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GENERAL STUDIES (TEST CODE : 1072)

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Medium Eng./Hindi	ENGLISH	Registration Number	146733
Center	ONLINE	Date	16-09-2018

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		
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- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
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- There are TWENTY questions printed in ENGLISH & HINDI
bl dhl izu g vath vj fgh aNs gA
- All questions are compulsory.
lhn izu vfuKZ gA
- The number of marks carried by a question/part is indicated against it.
lRsd izuK d v d ml d lKus fn, x, gA
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
lR d d mjk mlh d e; e a fy lK tks pfg, ft ldk mYsk vk d isK lK a fd; k x; k g vj ml d e; e dk Li'V mYsk izu l g mjk (Dwlh,) iqrk d a; i'B ij vdr fufzV lRku ij fd; k tkk pfg. Amfyf lR d e; e d vfrfDr v; fd lh d e; e a fy, x, mjk ij dKZ v d uga fey aA
- Word limit in questions, if specified, should be adhered to.
lR d a 'Kn lhdj tg; fofufzV g dk v d j. k fd; k tkk pfg, A
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
mjk iqrk a lKyh Nk gk i'B ; kml d v k d Li'V : i l dK tkk pfg, A

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Explain why it is important to urgently address the problem of poor land records and infirmity of land titles in India. Also discuss how this problem can be addressed. (150 Words) 10

ब्याख्या कीजिए कि भारत में खराब भू-अभिलेखों एवं भूमि अधिकारों के सुदृढ़ नहीं होने की समस्या का तत्काल समाधान करना क्यों महत्वपूर्ण है। साथ ही, चर्चा कीजिए कि इस समस्या का समाधान किस प्रकार किया जा सकता है।

Irregularly maintained land records and infirm land titles calls for urgent addressal of the issue.

REASON :-

- (i) Property disputes : According to NITI Aayog's India Action Plan, such poor record maintenance results into 2/3rd property disputes in the courts.
- (ii) Long litigation : Such disputes take 20 years on an average to resolve.
- (iii) Delay in land acquisition : This results in lower rank in Ease of Doing Business (100).
- (iv) Impact on agriculture : Much of the land lies idle due to disputes. It also results in degradation.
- (v) Results in Benami Transactions due to absence of adequate regulations.

- (vi) Lack of investment in projects like
Smart cities, which needs land.

SOLUTIONS

- (i) Digitisation of land records
eg. Bhoomi Project in Karnataka
- (ii) Land Titling law as proposed.
- (iii) Cooperation b/w Centre and state is
required for uniform policy as land is
a state subject.
- (iv) Use of Big data to detect any fraud
transactions.

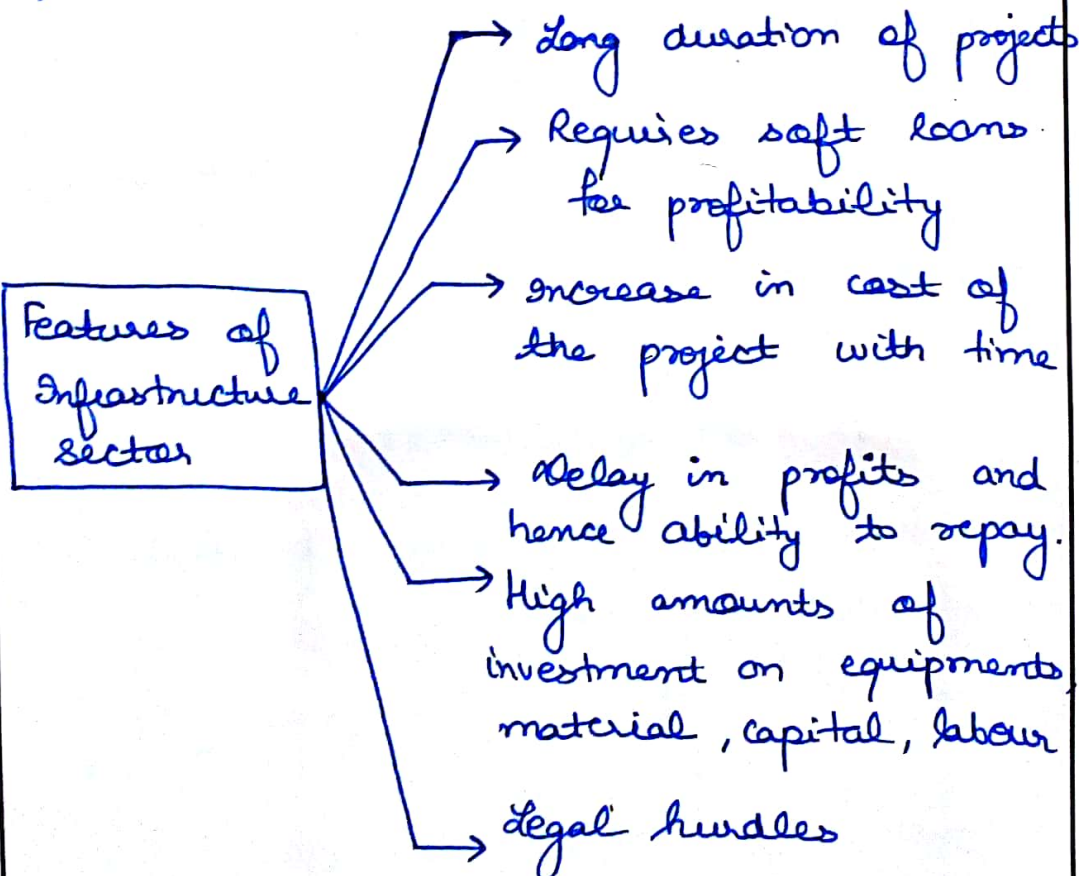
These steps will ensure that land -
a scarce resource is used efficiently
and effectively.

2. What are the special features of the infrastructure sector that make its financing a challenge? What measures have been taken to facilitate adequate amount of finance to this sector?

(150 Words) 10

अवसंरचना क्षेत्र के वे विशेष लक्षण क्या हैं जो इसके वित्तियन को चुनौतीपूर्ण बना देते हैं? इस क्षेत्र में वित्त की पर्याप्त उपलब्धता को सुनिश्चित करने के लिए कौन-से उपाय किए गए हैं।

India requires \$6 billion investment in Infrastructure from 2016-30 for it to show high rates of economic growth. But financing is a challenges in Infrastructure sector: —



These features make financing a challenge.

Measures taken to facilitate finance :-

- Use of soft loans from countries like Japan.
- Creation of National Investment Fund (NIF)
- Easy KYC Norms for credit for the sector.
- Use of Viability Gap funding through adequate participation of private sector.
- Reducing logistics cost which accounts for 14.4% of costs.

Way Forward :

Infrastructure is the backbone of the economy. It must be adequately supported to reap maximum benefits.

3. Despite favourable circumstances, India's electronics manufacturing has been unable to respond to the rising demand. Discuss. What steps can be taken to address this situation? (150 Words) 10

अनुकूल परिस्थितियों के बावजूद, भारत का इलेक्ट्रॉनिक विनिर्माण बढ़ती मांग के प्रति प्रतिक्रिया करने में असमर्थ रहा है। चर्चा कीजिए इस परिस्थिति को संशोधित करने के लिए कौन-से कदम उठाए जा सकते हैं?

India's electronics sector is one of the sunrise sectors. There are many favourable conditions for its growth.

- High demand with growth rate > 8%
- Government's Boost through 'Make in India'.
- 100% FDI allowed in the sector.

However, it is unable to respond to demands.

