



# VISIONIAS

INSPIRING INNOVATION

## ABHYAAS MAINS

### सामान्य अध्ययन (प्रश्न पत्र-III)/GENERAL STUDIES (Paper-III) (2033)

निर्धारित समय: तीन घंटे  
Time Allowed: **Three Hours**

अधिकतम अंक: 250  
Maximum Marks: 250

#### सामान्य अनुदेश

इस प्रश्न-सह-उत्तर (क्यू.सी.ए.) पुस्तिका में 55+1 पृष्ठ हैं। प्रश्न-पत्र, क्यू.सी.ए. पुस्तिका के अंत में संलग्न है, जो अलग (वियोज्य) किया जा सकता है और उम्मीदवार परीक्षा के उपरांत अपने साथ ले जा सकते हैं।

रफ कार्य के लिए, इस पुस्तिका के अंत में खाली पृष्ठ दिया गया है।

पुस्तिका प्राप्त होने पर, कृपया यह जांच कर लें कि इस क्यू.सी.ए. पुस्तिका में कोई कमी न हो, फटा हुआ पृष्ठ न हो अथवा कोई पृष्ठ गायब न हो इत्यादि। यदि ऐसा हो, तो इसके बदले नई क्यू.सी.ए. पुस्तिका प्राप्त कर लें।

#### General Instructions

This Question-Cum-Answer (QCA) Booklet contains 55+1 pages. Question Paper in detachable form is available at the end of the QCA Booklet which can be taken away by the candidate after examination.

For rough work, blank page has been provided at the end of this Booklet.

On receipt of the Booklet, please check that this QCA Booklet does not have any shortcomings, torn or missing pages etc. If, so, get it replaced with a fresh QCA Booklet.

(उम्मीदवार द्वारा भरा जाएगा/To be filled by the Candidate)

पंजीकरण सं./Registration No. : 166005

अभ्यर्थी का नाम/Name of Student : Anjali Shrotriya

माध्यम: हिंदी/अंग्रेजी  
Medium: Hindi/English

English

तारीख  
Date

19/12/2024

### सामान्य अध्ययन (प्रश्न पत्र-III) GENERAL STUDIES (Paper III)

केंद्र  
Centre

निरीक्षक के हस्ताक्षर  
Invigilator's Signature



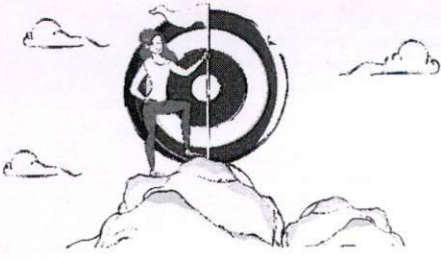
|   | महत्वपूर्ण अनुदेश   | Important Instructions  |
|---|---|---|
|   | उम्मीदवारों को नीचे उल्लिखित निर्देश सावधानी से पढ़ लेने चाहिए। किसी भी निर्देश का उल्लंघन करने पर उम्मीदवारों को मिलने वाले अंकों में कटौती, उम्मीदवारी रद्द या आयोग के परवर्ती परीक्षाओं के लिए वर्जित करने इत्यादि के रूप में दण्डित किया जा सकता है।                      | Candidates should read the undermentioned instructions carefully. Violation of any of the following instructions may entail penalty in the form of deduction of marks, cancellation of candidature, debarment from further Examination of the Commission etc.   |
| 1 | (क) अपना पंजीकरण सं. एवं अन्य विवरण केवल प्रश्न-सह-उत्तर पुस्तिका में उम्मीदवार के लिए निर्धारित स्थान पर ही लिखें।<br>(ख) इस पुस्तिका में अन्यत्र कहीं भी अपना नाम, पंजीकरण सं., मोबाइल नं., पता अथवा प्रश्न-सह-उत्तर पुस्तिका संख्या न लिखें जिससे आपकी पहचान का खुलासा हो। | (a) Write your Registration Number and other details only in the space provided in the Question-Cum-Answer (QCA) Booklet for candidates.<br>(b) Do not disclose your identity in any manner such as, by writing your Name, Registration number, Mobile number, Address, Question-Cum-Answer (QCA) Booklet No. etc. elsewhere in the Booklet |
| 2 | अपनी प्रश्न-सह-उत्तर पुस्तिका में कहीं भी प्रश्नों के वास्तविक उत्तर के अतिरिक्त कुछ न लिखें जैसे कि कोई कविता/दोहा, अभद्र या अपमानजनक अभिव्यक्ति इत्यादि और न ही कोई ऐसा चिन्ह/निशान बनाएं जिसका उत्तर से सम्बन्ध न हो।  | Do not write in the QCA Booklet anything other than the actual answer such as couplet, obscene, abusive expression etc., nor put any sign/mark having no relevance to the answer.   |
| 3 | परीक्षक को प्रत्यक्ष/अप्रत्यक्ष रूप से कोई भी प्रार्थना/धमकी भरी बातें न लिखें।   | Do not make any direct/indirect appeal/threat to the examiner.  |
| 4 | उत्तर अस्पष्ट अथवा गंदी लिखावट में न लिखें। इस प्रकार के उत्तर का मूल्यांकन नहीं भी किया जा सकता है।  | Do not write answers in bad/illegible handwriting. Such answers may not be evaluated.   |
| 5 | उत्तर स्याही में ही लिखें। उत्तर लिखने के लिए पेंसिल का उपयोग न करें, हालांकि आरेख, चित्र इत्यादि बनाने के लिए पेंसिल का उपयोग किया जा सकता है।   | Write answers in ink only. Do not use pencil for writing the answers. However, pencil may be used for drawing diagrams, sketches, etc.  |
| 6 | प्रवेश पत्र में उल्लेख किए गए माध्यम के अलावा अन्य किसी माध्यम में उत्तर न लिखें। अधिकृत और अनधिकृत की मिली जुली भाषा का भी उपयोग न करें।   | Do not write answers in medium other than the authorized medium in the Admission Certificate. Do not use mixed language either i.e. authorize and unauthorized media together for writing answers.  |
| 7 | प्रश्नों के उत्तर ठीक उसके नीचे दिए गए निर्धारित स्थान पर ही लिखें। निर्धारित स्थान के अलावा किसी अन्य स्थान पर लिखे गए उत्तर का मूल्यांकन नहीं किया जाएगा।   | Write answer at the specific space (right below the question) only. Answers written elsewhere at unspecified places in the booklet shall not be evaluated.  |
| 8 | यदि आप अपने किसी उत्तर को रद्द करना चाहते हैं तो उसे पेन से काट दें तथा उस पर "रद्द" लिख दें, अन्यथा उसका मूल्यांकन किया जा सकता है।  | If you wish to cancel any work, draw your pen through it and write "Cancelled" across it, otherwise it may be valued.   |



|  |   |
|--|---|
| कार्यालय के प्रयोग हेतु<br>For Official Use      | कार्यालय के प्रयोग हेतु<br>For Official Use |
| परीक्षक के हस्ताक्षर<br>Signature of Examiner(s) |   |

**प्राप्तांक के विवरण (परीक्षक द्वारा भरा जाए)/ Marks Details (To be filled by the Examiner(s))**

| प्रश्न सं.<br>Q. No.              | अंक<br>Marks |  | प्रश्न सं.<br>Q. No.       | अंक<br>Marks |  |
|-----------------------------------|--------------|--|----------------------------|--------------|--|
| 1                                 |              |  | 11                         |              |  |
| 2                                 |              |  | 12                         |              |  |
| 3                                 |              |  | 13                         |              |  |
| 4                                 |              |  | 14                         |              |  |
| 5                                 |              |  | 15                         |              |  |
| 6                                 |              |  | 16                         |              |  |
| 7                                 |              |  | 17                         |              |  |
| 8                                 |              |  | 18                         |              |  |
| 9                                 |              |  | 19                         |              |  |
| 10                                |              |  | 20                         |              |  |
| उप-योग (A)<br>Subtotal (A)        |              |  | उप-योग (B)<br>Subtotal (B) |              |  |
| सकल योग (A+B) / GRAND TOTAL (A+B) |              |  |                            |              |  |



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**सामान्य अध्ययन (प्रश्न पत्र-III)/GENERAL STUDIES (Paper-III) (2033)**

निर्धारित समय: तीन घंटे

Time Allowed: Three Hours

अधिकतम अंक: 250

Maximum Marks: 250

**प्रश्न-पत्र संबंधी विशेष अनुदेश**

कृपया प्रश्नों के उत्तर देने से पूर्व निम्नलिखित प्रत्येक अनुदेश को ध्यानपूर्वक पढ़ें:

कुल बीस प्रश्न दिए गए हैं जो हिंदी और अंग्रेजी दोनों में छपे हैं।

सभी प्रश्न अनिवार्य हैं।

प्रत्येक प्रश्न/भाग के लिए नियत अंक उसके सामने दिए गए हैं।

प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए, जिसका उल्लेख आपके प्रवेश-पत्र में किया गया है, और इस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यू.सी.ए.) पुस्तिका के मुख-पृष्ठ पर निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिखे गए उत्तर पर कोई अंक नहीं मिलेंगे।

प्रश्न संख्या 1 से 10 तक का उत्तर 150 शब्दों में तथा प्रश्न संख्या 11 से 20 तक का उत्तर 250 शब्दों में दीजिए।

प्रश्नों में इंगित शब्द सीमा को ध्यान में रखिए।

प्रश्न-सह-उत्तर पुस्तिका में खाली छोड़े गए कोई पृष्ठ अथवा पृष्ठ भाग को पूर्णतः काट दीजिए।

**QUESTION PAPER SPECIFIC INSTRUCTIONS**

*Please read each of the following instructions carefully before attempting questions.*

There are **TWENTY** questions printed both in **HINDI** and in **ENGLISH**.

All questions are compulsory.

The number of marks carried by a question/part is indicated against it.

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 a medium other than the authorized one.

Answers to Questions No. 1 to 10 should be in 150 words, whereas answers to Questions No. 11 to 20 should be in 250 words.

Keep the word limit indicated in the questions in mind.

Any page or portion of the page left blank in the Questions-cum-Answer Booklet must be clearly struck off.



## 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.

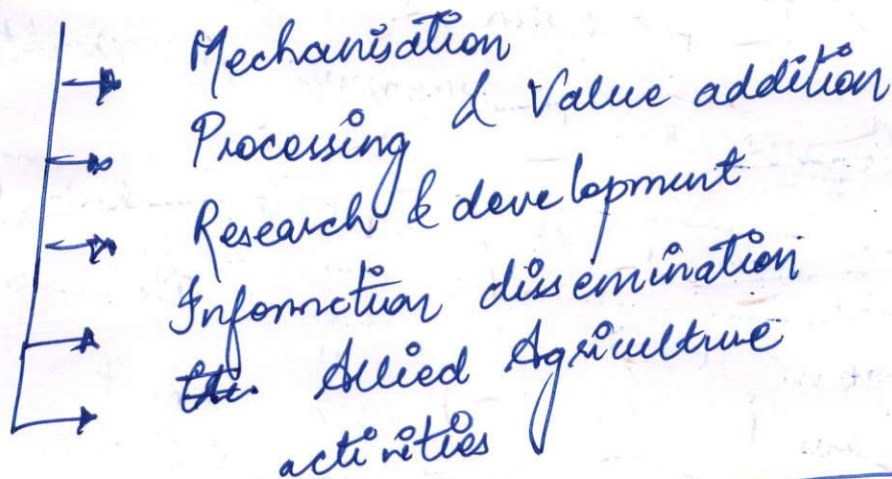
भारत में कृषि प्रसार से सम्बद्ध मुद्दों का उल्लेख करते हुए, राष्ट्रीय कृषि अनुसंधान प्रसार प्रणाली को सुदृढ़ बनाने में कृषि विज्ञान केंद्रों (KVKs) की भूमिका पर चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

Stating the issues associated with agricultural extension in India, discuss the role of Krishi Vigyan Kendras (KVKs) in strengthening the national agricultural research extension system. (Answer in 150 words)

10

उम्मीदवारों को इस ह्रासिप में नहीं लिखना चाहिए  
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The agriculture extension refers to the extension services beyond production in agriculture mostly concerned after sowing



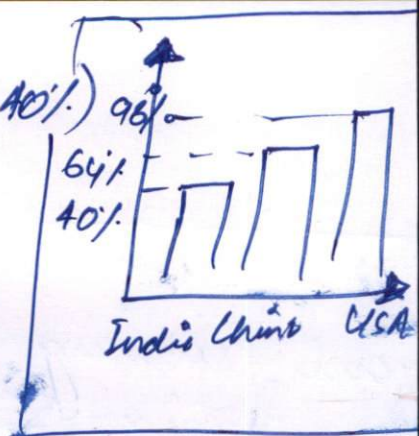
Issues in agricultural Extension →

- ① Poor Information & Communication dissemination framework (IEC)
- ② Lack of diffusion of technology and innovation in agriculture



### ③ Poor mechanisation (only 40%)

L. due to small and fragmented land holdings  
86% farmers are small and marginal



### ④ Poor Processing and Value addition

L. food processing only at house primary level (rice & wheat)

### ⑤ Research and development in agriculture is less

#### Role of KVK in strengthening research extension

① Act as Center for information communication to farmers

② Tell about  $\begin{cases} \text{Weather forecast} \\ \text{Crop Combination} \\ \text{Fertiliser Usage} \end{cases}$

③ Provide with Technological impetus and machinery

④ Help rural youth in agriculture research

Agriculture Extension programs like -  
ICAR, TAMU university; ARYA & READY;  
Sub mission on mechanisation needs to be promoted well.



