

TEST CODE 6 1 3 3 0 1

FIAS – MGP 2023 – GS PAPER 3_FLT #3

Time Allowed : Three Hours
समय : तीन घंटे

Forum IAS

Maximum Marks : 250
अधिकतम अंक : 250

GENERAL STUDIES / सामान्य अध्ययन

Name Of Candidate परीक्षार्थी का नाम	SHUBHANSHI SINGH		
Roll No./अनुक्रमांक	1910083218	Medium/माध्यम	English <input checked="" type="checkbox"/> हिंदी <input type="checkbox"/>
Center Code/परीक्षा केंद्र	१९००	Date/दिनांक	17 Aug-2023

*Center Code . For Online - 1900 / Delhi : Karol bagh - 1901, ORN - 1902, Mukharji Nagar - 1903 / Patna : Boring Rd. - 2001 / Hyderabad : Jawahar Nagar - 2101

INDEX TABLE / अनुक्रमणिका			INSTRUCTION / अनुदेश	
Q. No. प्र.सं.	Max. Marks अधिकतम अंक	Marks Obtained प्राप्तांक	1. Please do furnish Name, Email, Roll No and Mobile in the answer sheet. कृपया उत्तर-पुस्तिका में नाम, ईमेल, रोल नंबर और मोबाइल नंबर भरें।	
1			2. There are TWENTY questions printed in ENGLISH & HINDI, all questions are compulsory. उत्तर पुस्तिका में अंग्रेजी/हिंदी में बीस प्रश्न दिए गए हैं, सभी प्रश्न अनिवार्य हैं।	
2			3. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के लिए निर्धारित अंक उसके सामने अंकित किए गए हैं।	
3			4. 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. उत्तर प्रवेश पत्र में अधिकृत माध्यम में लिखे जाने चाहिए, जो कि दिए गए स्थान में इस प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के कवर पर स्पष्ट रूप से लिखा जाना चाहिए।	
4			5. Word limit in questions, if specified, should be adhered to. Any page or portion of the page left blank in the Question-Cum Answer Booklet must be clearly Struck off. प्रश्नों में शब्द सीमा, यदि निर्दिष्ट हो, का पालन किया जाए। प्रश्न-सह-उत्तर पुस्तिका में खाली छोड़े गये किसी भी पृष्ठ या पृष्ठ के भाग को स्पष्ट रूप से काट दें।	
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			९.०० am	12:15 pm
Total Marks/कुल अंक :			Mode Of Examination/ परीक्षा की विधि :	Online/ऑनलाइन <input checked="" type="checkbox"/> Offline/ऑफलाइन <input type="checkbox"/>
*Examiner's Discretion is the marks awarded at the discretion of the examiner based on your overall impression, on the basis of (but not limited to) your handwriting, presentation, use of diagrams, flowcharts, facts and figures or absolutely anything that he/she liked in your copy. मूल्यांकन कर्ता का विवेक अंक, आपकी लिखावट, प्रस्तुति, आरेखों के उपयोग, फ्लोचार्ट, तथ्यों और आकड़ों या समग्र रूप किसी अन्य विषय वस्तु जो मूल्यांकन कर्ता को आपकी कॉपी में पसंद आयी के आधार पर (लेकिन इन्हीं तक सीमित नहीं) पर दिए गए अंक हैं।			For Office Use Only / केवल कार्यालय प्रयोग हेतु	
			ECN CODE/ ईसीएन कोड :	EG/ईजी :
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Note: You can discuss your evaluated copy with the Mentor. Raise a ticket from your portal to schedule a mentor call or visit the offline centre to meet mentor (all 7 days, Timings – 11 AM to 6 PM). Further if you are unsatisfied with the evaluation, you can seek re-evaluation of the copy.

EXAMINER'S REMARKS

CRITERIA FOR THE FEEDBACK SECTION AT THE END OF EACH QUESTION

1. **AWIS = Answered What is Asked.** This means whether you have addressed the core demand of the question or not. Addressing the core demand of the question gets you an objectively fair score. It is examiner's perception if you have understood the question and if you know the answer in the first place. Creative answer writing, sometimes missing the core demand, may fetch very high or very low scores, and exposes your answer to the subjectivity of the examiner.
2. **CD & VA = Content Density & Value Addition.** Examiner will evaluate the quality and quantity of your content in the answer. In the same word limit and space limit have you (a) written what is asked (b) gone beyond what is asked (c) enriched answers through combination of (but not all!) suggestions, ideas, quotes, flowcharts, diagrams, facts and figures, data etc. This affects objective components of assessment.
3. **S & F = Structure & Flow =** Whether you have structured your answer properly or not. Whether the answer has been broken into parts and sub-parts and each part has been addressed appropriately or not. Whether the flow of the answer is maintained. Affects both subjective and objective components of assessment.
4. **P & R =** How your answer performs on the criteria of **presentation, ease of read, clarity and apparent effort** in writing the answer. This affects the subjective components of assessment.

Q.1) Investment in infrastructure is a precursor to social and economic transformation; however, the focus on economic gains must not marginalise the concerns for safety. Comment. (10 marks, 150 words)

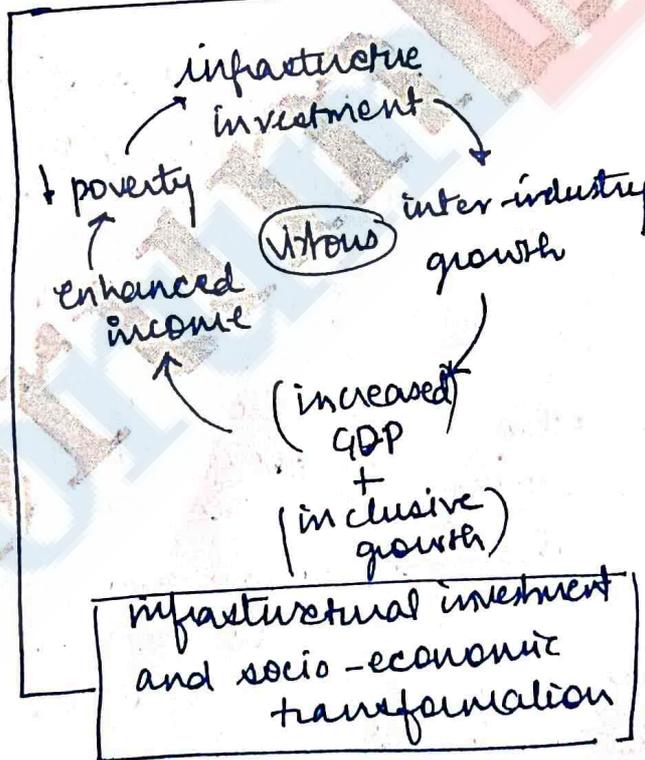
बुनियादी ढांचे में निवेश सामाजिक और आर्थिक परिवर्तन का अग्रदूत है; हालाँकि, आर्थिक लाभ पर ध्यान केंद्रित करने से सुरक्षा संबंधी चिंताओं को हाशिए पर नहीं डाला जाना चाहिए। टिप्पणी कीजिए। (10 अंक, 150 शब्द)

