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GENERAL STUDIES (TEST CODE : 1515)

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Medium Eng./Hindi	ENGLISH	Registration Number	52250
Center	JAIPUR	Date	2/12/21

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
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Total Marks Obtained:			
Remarks:			

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं करना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI**
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- 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.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसका अंश को स्पष्ट रूप से काटा जाना चाहिए।

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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 the meaning of off-budget borrowings and its role in helping the government raise funds for various expenditures. Also, comment on its desirability. (150 words) 10

बजट-बाहरी उधार (ऑफ-बजट बॉरोइंग्स) का अर्थ स्पष्ट कीजिए और विभिन्न व्ययों के लिए धन जुटाने में सरकार की सहायता करने में इसकी भूमिका का उल्लेख कीजिए। साथ ही, इसकी वांछनीयता पर टिप्पणी कीजिए।

Off Budget Borrowing or Extra Budgetary borrowing refers to the loans taken by government, which are not accounted for in Budget. They are taken in leverage of PSOs and are reflected in their balance sheets.

eg - GOI due to FCI debt

34 [helps] governments :-

- 1) It provides additional revenue for welfare
- 2) Prevents ballooning of fiscal deficit
- 3) FD is watched by international investors
- 4) The terms for these loans

are same as other government loans.

- 5) These can be paid back when surplus finances occur.

Thus they provide a temporary mechanism to balance budget.

But are not desirable in long run as.

- 1) It bypasses parliamentary scrutiny
↳ against constitutional measure of accountability
 - 2) It compromises finances of PSUs
↳ eg State discom.
 - 3) It reduces independence of PSUs
↳ eg FCI procurement
 - 4) Such loans, increase interest payments in long term
 - 5) 15th Finance Commission has asked to phase them out.
- Thus recommendation of 15FC on phasing out and independent ~~Finance~~ Fiscal Council are needed.

2. It is argued that genetically modified food crops are required to ensure food security of India. Examine in view of concerns regarding introduction of GM crops. (150 words) 10

यह तर्क दिया जाता है कि भारत की खाद्य सुरक्षा सुनिश्चित करने के लिए आनुवंशिक रूप में संशोधित खाद्य फसलों की आवश्यकता है। जी.एम. फसलों की शुरूआत में संबंधित चिंताओं के आलोक में परीक्षण कीजिए।

GM crops are those crops
in whose genetic material,
artificial manipulation is done
to achieve desired functional
property like yield

eg GM - Brinjal
GM - Cotton

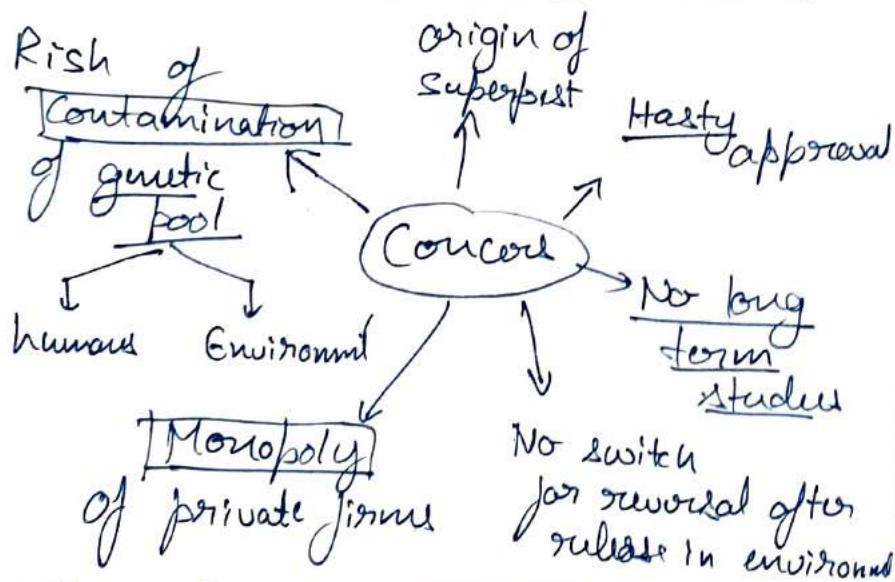
They are required for food
[security] as:-

- 1) It produces higher yield to
indigenous varieties
- 2) It protects from pest attacks
ex Cotton Bollworm
- 3) It can improve the climatic
resilience of the crop.
↳ eg ICRISAT experimental crops

4) They can also be used
to trap CO_2
↳ improve yield of other
crops.

5) Fortification can be achieved
by GM crops also
↳ eg Iron in wheat plant
↳ Nutritional security

But there are some concerns



Thus, they are meant for food security, but ~~no~~ it should not cause dilution of assessment so that concerns can be addressed.

3. India's price intervention policies to support its agricultural sector not only create a broken system but also complicate matters related to international trade rules. Critically discuss. (150 words) 10

अपने कृषि क्षेत्र का समर्थन करने के लिए भारत की मुख्य हस्तक्षेप नीतियां न केवल एक अर्थव्यवस्था का निर्माण करती हैं बल्कि अंतर्राष्ट्रीय व्यापार नियमों में संघर्षित मामलों को भी जटिल बनाती हैं। समालोचनात्मक विवेचना कीजिए।