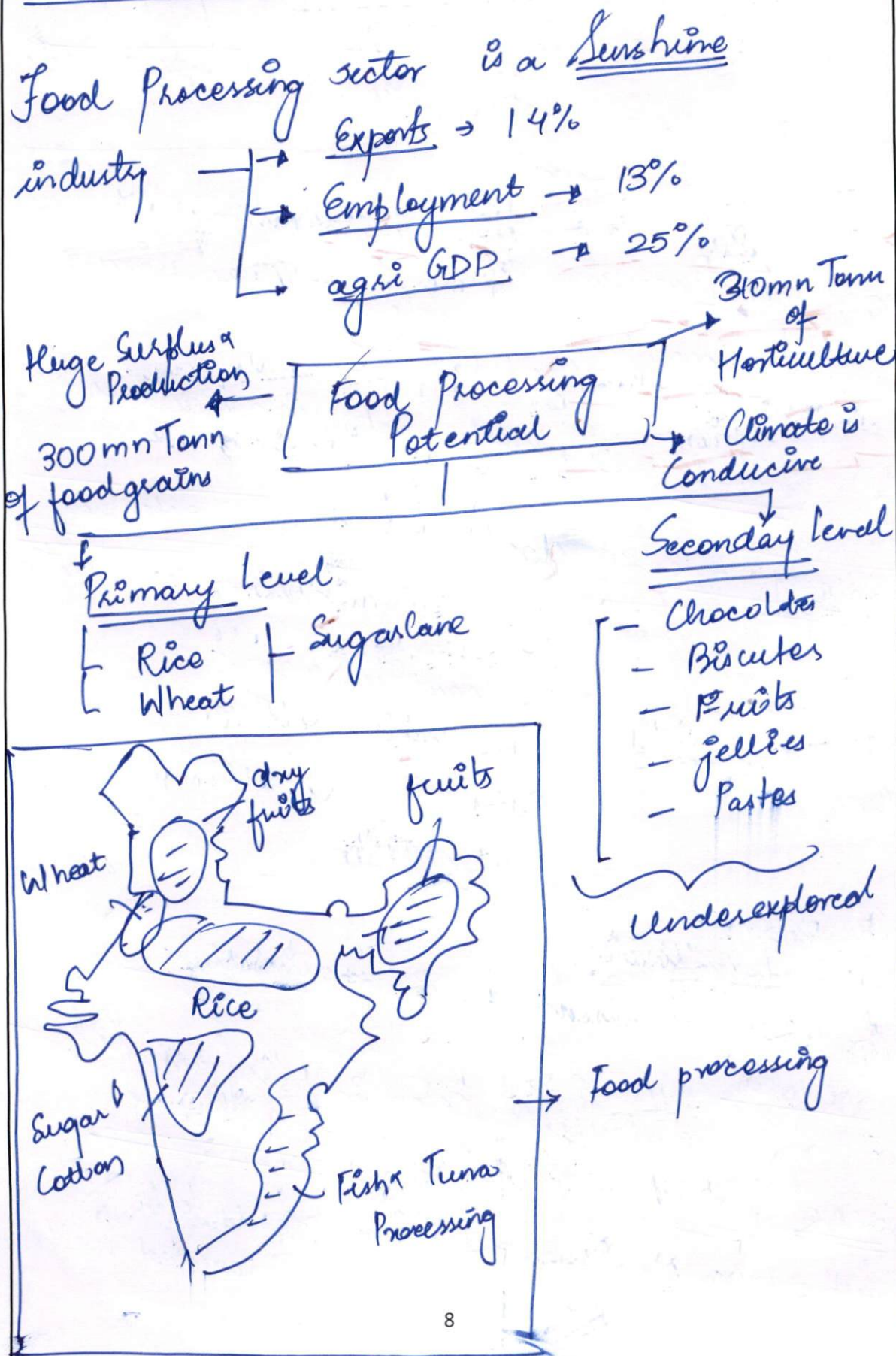
2.

भारत में, खाद्य प्रसंस्करण क्षेत्रक मूल्य संबर्द्धन की अपार संभावनाओं के कारण एक उच्च संवृद्धि और उच्च लाभ के क्षेत्रक के रूप में उभर रहा है। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

In India, the food processing sector is emerging as a high-growth and high-profit sector due to its immense potential for value addition. Discuss. (Answer in 150 words)

10

उम्मीदवारों को इस हस्तिय में नहीं लिखना चाहिए  
Candidates must not write on this margin





# Immense potential for value addition in FPI

उम्मीदवारों को इस कक्ष में नहीं लिखना चाहिए  
Candidates must not write on this margin

- ① Agriculture Value → Value addition in form of Biscuits, Chips, Sauces, Sugar.
  - ② Farmer's Value → Help in doubling farmer's income by 2022
  - ③ Rural Area value addition → Generate Employment  
→ Setup industries in Rural Areas
  - ④ Post Harvest Losses → FPI will minimise post harvest, storage losses
  - ⑤ Build logistics → Industries will lead to better transport and logistic connectivity
  - ⑥ Agriculture diversification
  - ⑦ Reduce Government's burden for subsidy
- 1) 100% FDI in food processing allowed
- Govt steps
- 2) PM - SAMPADA Yojana
  - 3) Micro food processing formalisation
  - 4) One district One product



3.

पशुधन आधारित एकीकृत कृषि प्रणाली (IFS) की अवधारणा की व्याख्या करते हुए, इसके लाभों पर चर्चा कीजिए। (उत्तर 150 शब्दों में दें)  
 Explaining the concept of livestock-based Integrated Farming System (IFS), discuss its benefits.  
 (Answer in 150 words)

10

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए  
 Candidates must not write on this margin

India has one of the largest livestock population (50.2mn) in world

Livestock based integrated farming system

↳ ① It essentially refers to usage of livestock on farms for productive activities

Eg :-

- Cows & Cattle → dairy production
- Pigs & Poultry → Meat
- Bees → Apiculture
- Silk → Sericulture

↳ ② Along with the normal agriculture livestock potential is also harnessed





## Benefits of livestock based - IFS

उम्मीदवारों को  
इस इलाक़ में  
नहीं लिखना  
चाहिए  
Candidates  
must not  
write on  
this margin

① Farmers : Double farmer income (Ashok Lakshar)  
Reducing farmer distress

② Agriculture productivity : as land will get time to regain fertility

③ Women Empowerment : as 90% women involvement in livestock

④ Rural area development

⑤ Resource Efficiency

⑥ Promotion of Indigenous breeds

Eg: Gir, Sahiwal

⑦ Promote Food processing

Eg- dairy - Cheese, Tofu, Panner

⑧ Promote alternative

source of income

⑨ Important in dry land

Eg: Rayalseema,

agriculture areas  
Vedharbha

⑩ promote Organic farming

: manure of animal can be used in fields

Thus, Livestock based IFS  
be boon for farmers and

will prove to  
agriculture sector



4.

जहाँ भारतीय मूल के व्यक्ति (PIO) विश्व भर में उद्यमिता का नेतृत्व कर रहे हैं, वहीं भारत में अभी भी उद्यमिता दर सबसे कम है। चर्चा कीजिए। साथ ही, भारत में उद्यमिता की गति को बढ़ाने के लिए उठाए गए नीतिगत उपायों का भी उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

While Persons of Indian Origin (PIO) are spearheading entrepreneurship across the world, India still has one of the lowest entrepreneurship rates. Discuss. Also, state the policy measures that have been taken to increase the pace of entrepreneurship in India. (Answer in 150 words) 10

उम्मीदवारों को इस ह्रासिए, में नहीं लिखना चाहिए  
Candidates must not write on this margin

The recent rise of Twitter CEO, Sundar Pichai (Google CEO), Satya Nadella (Microsoft), Indira Nooyi (ex-PepsiCo) → paints a very delighted picture of Indians spearheading entrepreneurship,

but there is a caveat to it that back in the country Entrepreneurship is in a bad shape leading to low employment, Research Ecosystem and wastage of demographic dividend

Entrepreneurship Rate - low in India

① Societal Culture

doesn't promote risk taking business more job oriented

② Education System

career & seeking job less focus on innovation



③ Economical reason  
↳ 24% multidimensionally poor people, struggle with basic necessities

④ Lack of industry - academia linkage

⑤ Technological knowhow and skills are low (4% population is skilled)

⑥ High gestational period  
↳ we seek instant gratification

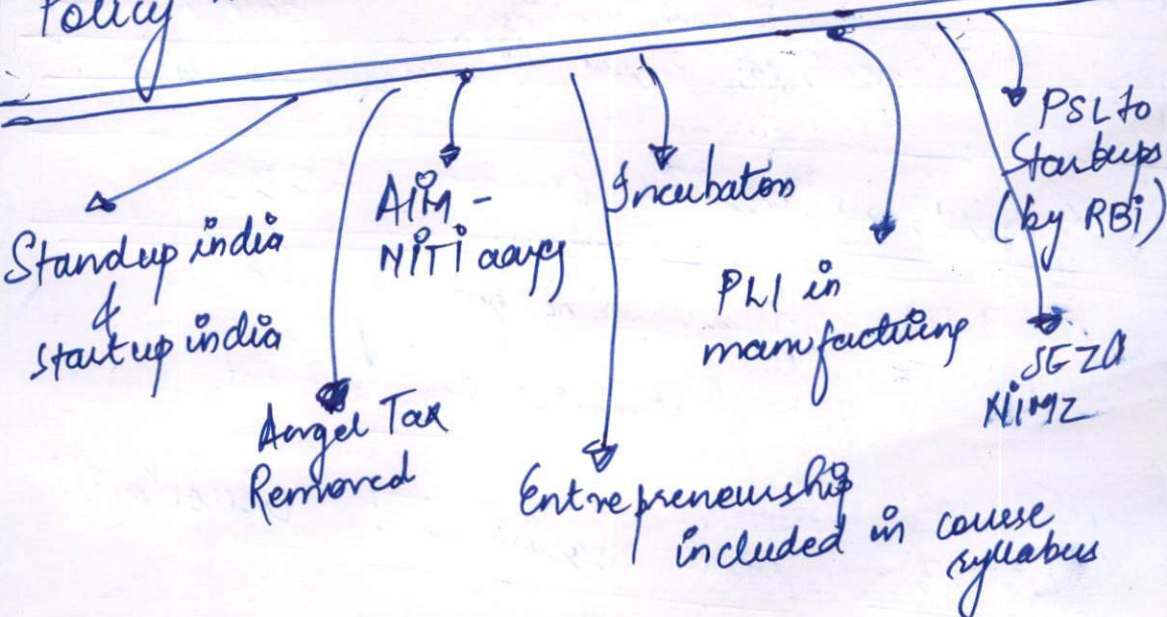
⑦ R&D in india is low  
↳ only 10.7% GDP is spent

⑧ Poor perception cost vocational education is high [or fam: 10% own 70% wealth]

⑨ Inequality is high

⑩ Women, SC, ST - face exclusion

Policy measures taken to increase entrepreneurship





5.

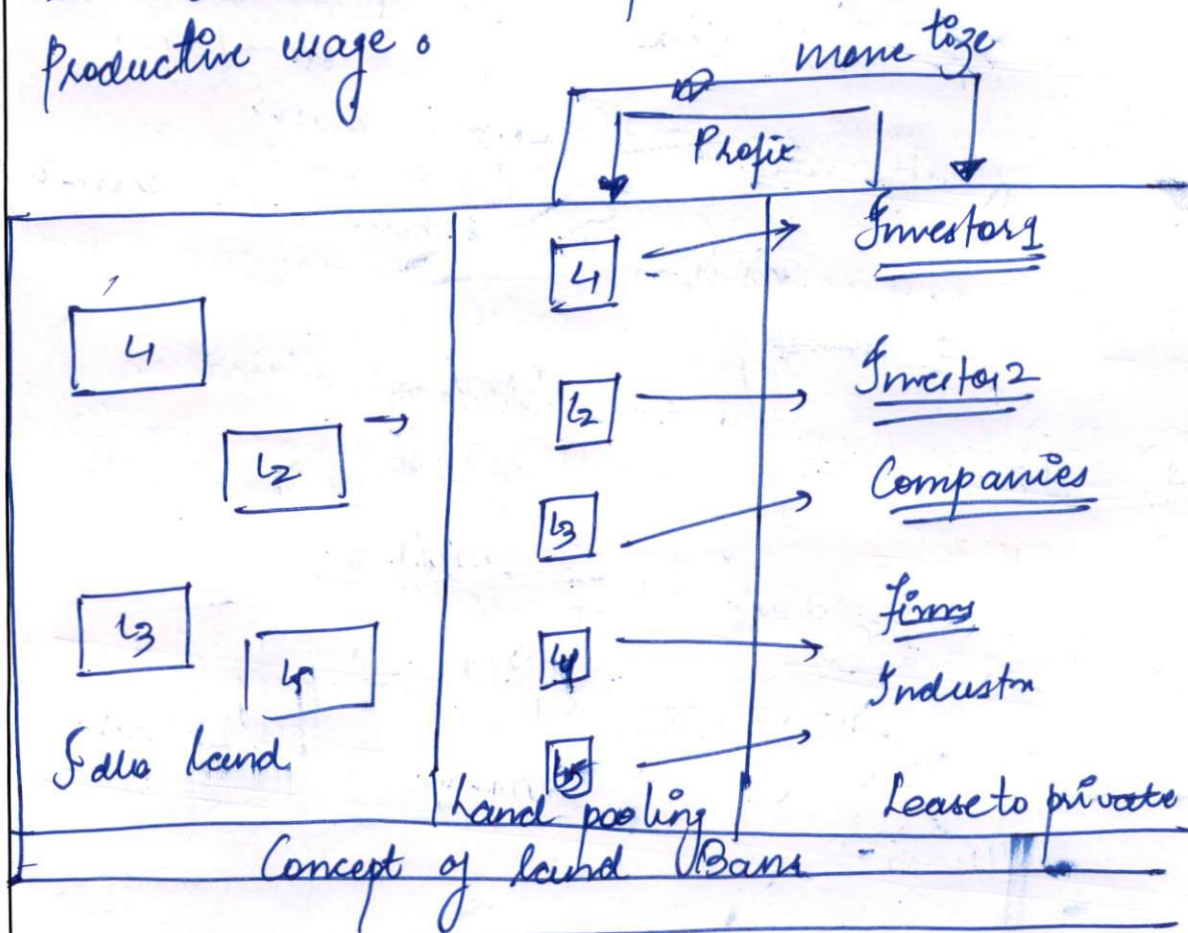
'भूमि बैंक' अर्थव्यवस्था को प्रोत्साहन देने और भारत में व्यापार सुगमता (ईज ऑफ डूइंग बिज़नेस) को बढ़ावा देने में महत्वपूर्ण भूमिका निभा सकते हैं। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

'Land banks' can play a critical role in boosting the economy and promoting ease of doing business in India. Discuss. (Answer in 150 words)

10

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए  
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Land Banks are the new concept under which government plans to pool in idle lands and put them to productive usage.