Infrastructural investment involves both physical and social infrastructure and has a forward domino effect on other industries

Infrastructural investment as a precursor

Economic growth
 ① Connectivity
 ↓
 market access
 ↓
 improved income
 ↓
 GDP growth

Social growth



① social infrastructure ⇒ equity for all
 (eg) Housing for all (PMAY)

② Physical infrastructure ⇒ equal accessibility
 (eg) roads to access healthcare in urban areas (PM Gram Sadak Yojana)

Economic gain and safety concerns

Importance of safety

- ① High incidents of safety negligence + life loss
eg → Balasore train crash killing over 200 people
- ② Necessary for basic human right to life (A-21)
- ③ GDP loss due to safety neglect
eg injuries → healthcare expenses
+ productivity - income.

Ensuring both economic gain and safety

- ① Necessary security clearance and regular social audits
- ② New technology for safety compliance
eg Railways = KAVACH
eg Cars = air bags
- ③ fund allocation for safety
eg Rajkya Rail Sualakha Kosh

Safety, inclusive growth and infrastructural investment are the wheels of the same chariot and need to go together

Feedback (For OFFICE use only)

#	G	A	P
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Please put tick marks in the above table.
Here G is Good, A is Average and P is Poor.

TOTAL MARKS	
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Q.2) What do you understand from Green growth? With special reference to the budget 2023-2024, discuss various government measures to propel green growth in the country. (10 marks, 150 words)

हरित विकास से आप क्या समझते हैं? बजट 2023-2024 के विशेष संदर्भ में, देश में हरित विकास को बढ़ावा देने के लिए विभिन्न सरकारी उपायों का आकलन कीजिए। (10 अंक, 150 शब्द)

Green growth refers to a sustainable manner of economic development. It adheres to India's "Panchsra" (COP26) and commitment to a greener, cleaner future.

Government measures to propel green growth

① Clean energy

① National Green Hydrogen Mission

Target ⇒ ① up to 5 ~~MT~~ MT of green hydrogen generation by 2030

② reduction in ~~GVA~~ GVA emission by 30 ~~MT~~ MT by 2030

Method → budgetary allocation (over 7000 cr)
→ special cells created for compliance.

② Impetus on solar energy adoption

eg PM-KUSUM scheme for farmer.

③ Wind energy utilization

eg) largest hybrid wind-solar park in Rajasthan -

B) Waste management

① Banning of single use plastic to reduce plastic pollution

↳ currently 60% of marine pollution is plastic

② Compost management and source segregation measures

C) Financial impetus

① Eco. ESG (Environmental, Social and Governance) measures with CSR for corporates

② Sovereign green bonds

③ Social stock exchange

④ Green GDP by Uttarakhand

① inclusive and participative green growth

② civil society and local bodies

③ Adherence to fundamental duty (Art 51(f))

Suggestions for further measures

Green growth is the sine qua non for a future without oxygen masks and air pumps!!

Feedback

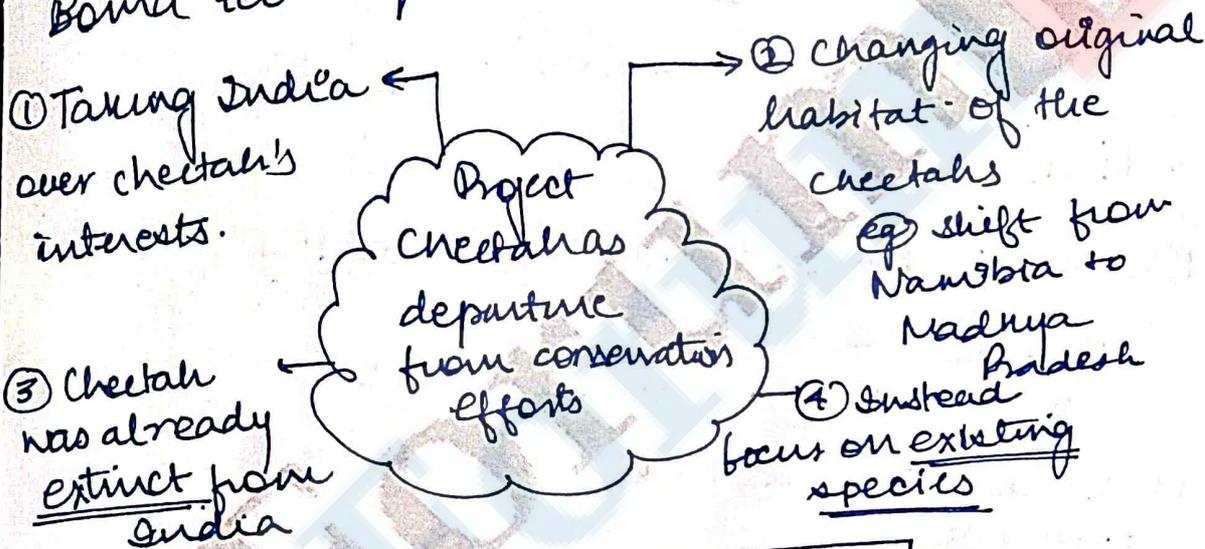
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Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			

Q.3) Project cheetah marks a departure from India's efforts for conservation of various critically-endangered species. In this perspective, do you think the reintroduction of major fauna that has gone extinct is justified? (10 marks, 150 words)

प्रोजेक्ट चीता विभिन्न गंभीर रूप से लुप्तप्राय प्रजातियों के संरक्षण के लिए भारत के प्रयासों से विचलन का प्रतीक है। इस परिप्रेक्ष्य में, क्या आपको लगता है कि विलुप्त हो चुके प्रमुख जीवों का पुनरुद्धार उचित है? (10 अंक, 150 शब्द)

Project cheetah established in early 2000s recently saw the reintroduction of 20 African cheetah in India using the Boma technique.



Reintroduction of major fauna

Justified

① Expansion of single out habitat of critically endangered species
eg if an earthquake destroys all African cheetahs, some in India would preserve the specie

② increased biodiversity richness with localized breeding and new adaptations over generations

eg) cubs born out of the migrated cheetahs

③ Efforts to sensitize humans towards wildlife conservation

eg) Mascot of cheetah in Madhya Pradesh

Not justified

① Change in habitat leading to deaths and illness

eg) 3 out of 20 cheetahs died

② local climate and problems not well researched

eg) Radio collar wounds

③ High risk of further reduction in number

Suggestions

→ ① dedicated researchers and regular consultation to cover all grounds

→ ② pilot projects to reduce the risk

A global collaboration is required to keep fauna at the centre of all projects and dialogues

Feedback

(For OFFICE use only)

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Please put tick marks in the above table.