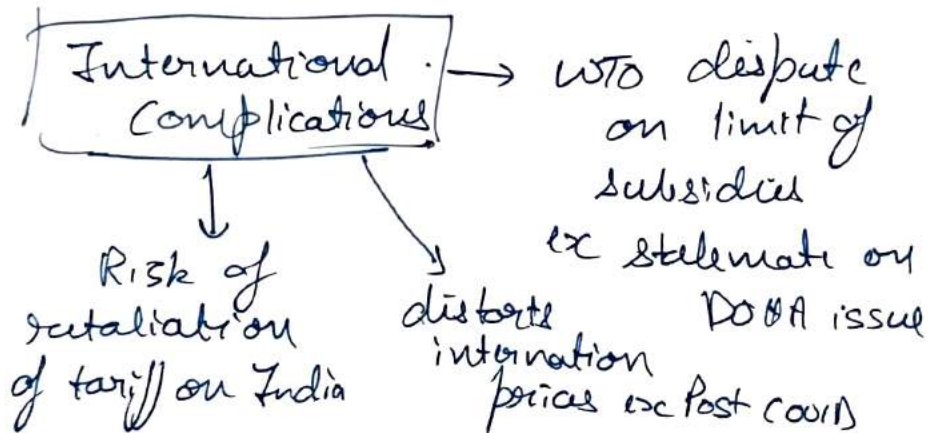
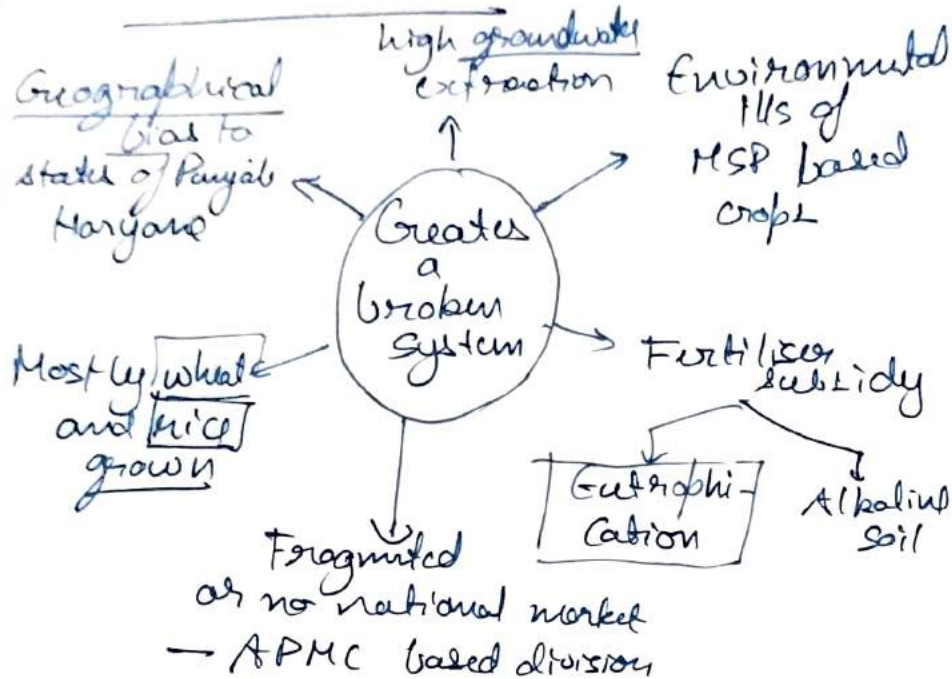
India supports agricultural produce by subsidies on input, price support.

eg MSP, fertiliser subsidy, seed, electricity subsidy

It is essential as

- 1) It was the foundation of green revolution
- 2) It assures farmers (marginal and small 86%) a regular monetary flow.
- 3) Prevent exploitation by private firms.
- 4) Food security of nation.
- 5) International conflict is due to lack of consensus on issue.

But, there are certain ills
to its credit too:-



Thus a more scientific, DBT based targeted system should be adopted.

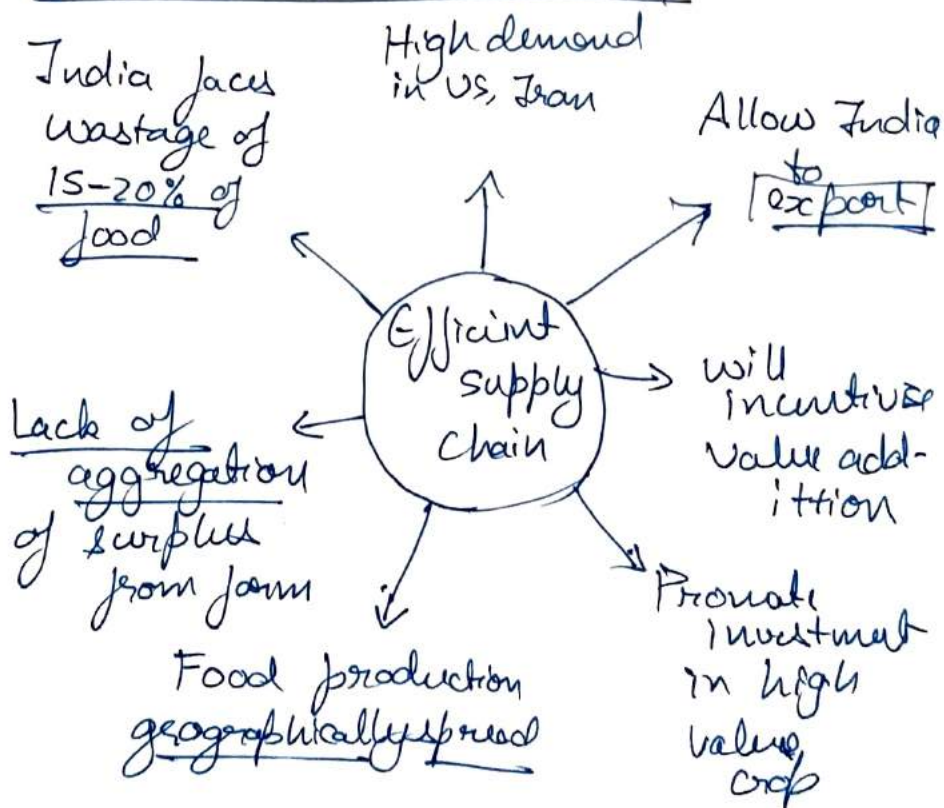
4. India has an opportunity to become a leading global food supplier provided it has an efficient supply chain and the right marketing strategies. Elucidate.