Land Banks : Boosting Economy & EODB

① Idle lands will be put to use  
↳ Industrial development

② EODB as land acquisition issues will be resolved



- ③ Asset monetization → real value of land to be realized by government
- ④ Industries → Employment generation & economic growth
- ⑤ Delays and RedTapisim will decline in scarcity land
- ⑥ Corporate will find easy to invest
- ⑦ Problem of Development - induced - displacement will be solved
- ⑧ Transparency due to bidding process

Thus land banks will help in improving government's fiscal capacity and also promote industrial development

6.

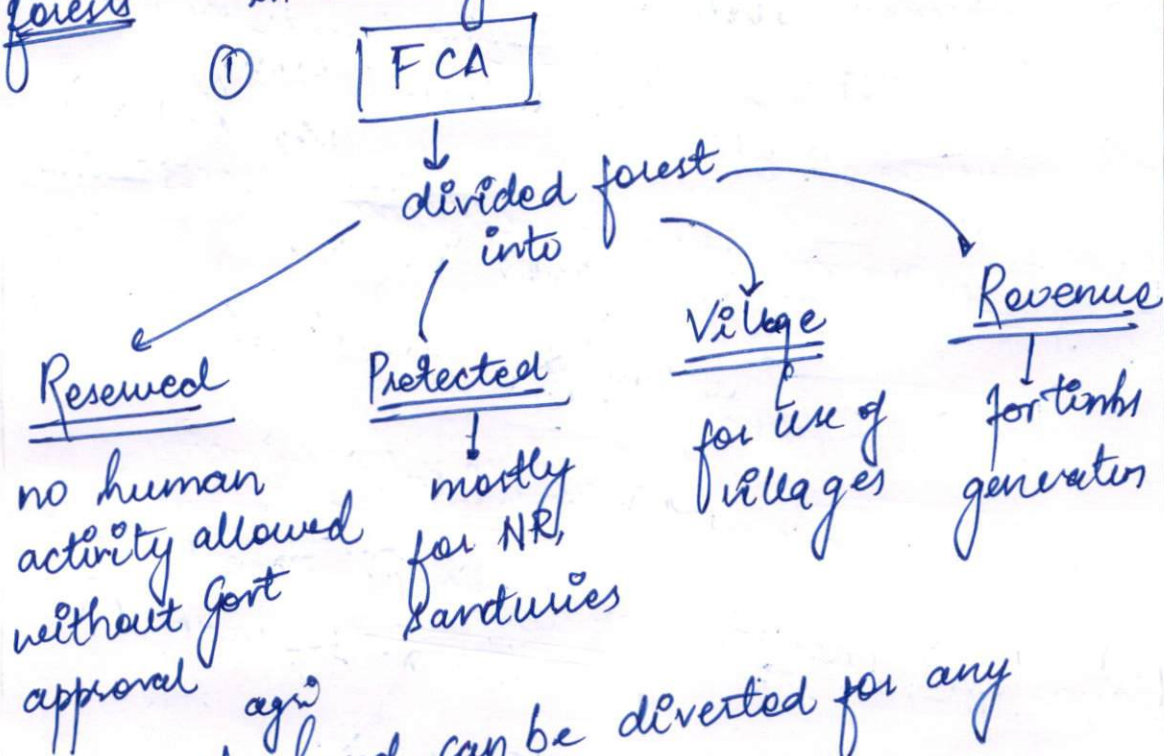
वन संरक्षण अधिनियम (FCA) में प्रस्तावित संशोधन, न केवल वन अधिकार अधिनियम (FRA) के विपरीत हैं, बल्कि इनके कारण भारत को जलवायु परिवर्तन पर अपनी प्रतिबद्धताओं को प्राप्त करने में देरी होने की भी संभावना है। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

The proposed amendments to the Forest Conservation Act (FCA) are not only antithetical to the Forest Rights Act (FRA), but are also likely to delay India achieving its commitments on climate change. Discuss. (Answer in 150 words)

10

## The Forest Conservation Act (1980)

was brought with a aim to safeguard forests in country's



② No <sup>agri</sup> land can be diverted for any work that is non agriculture

③ Concept of CAMPA

↳ to compensate for felling the trees by doing afforestation elsewhere

उम्मीदवारों को इस क्षति में नहीं लिखना चाहिए  
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## Relaxations in provisions of FCA

- Various Exemptions provided for Reserved & Protected forest
- Various industries, development work, MEP allowed inside forest
- deforestation can be done & land can be reached even later

## Against FRA and Climate Change Commitments

- ① Infringe upon Tribals right to land, Community Ownership, Use rights 4/FRA (2006)
  - ② Gram Sabha permission not needed
  - ③ Paris INDC's — (2-3) billion tonne of Carbon sequestration
- Bonn Challenge — 26 mn hec of degraded land restoration

All these amendments should be brought with public Consensus and Action (Dialog, Approach, Negotiation)



7.

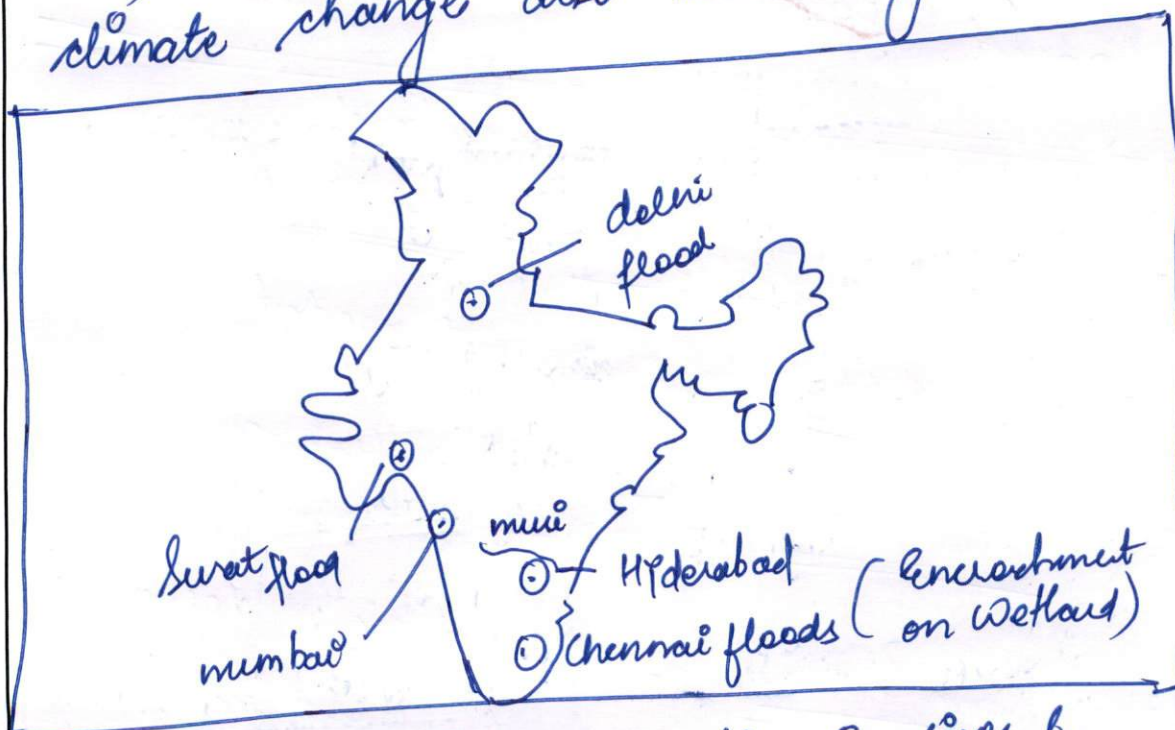
शहरी क्षेत्रों में बाढ़ की समस्या न केवल नदियों के उफान के कारण है, बल्कि उन अनियोजित तरीकों के कारण भी है जो हमारे नगर, शहरीकरण की प्रक्रिया में अपना रहे हैं। चर्चा कीजिए। इस संदर्भ में, शहरी बाढ़ पर राष्ट्रीय आपदा प्रबंधन प्राधिकरण के दिशा-निर्देशों का उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

The problem of flooding in urban areas is not only due to overflowing rivers, but also the uninformed ways in which our cities are coping with urbanisation. Discuss. In this context, mention the National Disaster Management Authority guidelines on urban floods. (Answer in 150 words)

उम्मीदवारों को इस हाथिए में नहीं लिखना चाहिए  
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10

The urban flooding has been a recurrent phenomena in Indian cities as the pressure of Urbanization (50% by 2040) increases and simultaneously climate change also increasing



Urban floods : Result of over flowing river & unsustainable urbanisation

- ① High Rainfall during monsoon due to erratic weather & Convective heating



② Poor storm water drain management in urban areas.

- ③ Encroachment of wetlands
- ④ River floodplain encroachment
- ⑤ Solid Waste disposal not done properly
- ⑥ Urbanisation → deforestation → lack of water infiltration

## NDMA Guidelines

### ① Disaster Risk Reduction (DRR)

- Hazard mapping
- Early warning system
- Risk analysis
- mitigation map

### ② Invest in DRR

Structural :  
disaster & flood  
resilient buildings

### ③ Relief and Rescue during floods

Non Structural :

### ④ Rehabilitation achieve

- Building norms follow
- Urban Governance  
strengthen

To, SDG 11 : Sustainable Cities

we need to strengthen Urban Governance



8.

इसरो अब केवल उपग्रहों के प्रक्षेपण तक ही सीमित नहीं है, बल्कि यह वर्षों से विकास गतिविधियों में अपनी भूमिका को लगातार बढ़ा रहा है। विवेचना कीजिए। (उत्तर 150 शब्दों में दें)

ISRO is no longer confined only to the launching of satellites, but it has been constantly enlarging its role in development activities over the years. Discuss. (Answer in 150 words) 10

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए  
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ISRO premier space research organisation

Satellite launching missions

- Cartosat
- NISAR with NASA
- IRNSS - navigation
- ASAT - anti satellite defence
- INSAT - Communication
- Chandrayaan
- Mangalyaan

ISRO and development

① Agriculture

↳ chrones in Swarnajayanti Scheme  
mapping of land, soil quality

② Education

(UNNATI  
VIGYAN yojana)

young  
scientists



③ Soil Degradation map  
and Atlas by ISRO  
↳ desertification Atlas

④ Health ↳ Tele Health during COVID

⑤ defence ↳ / GSAT 7A for navy and  
airforce

⑥ IRNSS ↳ for navigation

⑦ GAGAN ↳ for fisherman

Thus ISRO has shed off its  
conventional role & integrating more in  
development

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9.

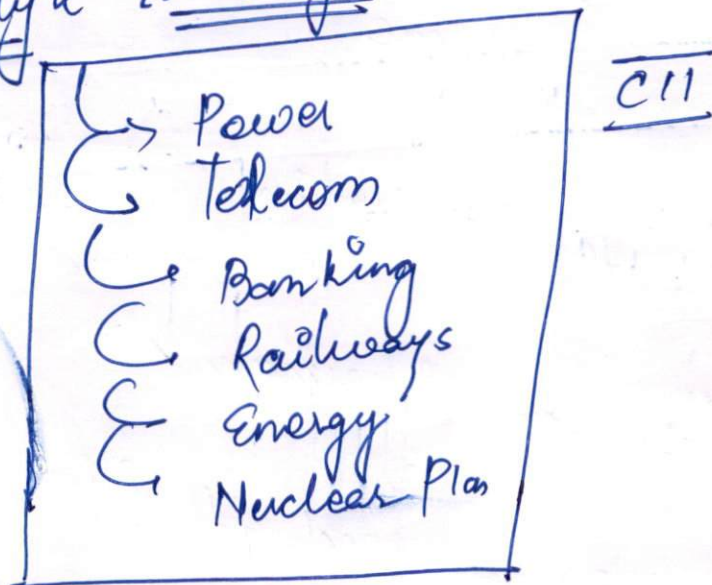
राज्य और गैर-राज्य अभिकर्ताओं द्वारा महत्वपूर्ण सूचना अवसंरचना (CII) को लक्षित करने के पीछे उत्तरदायी कारणों को बताइए। साथ ही, भारत सरकार द्वारा अपने CII को सुरक्षित करने के लिए उठाए गए कदमों पर भी चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

State the reasons behind targeting of Critical Information Infrastructure (CII) by state and non-state actors. Also, discuss the steps taken by the Indian government to secure its CII. (Answer in 150 words)

10

Critical information infrastructure (CII)

are those which are of great importance to country - National Security & Strategic Assets



Why targetted?