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TOTAL MARKS

Q.4) In what ways can precision agriculture become a panacea for multipronged challenges plaguing the agriculture sector? Discuss. Also, analyse various impediments in widespread adoption of precision farming in India. (10 marks, 150 words)

किस प्रकार परिशुद्ध कृषि कृषि क्षेत्र की बहुआयामी चुनौतियों के लिए रागवाण बन सकती है? चर्चा कीजिए। इसके अलावा, भारत में परिशुद्ध खेती को व्यापक रूप से अपनाने में विभिन्न बाधाओं का विश्लेषण कीजिए। (10 अंक, 150 शब्द)

Precision agriculture refers to the well calculated and precise use of inputs, growth monitoring and post harvest management using new and emerging science and technology. (NEST)

Precision agriculture as a panacea

A Input level

① soil health monitoring to rationalize fertilizer and water requirements
eg Soil health cards

② Water application using micro irrigation
eg Drip irrigation

③ seed management by bio-engineering
eg GM crops

④ Point application of fertilizers.

B During crop growth

① Protection from pests and predators by real time monitoring
eg Drones.

② Plant growth monitoring using biosensors

③ Post harvest management

① Quality standard regulation with precise testing

③ Quality based pricing → ↑ Income for farmers

② Reducing losses by real time monitoring of "rotten" state.
eg IR sensors in transport truck

Impediments

① Low technological knowhow among farmers

↳ only 40% farmers receive extension services from govt centres (NSO)

③ Poor implementation of schemes.
eg only 6% get MSP benefit

② Digital divide and rural urban divide would lead to exclusion from NEFT

internet → rural = 31%
 → urban = 67%

Solutions

→ empowering the farmers with knowledge and technology
→ involving civil societies.

Precision agriculture is the next generation of agriculture leading its way to single-click agriculture

Feedback
(For OFFICE use)

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Please put tick marks in the above table. Here G is Good, A Average and P is Poor		
TOTAL MARKS		

Q.5) What are the reasons for increasing emphasis on the horticulture sector in recent years? Evaluate government measures for the development of the horticulture sector.

(10 marks, 150 words)

हाल के वर्षों में बागवानी क्षेत्र पर अधिक जोर देने के क्या कारण हैं? बागवानी क्षेत्र के विकास के लिए सरकारी उपायों का मूल्यांकन कीजिए। (10 अंक, 150 शब्द)

Horticulture sector is the growth of non grain crops like fruits, vegetables and flowers. Its production (340MT) surpassed the grain production (315MT) in early 21st century.

Reasons for increasing emphasis

- ① Crop diversification
(Rainbow revolution)
- ② Doubling farmer income
(Dahwai committee)
- ③ Soil fertility maintenance
(eg) crop rotation
- ④ Food processing industry growth
(eg) Mango ⇒ pulp based drinks like "slice"
- ⑤ Saturation in grain sector + ~~over~~
- ⑥ Overdependence on rice and wheat (75% of total grains)

Government measures

1) National Mission on Horticulture

- i) seed subsidy to encourage horticulture
- ii) Better market access
- iii) Extension services.

2) Institutes for excellence in Horticulture education
 eg) Bengaluru Agriculture College

3) National Missions on Saffron and lavender
 ↳ growing them in North East

4) Agricultural Term Ahead Markets to provide input capital

5) Mechanisation of farms for easier growth
 eg) Common hiring centres

Lacunae

- 1) Poor motivation among farmers due to high ~~and~~ MSP on grains
- 2) Small orchards reduce yield
- 3) Poor transportation + low shelf life reduces profits

Horticulture sector is a sunrise sector that can contribute in an inclusive economic growth

Feedback (For OFFICE use only)

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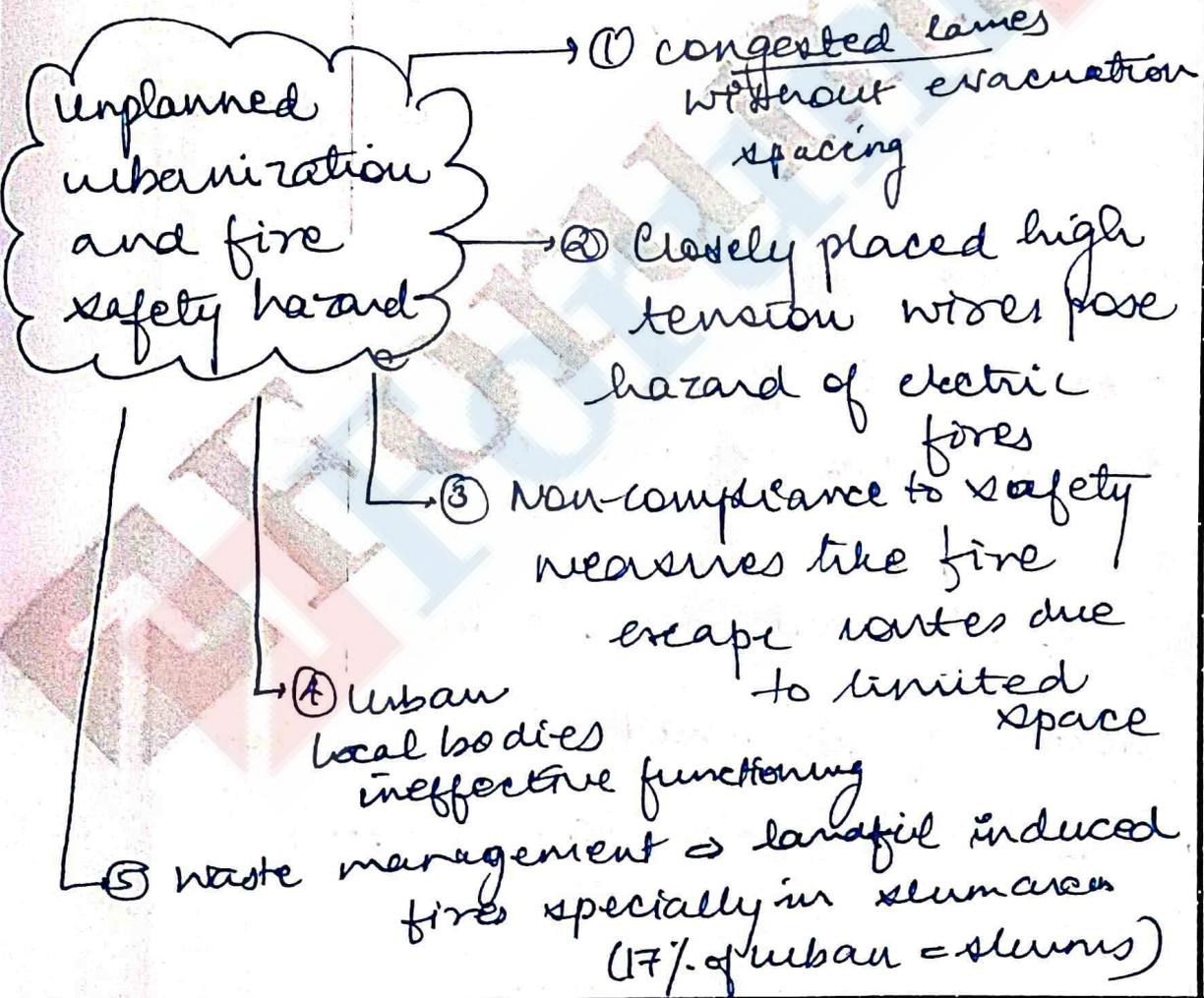
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TOTAL MARKS