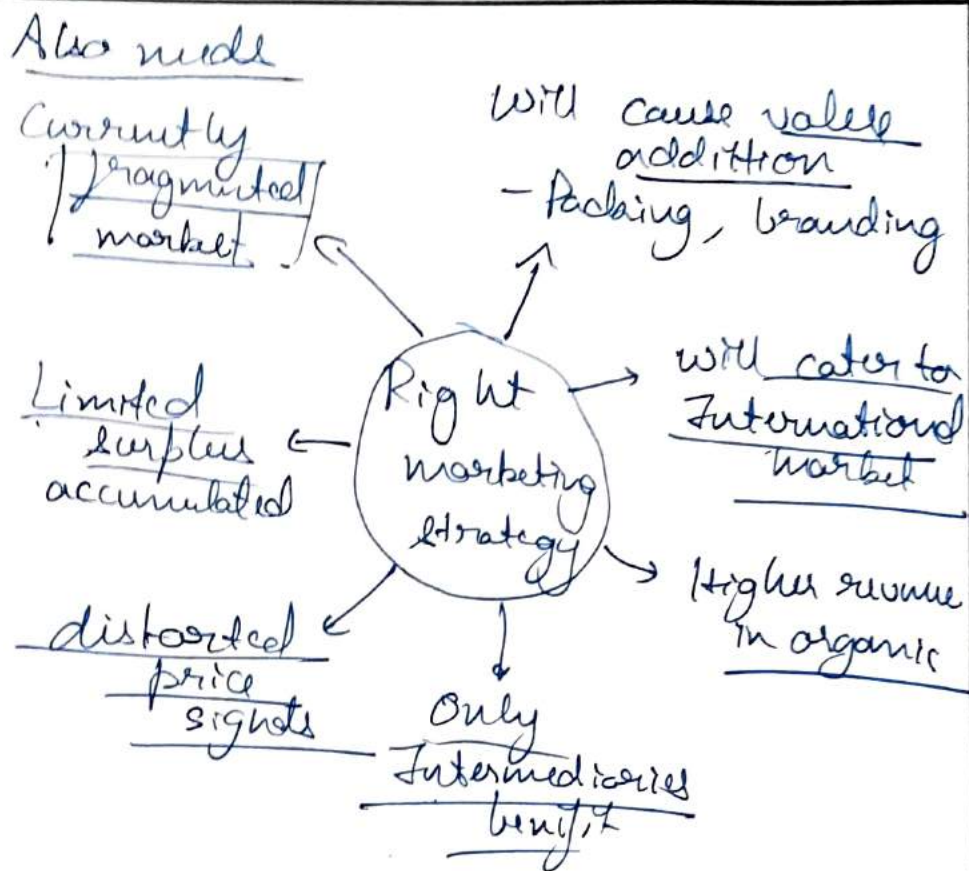
(150 words) 10

भारत के पास एक अग्रणी वैश्विक खाद्य आपूर्तिकर्ता बनने का अवसर है बशर्ते उसके पास एक कुशल आपूर्ति श्रृंखला और सही विपणन रणनीति हो। विशदीकरण कीजिए।

From food crisis in 1991, to
net food exporter, with largest
production of milk, buffalo meat,
fruits like bananas, papaya and
2nd largest of fishes, rice, wheat.
 India's story is miraculous

But India now needs :-





Thus India needs to invest in supply chain ex KISAN rail and reform marketing by coopting private players.

Only then can we truly benefit from agricultural potential and make agriculture remunerative for farmers

5. Land banks are increasingly gaining prominence in India to encourage land-use efficiency and enable economic growth. In this context, discuss the benefits of a land bank and state the concerns associated with it.

(150 words) 10

भूमि उपयोग दक्षता को प्रोत्साहित करने और आर्थिक वृद्धि को सक्षम बनाने के लिए भूमि बैंक भारत में तेजी से प्रमुखता प्राप्त कर रही हैं। इस संदर्भ में, भूमि बैंक के लाभों तथा इससे संबंधित चिंताओं का उल्लेख कीजिए।

Land Bank is a company created to pool in land by government and cause a sale of entire block for ready use.

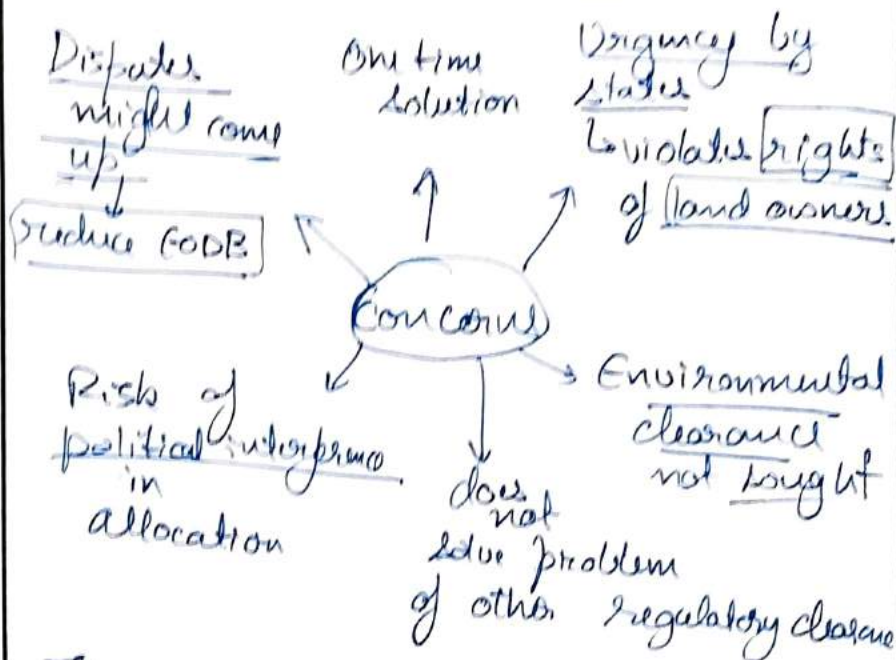
eg Maharashtra for Airport

[Benefits] of land Bank:-

- 1) It streamline the process of land sale.
- 2) Consolidation increases productivity of land
- 3) Will cause investment by companies on PSO's idle land
↳ greater efficiency in use.
- 4) Better earning for government.

- 3) Will just economic growth
 ↳ as India faces land scarcity
 ↳ ~10% land for non agricultural use

But there are concerns



Thus Land Bank is a road for economic growth but should not be used to bulldoze rights of citizens

Thus Land Pooling is a suitable alternative eg Amravati in Andhra Pradesh

6. Desertification has been described as one of the greatest environmental challenges of our time and climate change is making it worse. Discuss.

(150 words) 10

मरुस्थलीकरण को वर्तमान समय की सबसे बड़ी पर्यावरणीय चुनौतियों में से एक के रूप में वर्णित किया गया है तथा जलवायु परिवर्तन इसे और बदतर बना रहा है। चर्चा कीजिए।

Desertification is the problem of land degradation by spread of desert areas towards fertile regions. eg Rann of Kutch & Thar towards Delhi.