- Less than 1% FDI in the sector.
- Presence of duty inverted structure that favours more imports of finished products.
- Lack of raw materials like lithium.
- Dumping by countries like China
- Strict environment laws for e-waste.

To address this issues, following

Steps need to be taken:-

- Increase in co-operation with countries of Central Asia for ^{cheaper} imports of raw materials.
- Rationalising the duty structure to leverage the domestic industry.
- Ease in doing business to increase FDI in the sector.

Such steps will ensure that electronics sector is able to plug the loopholes in supply-demand imbalance

4. Despite registering a high growth rate in the post-reform era, India continues to witness a high incidence of poverty. Explain this paradox and suggest ways to resolve it. (150 Words) 10

आर्थिक मुद्धारों के बाद की अवधि में उच्च संवृद्धि दर दर्ज करने के बावजूद, भारत लगातार निर्धनता की अति व्यापकता का साक्षी रहा है। इस विरोधाभास की व्याख्या कीजिए और इसका समाधान करने के उपाय सुझाइए।

India's growth rate post LPG reforms has been a paradoxical growth.

High growth rate

- 6th largest economy of the world
- ~7.3% annual growth rate of GDP.
- >\$400 billion forex reserves

High poverty

- Poverty line at ~21.3% (TENDULKAR COMMITTEE)
- According to UNDP, >50% Population is multidimensionally poor.

REASONS

- Unequal sharing of benefits : According to Oxfam Report 2018, top 1% holds 73% wealth in India.
- Failure in trickle down policy
- Failure of too pro-poor schemes

- Agriculture sector which employs ~45.7% population is witnessing one of the lowest growth rates of 3.4%.
- High rates of unemployment due to mismatch of skills.

WAYS TO RESOLVE

- Idea of Universal Basic Income as suggested by ES 2016-17 can be explored.
- Greater focus on sectors like Agriculture, MSME which are labour intensive.
- Universal access to Health, Education
- Greater levels of skilling

Removal of Poverty is necessary for India to have a sustainable growth. It will also help in fulfilling SDG Goal-1.

5. In light of the argument that India has entered a regime of "permanent surpluses", discuss whether the time has come to remove agricultural commodities completely from Essential Commodities Act. (150 Words) 10
- इस तर्क के आलोक में कि भारत "स्थायी अधिशेषों" के युग में प्रवेश कर गया है, चर्चा कीजिए कि क्या कृषि जिनमें को आवश्यक वस्तु अधिनियम में पूर्णतया हटा देने का समय आ गया है।

with huge investments in agriculture through policies like Green Revolution, Minimum Support Price etc; India today is a food surplus country.

However, legislations like Essential Commodities Act, 1955, do not address the case of such surpluses.

- ↳ These put restrictions on storage amount of foodgrains.
- ↳ It doesn't distinguish between retailers, exporters, processors.
- ↳ It also puts restrictions on imports / exports.

Such an act prevents the agriculture

sector to realise its full potential.
On this light,

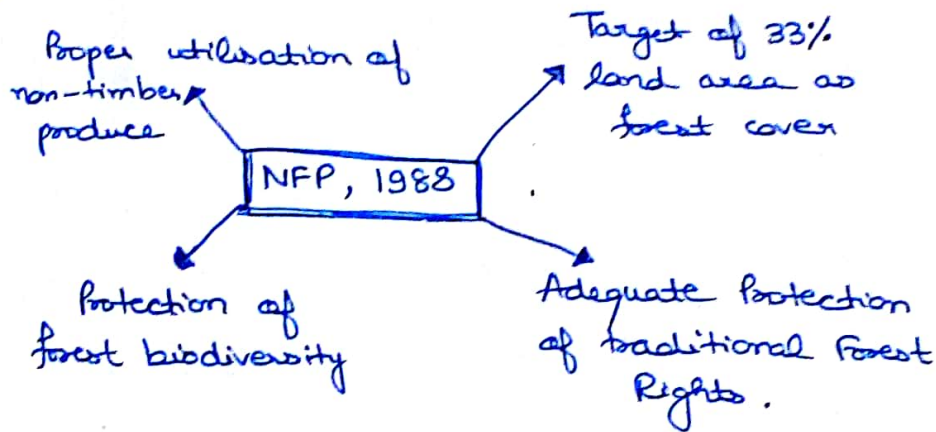
- NITI Aayog has suggested to exclude agriculture commodities to be removed from its ambit.
- Agriculture commodities can instead be better regulated under Blacka marketing Act
- This will give a push to food processing - currently growing at $>10\%$
- This will help in adopting the "income-oriented" approach, rather than "production oriented".

Thus, this Act needs to be relaxed into. It doesn't take into account contemporary realities.

6. The 1988 National Forest Policy (NFP) was visionary in its scope and ambition. However, there is a need for a new forest policy in the current context. Discuss. (150 Words) 10

1988 की राष्ट्रीय वन नीति (NFP) अपने विषय-क्षेत्र और लक्ष्य की दृष्टि से दूरदर्शी थी। हालांकि, वर्तमान संदर्भ में एक नवीन वन नीति की आवश्यकता है। चर्चा कीजिए।

Recently, National Forest Policy (2018) is proposed, replacing National Forest Policy (1988)



Need for new forest policy :

1. Outdated policy of 1988 doesn't address the present concerns of climate change, land degradation etc.
2. Failed to meet objectives : According to India Forest Survey Report 2017, India has only ~21.4% forest cover, which is way less than the target.

3. Not in line with Forest Rights Act, 2006
which was enacted later.
4. Absence of regulatory body and
feeling of alienation with present
bureacracy.
5. Increase in incidence of forest fires by
more than 50%. These were not addressed
in this policy.

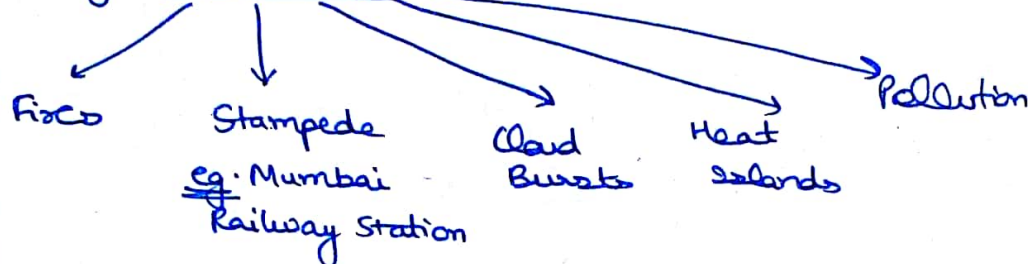
Forests act as a resource for raw material, carbon sink, livelihood etc. Their adequate protection is of utmost importance. Therefore, National Forest Policy, 2018 was enacted.

7. How does rapid urbanization increases the vulnerability to major disasters? Explaining with examples, suggest measures to develop disaster-resilient cities. (150 Words) 10

द्रुत शहरीकरण प्रमुख आपदाओं के प्रति सुभेद्यता को कैसे बढ़ाता है। उदाहरणों के साथ व्याख्या करते हुए, आपदा-प्रत्याम्भ शहरों का विकास करने के उपाय सुझाइए।

According to UN, ~68% Population is expected to live in urban areas by 2050, as compared to ~55% today.

Such, rapid urbanisation results into many disasters :-



Reasons for increased vulnerability

- Huge Population pressure results into heavy crowding
- Encroachments of wetlands, forest land
- Excessive usage of energy.
for eg. New York uses same energy in 1 week as Zimbabwe in 1 year
- Absence of resilient infrastructure.