- ① National security breach
- ② Confidential information
- ③ Country's Economy is run on them

उम्मीदवारों को इस हार्गिफ में नहीं लिखना चाहिए  
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(4) Have a spill over impact on other sectors

उम्मीदवारों को  
इस हार्जिए में  
नहीं लिखना  
चाहिए  
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### Measures Taken

- ① NCII PC under NTRO
- ② National Cyber Security policy (2013)
- ③ Laws → IT Act (2000)
- ④ Cyber Security Cell  
Training Cyber security personnel
- ⑤ Paris Call for cyber security  
(unesco)
- ⑥



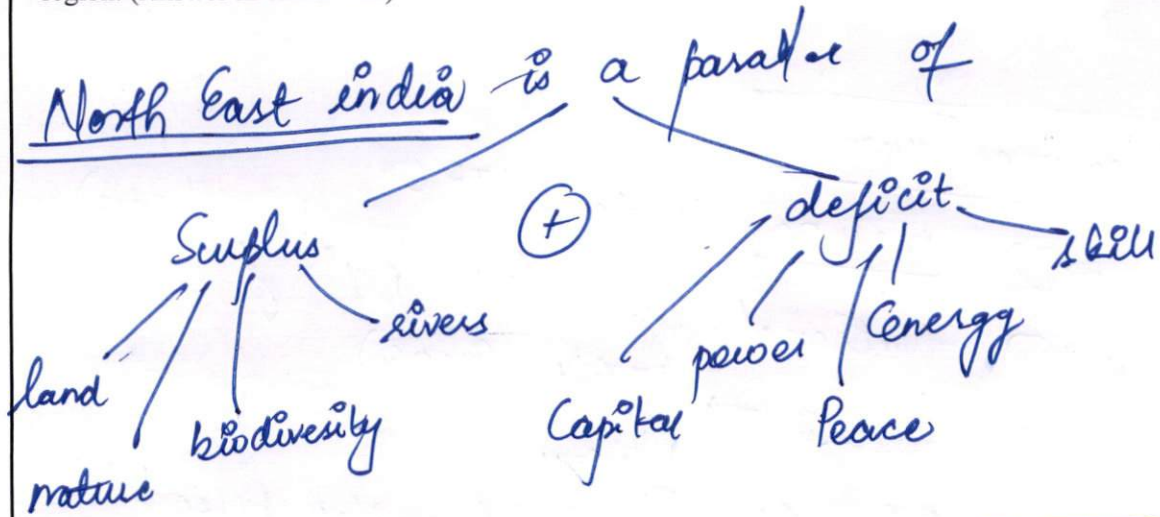
10.

पूर्वोत्तर भारत के रणनीतिक महत्व के बावजूद, इस क्षेत्र को कई सुरक्षा खतरों का सामना करना पड़ता है। चर्चा कीजिए। साथ ही, क्षेत्र में शांति और स्थिरता सुनिश्चित करने के लिए सरकार द्वारा उठाए गए कदमों का भी उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

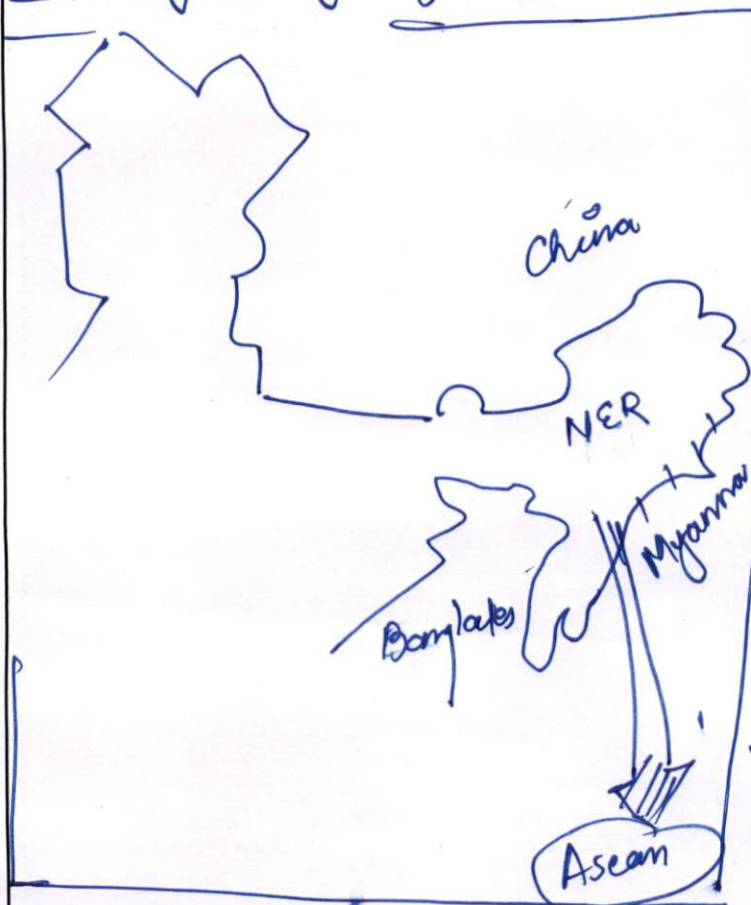
Despite the strategic significance of North-East India, the region faces several security threats. Discuss. Also, state the measures taken by the government to ensure peace and stability in the region. (Answer in 150 words)

10

उम्मीदवारों को इस हाथिए में नहीं लिखना चाहिए  
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### Strategic Significance of NER



① Geostrategic Location

↳ bordering the 3 countries

② Bridge to Asean

③ High value potential of

- ✓ Power
- ✓ Energy
- ✓ HEP

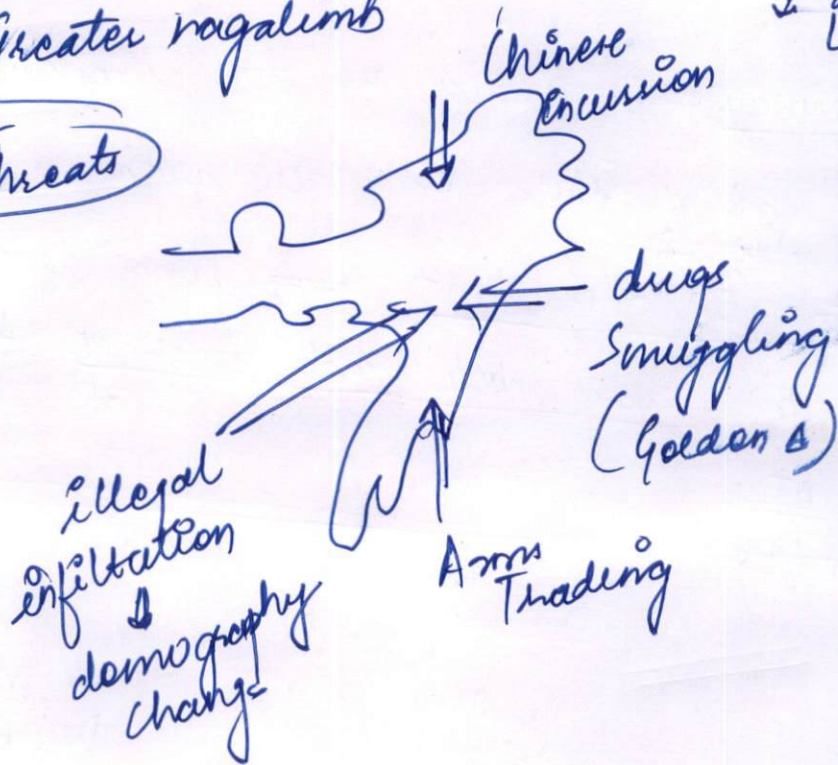


## Security Threats → Ethnic Clashes (Naga, Bodo, Maitai)

- ↳ ULFA groups in Assam
- ↳ Secessionism by Bodoland demand
- ↳ Gorkhaland demand
- ↳ Greater Nagalim

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## External Threats



## Steps Taken

- ↳ Assam Accord (1985), NRC,
- ↳ Recent Bodo Accord
- ↳ Operation Sunrise
- ↳ Integrated Check Posts at borders
- ↳ Skill & Human Resource development
- ↳ BOLT & IT on border with Bangladesh
- ↳ Border fencing
- ↳ CAPE deployment (Assam Rifles)
- ↳ Peace by Schedule VI granting autonomy



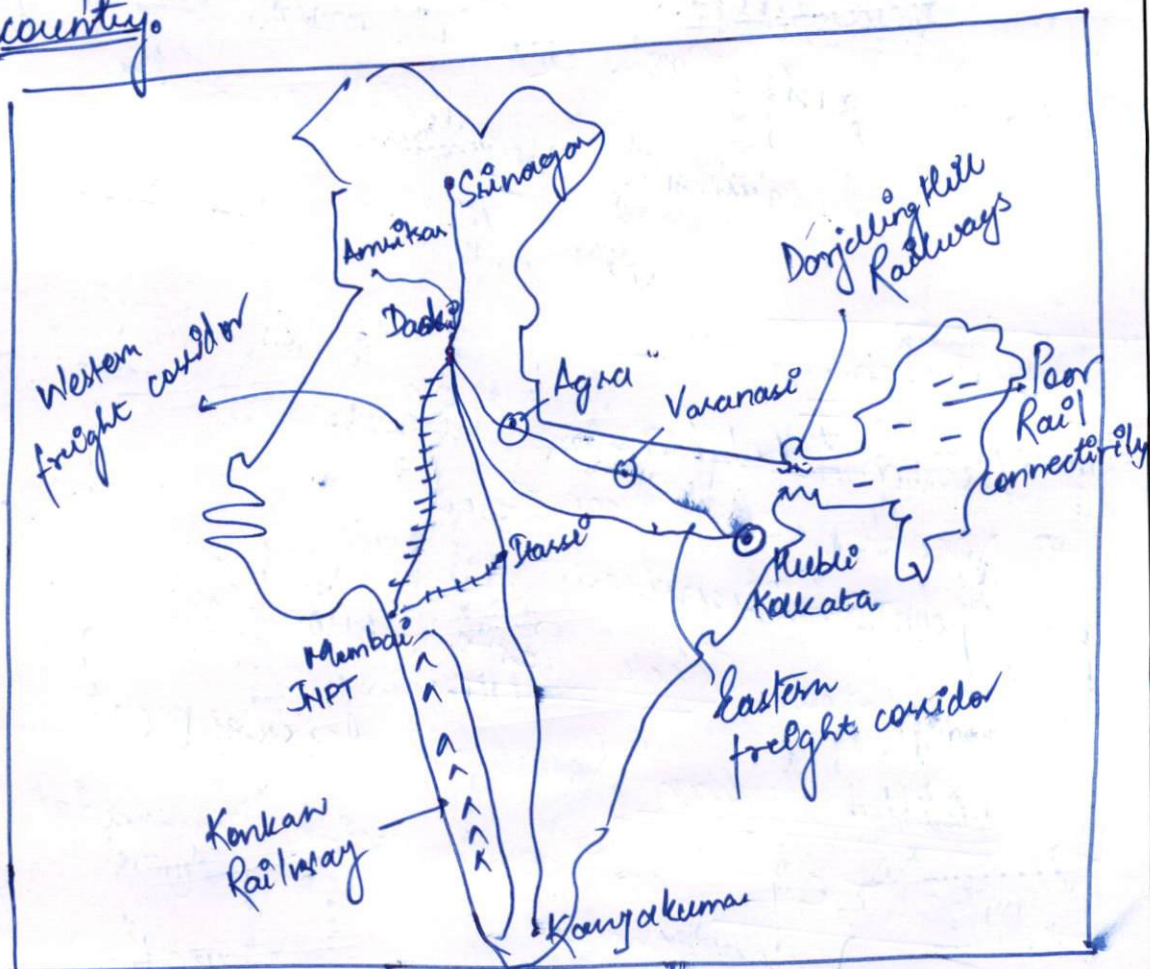
11.

भारतीय रेलवे को लंबे समय से अल्प निवेश की समस्या का सामना करना पड़ा है, जिसने इसके परिचालन के प्रमुख क्षेत्रों पर प्रतिकूल प्रभाव डाला है। इस संदर्भ में, बुनियादी ढांचे के तीव्र निर्माण में रेलवे के समक्ष आने वाली चुनौतियों पर चर्चा कीजिए। साथ ही, इस संबंध में सरकार द्वारा उठाए गए कदमों का भी उल्लेख कीजिए। (उत्तर 250 शब्दों में दें)

Indian Railways has suffered from chronic under-investment, which has adversely impacted key areas of its operations. In this context, discuss the challenges faced by the railways in speedy creation of infrastructure. Also, mention the steps taken by the government in this regard. (Answer in 250 words)

15

Railways in India are the second largest  
in terms of their coverage with ~~a~~ sewing  
upto (50, -60,000) km<sup>2</sup> ~~area~~ long lines and  
upto every nook and corner of the  
country.