It is described as greatest environmental challenge as:-

- A) It reduces productivity of land
 - 1) Threatens agricultural produce
 - 2) Ecological degradation.
 - 3) Changes soil profile

Other

- 4) Causes siltation of lakes and rivers

↳ frequent flooding

- 5) Health disorder due to dust

↳ Asthma, Emphysema.

6) Reduce percolation of water in soil

↳ reduce groundwater

7) Creates fog, dust cloud

↳ reduces visibility, flight

Climate change is making it worse by !—

8) Extreme weather events

↳ drought causes drying of new regions.

9) Heat waves are more common

↳ deforestation, reservoir dry

10) Forest fires eg Australia

↳ causes deforestation

11) Climate change cause heating and expansion of Tropical desert zones of climate

Thus governments planning of Green Belt from Parbargarh to Panipat is futuristic and must be expedited.

in the context of intellectual property rights, discuss the advantages and disadvantages of releasing creative works as Open Source license.

(150 words) 10

वैज्ञानिक संसाधन अधिकारों के संदर्भ में, स्रोत कोड को सार्वजनिक रूप से रखने के फायदों और नुकसानों के बारे में चर्चा करें।

Open source license is a approach for written codes where the codes instead of blocking future access to his codes by IPR, releases them for markets use and adaptation. eg UPI, Android

Advantages

1) More innovation in market

fair play field for smaller startups

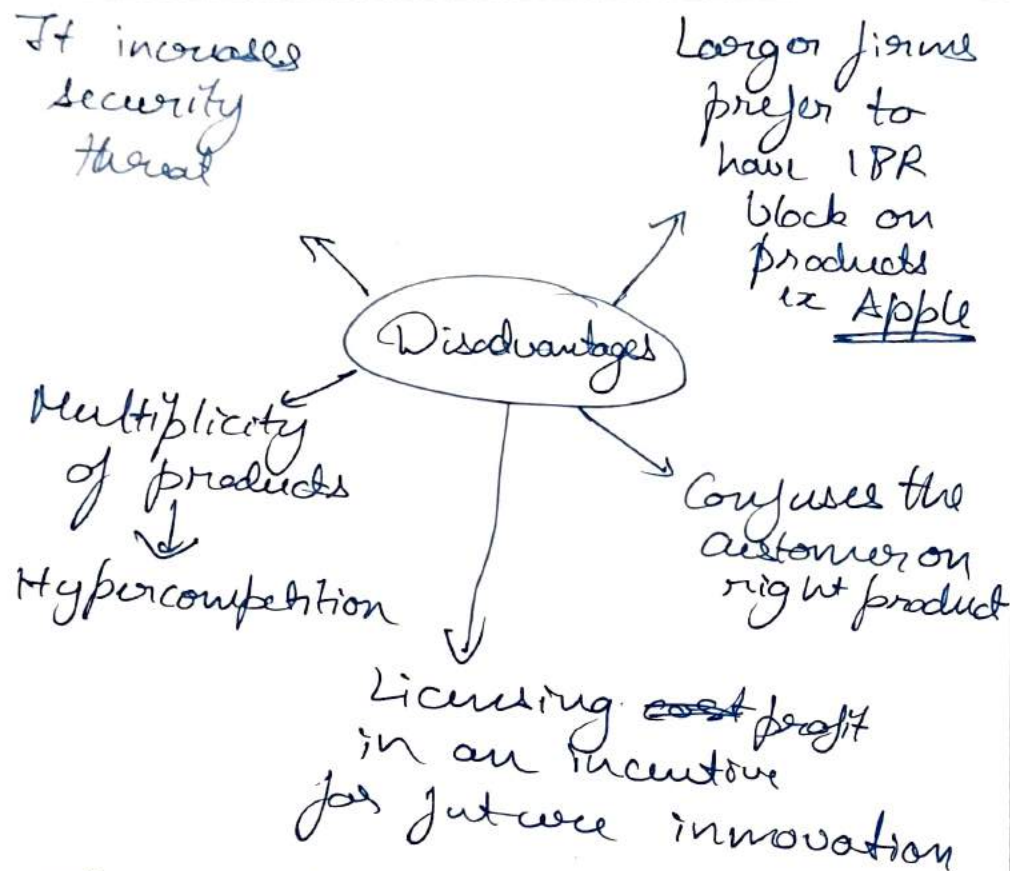
Advantages

Better versions of that product

Fault can be easily traced and removed.

Standardise operations

eg government want open data system for e-commerce



Thus Benefits of open data source clearly outweigh costs for public use platform. For example the success of UPI platform in India.

Thus for e-commerce, such a platform can be a game changer.

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Don't write anything in this margin (इस मार्ग में कुछ न लिखें)

8. "Indian space sector has been dominated by a single umbrella of government and government institutions." In light of the statement, discuss the significance of Indian Space Association in providing an impetus to space technology in India. (150 words) 10

"भारतीय अंतरिक्ष क्षेत्र पर सरकार की एकमात्र संस्था का प्रभुत्व रहा है।" इस कथन के आलोक में, भारत में अंतरिक्ष प्रौद्योगिकी को प्रोत्साहन प्रदान करने में भारतीय अंतरिक्ष संघ के महत्व की विवेचना कीजिए।

Indian space Association is supposed to play an overarching regulatory role for development of private sector in space domain.

Currently space industry is very successful eg. Bangalore, etc

But, single government agency creates some issues

1) No push for innovation on commercial scale

2) ISRO focuses on big launches
↳ commercial launches are a distraction.

3) Growing international competition

In light of this ISA can
play a transforming role! -

1) Increase the number of
PSLV, GSLV launches

- ↳ commercial revenue
- ↳ foreign exchange.

2) Spinoff technologies from
Space tech.

- ↳ ex Lithium battery under
NM271 mission

3) Private competition will foster
innovation

4) Increase private R&D expenditure
↳ currently low in India

5) Newer opportunities like space
tourism

- ↳ ex Virgin Galactic.

Thus Space sector has come of age
and is ready to unleash private spirit

9. Man and machine both have an important role in national security and making urban areas secure. In this context, discuss how technology is a major stakeholder in addressing the internal security challenges of India.