Q.6) Unplanned urbanization has made Indian cities vulnerable to fire safety hazards. Discuss and recommend measures for mitigating urban fires, with special reference to national building code, 2016. (10 marks, 150 words)

अनियोजित शहरीकरण ने भारतीय शहरों को अग्नि सुरक्षा खतरों के प्रति संवेदनशील बना दिया है। राष्ट्रीय भवन संहिता, 2016 के विशेष संदर्भ में, शहरी अग्नि को कम करने के उपायों पर चर्चा करें और सुझाव दीजिए। (10 अंक, 150 शब्द)

Recent urban fire in Delhi's Mukherjee Nagar directed the attention of the nation towards the ever-growing hazard of urban fire.



Measures for mitigating urban fires

(A) Preparedness

- ① Compliance to National Building Code for fire safety measures
- ② Regular audits from government agencies.
eg) Municipality audits
- ③ Strict actions on non compliance

(B) During hazard

- ① Evacuation path construction
- ② immediate ambulance availability

Urban fire hazard needs to be combated by planned urbanization and sustainable cities (SDG 11)

Feedback
(For OFFICE use)

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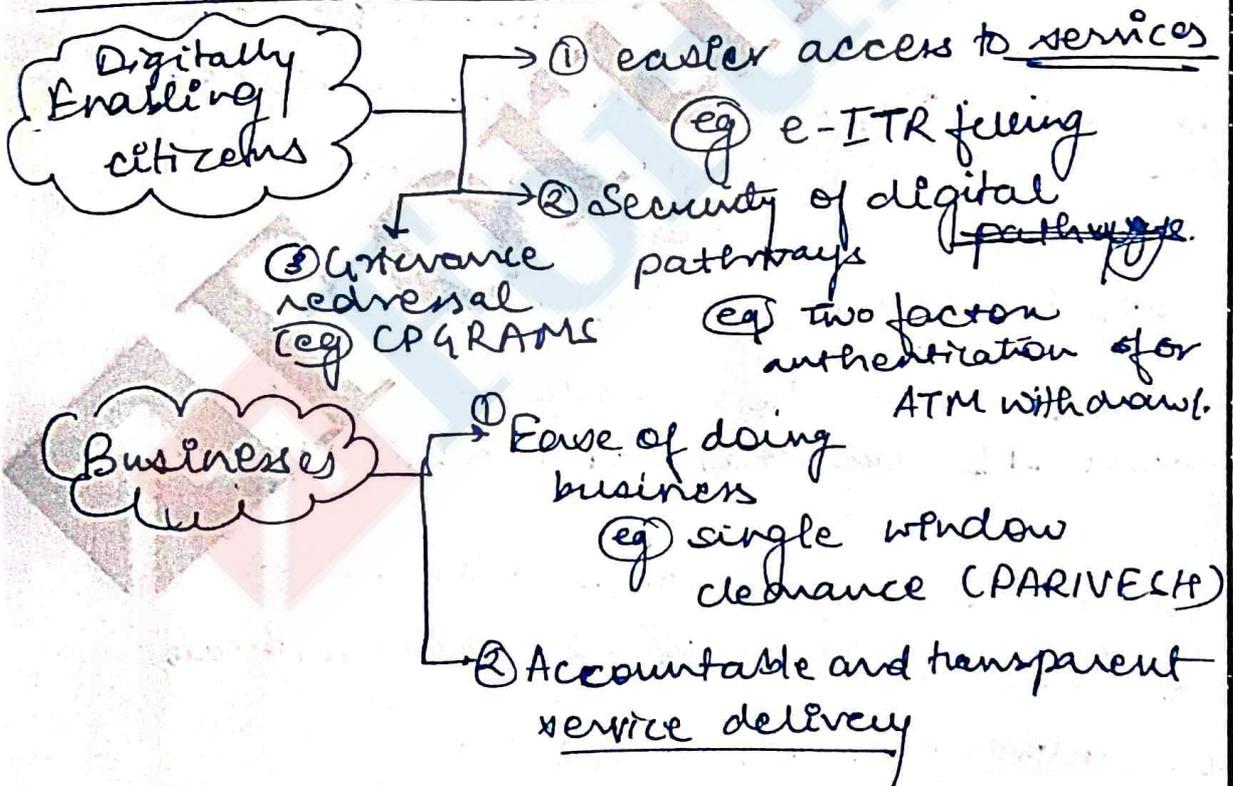
Q.7) DPI (Digital Public Infrastructure) is indispensable for digitally enabling citizens and businesses; however, the challenges of exclusion, exploitation, and monopolisation cannot be ignored. Examine. (10 marks, 150 words)

DPI (डिजिटल पब्लिक इंफ्रास्ट्रक्चर) नागरिकों और व्यवसायों को डिजिटल रूप से सक्षम करने के लिए अपरिहार्य है हालाँकि, बहिष्कार, शोषण और एकाधिकार की चुनौतियों को नजरअंदाज नहीं किया जा सकता है। परीक्षण कीजिए। (10 अंक, 150 शब्द)

Digital public infrastructure refers to the various digital infrastructure used to implement citizen centric good governance and provide public service

eg) JAM trinity, UPI system.

DPI as indispensable



Challenges

① Exclusion → digital divide
 only 38% digitally literate - Oxfam

↳ rural urban divide

↳ gender divide
 only ~30% women use internet

↳ internet → rural = 3%
 ↳ urban = 67%

② Exploitation → poor biometric performance
 (eg) technical glitch rejected fingerprints

↳ poor scheme implementation
 (eg) MGNREGA photo tagging failure

↳ data privacy concerns in India

③ Monopolisation: only NPCI is the current umbrella entity controlling most DPI like UPI, NEFT, RTGS, Aadhaar, etc.