Incidents like dust storm in Delhi, Fire in Mumbai's Restaurant in 2017 etc. highlights vulnerability to disasters.

Measures to be taken

- Adequate buffer lands in the form of wetlands, forests and prevent their encroachment.
- Regular checks of electricity lines.
- Effective crowd management.
- Capacity Building by availability of adequate personnel, equipments.
- Awareness of citizens by providing to-do manual in case of disasters.

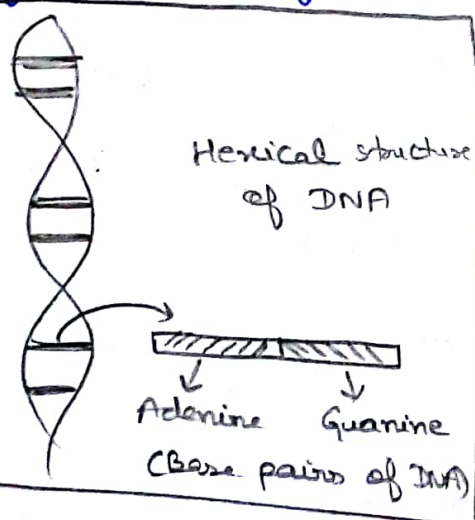
Way forward

For India, to truly realise the goal of "Smart cities", it must be disaster-resilient. This will help in achieving the goal SDG - Goal - 11.

8. Explain DNA profiling and highlight its forensic application. Also discuss the significance of DNA Technology (Use and Application) Regulation Bill, 2018 in this regard. (150 Words) 10

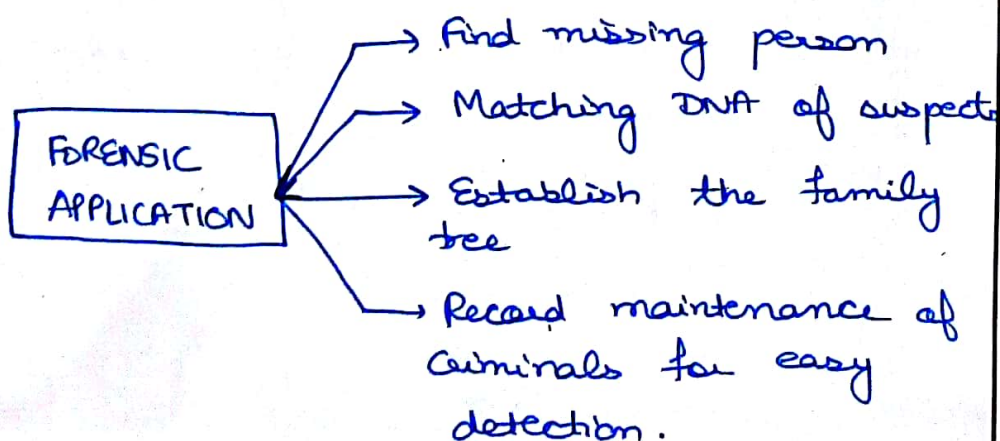
डीएनए प्रोफाइलिंग की व्याख्या कीजिए और इसके फॉरेंसिक अनुप्रयोग पर प्रकाश डालिए। साथ ही, इस संवंध में डीएनए प्रौद्योगिकी (प्रयोग और लागू होना) विनियमन विधेयक, 2018 के महत्व पर चर्चा कीजिए।

DNA Profiling means tracing the history, identity etc. of a person using his/her DNA and collecting all the possible information of that person.



Every person has different genetic material (DNA) due to huge possibilities of base-pairing.

This makes it easier for DNA profiling.



Significance of DNA Technology Bill, 2018

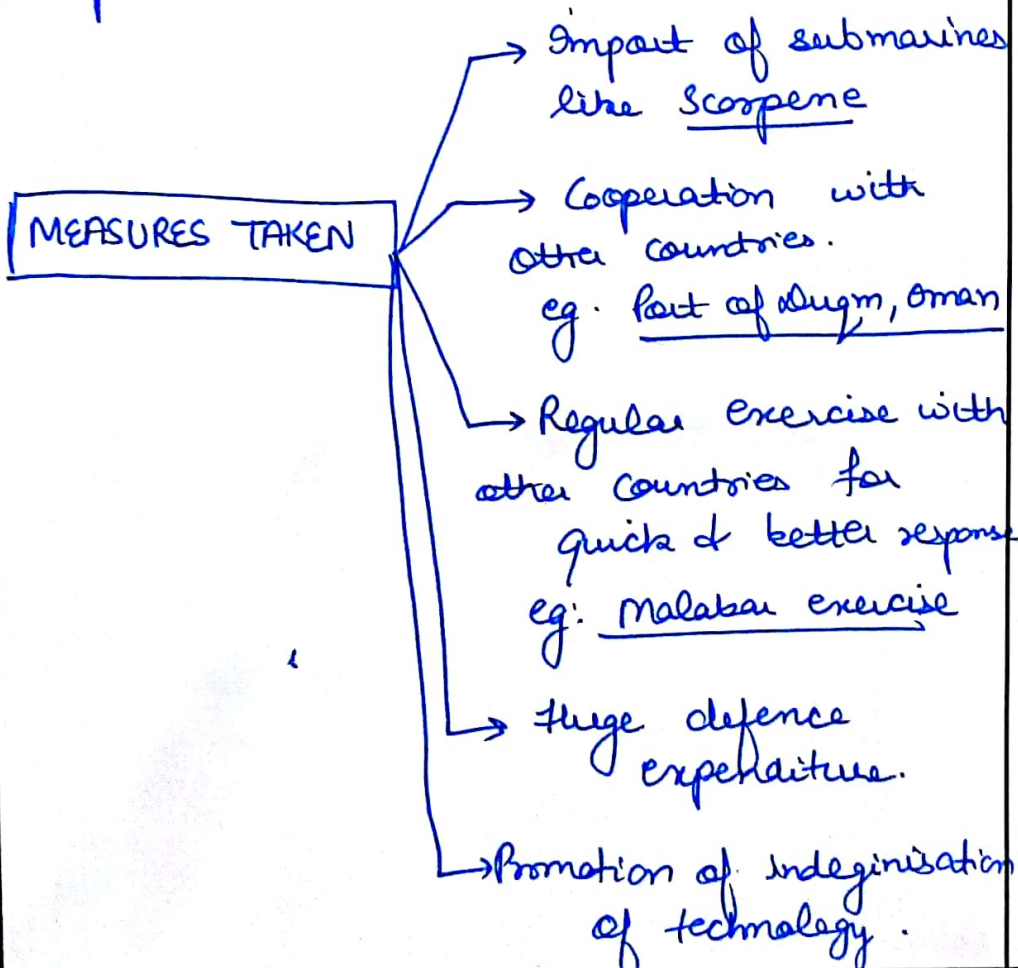
- DNA data banks : At national , state levels to store the relevant information.
- DNA Regulatory Board to ensure proper implementation of the Rules.
- Balance between Privacy and DNA Profiling
- will help in Increase in Conviction Rate which currently stands at 47%.
- Reduce the time of investigation.
- Help addressing the issue of rehabilitation of missing persons.

This Bill has the potential to bring revolution in both technology sector as well as criminal justice system. It must be properly leveraged.

9. What is meant by the term Blue Water Capabilities? In this context, identify the key measures that have been undertaken to enhance the blue water capabilities of the Indian Navy. (150 Words) 10

ब्लू वाटर क्षमताएँ पद का क्या अर्थ है? इस प्रसंग में भारतीय नौसेना की ब्लू वाटर क्षमताओं का संवर्द्धन करने के लिए किए गए प्रमुख उपायों की पहचान कीजिए।

Blue Water Capabilities refers to the capabilities of Armed Forces to secure domestic and international waters through adequate use of technologies, manpower etc.