(150 words) 10

राष्ट्रीय सुरक्षा और शहरी क्षेत्रों को सुरक्षित बनाने में मानव और मशीन दोनों की महत्वपूर्ण भूमिका है। इस संदर्भ में, चर्चा कीजिए कि प्रौद्योगिकी किस प्रकार भारत की आंतरिक सुरक्षा चुनौतियों में निपटने में एक प्रमुख हितधारक है।

Internal security threats are growing complex and more so in urban jungle of haphazard growth. It is here that man must seek aid of technology.

As Technology is a major stakeholder!—

- 1) It provides surveillance capacity at large scale eg CCTV
 ↳ tackle issue of concentrated population monitoring
- 2) Use of AI, machine learning to observe / deconstruct faces
 ↳ identify unsuspicious elements

3) Use of UAV technology to
increase reach

↳ tackle inaccessible slum
areas of urban regions.

4) Use of deep space telescoping
to observe illegal activities
of cyberspace

↳ prevent illegal drug, arms
trade.

5) ~~Cyber~~ Social media cell of
police like Mumbai.

↳ monitors public behaviour
and prevents riot.

↳ disseminate correct data
and prevent fake news.

Thus the complexities of 21st century
growth makes technology

essential for security agencies.

Thus India must make its forces
[SMART] with technology

10. National Security Guard (NSG) has emerged as a formidable force equipped to handle various manifestations of terrorism. Discuss the mandate and achievements of this force. (150 words) 10

राष्ट्रीय सुरक्षा गार्ड (NSG) एक एग्रेसिव बल के रूप में उभरा है जो आतंकवाद के विभिन्न रूपों से निपटने के लिए मुख्तियार है। इस बल के अधिदेश और उपलब्धियों की विवेचना कीजिए।

National Security Guard (NSG)

is an elite force working directly under the Cabinet Secretary.

Its mandate include:

- 1) To react on actionable intelligence.
- 2) To tackle special hostage situation.
- 3) To engage in urban warfare ~~with~~ where regular armies cannot engage.
- 4) To provide security to Prime Minister of India.
- 5) To support state security force.

when needed.
And to fulfill this ^{mandate} ~~achievement~~
it has many achievements
to its credit

1) Successful tackling of Mumbai
26/11 attack.

↳ Neutralised terrorists
from Taj.

2) 24x7 protection to the Prime
minister without any breach.

3) Successfully trained J&K special
police to tackle terrorist
threats

Thus it has successfully lived
up to the expectation of an
elite force.

11. What do you understand by asset monetisation? Why is it needed in India? In this context, discuss the issues that need to be addressed for the National Monetisation Pipeline to succeed. (250 words) 15

परिमंपति मुदीकरण से आप क्या समझते हैं? भारत में इसकी आवश्यकता क्यों है? इस संदर्भ में, उन मुद्दों पर चर्चा कीजिए जिन्हें राष्ट्रीय मुदीकरण पाइपलाइन के सफल होने के लिए समाधान करने की आवश्यकता है।

Asset monetisation is an exercise by which idle assets with government departments, PSUs can be sold in market or lease out to private firms. This allows additional revenue for government.
eg Railway properties

[Need in India]

1) It allows for additional revenue for government

↳ eg use in PM KISAN, etc

2) Assets are lying idle currently

↳ increases opportunity cost

3) They have created scarcity of

land in urban area

↳ unaffordable house → slum
↳ migrant GIGS

4) Private sector will get investment opportunity

↳ EODB improve.

5) Cause Regional economic growth

↳ new factories in idle land.

6) Does not equate to selling family silver (land) - if only leasing

To achieve this National monetisation pipeline was envisaged. But there are certain

Issues

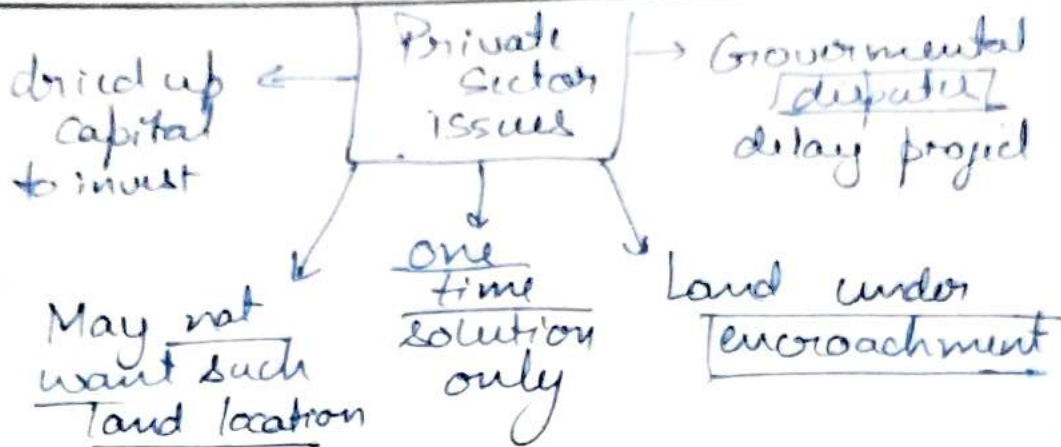
Political interplay
in monetisation

Departments work in Silos

Delay in approval

Government related

Fragmented holding



Thus these issues need to be Tackled by:-

- 1) Created a dedicated land bank company for this purpose.
- 2) Use of GIS to map land.
- 3) ICT technology for transparency.
- 4) Conclusive land titling, instead of presumptive to private sector.

5) Faster environmental clearance.

Thus land monetisation, needs to be institutionalised to push fuel into India's 5 trillion target.

12. What is social stock exchange (SSE)? Discuss the need for setting up of SSEs and key challenges in their effective implementation. (250 words) 15

सोशल स्टॉक एक्सचेंज (SSE) क्या है? SSEs की स्थापना की आवश्यकता और उनके प्रभावी कार्यान्वयन में विद्यमान प्रमुख चुनौतियों पर चर्चा कीजिए।

Social stock exchanges are platform for online trading where accredited voluntary organisation (for profit, not for profit) can get access to impact investors.

eg UK social stock
Singapore Impact investment

Need for SSE

A) For organisations

- 1) Better visibility of work
- 2) Easy access to funds
- 3) Export support in working areas
- 4) Prevent Yellow NGOisation

B) For investor

- 5) Earn decent profit

- 6) Produce social and environ-
mental impact by invest^{ment}.
- 7) No need to find ^{good} NGOs on
their own
- 8) Government social
Reduce burden to support
NGOs.
- 9) Social welfare cause mult.