Digital payment infrastructure should be inclusive and equitable in its approach towards service delivery (serottam model).

Feedback (For OFFICE use)

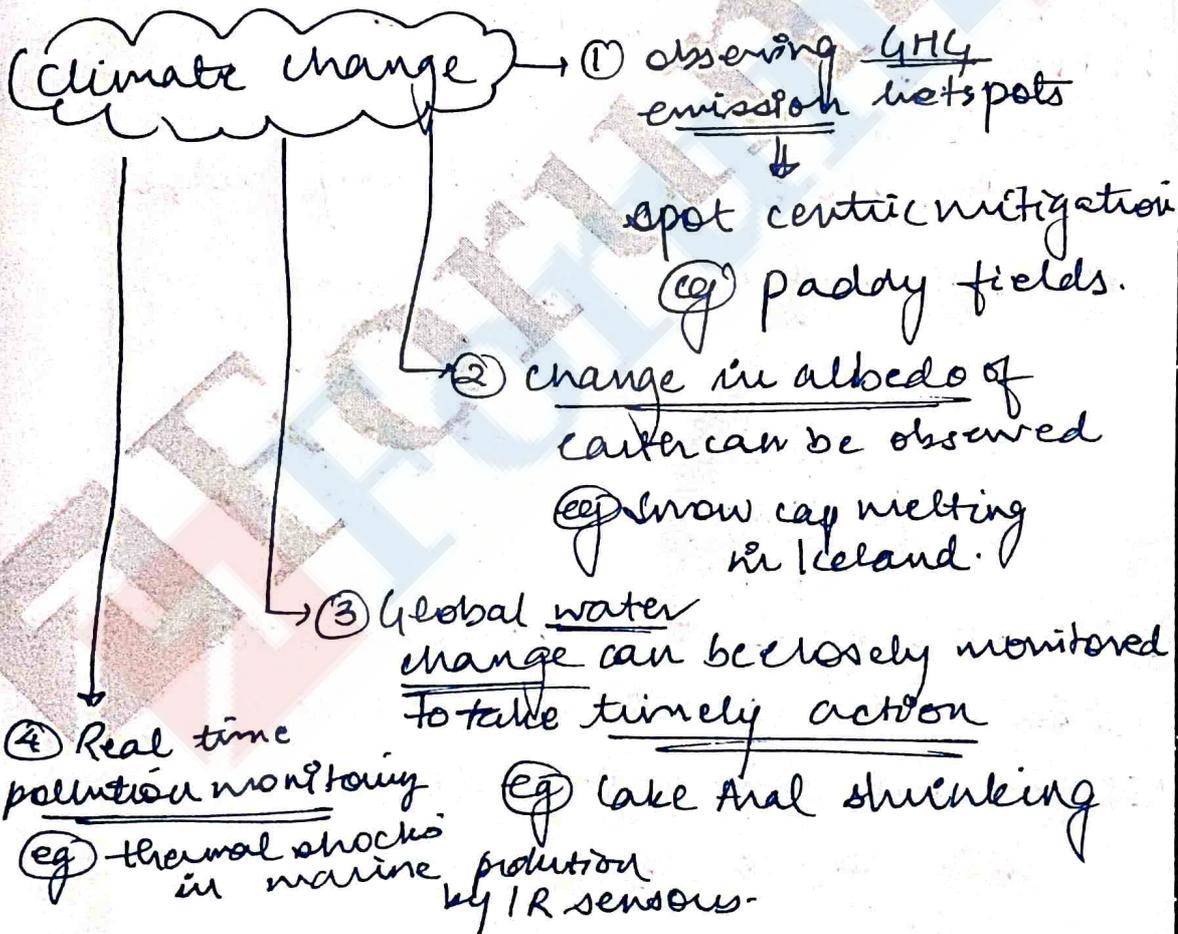
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Here G is Good, A is Average and P is Poor		
TOTAL MARKS		

Q.8) Assess the relevance of the NISAR mission in observing and managing climate change and natural hazards. (10 marks, 150 words)

जलवायु परिवर्तन और प्राकृतिक खतरों के अवलोकन और प्रबंधन में NISAR मिशन की प्रासंगिकता का आकलन कीजिए। (10 अंक, 150 शब्द)

NISAR mission is an ^{earth} ~~space~~ observation mission developed in collaboration by ISRO and NASA.

Relevance of NISAR in :



Natural hazards

- ① Observe development and change in yclone trajectory
 (eg) Fujiwara effect seen in Pacific (2022)
- ② Detection of wild fires and timely cutting of fuel supply (trees) to stop the process
 (eg) Canadian wildfire 2023
- ③ Shifting of plates can be better observed to predict earthquakes
 (eg) Anatolian plate @ Turkey earthquake
- ④ Localized phenomenon → monsoon pattern in India
 local wind intensity (eg) Bezzards in USA
 (eg) observe ELNino to predict

NISAR is not only a step into satellite observation and climate and disaster resilience but a stepping stone in India-US ties.

Feedback
(For OFFICE use)

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Here G is Good, A Average and P is Fair

TOTAL MARKS	
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Q.9) Defense indigenization remains the Achilles heel of India's security architecture. Examine the importance of startups in defense sector to make India secure and self-reliant.

(10 marks, 150 words)

रक्षा स्वदेशीकरण भारत की सुरक्षा संरचना का आधार बना हुआ है। भारत को सुरक्षित और आत्मनिर्भर बनाने के लिए रक्षा क्षेत्र में स्टार्टअप के महत्व का परीक्षण कीजिए।

(10 अंक, 150 शब्द)

India ~~is~~ ^{was} the largest arms importer from 2018-2022 according to SIPRI, emphasizing the need for defence indigenization.

Defence indigenization as Achilles heel

as a result, import bill increases and superior innovation like Israel's Iron dome is limited in India

- ① largest arms importer (SIPRI)
- ② limited technological development
(eg) RAAAF from France
- ③ Budgetary allocation is limited
- ④ Poor private sector participation due to strategic sector declaration

Importance of startups

(A) Innovation

① Dedicated research and innovative solutions found (eg) Smart India Hackathon.

② Dedicated funds for Innovation and performance appraisal enhances quality of innovation

③ Export orientation

① Decentralizing defence indigenization to startups would help in better quality production in limited time
 ↓
 export preparedness

④ Inclusive security

① Ground level issues would be better understood by regional startups

- eg) Kerala's cyberdome for cyber security
- eg) Intelligent border management

With India being the 3rd largest startup ecosystem and housing over 100 unicorns, startups play a major role in 'atmanirbhar' defence.

