not possess recent advancements in aircraft technologies. However, as a result of negotiations between forces, DRDO and government the aircraft was given 1st level clearance. DRDO is not able to develop its indigenous Kaveri engine.
2. **Arjun Tank** project was sanctioned in late 1970s, it was rolled out for trial in few years ago. Even after all these years it is said to be too heavy to use in actual war operations. Now DRDO is working on using composites to reduce the weight.
3. **Arikant** First indigenous nuclear submarine was developed in association with BARC by DRDO. But it has insufficient fuel inventor because of which it cannot go for long deployment and further improvements are necessary.
4. **AGNI V** has given India the status of intercontinental ballistic missile (ICBM) holder country in 2013 though the project on integrated guided missile development was started in 1983. This along with dhanush, nirbhaya, prithvi, akash missiles has improved our deterrence.
5. **INS Vikrant** - India's first indigenous Aircraft carrier is under sea trials.
6. **K-4/K-15** - submarine-launched ballistic missile
7. **BRAHMOS**, a supersonic cruise missile developed with Russian collaboration, is one of the best in its class, X under what category does the developed Brahmos comes? and air, land and water variants are under development.

Thus, inspite of several achievements, India continues to be major importer of arms. Our indigenous efforts have been criticised due to cost escalations and breach of time-limit one after another.

Q16. In the recent past, the role of NGOs in disaster management (DM) has started changing from providing post-disaster relief to strengthening pre-disaster preparedness and mitigation. Explain.

NGOs have been playing a significant role in providing humanitarian assistance to disaster-affected people in most of the severe disasters like the Hud-Hud cyclone, Uttarakhand flash floods, Assam floods, etc. However, in the recent past, NGOs are involved in strengthening pre-

disaster preparedness and mitigation through capacity building, public awareness campaigns, mock exercises, workshops and conferences.

NGOs are powerful advocacy institutions and would collaborate with the Government in reviewing various sectoral policies to ensure that Disaster Preparedness concerns are addressed.

It identifies available resources and capacities within the community to overcome vulnerabilities and address risks and build the capacities of the community (Disaster Management Committees & Task forces) and other government officials at district and state level to undertake activities in various thematic areas which will result in the integration of the same in the Disaster Management or other departmental plans and may also facilitate preparation of the Plans by involving the local communities and the Panchayat Raj Institutions.

NGOs with their long standing experience in the areas of community mobilisation, social inclusion and participatory approaches become effective partners of government action planning and ensure that the developmental planning in a vulnerable geography is inclusive for all resident and dependent communities regardless of their identity (caste, gender and ethnicity), economic backgrounds and physical abilities, to prepare and respond adequately to disasters.

Awareness campaigns like safe construction, school safety, personal health and hygiene, environment management, maternal health, food and nutrition, and overall sustainable development are key areas of NGOs operations. NGOs use local folk media besides using other modes of communications for the awareness campaigns.

NGOs have also started to collaborate with corporate entities in Public-Private Partnership (PPP) projects and Corporate Social Responsibility (CSR) initiatives in the field of DM at State, District and Sub-district levels.

But lack of transparency and accountability in NGOs has placed a question mark in their vision and mission. Further the role of NGOs in disaster preparedness and mitigation depends on citizen participation and diversity in Indian society in terms of caste, creed and religion act as a barrier for development of proper coordination between citizen and government with NGOs as a mediator.

Q17. What are Intended National Determined Contributions (INDCs). Discuss the challenges of India in meeting its commitments under INDCs and suggest suitable measures in this regard.

(12.5 marks / 200 Words)

Intended National Determined Contributions are the targets set by the countries and conveyed to the UNFCCC (United Nations Framework Convention for Climate Change) to address the challenge of climate change at their domestic level. These targets are not binding and they will be revised after 5 years i.e. in 2023.

The important **Indian INDCs are** (1) Reduction of emission intensity of its GDP by 33-35 % by 2030 from 2005 levels. (2) Creation of additional carbon sink of 2.5 to 3 billion tons of CO₂ equivalent by additional forest cover. (3) Generation of around 40 % cumulative power installed capacity from non-fossil fuel resources by 2030.

Challenges :

1. **Development-environment dichotomy:** India, being a developing nation with significant population below poverty, needs to address its own developmental aspirations. For instance, due to the increasing demand for land in India for urbanisation, industrial purposes, etc., we are witnessing loss of forest cover at a rapid pace. In this context, achieving INDC commitments is a challenging task.
2. **Financial crunch:** It is estimated that approximately US \$ 2.5 trillion are needed to meet our INDCs. The existing mode of resource mobilisation is not adequate to meet these targets.
3. **Transfer of technology :** The renewable energy technology is capital intensive, and the issue of intellectual property rights further complicates the technology transfer to India.
4. **Role of private sector and civil society :** There has to be a broad set of direction in order to synergise the efforts of all the stakeholders, where there are bound to be differences. Hence, arriving at a consensus among them is a pre requisite for to realise our INDCs goals.

Suggestions :

1. **Financial aspects :** Issuing of Green bonds, laying of Green Cess on the lines of Krishi Kalyan cess, rising the levies on coal products, and making the carbon market under Clean Development Mechanism more attractive are a few domestic measures. Seeking

financial support from global organisations like New Development Bank, Green Climate Fund, etc. can supplement domestic efforts.