Due to rising territorial aggression by China through its policy of string of pearls, Blue capabilities need to be enhanced at much higher levels. This will ensure security of the entire nation.

10. Identify the factors that make India vulnerable to drug trafficking? Also discuss the key steps taken to deal with it in our country. (150 Words) 10

उन कारकों की पहचान कीजिए जो भारत को ड्रग तस्करी के प्रति सुभेद्य बनाते हैं? साथ ही, हमारे देश में इसमें निपटने के लिए उठाए गए प्रमुख कदमों की चर्चा कीजिए।

In 2017, drugs worth 3700 crore were caught off the Coast of Gujarat. This highlights huge vulnerability of India to case of drug trafficking.

REASONS	STEPS TO BE TAKEN
i) <u>Large coastline</u> of 7500 km, this makes it easier for trafficking.	i) Proper patrolling of the borders and identifying the most used hotspots.
ii) Closeness to <u>Golden Crescent</u> and neighbours like Pakistan.	ii) Greater cooperation with these countries to control the menace.
iii) Increased demand among <u>youth</u> to address their frustrations due to unemployment, competition etc.	iii) Awareness to young children and their parents on harmful use of such drugs.

(iv) Rise in terrorism, extortionism who use this as a source to earn income.

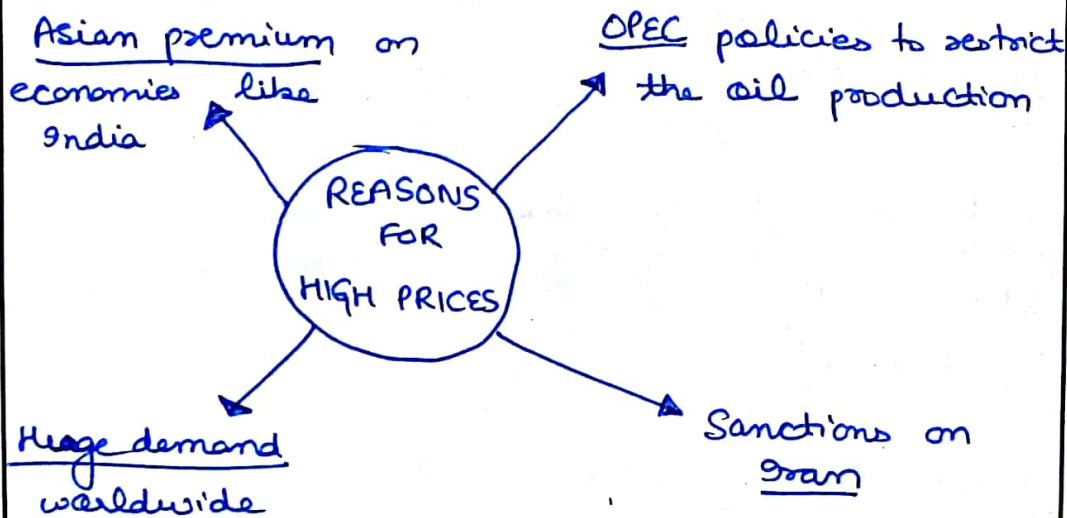
(iv) Control on such activities as done through proper surveillance, guarding the border, demonstration etc.

Though many steps have been taken but needs to be done to completely resolve the issue.

11. How do higher global crude oil prices affect the Indian economy? What steps can be taken to gradually insulate India from global oil price volatility in the long term? (250 Words) 15

कच्चे तेल की उच्च वैश्विक कीमतें भारतीय अर्थव्यवस्था को कैसे प्रभावित करती हैं? दीर्घावधि में भारत को वैश्विक तेल की अस्थिर कीमतों से सुरक्षित करने के लिए उत्तरोत्तर कौन-से कदम उठाए जा सकते हैं?

on the past few months, oil prices have almost becomes 1.5 times.



Such high prices have huge impact on Indian economy : —

1. Inflation : Since oil is raw material for energy sector, transportation etc, it has fall off impact on every other sector.
2. Current Account deficit : which has risen to > \$16.5 billion due to increase in

import expenditure. India meets 80% of its crude oil needs through imports.

3. Weakening Rupee : Increase in dollar demand to buy the oil weakens the rupee. It has recently become worst performing currency of Asia.

4. Affect on foreign reserves

5. Reduced demand in economy due to rising inflation. It also results in unemployment.

6. Affect on sectors like Aviation which have 40% costs of turbine fuel. This makes movement of people more costly.

STEPS that can be taken : —

1. National Energy Policy aims to reduce oil imports by 10% by 2020. ~~It~~ It must be adequately followed.

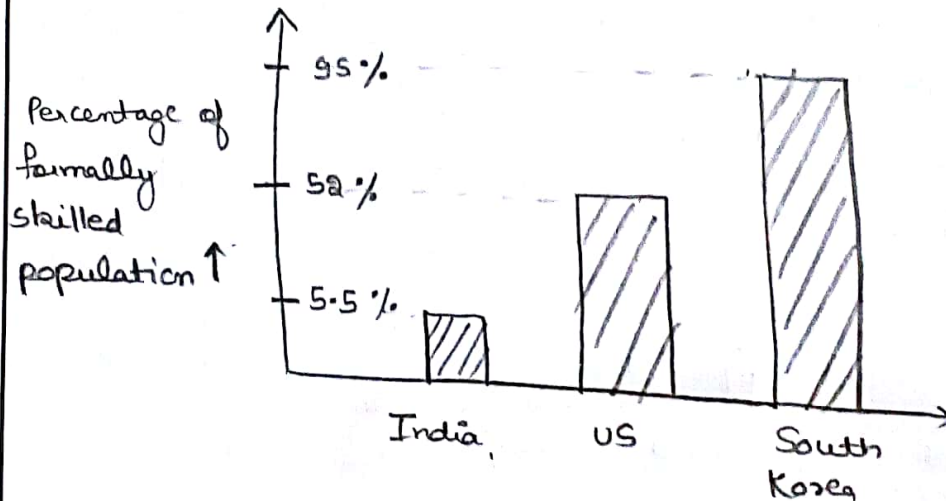
2. National Biofuel Policy, 2018 can be leveraged to produce Biofuels like Bio-diesel, Bio-CNG using surplus foodgrains, Municipal waste etc.
3. Lowering the Asian Premium by collective bargaining by Asian countries.
4. Faster work on projects like extraction of Petroleum oil in South-China Sea by collaborating with countries like Vietnam.

Thus, dual approach of increasing domestic Competencing and lowering imports can help India in shielding itself from global oil price volatility.

12. Critically discuss the role of private sector in skill development in India in recent years. In this context, what are the measures required to improve oversight as well as financing in the skill development sector?
(250 Words) 15

हाल के वर्षों में भारत में कौशल विकास में निजी क्षेत्र की भूमिका की समानोचनात्मक चर्चा कीजिए। इस संदर्भ में, कौशल विकास क्षेत्र में निरीक्षण और साथ ही वित्तीयन में सुधार के लिए कौन-से उपाय आवश्यक हैं?

According to NSSO Report, India has very poor record of formal skill training as compared to other countries.



POSITIVE ROLE OF PRIVATE SECTOR

- Enhancing capacity of state in providing skills.
eg. internships by companies.
- Use of CSR funds to provide skills.
eg. e-Choupal to help farmers.