Feedback (For OFFICE use)

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Please put tick marks in the above table. Here G is Good, A is Average and P is Poor

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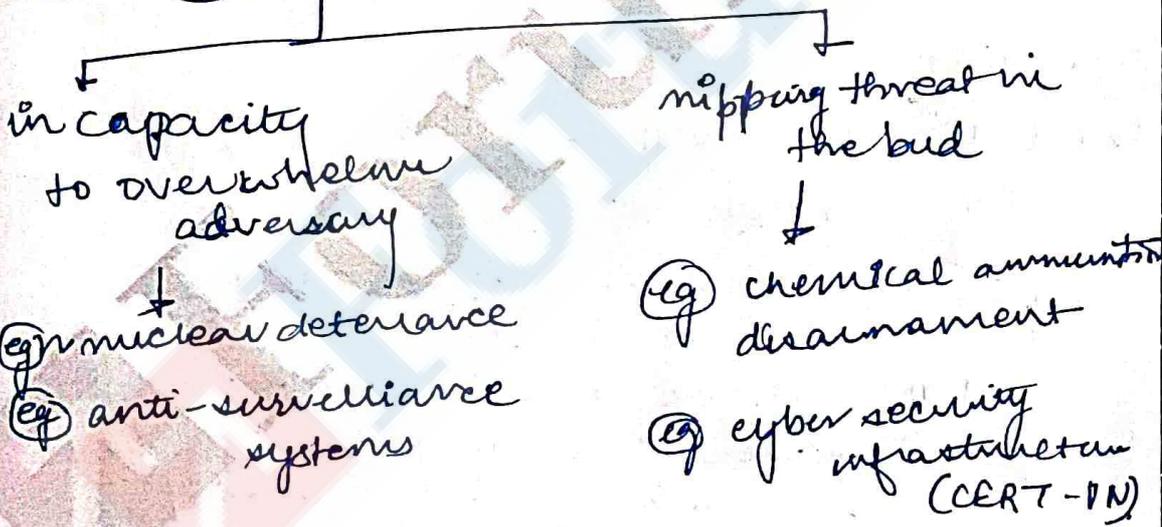
Q.10) Edge in modern warfare lies not so much in the capacity to overwhelm the adversary as much in the ability to nip the threat in the bud. In this context, discuss the role of intelligence in maintaining national security, and also cite challenges associated. (10 marks, 150 words)

आधुनिक युद्ध में बढ़त प्रतिद्वंद्वी पर हावी होने की क्षमता में उतनी नहीं है जितनी कि खतरे को शुरुआत में ही खत्म करने की क्षमता में है। इस संदर्भ में, राष्ट्रीय सुरक्षा को बनाए रखने में खुफिया जानकारी की भूमिका पर चर्चा कीजिए और इससे जुड़ी चुनौतियों का भी उल्लेख कीजिए।

(10 अंक, 150 शब्द)

Modern warfare techniques include crossing the three frontiers of ~~sp~~ land, air and water and moving to chemical warfare, nuclear warfare and biological warfare and cyber warfare.

Edge in modern warfare



Role of intelligence in maintaining national security

Ⓐ Border security

① Intelligence sharing of infiltrants and miscreants

eg Pakistan infiltrants in Kashmir
↓
help in stopping them
eg Border outposts

② Internal threats

eg LWE activities in Red corridor can be stopped by acting on intelligence gathered from locals
→ Urban nazals.

③ Cybersecurity

↳ intelligence about possible emerging threats eg Keyloggers.
help in building better infrastructure to counter

eg AUMC attack could be countered if employees were away of the risks and had safety software in their mobiles.

Intelligence is the new ammunition that would help in a holistic security of the nation.

Feedba
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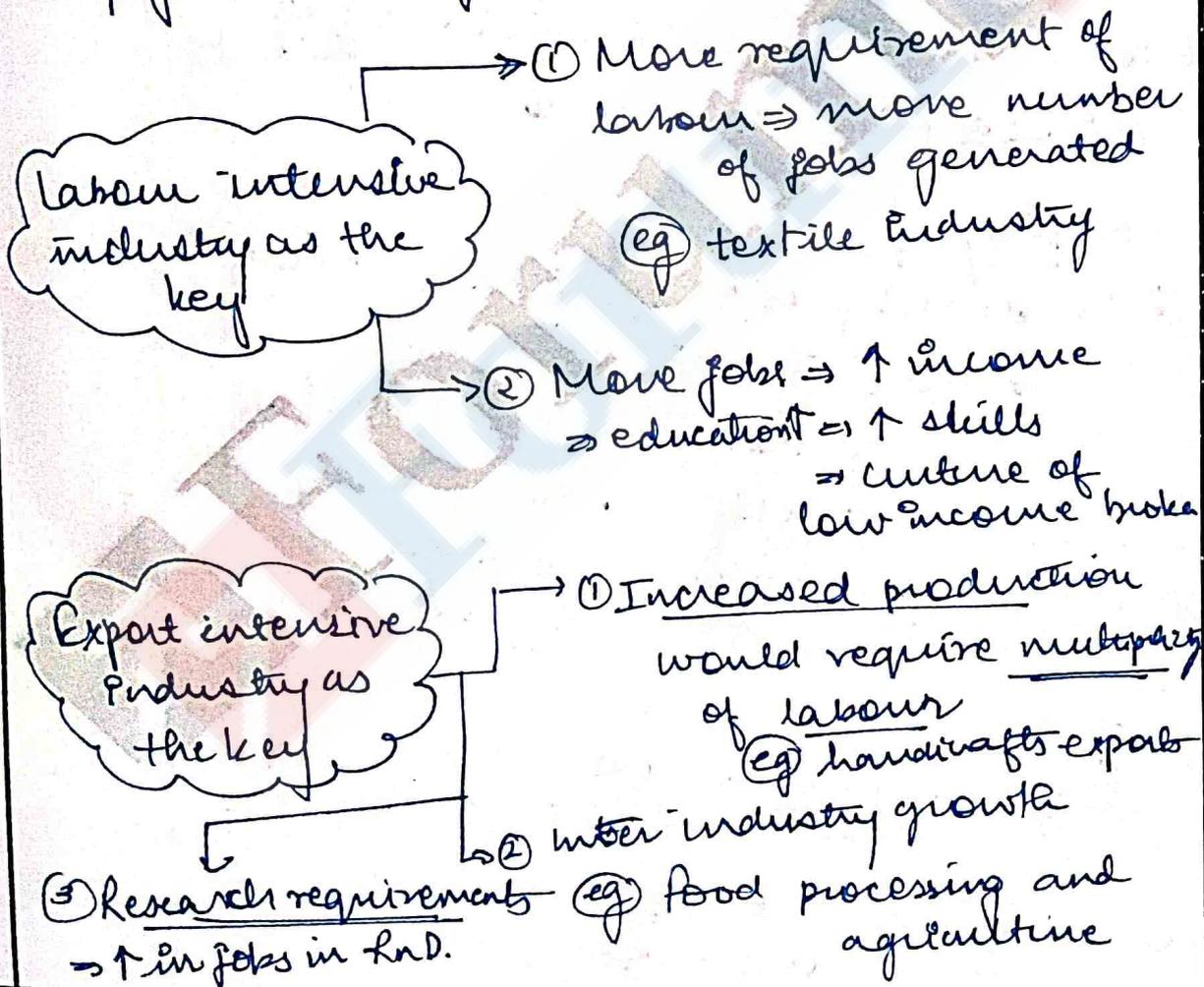
Q11) Labour and export intensive industries are key to problems of jobless growth. In this perspective, analyse the opportunities and challenges associated with the textile sector.