To this extent a committee was
formed by ministry of Finance
which has identified certain
challenges

1) Setting the parameter of
social work

↳ How to provide monitory
estimate of social cause?

- 2) It will increase number of
fake NGOs
- 3) Lack of accreditation capacity

with government.

- 4) Investors may not find profits lucrative enough
- 5) It will increase regulatory burden on smaller NGOs
- 6) Unfair competition between small and large NGO for funds.

Thus the mechanism has to be institutionalised for effective ~~SSE~~ - Social stock exchange.

It must have strong accreditation capacity of NGOs, awareness among investors and NGOs and governmental incentives to popularise the platform.

13. In the context of India, highlight the importance of agriculture extension services? What are the challenges faced in provisioning of agriculture extension services? How does the National Mission on Agricultural Extension & Technology (NMAET) address these issues?
(250 words) 15

भारत के संदर्भ में, कृषि विस्तार के महत्व पर प्रकाश डालिए। कृषि विस्तार सेवाओं के प्रावधान में सामना की जाने वाली चुनौतियाँ कौन-सी हैं? कृषि विस्तार और प्रौद्योगिकी पर राष्ट्रीय मिशन (NMAET) इन मुद्दों का कैसे समाधान करता है?

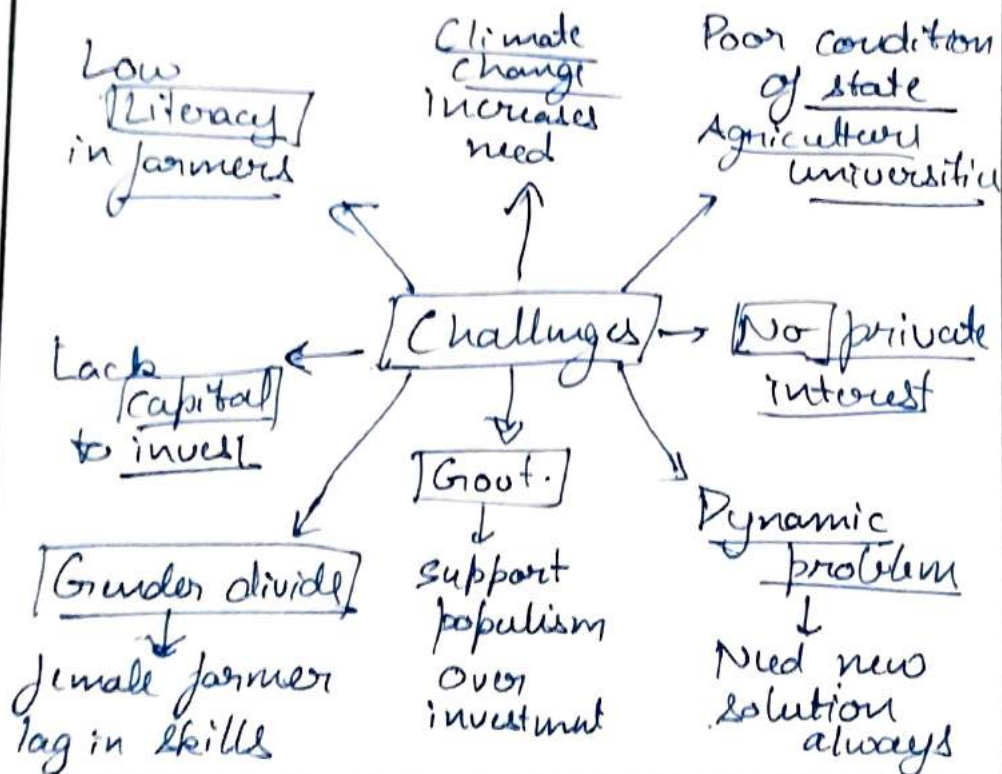
Agriculture extension is the extension (spread) of scientific and research advances from laboratories to agricultural field.

eg → training farmer to use
HYV seeds.
→ Israel's support for
micro irrigation.

Importance :-

- 1) Increase farm productivity
- 2) It will increase revenue for farmer.
↳ double farmer income
- 3) It provides climate resilience

- for agriculture
- ↳ eg suitable sowing time.
 - 4) Minimised environmental hazard
 - ↳ eg irrigation efficiency
 - 5) Gender inclusive agriculture
 - ↳ eg women farmers focused.
 - 6) Farmers get solution to localised problems
 - 7) Creates avenues for agri startups
- But, certain challenges:-



To address these issues
government launched National
mission for Agriculture Extension
under Krishnati Yojna.

It solves issues by

- 1) Supports R&D agriculture
university
- 2) Kisan Vigyan Kendra to
disseminate research and
train farmers.
- 3) Farmers can go to KVK
and can themselves get solution
- 4) Demonstration of new technology
on field of farmer.
- 5) Use of CHC for providing
new mechanised technology.

Thus it lays the bedrock in
achieving the target of doubling
farmers income by 2022

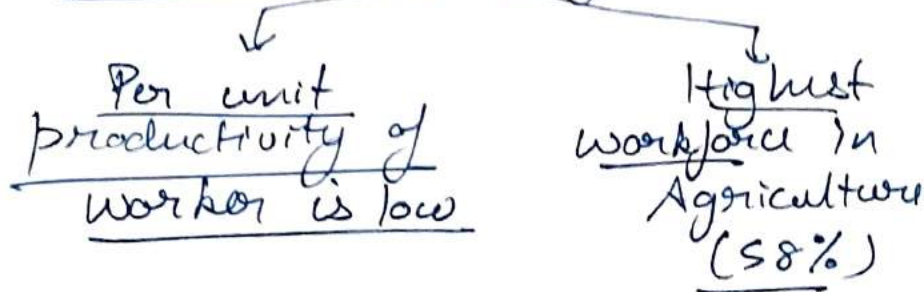
14. Clearly delineate the 'employment problem' that India currently faces. Also, explain the fundamental reasons behind existence of this problem (250 words) 15

भारत वर्तमान समय में जिस 'रोजगार समस्या' का सामना कर रहा है, उसे स्पष्ट रूप में निम्नलिखित ढंगों में समझाया जा सकता है। इस समस्या के अस्तित्व के मूल कारणों की व्याख्या की जायेगी।

India has age to reap dividend as highest young population in the world for next 25 years. But unfortunately it is also the highest unemployed population and a recipe for demographic disaster.