NEGATIVE ROLE

- Less industrial partnerships with colleges, universities result in lack of required skills.
FICCI Survey has said that only 16% graduates have required industrial skills.
- Regional, gender imbalance by cherry-picking some regions and excluding women from skill development.
- Non-adherence to Government's guidelines on mandatory apprenticeships to be provided.

Thus, private sector has failed to provide adequate levels of skill development.

MEASURES REQUIRED
TO IMPROVE OVERSIGHT

- 3rd party audits to ensure compliance
- Tax benefits on completion of targets
- Follow up on objectives
- India Skill Dev. Service

**MEASURES TO
IMPROVE FINANCING**

- Skill sector can be granted Priority sector status
- Dedicated fund with contributions from CSR.
- PPP for opening skill development institutions

Way Forward :

Economic Survey 2016-17 has said that 65% population of India is under 35 years. Both Private and Public sector need to show high levels of collaboration to prevent such demographic dividend turning into demographic disaster.

13. The e-commerce sector has been booming in India for the last few years. Examine the need for its regulation in light of the recently proposed draft e-commerce policy. Further, identify the challenges that the sector is currently facing.

(250 Words) 15

ई-कॉमर्स क्षेत्रक विगत कुछ वर्षों से भारत में तेजी से बढ़ रहा है। हाल ही में प्रस्तावित ड्राफ्ट ई-कॉमर्स नीति के आलोक में इसके विनियमन की आवश्यकता का परीक्षण कीजिए। साथ ही, इस क्षेत्रक द्वारा वर्तमान में सामना की जाने वाली चुनौतियां की पहचान कीजिए।

India's e-commerce sector today stands at value of \$25 billion, which is expected to increase to \$200 billion by 2030.

~~NEED FOR A NEW e-commerce policy~~

Need for its regulation :-

1. Currently it is regulated by multiplicity of Government regulators and departments.

↳ Draft e-commerce policy assigns this ^{central} task to 1 Consumer Protection Authority.

2. Traditional retailers have faced issue of price cartelisation by ^{deep} pockets pricing.

↳ Draft Policy restricts on influencing prices, price distortions and provide level playing field.

3. There have been many incidents of consumer dissatisfaction as bricks, soaps etc. sent instead of desired product

↳ New Policy provide proper route for grievance redressal.

4. Many companies form a group. This might lead to misuse of offers etc.
eg. Recent acquisition of flipkart by Walmart

↳ Draft Policy provides adequate provision for Competition Commission of India to take steps.

Therefore, there is a proper need for regulation of the sector and draft e-commerce policy adequately addresses it.

Challenges of the sector

1. FDI is not allowed in case companies own the inventories.
2. Cannot sell in-house brands.

3. Prices are made artificially higher.
4. Declining quality of product.
5. Grievances of local retailers against e-commerce.
6. Monopoly creation.
7. Misuse of consumer data.
8. Frauds etc.

Way Forward :

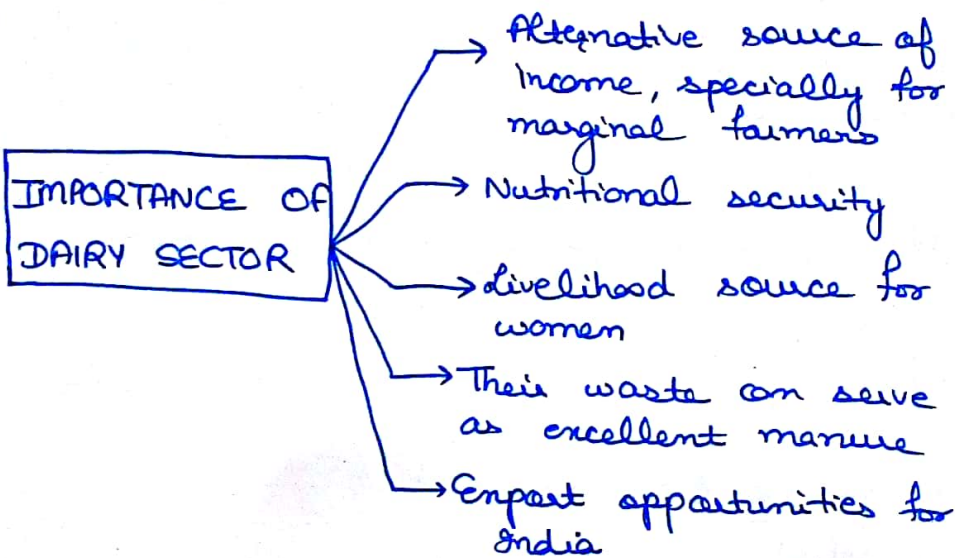
To address the challenges of the sector, Commerce Ministry's recommendations can be followed :-

- Use of Artificial Intelligence to detect frauds
- Local storage of data.
- 49% FDI allowed if 100% Make in India Products.

14. Explaining the importance, highlight the achievements of dairy sector in India. Examine whether over-production is the reason for the problems being faced by the dairy industry. Give some solutions to address the problems. (250 Words) 15

भारत में डेयरी क्षेत्र के महत्व की व्याख्या करते हुए, इसकी उपलब्धियों पर प्रकाश डालिए। परीक्षण कीजिए कि क्या अति-उत्पादन डेयरी उद्योग द्वारा सामना की जा रही समस्याओं का कारण है। इन समस्याओं को दूर करने के लिए कुछ उपाय सुझाइए।

Despite having ~2.3% world's land area, India is home to ~10.2% livestock. Such livestock offers great opportunities for dairy sector of India.



Achievements :

- India is the largest milk producer in world.
- Animal rearing contributes 4% to GDP, out of which maximum contribution is by dairy sector.

Over-production as the reason for problems

- It results in lower prices, thus reducing incentives to the sector.
- It leads to wastage due to high perishability and inability to store large quantities.

Over-production is not the main reason:-

- Domestically and globally, there is increase in demand as well as the prices. So, overproduction is not an issue.
- Issue lies with less usage of export opportunities. India exports only 0.3% of its milk production, as compared to New Zealand, which exports 25% of its production.
- Low utilisation of value-addition i.e. food-processing. This would otherwise have increased the shelf-life of product.

- Lack of skills among farmers to increase the productivity of animals.

STEPS TO BE TAKEN

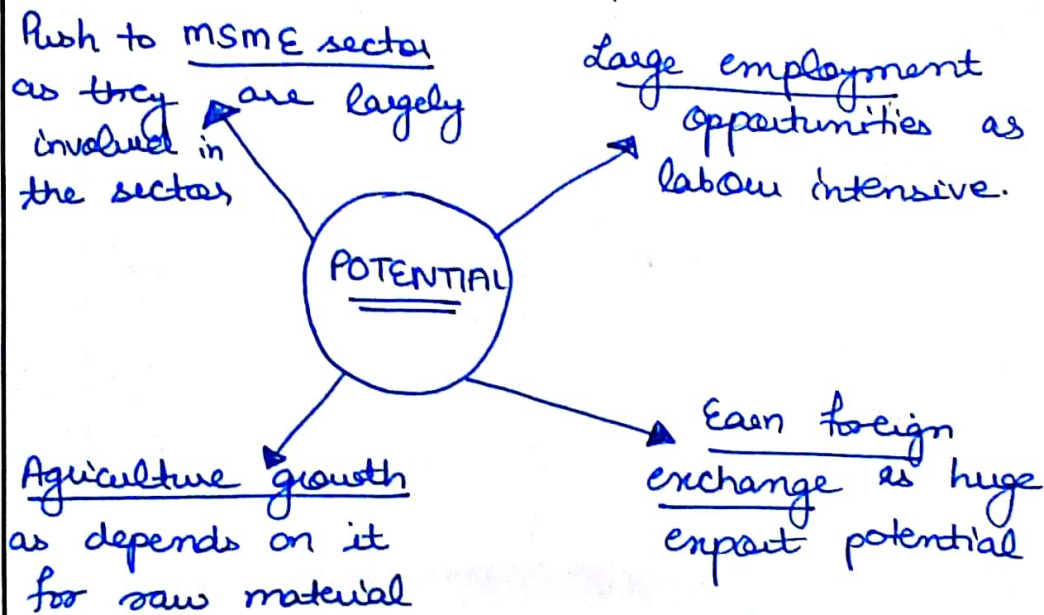
- e-Pashuhaat can effectively utilized to meet demand-supply needs.
- Dairy Infrastructure Development Fund (DIDF) created under Budget 2017-18 can be used for capacity building.
- Direct linking with industries for greater levels of food processing.
- Increasing productivity of indigenous breeds through cross-breeding.
- Cheap and indigenous technologies for better cold storage.