(15 marks, 250 words)

श्रम और निर्यात गहन उद्योग रोजगारहीन विकास की समस्याओं की कुंजी हैं। इस परिप्रेक्ष्य में, कपड़ा क्षेत्र से जुड़े अवसरों और चुनौतियों का विश्लेषण कीजिए।

(15 अंक, 250 शब्द)

In the recent years, India's GDP growth has been seen as a result of upskilling of existing labour force ~~and~~ ^{has} simply led to "jobless growth".



Opportunities with textile sector

(A) For the employees

- ① Labour intensive \Rightarrow job growth
 \Rightarrow more workforce
- ② Export orientation \Rightarrow \uparrow profits
(eg PM MITRA) \Rightarrow \uparrow incomes of employees
- ③ Formalization efforts \Rightarrow social security benefits
(eg ~~SEZ~~ Mega textile parks)

(B) For employers

- ① Enhanced profits \Rightarrow \uparrow expansion
 \Rightarrow inter-industry linkage
(eg) Textile - technical textiles
- ② Government policies \Rightarrow Ease of doing business
- ③ High market size within and outside India \Rightarrow \downarrow risks

(C) Society

- ① Gender equality \Rightarrow most women weavers and weavers get employment
- ② Reaching the last mile
(eg) local artisans

③ Research culture is encouraged

(eg) New technology for fire-proof technical textile

Challenges associated

- ① Limited export market of Indian textiles due to higher costs
- ② Poor mechanization leads to reduced efficiency and profits
- ③ Collaboration across industries is limited
- ④ Government schemes do not involve huge research expenditure (GERD=0.7% GDP)

Solutions

- ① Textile sector bonds for capital flow
- ② Public private partnership (Kelkar Committee)
- ③ Upskilling and reskilling of unskilled workers
- ④ Recognizing local traditional textiles
(eg) Mata Di Pachadi @ G.P.

labour intensive and export orientation can ensure employment creation.

Feedback

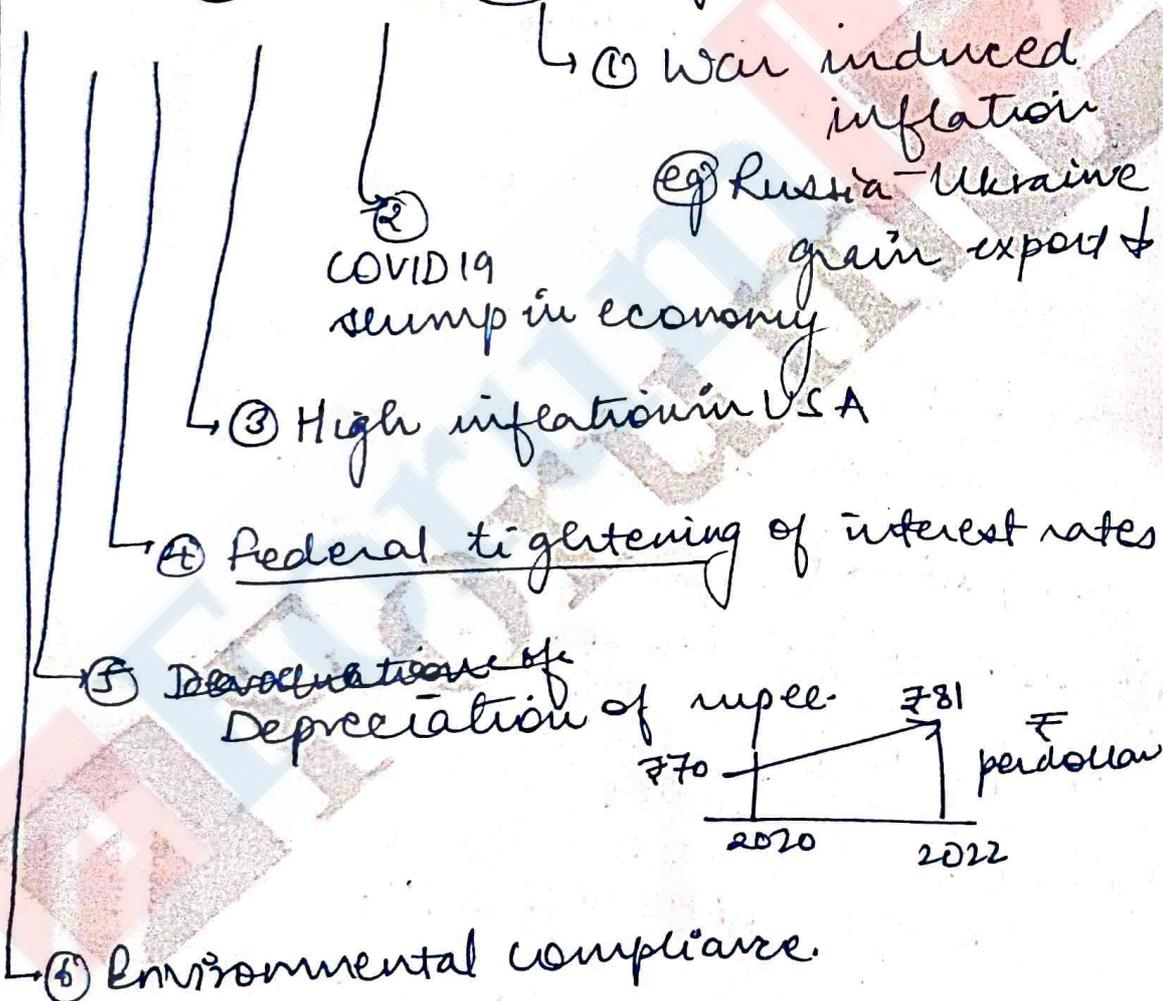
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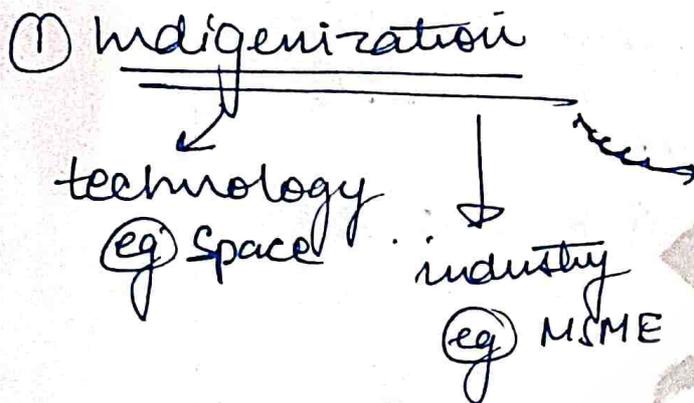
Q.12) In an era of interconnected challenges, the emerging global polycrisis poses significant implications for India's macroeconomic stability. Examine and suggest measures to make the Indian economy more resilient to global shocks and challenges. (15 marks, 250 words)