Fig<sup>3</sup> Railways in India

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए  
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Chronic under investment - adversely impacting

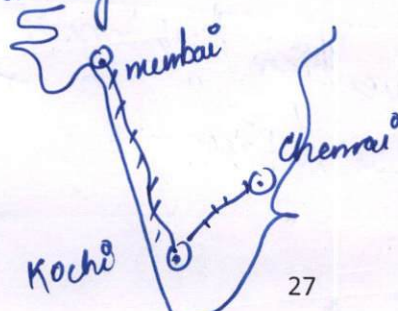
उम्मीदवारों को  
इस अक्षिप में  
नहीं लिखना  
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- ① Underinvestment led to poor operations in the North East region which remain unconnected mostly
- ② Also, the services are cross subsidised meaning freight charges ~~less~~ <sup>more</sup> than passengers, leading to losses
- ③ Quality of railways in terms of services has declined
- ④ Poor electrification
- ⑤ Narrow Gauge lines are laid more, broad gauge less
- ⑥ Delays in railway operation
- ⑦ Technological upgradation has not taken place

### Challenges faced by Railways in Infrastructure

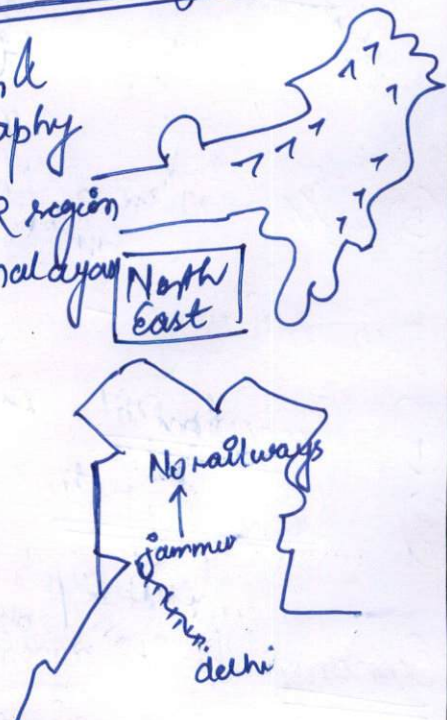
① Physical and Geographical Challenge →

Hard Rocks ∴  
difficult to lay lines  
in Peninsula



Mumbai  
Chennai  
Kochi

Terrain &  
Topography  
Eg NER region  
Himalayas





- ② Economic challenge of Cross Subsidisation leading to poor investment recution
- ③ Human Skills low : Human infrastructure is not well developed
- ④ Technological penetration is low  
↳ Old & obsolete technology
- ⑤ Private Sector  
↳ only recently allowed in train running but not operations

### Steps Taken by Government

- ① Talks of Privatization of railways  
↳ Nande Bharat Express  
Tejalu Express
- ② Outsourcing operations  
↳ Eg : IRETC performing better.
- ③ ~~Is~~ Exploring Public private partnership in railways -  
(Kelkar Committee)
- ④ Technological investment
- ⑤ Skill impetus  
Railways have been back bone of Indian Economy be it agriculture, passengers. Thus public investment required



12.

किसानों की आय को दोगुना करने के भारत के उद्देश्य को साकार करने हेतु कृषि प्रणाली के अंतिम बिंदु तक के दायित्वों पर ध्यान देने के साथ अनुसंधान और विकास (R&D) के लिए एक परिवर्तनकारी दृष्टिकोण आवश्यक है। विवेचना कीजिए। (उत्तर 250 शब्दों में दें)

A disruptive approach to research & development (R&D), with a focus on last mile obligations of the agricultural system is necessary to realize India's objective of doubling farmer's income. Discuss. (Answer in 250 words)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए  
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15

According to Ashok Dalwai Committee -  
India has a target of Doubling farming Income by 2022 for which we need a agriculture revolution in terms of production - research & development - connectivity

Disruptive approach to Research & development

① E-technology  
in aid of farmer

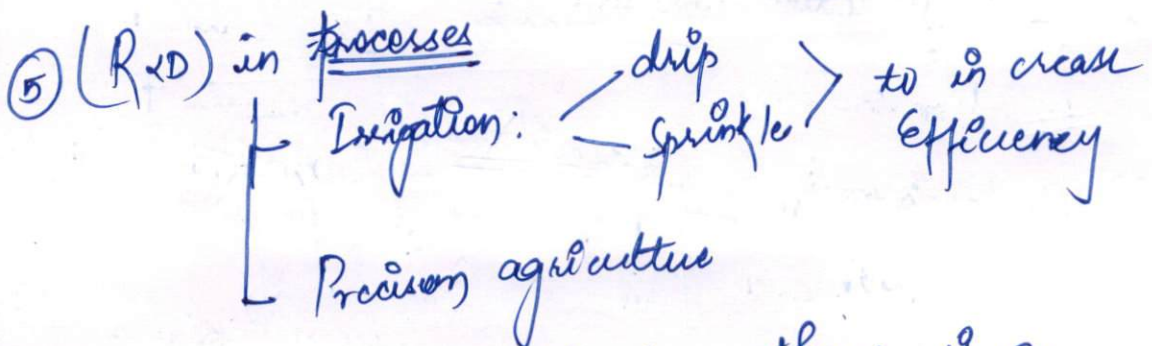
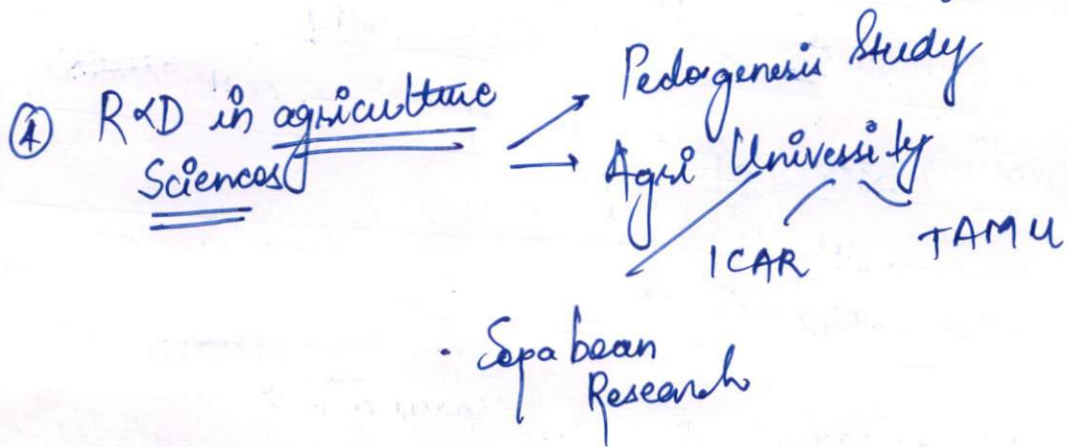
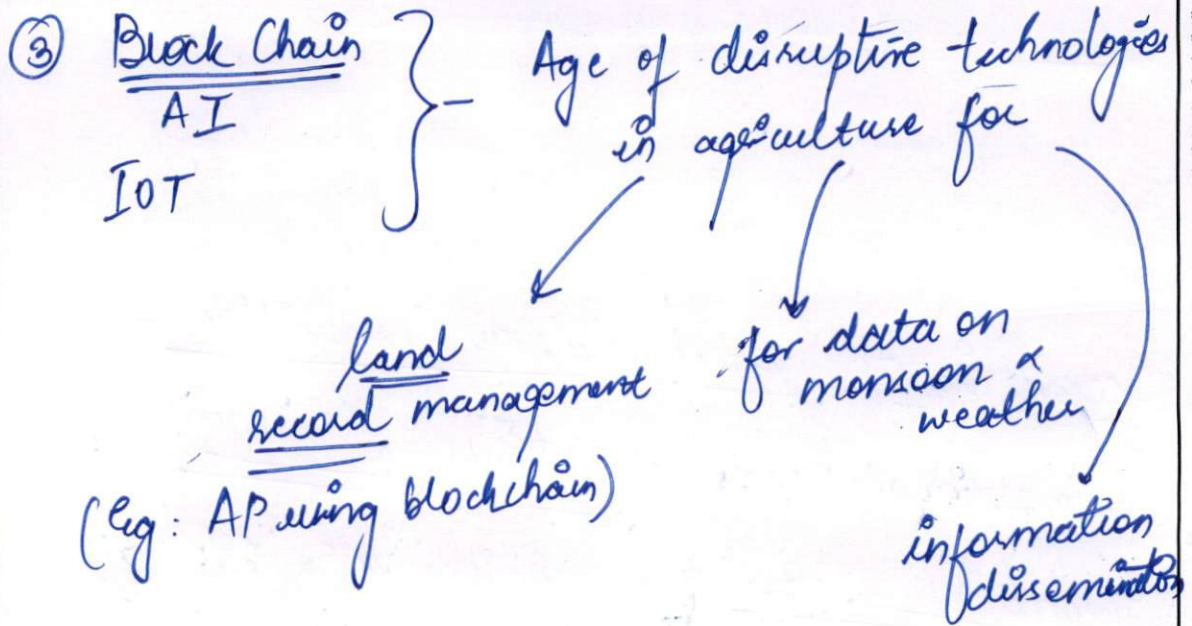
Krishi Vigyan Kendras  
Bhuvan, Chaman satellites  
Gagan

② Research on inputs

fertilizers → Quantity  

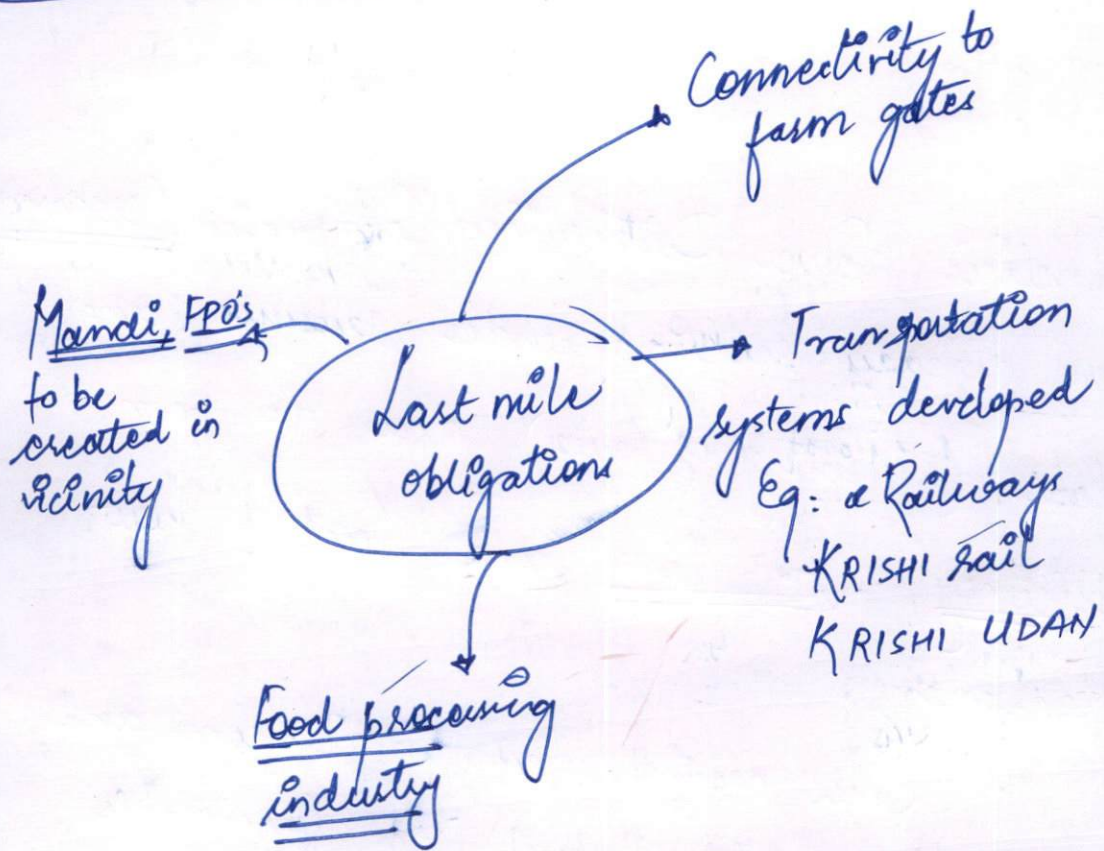
$$\left\{ \begin{array}{l} N:P:K :: 8:4:1 \\ \text{Vs} \\ \text{model } N:P:K :: 4:2:1 \end{array} \right\}$$
  
Seeds quality → Breeder  
 Certified  
 Hybrid Variety



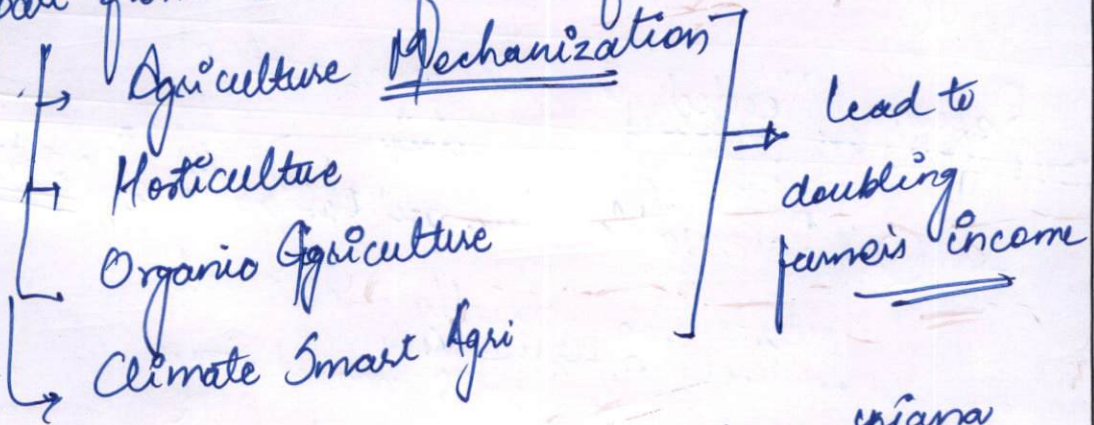


Along with disruptive (R&D), there is a need to focus on last mile obligations of agricultural system →





Apart from these reforms, focus on →



Govt steps like: → PM - Krishi Sinchayee Yojana  
Food processing: Sampada Scheme  
are right steps



13.