Employment problem in India

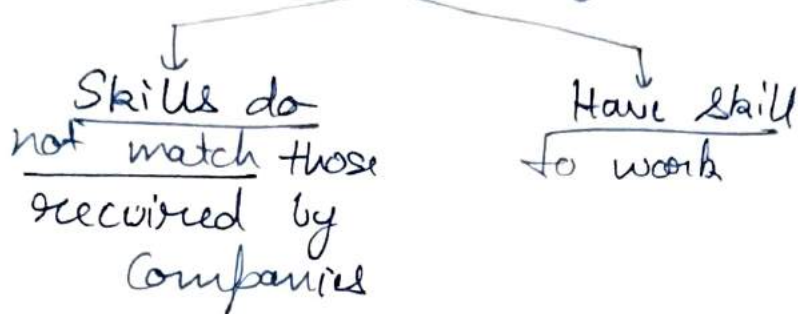
1) Hidden unemployment



2) Working poverty



3) Structural unemployment



4) Demographic potential is
short term phenomenon
↳ will last 25 years only

5) Demographic Pyramid is reversing
↳ eg TFR 2.0 in NFHS-5

Reasons behinds

1) High population growth rate

2) Slowdown in economy-
Agriculture

3) Hidden nature of unemployment

4) Absolute workers without due
wages

Education

- 5) Curriculum is not updated with current needs
- 6) No industrial-academia linkage

Industries

- 7) Rigid labour laws reduce desirability of labour.
- 8) Stiff competition from South Asian peers

Service sector

- 9) Capital driven growth.
- 10) Political Apathy to unemployment

Thus there is a need to make labour market competitive by less rigid rules, more industry oriented skills, focus on labour intensive sectors and a complete overhaul of education.

15. Although steps have been taken for integrating the dispersed logistics activities of maritime trade, much more needs to be done to make India a maritime powerhouse. Discuss. (250 words) 15

हालांकि समुद्री व्यापार की बिखरी हुई लॉजिस्टिक गतिविधियों को एकीकृत करने के लिए विभिन्न कदम उठाए गए हैं, फिर भी भारत को एक समुद्री शक्तिशाली बनाने के लिए और भी बहुत कुछ किए जाने की आवश्यकता है। चर्चा कीजिए।

India enjoys a unique distinction
of having an ocean named
after it due to its preminent
position over maritime trade
historically

To recreate this legacy
Government took steps to
integrate dispersed logistics
activities:-

- 1) Sagarmala Pariyojna to develop
port infrastructure and
cause hinterland development
- 2) Inland waterway development
to enhance maritime connectivity
eg Jal Marg Vikas Yojna

- 3) Bhoomiksha to provide multimodal linkage to ports
- 4) Aids to navigation Act 2021
to improve safety and efficiency of trade
- 5) Faster custom procedures
↳ eg ICE DASH — tax
SWIFT portal

This has increased maritime share to 90% by volume and 70% by value in trade

But much^{more} needs to be done as Issues exist

- 1) Uncompetitiveness of Indian ports
↳ shallow depth, congested
- 2) Multimodal links are weak.
↳ dispersed maritime trade

- 3) Lack of interest of FDI even after 2 decades of allowing FDI in port.
- 4) Small fleet size of Indian vessels
- 5) Lack of coordinated policy of at national level.
- 6) Poor port support infrastructure
↳ high turn around time.

Thus there is a need to increase investment in port and integrate their connectivity with land and water routes within the country. This needs incentives like no fee on national waterway for initial ~~days~~ years.

16. Accounting for natural capital and ecosystem services is crucial to understand the link between the economy and environment. Discuss with specific references to India's initiatives in this regard. (250 words) 15

वर्धनशीलता और पर्यावरण के मध्य संबंध को समझने के लिए प्राकृतिक पूंजी और पारिस्थितिकी तंत्र सेवाओं के लिए संश्लेषित महत्वपूर्ण है। इस संबंध में भारत द्वारा की गयी पहलों के विशिष्ट संदर्भ के साथ चर्चा कीजिए।

Accounting for natural capital and ecosystem system is the integration of environmental costs and benefit in terms of monetary value in the GDP calculation of the country.

It is crucial as :-

- 1) It highlights the value of environment in economic parameters
 ↳ eg India's MOSPI planned a natural capital calculation
- 2) Such initiatives allowed better targeting of governmental

policy

↳ National mission for
Himalayan ecosystem studies

⇓
To plan for future intervention

3) It creates a public perception
change and creates demand
for conservation

↳ eg calculation of carbon
footprint of goods

4) It enables local communities
to support each others
conservation

↳ eg Payment for ecosystem
services in Palampur
Himachal Pradesh

5) It allows for ecological fiscal
transfers based on this

calculation

↳ eg 15th Finance Commission recommended economic incentives for states to conserve environment.

6) It is used to bring common but differentiated responsibility at international level

↳ eg REDD+ initiative provides economic incentive for environmental conservation

Not only India, but Indians across the world are spreading this idea eg Pawan Subkhwal is the man behind TEEB the biggest effort to bring in natural capital accounting.

17. Rapid and unplanned urbanisation accompanied by population growth have increased both the risk and impact of natural disasters. Discuss the statement along with adequate measures to address the relevant concerns in India. (250 words) 15

जनसंख्या वृद्धि के साथ-साथ तीव्र और अनियोजित शहरीकरण ने प्राकृतिक आपदाओं के जोखिम और प्रभाव दोनों को बढ़ा दिया है। भारत में विद्यमान प्राकृतिक चिंताओं के निवारण हेतु यथोचित उपायों के साथ हम कदम की आवश्यकता को लेते हैं।

India has 31% urban population as per Census 2011 and this is expected to be 60% by 2050 (UN population fund)

This rapid phase of urbanisation has increased

Risks of natural disaster:-

- 1) Concentration increased run-off of rainfall
↳ flooding at faster pace.
- 2) Heat island effect, no forests
↳ torrential rain, ~~the~~ cloud burst.

3) Overextraction of ground water

↳ collapse earthquakes

4) Encroachment of coastal areas,
cutting mangrove

↳ stronger impact of cyclones
and Tsunami.