2. **Institutional reforms** : Carry out capacity building measures for agencies that are associated with the climate change, forest, renewable energy departments, etc.
3. **Allocate more funds and collaborate with academia, and private sector** to develop cheaper and efficient renewable energy technologies.
4. **Forest cover** : Effective utilization of funds from CAMPA to carry out afforestation, and minimisation of diversion of forestland have to be pursued. Green India initiative is a right step in this direction.
5. **Creation of awareness** : Environmental awareness among the people is needed which can be facilitated with association of NGOs, media, etc. as their participation is vital.

Q18. "The responsibility of ensuring peace and security within India is divided between States and Union. This fragmented system has contributed enormously to the evasion of responsibility by both the Union government and the States." Elaborate.

Union

The Union Government has the constitutional authority to seize control of a state on the grounds of breakdown in public order under Articles 257, 258, 365, and 356, and a national emergency can also be declared under Article 352, if "a grave emergency exists whereby the security of India or of any part of the territory thereof is threatened, whether by war or external aggression or armed rebellion."

State

Responsibility for maintenance of "public order" and "police," under List II of the constitution (the State List), is, however, vested in the various state governments.

Thus, responsibility of ensuring peace and security within India is divided between the States and Union. This division of responsibility has created a fragmented system that has contributed enormously

1. to the evasion of responsibility by both the union government and the states, and
2. an enduring neglect of the internal security apparatus.

The **lack of sustained investment in and the neglect of** the transforming role of the police within a modernising state system have enormously compromised the capacities, efficiency, and effectiveness of state police organisations.

Constant political interference and a subordination of legal mandate to partisan political objectives have undermined the ability of the police to deal effectively with internal security problems.

This situation of the state police has resulted in a constant cry for central assistance and the deployment of increasing numbers of Central Paramilitary Forces (CPMF) in local disorders across the country.

**Q19. "Cyberspace is evolving to become fifth potential theatre of war along with land, sea, air and space. However, there are several reasons that complicate the task of securing cyberspace compared to the other theatres of conflict." Explain.
(12.5 marks / 200 Words)**

Cyberspace is the term used to describe the virtual world of computer networks. Cyber security involves securing the physical infrastructure (undersea cables, fiber networks, data servers, etc.) that enables setting up and usage of communication networks and protecting the data that is stored, manipulated and transmitted through these networks. The task is particularly complex for the security services as cyberspace differs from other conventional arenas of conflict in following ways:

1. The national territory (land, air and sea) that is being defended by the military forces is well defined. Cyberspace is inherently **international** . It has no boundaries to defend.
2. The global Internet system, a key part of cyberspace, is still under **the control of one country** (USA). Hence national defence and international cooperation are inevitably intermeshed.
3. In cyberspace it is **very easy for an attacker to cover his tracks** and even mislead the target into believing that the attack has come from somewhere else. This difficulty in identifying the perpetrator makes it difficult to rely on the capacity to retaliate as a deterrent.(offers anonymity)

4. **The costs of mounting an attack are very modest.** The above two factors make cyberspace an ideal vehicle for states and non-state actors who choose to pursue their war aims
5. The technologies that are used in cyberspace are still very **new and are evolving rapidly.** Hence investing in technological capacities to keep track of global developments, developing countermeasures and staying ahead of the competition is as central to the defence of cyberspace.

In the recent past, besides Internet, many networks facilitating governance, financial institutions, security and service delivery have been setup like NATGRID, SWAN, NKN, NOFN, etc. So it's imperative that Government takes all necessary steps to secure the cyberspace. The recent implementation of cyber security policy and digital army are steps in right direction.

Q20. Effective implementation of land reforms might have acted as a deterrent in the spread of Naxalism in India. Do you agree ? Substantiate.

(12.5 marks / 200 Words)

Naxalism can be traced back to Naxalbari peasant uprising in 1967 demanding for fair, transparent and equitable land distribution. Successful implementation of land reforms in the state of Kerala by leftist government is often cited as the reason for failure of naxalism in the state.

Though the armed struggle has started off demanding swift land reforms, there are several other contributing factors for spread and persistence of naxalism menace in India. Some of them are:

1. **Displacement due to developmental projects** like multipurpose dams, mining and industries especially in tribal areas, poor rehabilitation and resettlement packages of the affected people, etc.
2. **Alleged human rights violations** by security forces, police and outfits like Salwa Judum resulted in discontent among people.
3. **Governance deficit** in these areas with poor physical and social infrastructure, further alienated the people .
4. **Ineffective implementation** of legislative measures like Panchayats (Extension to Scheduled Areas) Act, Forest Rights Act, etc.

Today naxalism is spread over 40 per cent of India's geographical area with tribal heartlands of three geographically contiguous states of Orissa, Jharkhand and Chhatisgarh, sitting on plentiful reserves of coal, iron ore, aluminium, manganese, etc, are mainly affected. They seem to have infiltrated universities too.

Naxalites are fighting for tribal rights in these areas which go beyond land. Thus, though land reforms could mitigate the problem of left wing extremism to an extent, only comprehensive approach to curb the discontent and ideologically defeat of Maoism would end Naxalism in India.