भारत की विद्युत वितरण कंपनियों और विद्युत ग्रिड को जीवाश्म ईंधन से अक्षय ऊर्जा के अधिक संधारणीय रूपों में संक्रमण हेतु सुधारों से गुजरना होगा। चर्चा कीजिए। (उत्तर 250 शब्दों में दें)  
 India's power distribution companies and electrical grids must undergo reforms to transition from fossil fuels to more sustainable forms of renewable energy. Discuss. (Answer in 250 words) 15

उम्मीदवारों को इस हार्शिए में नहीं लिखना चाहिए  
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India's Power Distribution Companies (DISCOMS) are already reeling under pressure and debt (Ministry of power) due to poor efficiency, (A&T) losses and lack of new technology.

Thus need of reforms in Discoms and grids from coal (fossil fuel) to Renewable energy is needed

### Reforms Needed in Discoms and El.

- ① Renewable Purchase Obligations (RPO) must be strictly followed  
 ↳ 20% mandatory
- ② Buy more from Renewable Generation
- ↳ ③ Reforms like: UDAY Scheme to take over their debt
- ↳ ④ Smart Metering and Net Metering



## Reforms in Electrical Grid

- ① Need to be properly managed to handle load during peak hours.
- ② Grid connectivity to North East must be improved, as high renewable potential
- ③ Integration of Green Grid with traditional grid.

The reforms in Electrical Grid and discoms will help India fulfill its Sustainable development goals & INDC's of Renewable Energy generation







14.

भारत में आगत-सघन (इनपुट इंटेन्सिव) कृषि की प्रथा में, इसकी अस्थिरता और नकारात्मक परिणामों के कारण, बृहद पैमाने पर बदलाव की आवश्यकता है। इस संदर्भ में, निम्न बाह्य आगत संधारणीय कृषि (LEISA) के महत्व पर चर्चा कीजिए। (उत्तर 250 शब्दों में दें)

The practice of input-intensive agriculture in India needs a massive overhaul due to its unsustainability and negative consequences. In this context, discuss the significance of Low External Input Sustainable Agriculture (LEISA). (Answer in 250 words)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए  
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15

Agriculture in India is characterised by being input intensive i.e. high focus and subsidies on input side.

Input Intensive agriculture → Unsustainable

Seeds : Hybrid Variety Seeds, Breeder Terminator Seeds

Power : Power Subsidy

Irrigation : Irrigation subsidy - largest use of ground water

Credit : Priority Sector lending in agriculture

Export : Export Subsidy to farmers

Fertiliser : around 70,000 crore support

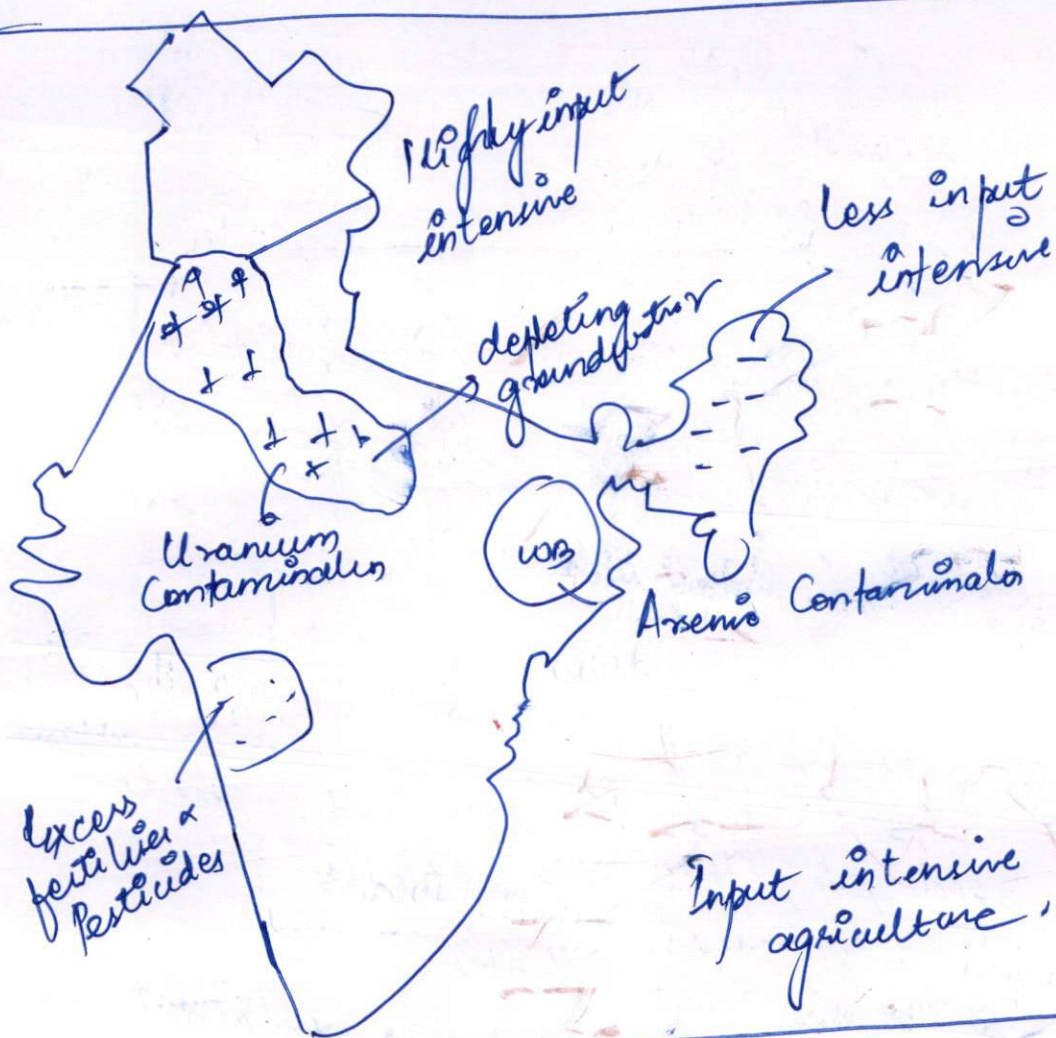
As a result agriculture becomes input intensive and negative consequences like :

Soil salinization

Water logging

→ Groundwater depletion

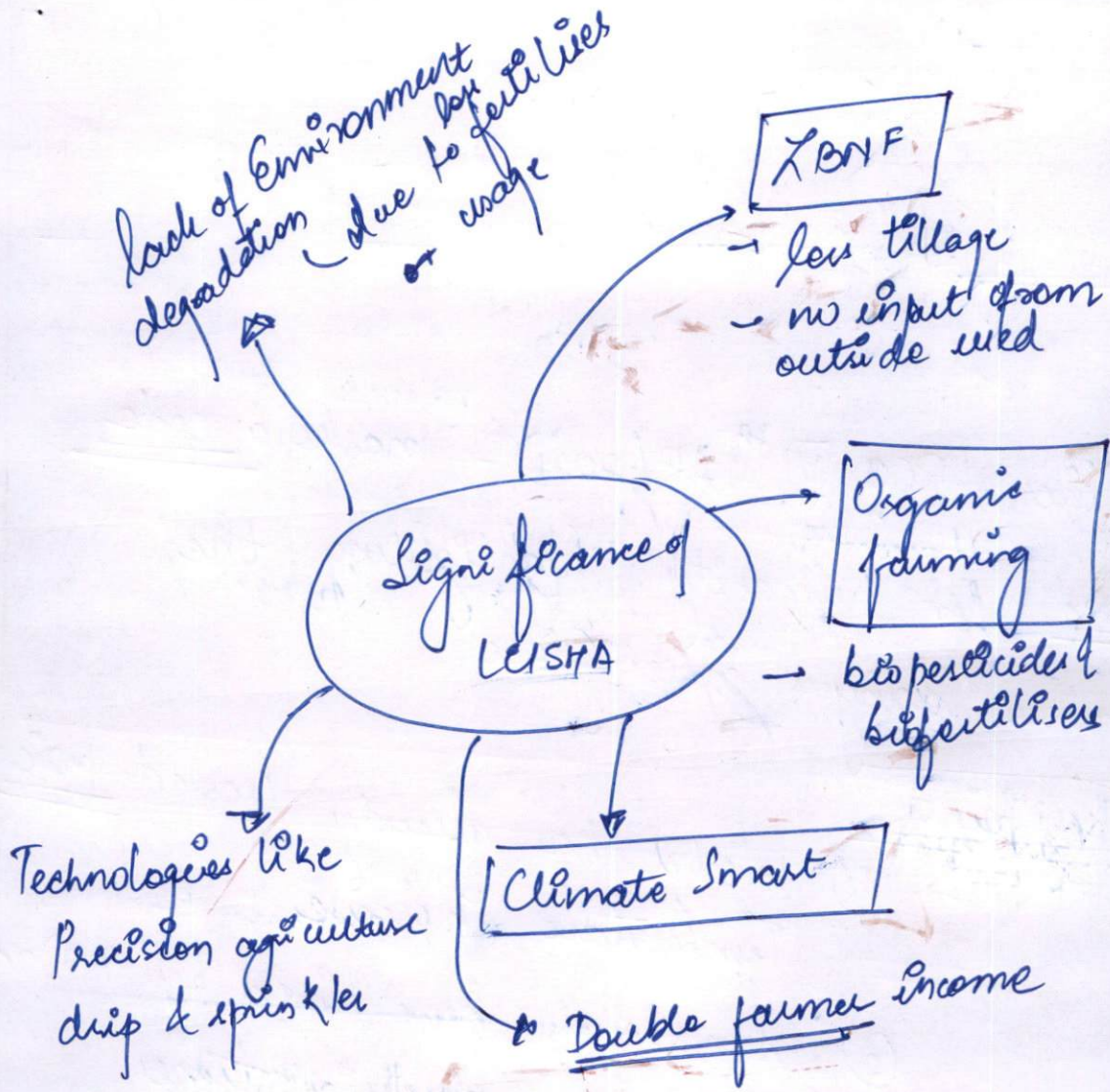




## Significance of Low External Input Sustainable agriculture (LEISA)

~~Low~~ LEISA - refers to the less input intensive agriculture meaning following more natural ways to do agriculture to make it sustainable





Apart from LEISHA government to make agriculture more sustainable has been focusing on

- Climate Smart Agriculture
- Green Revolution (20)



15.

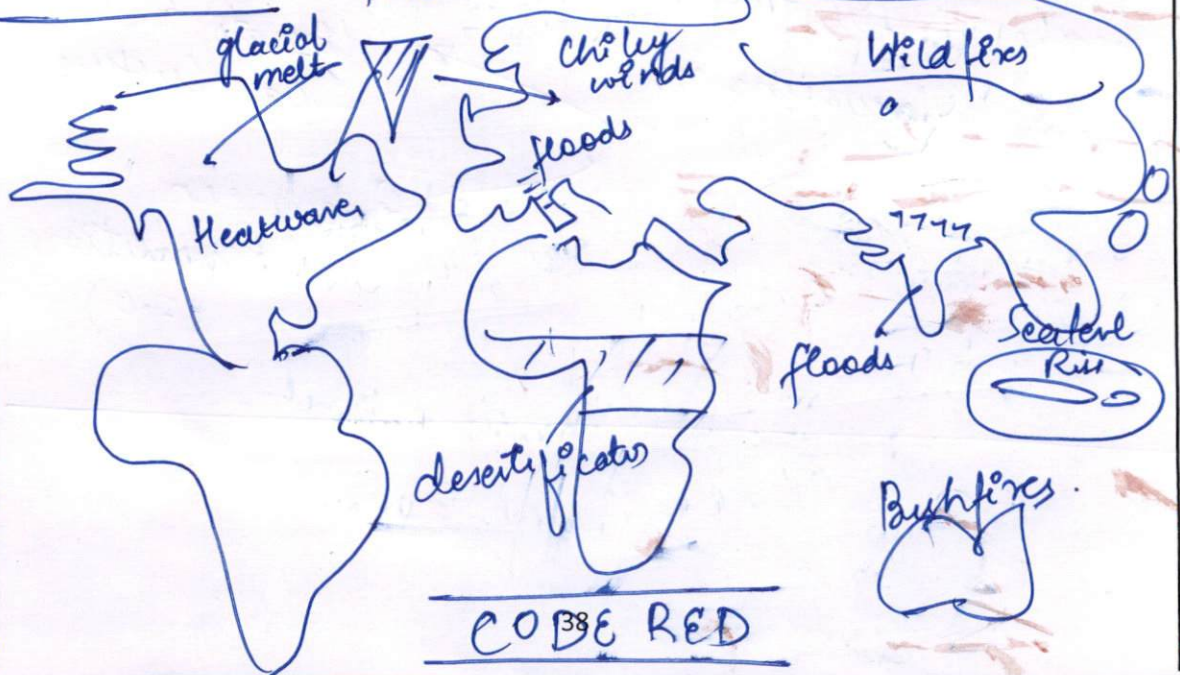
हाल ही में जारी IPCC की छठी आकलन रिपोर्ट (AR6) - 2021 को मानवता के लिए 'कोड रेड' माना गया है। इस संदर्भ में, भारत पर विशेष ध्यान देते हुए इस रिपोर्ट में उजागर की गई विभिन्न चिंताओं की विवेचना कीजिए। साथ ही, इस रिपोर्ट द्वारा प्रदत्त उपचारात्मक उपायों को भी सूचीबद्ध कीजिए। (उत्तर 250 शब्दों में दें)

The recently released (IPCC Sixth Assessment Report (AR6) - 2021) has been deemed as 'code red' for humanity. In this context, discuss the various concerns raised in the report with special focus on India. Also, enlist the remedial measures given by the report. (Answer in 250 words) 15

The IPCC VI<sup>th</sup> AR(2021) - marks a code red for humanity highlighting the various dangers across globe

Key points

- ① World has already crossed 1.2°C Temperature increase
- ② Sea Levels have risen by (4-8) cm since pre industrial times
- ③ By 2100; at this pace more than 2°C would be breached