These steps will provide a much needed push to the dairy industry.

15. There has been a focus on Textile and Apparels industry in India in recent years. Elaborate the potential of this industry and the challenges that lie in achieving it. What steps have been taken in this regard? (250 Words) 15

हाल के वर्षों में भारत में वस्त्र एवं परिधान उद्योग पर ध्यान केंद्रित किया गया है। इस उद्योग की संभावित क्षमता और उसे हासिल करने में निहित चुनौतियों की सविस्तार वर्णन कीजिए। इस संबंध में कौन-से कदम उठाए गए हैं?

Textile and Apparels Industry is one of the largest employers in the country. It holds huge potential.



CHALLENGES TO THE INDUSTRY

1. Outdated technology, machines lowers the output.
2. Declining demand of handloom and shift to powerloom.

3. Competition from countries like Vietnam, Bangladesh etc.
4. Labour restrictions on ^{hiring} ~~higher~~ cheaper contractual labour.
5. Irational duties by developed countries
eg. US charges heavy import duties on Indian textiles.
However, Bangladesh enjoys 0% import duty.
6. Credit crunch due to rising NPAs, Basel Norms etc.
7. Strict Environment laws which results in increase of input cost.
8. Declining quality of raw-material i.e. cotton.

Steps that have been taken :-

1. Technology Upgradation Scheme by providing upgradation linked incentives.

2. Boost to MSME sector by reducing Corporate tax to 25% for MSME with turnover < 250 crore under Budget 2018-19. This will increase their competitiveness.
3. Introduction of GST will prevent unnecessary duties by states.
4. Wage Code Bill to ease on labour laws.
5. 'Make in India' to promote the sector.
6. Social Campaigns like 'Wear Khadi'.

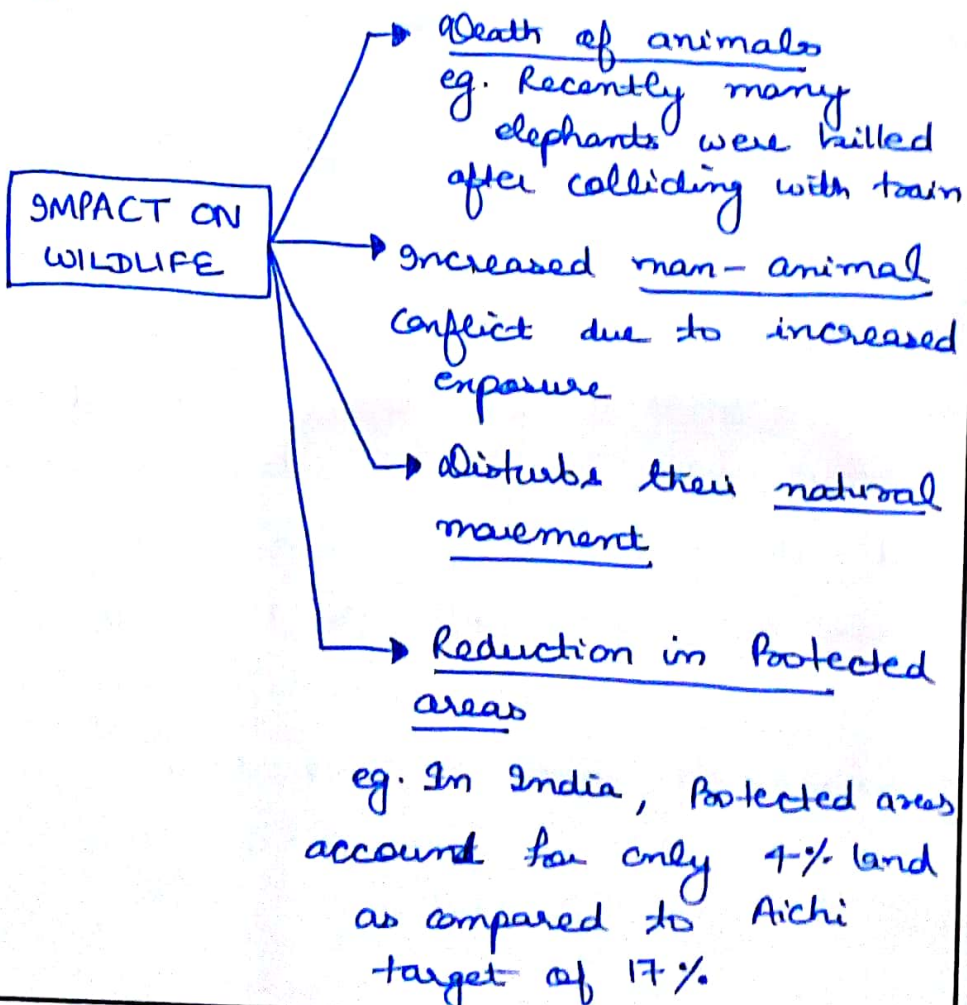
Way Forward

Due to declining growth in China and its rising wages, a void has been created at global level. For India to become a developed country and fulfill goal of 25% GDP manufacturing by 2022, it needs to fill that void.

16. How do transportation corridors in biodiversity rich areas impact the wildlife? Examine the current policy framework in this regard. Also, suggest measures to minimise the negative effects while balancing the need for development. (250 Words) 15

जैव विविधता से समृद्ध क्षेत्रों में परिवहन गलियारे वन्य-जीवन को कैसे प्रभावित करते हैं? इस संबंध में वर्तमान नीतिगत ढांचे का परीक्षण कीजिए। साथ ही, विकास की आवश्यकता को संतुलित करने समय इसके नकारात्मक प्रभाव को न्यूनतम करने के उपायों का सुझाव दीजिए।

India has huge number of transportation corridors in the form of roads, railway lines etc. crossing through the biodiversity rich areas.



Current Policy framework :

- National Wildlife Action Plan (2017-30) aims to work on such transportation corridors to reduce conflicts.
- Tougher criteria for such land acquisitions.
- Building of underpasses, bridging.
- Mandatory rules on slowdown of vehicles in such zones.

However, such policies lack strict enforcement.

Measures to balance development and biodiversity protection. :-

- GIS based mapping of such corridors and find alternative routes.
- Fix accountability in case of flouting of rules of speed etc.
- Involvement of local population, traditional knowledge to reduce conflicts.

→ Learn from countries like Netherlands which have succeeded in building connected protected areas along with road infrastructure.