5) Hilly urbanisation

↳ Avalanches, Landslides

It also increases [impact] as:-

6) Concentrated population

↳ larger section vulnerable

7) 17% area slum without facilities

↳ diarrhoea, cholera, Malaria in
monsoon > flood

8) Lack of strong social capital

9) Constrained capacity of adminis-
tration

10) Lack of traditional knowledge
to save life

Thus measures are needed
to address these

A) Control urbanisation

- 1) Prevent rural to urban migration
- 2) Increase work opportunity in rural area.
- 3) Facilities to slum

B) Disaster management

4) Strengthen URBs to tackle
disaster

5) Community participation —
improve social capital.

6) Strict enforcement of regulation
↳ eg CRZ, river flood zoning

Thus only a cooperative and
participative Sendai framework ^{planning} is way out.

18. National Hydrogen Mission can be a game changer for India's rising energy demands. Comment.
(250 words) 15
भारत की बढ़ती ऊर्जा मांगों के लिए राष्ट्रीय हाइड्रोजन मिशन एक गेम चेंजर हो सकता है। टिप्पणी कीजिए।

National Hydrogen mission
as announced in budget aimed
to propel the economy on the
booster rails with energy
stored in Hydrogen molecule.

Its features

- 1) Aim to transition from
non renewable to Hydrogen
based energy
- 2) Green Hydrogen to be preferred
for energy storage.
- 3) Creating infrastructure for
easy adoption
↳ storage, transport.
- 4) Tax incentives for vehicles.

5) Support for R&D capacity.

It can be a game changer
to India's demands as

1) India is facing a shortage
of energy resources to meet
demand

↳ recent coal shortage

2) Non renewable not sustainable,
and also increases CAD

3) Whereas H_2 can be produced
from renewable sources

↳ eg Green hydrogen

4) Abundant supply of Hydrogen

↳ most common element
in universe

5) High energy density for
storage

↳ better than electric vehicle

6) It will reduce need to import oil, lithium to meet energy.

7) Easy storage option
↳ tide over seasonality of renewable resources.

But it remains limited in use due to nascent technology, risk of explosion in storage, and expensive manufacturing.

Thus, it needs governmental hand holding to bring economies of scale which can allow it to play transformative role.

19. Despite geo-strategic instability of its region and a known awareness of the cyber threat it faces, India has made only modest progress in developing its policy and doctrine for cyberspace security. Critically examine

(250 words) 15

बारम्बार क्षेत्र की भू-राजनीतिक अस्थिरता और इसके मजबूत विद्यमान साक्ष्य के बावजूद भारत ने साइबर सुरक्षा के क्षेत्र में केवल मामूली प्रगति की है। इसका कारण क्या है? इसके अलावा भारत ने साइबर सुरक्षा के क्षेत्र में केवल मामूली प्रगति की है। इसके अलावा भारत ने साइबर सुरक्षा के क्षेत्र में केवल मामूली प्रगति की है।

India has always aimed for stability but sit in a highly unstable neighbourhood.

This has been compounded by growing cyber threats.

India is world 3rd biggest victim of cyberattacks.

India has tried to tackle the problem by

- 1) National cybersecurity policy 2013

↳ laid architecture, promote domestic manufacturing

- 2) CERT-IN - to respond to

Cyber attacks

- 3) National Cyber coordination
centre, cybercrime reporting
portal

↳ provide institutional approach
to tackle security challenge

- 4) India is participant of
UN's global group of experts

↳ to help form world
cyber security doctrine.

- 5) In its doctrine — a gradual
shift from multilateral to
stakeholder model of
governance.

But the achievements are
modest only as

- 1) Though smartphone manufacture
in India — chips imported
↳ risk of threat.

2) Injurious attack on Indian strategic installations

↳ eg D track on Kudankulam nuclear power plant

3) Persisting child porn, cyber bullying, piracy.

4) India is not participant of global governance model
↳ eg Budapest model.

5) Cyber attack awareness is low in Indians

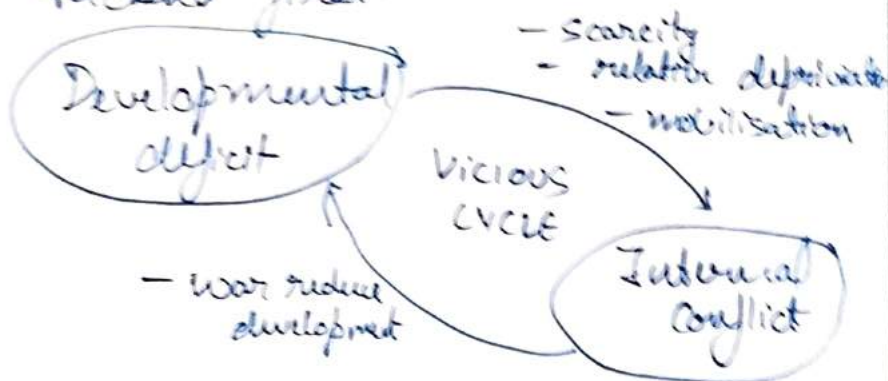
Thus, India needs to constantly upgrade its framework to suit everchanging cyberspace. And

this must begin from replacing 8 year old cyber security law.

20. Developmental imperatives have played a defining role in the resolution of existing and protracted internal conflicts in various parts of the world within a reasonable time frame. Discuss. (250 words) 15

Development and internal conflict have become a "egg and hen" problem for

administration as we are equally perplexed, who's the mother, and who needs to be tackled first.



Thus to tackle it

development it must :-

- 1) It reduces the supply of deprived souls

↳ thus reduce grievance

- 2) Development is a ground of fear
- 3) Education, health, food can
bring disgraced element
back to society
- 4) Recognition of land rights
↳ prevent alienation
- 5) Give role in governance
↳ feel empowered.

But development alone is
not sufficient in protracted
conflict as:-

- 1) Conflicts prevent development
from happening
↳ eg Naxalites destroyed school
in Lalgarh
- 2) developmental agencies are
reluctant to work in strife

↳ eg ~~Yemen~~ vacancy of civil servants

3) Fear among local communities prevent adoption of development

4) Naxalites, north east insurgents run parallel governments
↳ true development alone cannot ensure governance.

5) "Development itself is a dividend of peace"

Thus government of India has adopted a multipronged SAMADHAN strategy which has both component of law and order approach and development.