उम्मीदवारों को  
इस क्राशिए में  
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# Concerns Specific to India

उम्मीदवारों को इस इतिहास में नहीं लिखना चाहिए  
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## ① Himalayan Region →

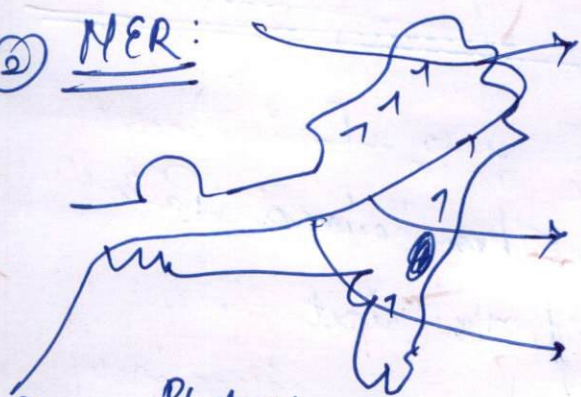


Melting Glaciers → Glacial Lake Outburst floods (GLOF)

More Temperature rise  
↳ Transhumance affected

More floods  
Cloud Bursts (Eg: Uttarakhand)

## ② NER:



forest and biodiversity impacted

floods in Brahmaputra

More Coastal erosion

## Deccan Plateau



More frequency of droughts  
Heat waves

## ④ Coastal Region:



More Cyclones (Gulab, Fani)

Erratic Rainfall  
Coastal Erosion



⑤ Rj region



Desert Expansion  
Dust Storms & Convective  
Rainfall

⑥ Monsoon System

→ Variability increase  
→ Breaks increase  
→ Erratic & Low  
Rainfall

## Remedial Measures

① Climate Commitments

↳ adhere as in Paris Accord  
↳ Need to go beyond Paris  
Commitment

② Invest in Renewable Energy to reduce fossil  
fuel usage

③ Climate Adaptation fund and Climate  
Technology fund needs to be formed

④ \$100bn commitment of developed countries  
must be adhered to

Apart from this [COPD - RC]

Common But differentiated Responsibility  
should be guide to tackle the concerns.



भोपाल गैस त्रासदी से लेकर विशाखापत्तनम में गैस रिसाव तक कई रासायनिक आपदाओं ने भारत में खतरनाक रसायनों (HAZCHEM) द्वारा उत्पन्न जोखिमों को ध्यान में लाया है। इसके दृष्टिगत, भारत में रासायनिक आपदा प्रबंधन (CDM) की तैयारियों के साथ-साथ इसमें व्याप्त कमियों की भी विवेचना की जाए। (उत्तर 250 शब्दों में दें)

Multiple chemical disasters from the Bhopal gas tragedy to gas leak in Visakhapatnam have brought into focus the risks posed by hazardous chemicals (HAZCHEM) in India. In view of this, discuss the preparedness as well as gaps in Chemical Disaster Management (CDM) in India. (Answer in 250 words)

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Chemical disasters in India have had a huge loss of lives of human-animals and what makes them more grave is the intergenerational and intragenerational inequity that they cause by showing side effects in coming years as well

Risk posed by Chemical disasters

- ① Human Lives : Bhopal Gas Tragedy killed around (20-30) thousand People
- ② Animal life : Many animals, birds, livestock lose their habitats & live
- ③ Environment and Ecosystem : Entire balance of ecosystem is disturbed



④ Intergenerational Risk → The effects of chemical

disasters are also seen in the coming future generations

⑤ Impact on Family & Society  
→ Causes disintegration of social life as many families lose their breadwinners

⑥ National risk  
↳ Threat to critical infrastructure of a nation during such disaster

⑦ Can be used as Bio weapon

⑧ Difficult to contain once start

Preparedness for Chemical disaster management → (CDM)

↳ Institutional : National Green Tribunal (NGT) to look after industries flouting Rules

↳ Legal : ① Chemical & Hazardous Substance Management Act

② EIA (1986)

NDMA Guidelines on tackling Chemical disaster



→ Principle of Polluter Pays :

↳ The burden of compensation should be on the industry accused

→ International

↳ Part of controlling the export, buying of Chemical & Biological (BWC) convention

Gaps in India's Preparation for CDM

→ ① No disaster vulnerable areas mapped  
Hazard zonation mapping has not been carried out

→ ② Strong regulatory framework needed to check industries flouting rules.

→ ③ The rules under CDM Act need to be updated

→ ④ Rescue & Relief operations need to be managed well

→ ⑤ Inter agency and ministerial coordination is weak

India needs a strong CDM policy for long term



17.

महामारी के समय सार्वजनिक स्वास्थ्य से संबंधित वस्तुओं और सेवाओं के उदारीकरण की बढ़ती मांग ने वर्तमान बौद्धिक संपदा व्यवस्था के संबंध में महत्वपूर्ण मुद्दों को उठाया है। विवेचना कीजिए। (उत्तर 250 शब्दों में दें)  
 The growing demand for liberalisation of public health-related goods and services amidst the pandemic has raised critical issues with regard to the current intellectual property regime. Discuss. (Answer in 250 words)

15

The COVID pandemic has created a ethical dilemma over whether to protect the Intellectual property rights (IPR) of innovators who developed drugs, vaccines or give the benefits to all and liberalise public health goods & services.

Growing demand for Public Health liberalisation

- ① To improve Accessibility, Affordability  
Quality of health care
- ② Technological penetration in health care  
 will lead to spillover effects in different industries and domains
- ③ It will drive up Social indicators  
 related to Infant & Maternal mortality



④ Will curb Out of pocket expenditure of the common man and reduce the poverty levels.

⑤- Bring about Intergenerational Equity and Inclusive development

### Critical issue of IPR and liberalisation

- 1) Liberalisation of health care will be achieved by Compulsary licensing (CL)
- 2) This will compromise the innovation and morale of researchers
- 3) Profits to the industry will decline
- 4) Future research and innovation will be hurt
- 5) It might also lead to more inequality due to complete closure of sharing of technology.



Thus, the growing demand for liberalisation of public health goods compromises and contravenes the objectives under IPR regime.

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Way forward: Towards a more Equitable World

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① Countries can invoke Compulsary Licensing in issue of public health Emergency  
Eg - India in case of Glivec  
Cancer drug

② Share of royalty - still goes to the patent producer

③ It will help in Trickle down the benefits to all the LDC's who cannot afford a - expensive health care system

This will help in ensuring  
SDG-3 related to Healthy life and Wellbeing  
& also promoting innovation

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भारत में रक्षा प्रौद्योगिकियों के स्वदेशीकरण में उप-इष्टतम परिणामों के लिए उत्तरदायी कारणों पर प्रकाश डालते हुए, उन उपायों का सुझाव दीजिए जो रक्षा क्षेत्र में स्वदेशीकरण की गति को तीव्र कर सकते हैं। (उत्तर 250 शब्दों में दें)

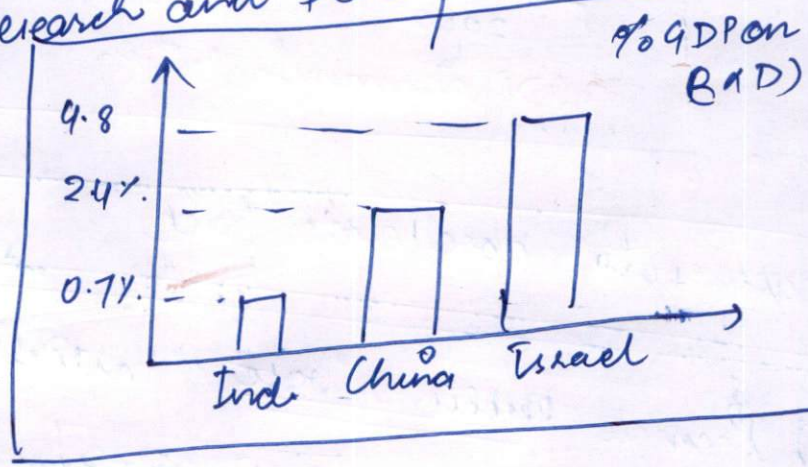
Highlighting the reasons behind suboptimal results in indigenization of defence technologies in India, suggest measures which can accelerate the pace of indigenization in the defence sector. (Answer in 250 words)

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India has recently launched its Defence Procurement Policy (2018) - where in the private sector participation is also committed in strategic sectors like - defence, arms

Reasons for suboptimal results in indigenization of defence technology

(1) Poor Research and Development



(2) Poor Skills & low human resource development  
→ only 4% skilled v/s  
40% in China  
96% in S. Korea.

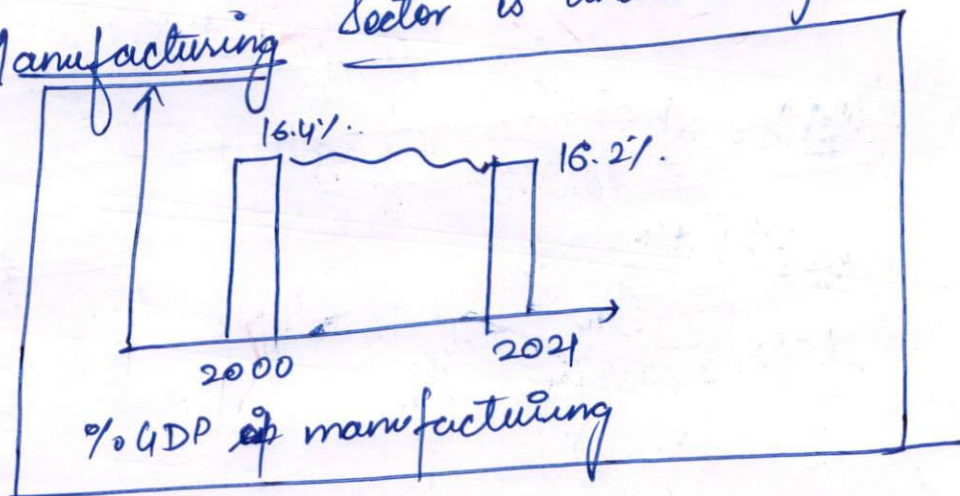


(3) Synergy of Private Sector is missing

(4) Lacks some, Complex and Regulatory measures

(5) Innovations in defence are meagre  
↳ World Innovation Index: 46

(6) Manufacturing sector is underutilized



Measures to accelerate pace

① Promote public private participation  
↳ Recent DPP-2020

② Innovations needed in defence sector  
↳ Promote defence startups



③ Increase Investments, funding in defence sector

④ Reduce the Regulatory Cholesterol, Redtapism

⑤ Skill needs to imparted  
( Mission Skill India  
PM-Kaushal Vikas Yojana -

⑥ Technology Transfer from foreign nation  
like ISRO and DRDO need

⑦ Institutions  
to take a lead

⑧ Develop industry - academia linkage.

'Defence in India' needs to be  
indigenously competitive.



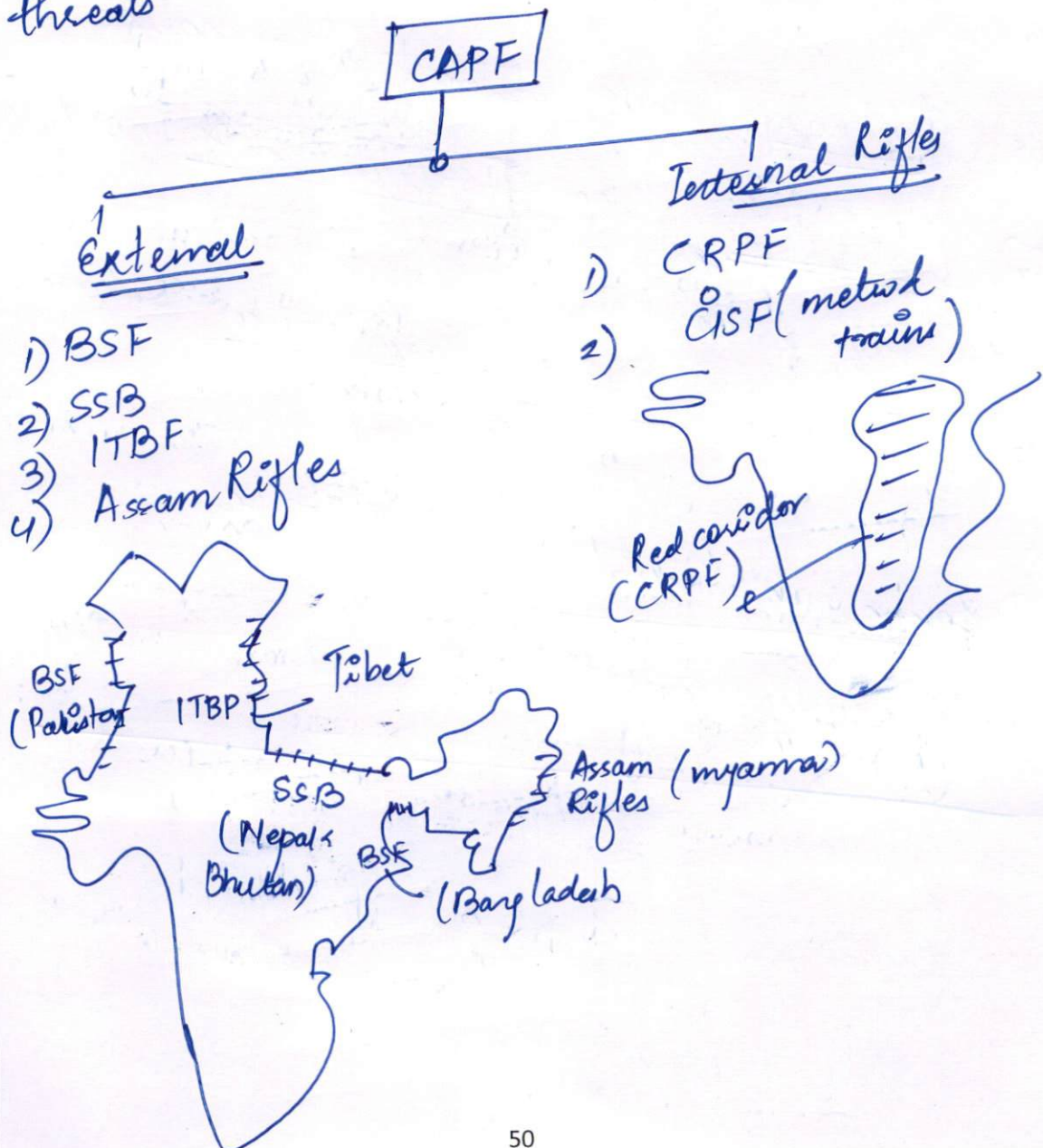
19.