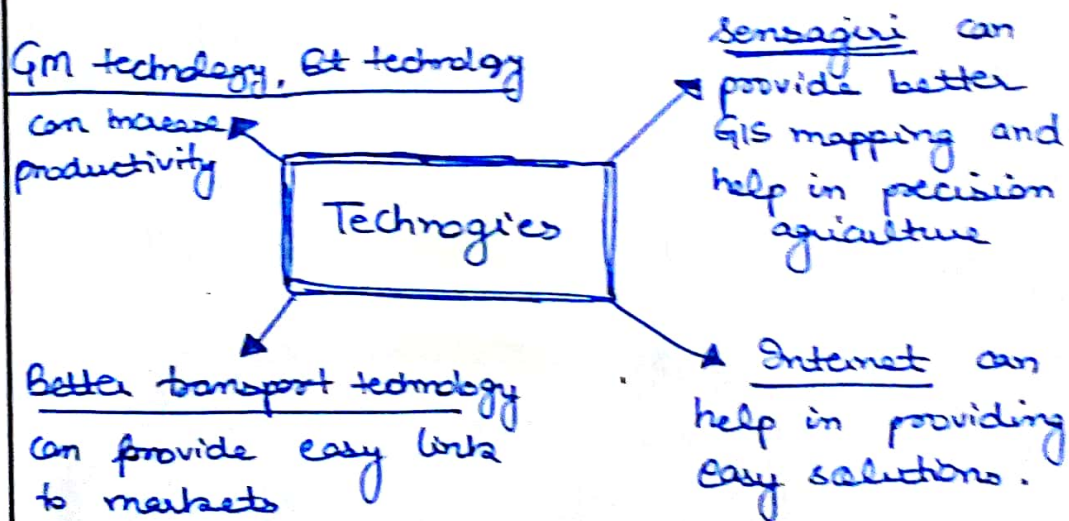
Way Forward

Earth is a shared planet between different form of life. Humans must make sure that they must not corner the resources. It will ultimately impact their sustainable future.

17. The potential of technology to aid farmers in increasing productivity as well reducing susceptibility to climate change remains underutilized. Identify the reasons for the same and suggest measures to improve technological penetration in agriculture. (250 Words) 15

उत्पादकता में वृद्धि के साथ-साथ जलवायु परिवर्तन के प्रति सुमेधता को बनाने हेतु किसानों की सहायता करने के लिए शैक्षणिकी की क्षमता का पूर्ण दोहन नहीं हो पाया है। इनके कार्यों की पहचान कीजिए और कृषि में शैक्षणिकी प्रकार में सुधार हेतु उपाय सुझाइए।

Agriculture sector grew at a low rates of $\approx 3.4\%$ in 2017-18. Also, Economic Survey 2017-18 pointed out that, climate change has potential to reduce farmers income by 14-18%. In these scenarios, technology can become a rescue tool for farmers.



However, such potential of technology remains underutilised :—

REASONS :—

1. Resistance by farmers due to lack of ~~every~~ trust in technologies.
2. Lack of technology related education and skills to properly utilise it.
3. Fragmented land holdings prevent utilising maximum potential of mechanisation, tractors etc.
4. Less penetration as benefits are sided by large farmers.
5. Fear of employment results in formation of pressure groups against it.
6. Lack of investment in ~~drast~~ climate resilient technologies.
7. Expensive technologies, that cannot be afforded by many farmers.

MEASURES TO IMPROVE TECHNOLOGY PENETRATION

1. Awareness on the benefits by organising

workshops, seminars.

2. Availability at cheaper costs specially the basic technologies like tractors, ginning machines etc.
3. Technology transfers from countries like Israel. eg. drip irrigation technologies.
4. due to feminization of agriculture, greater participation of women for such technology demonstrations.
eg. Recently few women were sent to Rice Research Institute, Philippines to get knowledge on some technologies.
5. Use of CSR to provide technology related education, skills.
6. Contract Farming for technology promotion

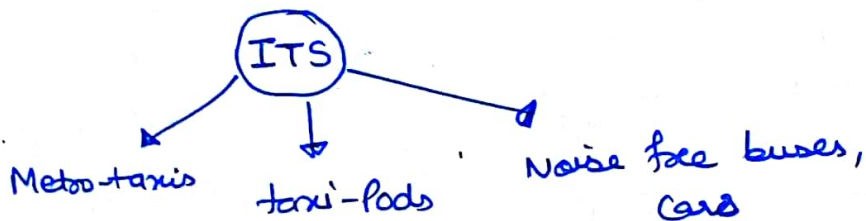
Way FORWARD

Technology is the best solution in our hand to realise the goal of doubling farmer's income by 2022.

18. What is Intelligent Transportation System (ITS)? Explaining the need of ITS in India, identify the challenges in deploying it. (250 Words) 15

कुशल परिवहन व्यवस्था (इंटेलिजेंट ट्रांसपोर्टेशन सिस्टम: ITS) क्या है? भारत में ITS की आवश्यकता की व्याख्या करते हुए, इसके परिनियोजन में आने वाली चुनौतियों की पहचान कीजिए।

Intelligent Transportation Systems refers to the modes of transport which do not require much of mechanical operations, are fast, fuel efficient, require less land etc.



NEED FOR ITS

- Swift movement of goods as well as people.
eg. In Bengaluru, it takes 1 hour on an average to travel 3 km.
ITS will help resolve it.
- Reduced pollution due to higher efficiency and cleaner fuels.

- Address traffic issues ~~caused due to~~ by better collision detection and handling.
- 'Smart' vehicle for 'Smart City'
- Create employment in this new sector of vehicle manufacturing.
- Will be on the lines of 'Move People, not vehicles'.
- Save time wasted in travelling.

Challenges in deploying

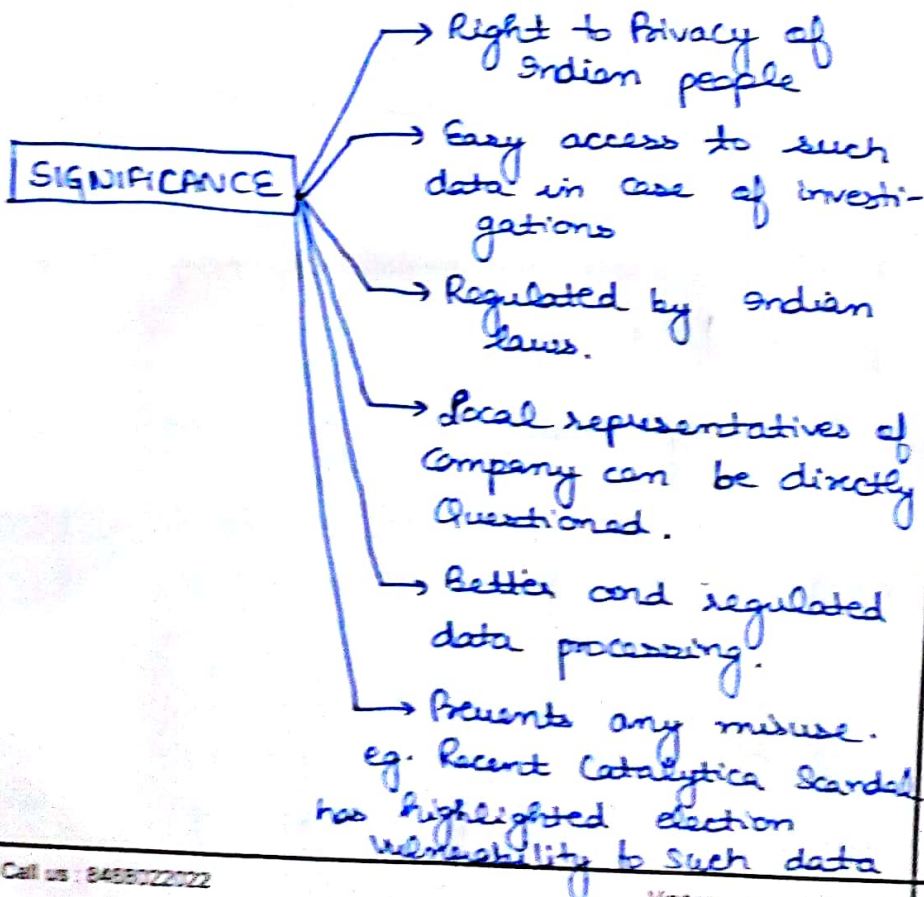
- Huge investments are required in the development of such transportation.
- Indian roads are not ready for swift movement of such vehicles.
- Resistance in people
- Ethical issues in case of automated vehicles.
- Fear of loss of employment in the form of helpers like drivers etc.