अंतर्राष्ट्रीय सीमाओं की रक्षा के लिए विभिन्न केंद्रीय सशस्त्र पुलिस बलों की अवधारणा के पीछे के कारकों पर चर्चा कीजिए। साथ ही, भारत की सुरक्षा सुनिश्चित करने में इन बलों के योगदान पर भी प्रकाश डालिए। (उत्तर 250 शब्दों में दें)

Discuss the factors behind conceptualization of different Central Armed Police Forces for guarding the international borders. Also, highlight the contribution of these forces in ensuring security of India. (Answer in 250 words)

15

Central Armed police forces (CAPF)  
came with an intention to guard India w.r.t external as well internal threats



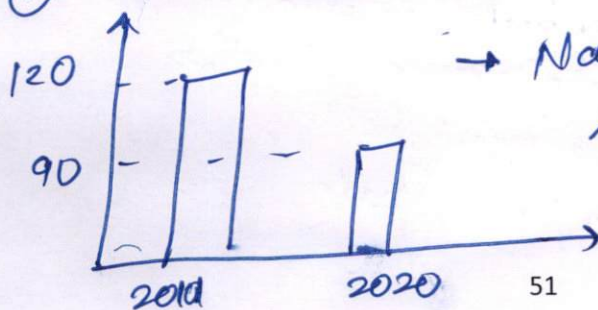


## Factors behind different CAPF

- ① Physical and Geographical : different forces in different Climate & Terrain
- ② Different Type of Challenges : Eg. Hot & humid (Western)  
Cold (near HP, UK border)
- ③ Different Level needed in different Terrain : Eg. Assam Rifles trained in guerrilla warfare
- ④ Internal issue of : Needed a dedicated Paramilitary force  
Naxalism
- ⑤ Balance needed with : Needed as a separate force apart from Army
- ⑥ Acquainted with local conditions of place : Eg. ITBP familiar with area

## Contribution of forces in ensuring Security

- ① Have contained Naxalism successfully



→ Naxal Affected districts have reduced to 90 (NAXA)



② Safeguarding of borders by BSF  
in → Pakistan infiltration  
↳ drug menace curb

③ In case of Assam Rifles - successfully  
carried out Operation Spring against  
insurgents

④ CISF have been guarding critical  
railway infrastructure

⑤ SSB - vigilant in checking the  
infiltration & counterfeit  
currency from Nepal

Though there are various issues in  
functioning like - lack of coordination  
& collaboration among forces, proper  
training. This can be achieved via

|   |   |                              |
|---|---|------------------------------|
| S | → | Security & Border management |
| E | → | Enhancing Capability         |
| C | → | Cooperation                  |
| U | → | upgrading Surveillance       |
| R | → | Regional integration         |
| I | → | Intelligence Strengthen      |
| T | → | Technological Skill          |
| Y | → | Youth participation          |



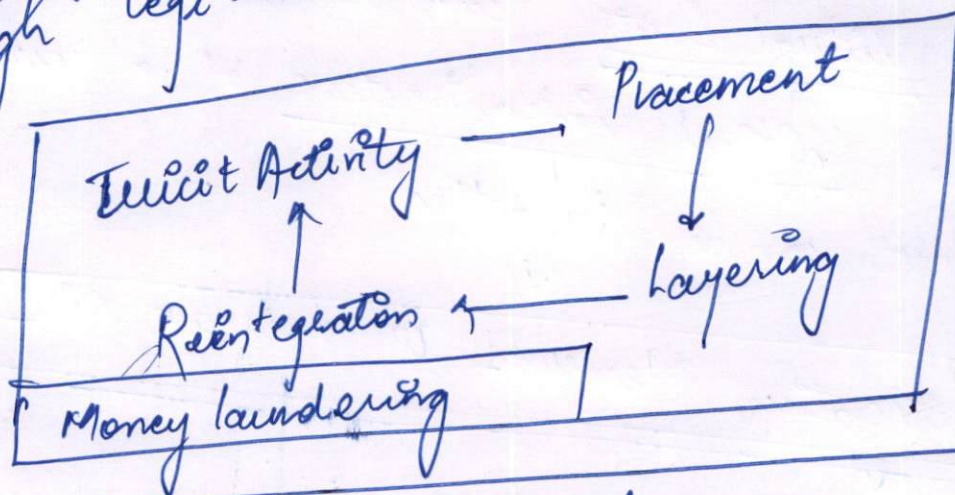
धन शोधन (मनी लॉन्ड्रिंग) गतिविधियों के लिए आभासी परिसंपत्तियों के दुरुपयोग के संदर्भ में, उनकी सुभेद्यता पर चर्चा कीजिए। साथ ही, उन सुधारात्मक उपायों का भी उल्लेख कीजिए, जो आभासी परिसंपत्तियों के उपयोग से उत्पन्न जोखिमों को कम करने के लिए अपनाए जा सकते हैं। (उत्तर 250 शब्दों में दें)

Discuss the vulnerability of virtual assets in terms of their misuse for money laundering activities. Also, state corrective measures that can be taken to mitigate the risks posed by the use of virtual assets. (Answer in 250 words)

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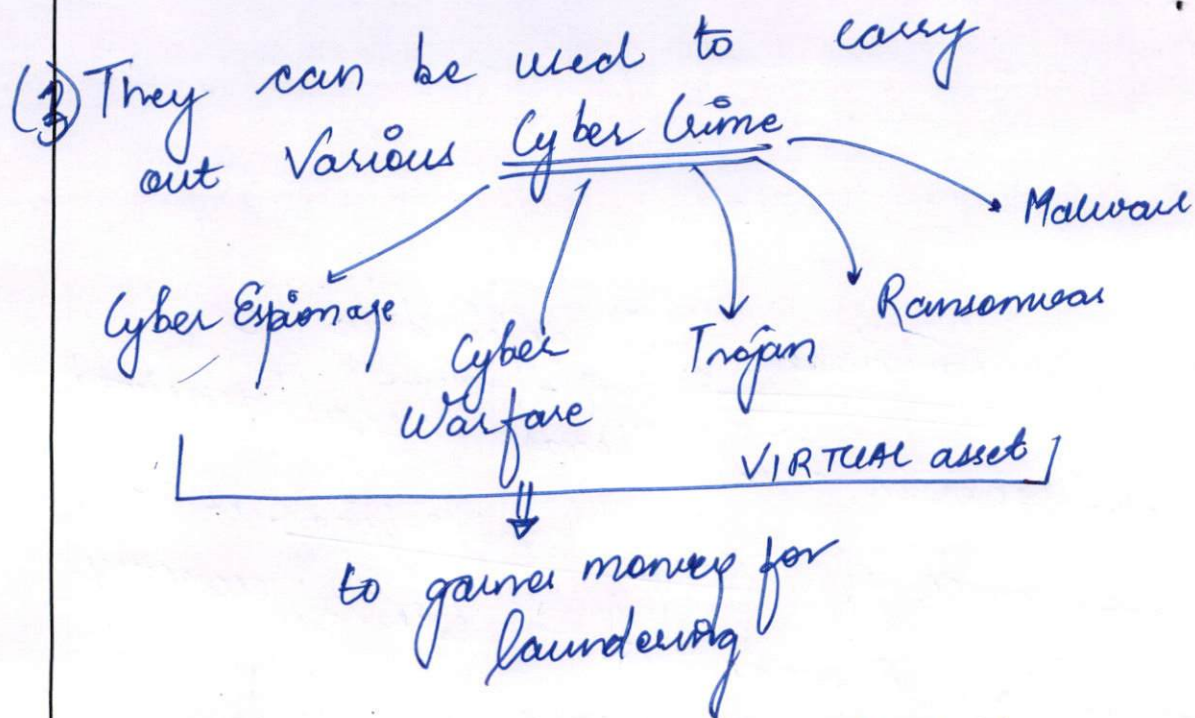
Money Laundering is defined as the process wherein the illegal money generated from source of drug trafficking, smuggling is made to re enter economy through legitimate means



### Vulnerability of VIRTUAL assets

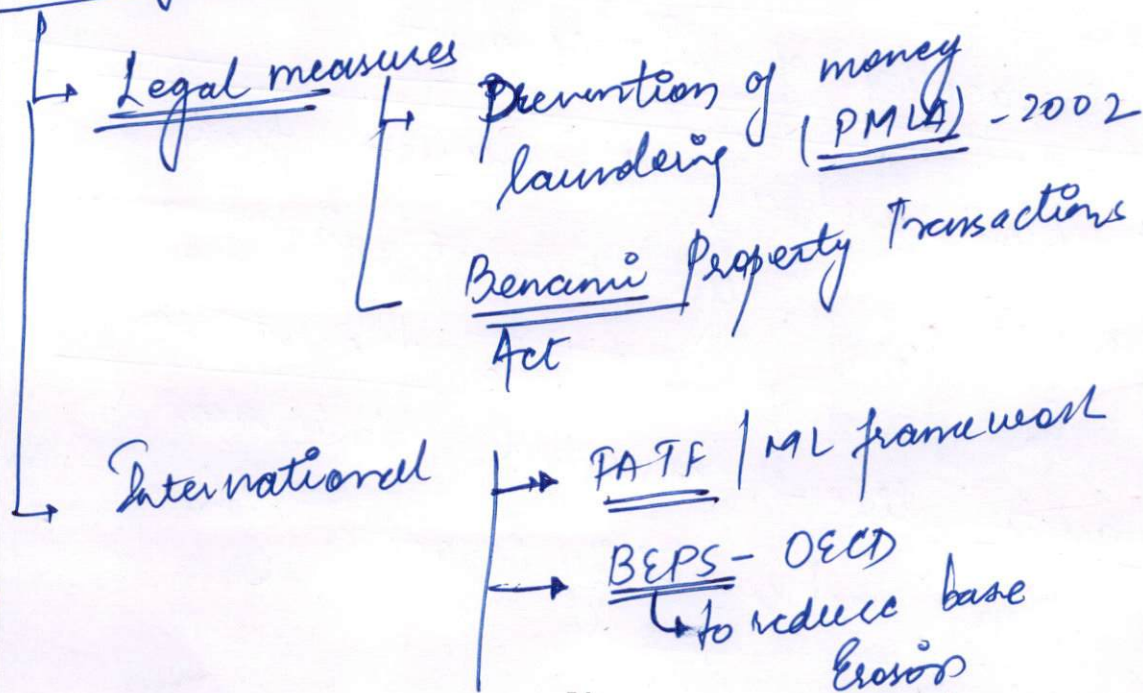
- ① Virtual assets are those assets that are not physically present in an area
- ② In terms of misusing the virtual assets like - computers, dark web, their vulnerability is quite high



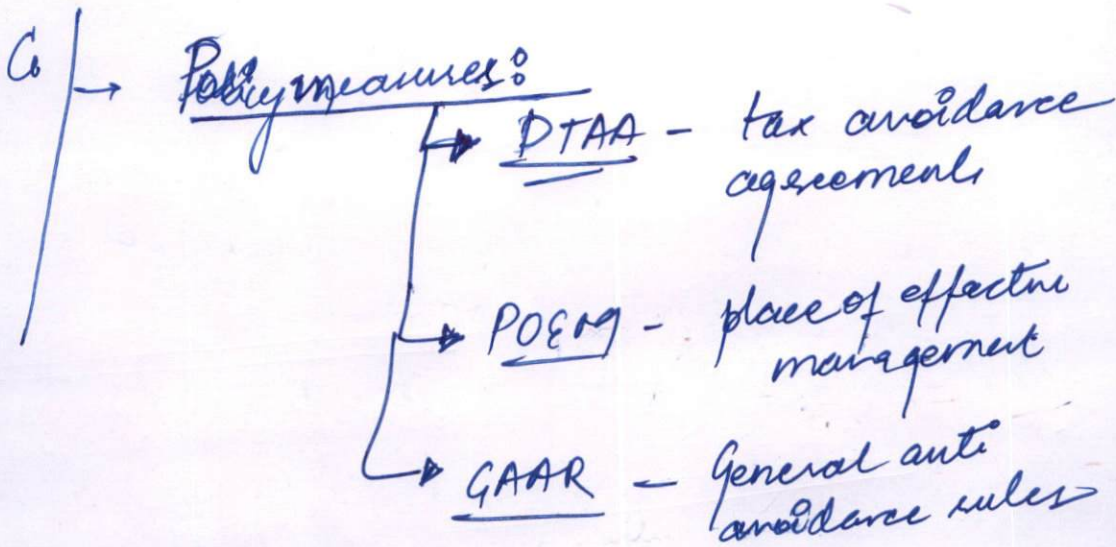


(4) Virtual Assets can also include the critical infrastructure of a country that can be targeted

### Mitigation Measures to decrease risk







Money laundering poses a risk of \$10bn economically, also associated with drug and arms trafficking hence needs to be checked.