As Niti Aayog's Action Agenda has
pointed out, Intelligent Transportation
System requires effective Public-Private
Partnership to develop.

19. Explain the concept and significance of Data Localisation. Also discuss its limitations in strengthening law enforcement efforts in the context of Srikrishna Committee report and the draft Personal Data Protection Bill, 2018.
(250 Words) 15

डेटा लोकलाइजेशन की अवधारणा और महत्व की व्याख्या कीजिए। साथ ही, श्रीकृष्णा समिति की रिपोर्ट और ड्राफ्ट पर्सनल डेटा प्रोटेक्शन बिल, 2018 के संदर्भ में कानून प्रवर्तन प्रयासों को सुदृढ़ करने में इसकी सीमाओं की चर्चा कीजिए।

data localisation means to keep the data related to Indian customers within the domestic territory of India. Presently, most of the data is stored on international servers.



Srikishna Committee report and draft Data Protection Bill have adequate provisions of data localisation.

Limitations :-

1. There is no certain evidence that data localisation would protect user's identity and privacy.
2. Absence of adequate infrastructure for storage of large amounts of data.
3. Puts additional cost burden on companies.
4. US law denies access to data without its permission irrespective of the place of storage of data.
5. India is highly prone to Cyber-attacks.
It ranks as low as 23 in Cyber Security Index by International Telecommunication Union.

These limitations thus restrict the law enforcement as proposed by

Committee .

WAY FORWARD

Data localisation though is a step in right direction but it lacks adequate support in terms of finance, infrastructure etc.

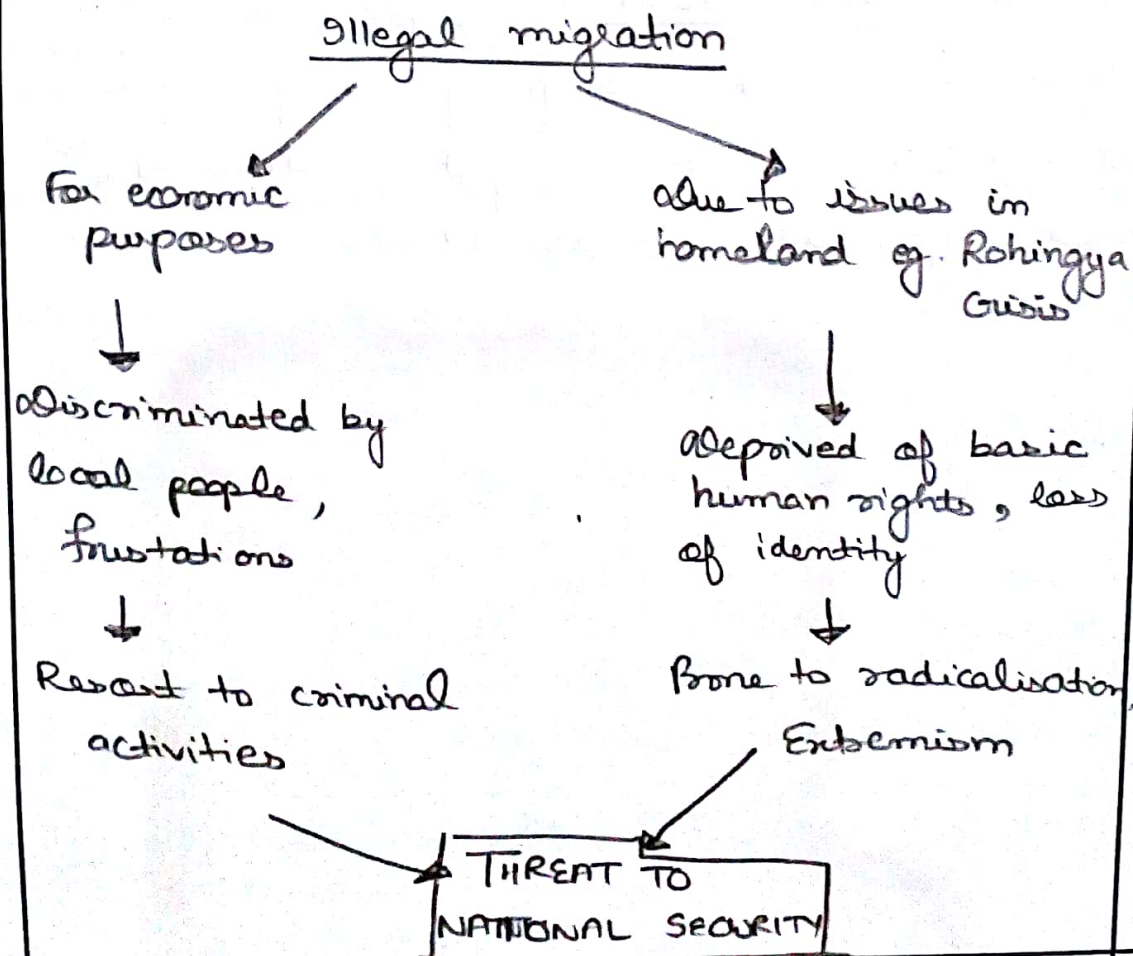
- India needs to focus on capacity building for such huge storage.
- US's new law Cloud Act provides for direct access to company surpassing US authorities. This might reduce the need of data localisation.

20. What is the link between illegal immigration and national security? In this context, critically discuss the exercise of creating a National Register of Citizens in Assam. (250 Words) 15

अवैध आप्रवासन और राष्ट्रीय सुरक्षा के मध्य क्या संबंध है? इस संदर्भ में, असम में नागरिकों के राष्ट्रीय रजिस्टर को तैयार करने की कवायद की समालोचनात्मक चर्चा कीजिए।

Rising Xenophobia, Refugee Crisis in the world is ^{mainly} based on the premise that illegal migration is threat to national security.

LINK BETWEEN BOTH :-



However, to say that illegal migration leads to threat to national security, ~~equalis~~ is equal to generalising things.

- Not all immigrants are threat.
- They are stereotyped, branded as threat.
- Situations forced them to resort to illegal activities.

POSITIVES OF NRC in ASSAM

- There are around 40 lakh illegal migrants allegedly staying in Assam.
- This puts a huge burden on resources of the country as well as state.
- Threat to democracy as they are used as vote banks.
- Frequent conflicts with local population.
- Suspected of increased radicalisation, fundamentalism in the region.

NEGATIVES OF NRC

- Absence of any definitive policy with their home country will result in human rights violation.
- They will be stranded, nowhere to go.
- It gives push to deglobalisation.
- There can be huge inclusion/exclusion errors.
- Manual exercise has put a lot of burden on administrative sources.

NRC is a sensitive issue. Though Government has obligation under Assam Accord of 1985, but it cannot be used to marginalise or discriminate a single community.