परस्पर जुड़ी चुनौतियों के युग में, उभरता हुआ वैश्विक बहुसंकट भारत की व्यापक आर्थिक स्थिरता के लिए महत्वपूर्ण प्रभाव डालता है। भारतीय अर्थव्यवस्था को वैश्विक संकटों और चुनौतियों के प्रति अधिक लचीला बनाने के लिए उपायों का परीक्षण कीजिए और सुझाव दीजिए। (15 अंक, 250 शब्द)

Interconnected challenges



Measures to make Indian economy more resilient



② Atmanirbhar Bharat

↓

↓ import dependence

(eg) currently target aims importer (SIPRI)

③ ↑ grain production

```

    graph TD
      A["↑ grain production"] --> B[food security]
      A --> C[export orientation]
  
```

④ Rationalising FTAs and (EPA/CECA) to avoid abuse and exploitation

- ⑤ Increasing forex reserves
- ⑥ Internalization of rupee
+ subsequent addition ⁱⁿ SDR
- ⑦ Fiscal prudence
- ⑧ Inflation targeting (MPC)

Indian economy should grow internally and deal with international shocks to become a \$5 trillion economy and the 3rd largest globally (IMF = by 2027)

(Don't Write in this Area)

Feedback (For OFFICE use)

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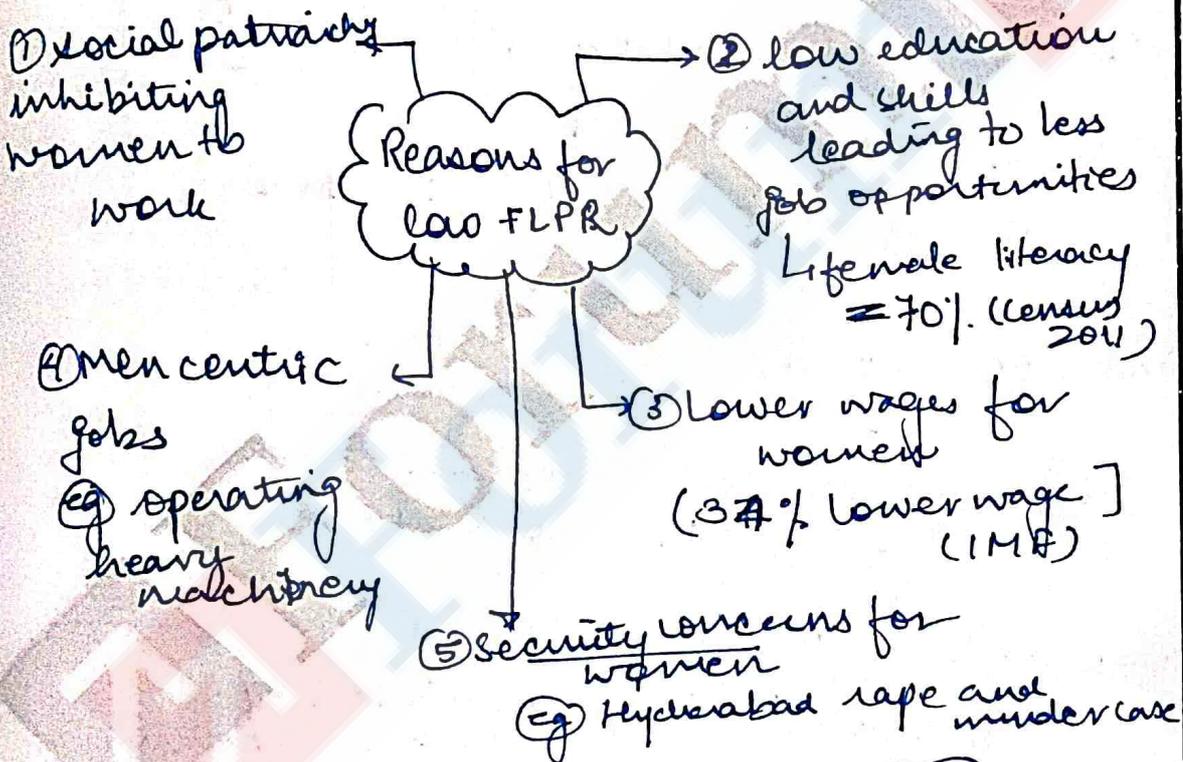
Q.13) Do you think the low Female Labor Force Participation Rate presents a correct picture about the 'working women' in India's economy? Give reasons in support of your answer.

(15 marks, 250 words)

क्या आपको लगता है कि कम महिला श्रम बल भागीदारी दर भारत की अर्थव्यवस्था में 'कामकाजी महिलाओं' के बारे में सही तस्वीर पेश करती है? अपने उत्तर के समर्थन में कारण दीजिए।

(15 अंक, 250 शब्द)

Despite making up roughly half of the population, female labour force participation is a meagre 30%. (PLFS 2020-21)



Low FLPR representing correct picture

① low number of women are

present in the workforce is clearly given by the rate.

② Working women rate represents ~~the~~ only the wage earners

(Not representing correct picture)

① It does not address the skewed nature of employment

(eg) feminization of agriculture

② No account for unpaid care economy

(eg) women spend over 2x more time in care taking

③ informal sector is excluded

(eg) Domestic help dominated by women.

④ Household work is completely excluded from definition of 'working women'

(eg) daily over 4hr of HH work.

The numbers are thereby not a correct representation of the working women. Instead, the following steps should be taken for better estimate:

- ① include unpaid labour of women
- ② formalization of labour
- ③ separate casual category for informal workforce
- ④ Measuring both time-labour and wage labour.
eg Household work.
- ⑤ Addressing the disparity and skewed nature of employments and trying to make it equitable.
eg pink collar jobs for women is a stereotype.

Working women are increasingly facing the "double shift" and it can be overcome by a behavioural change and structural removal of patriarchy.

Feedback

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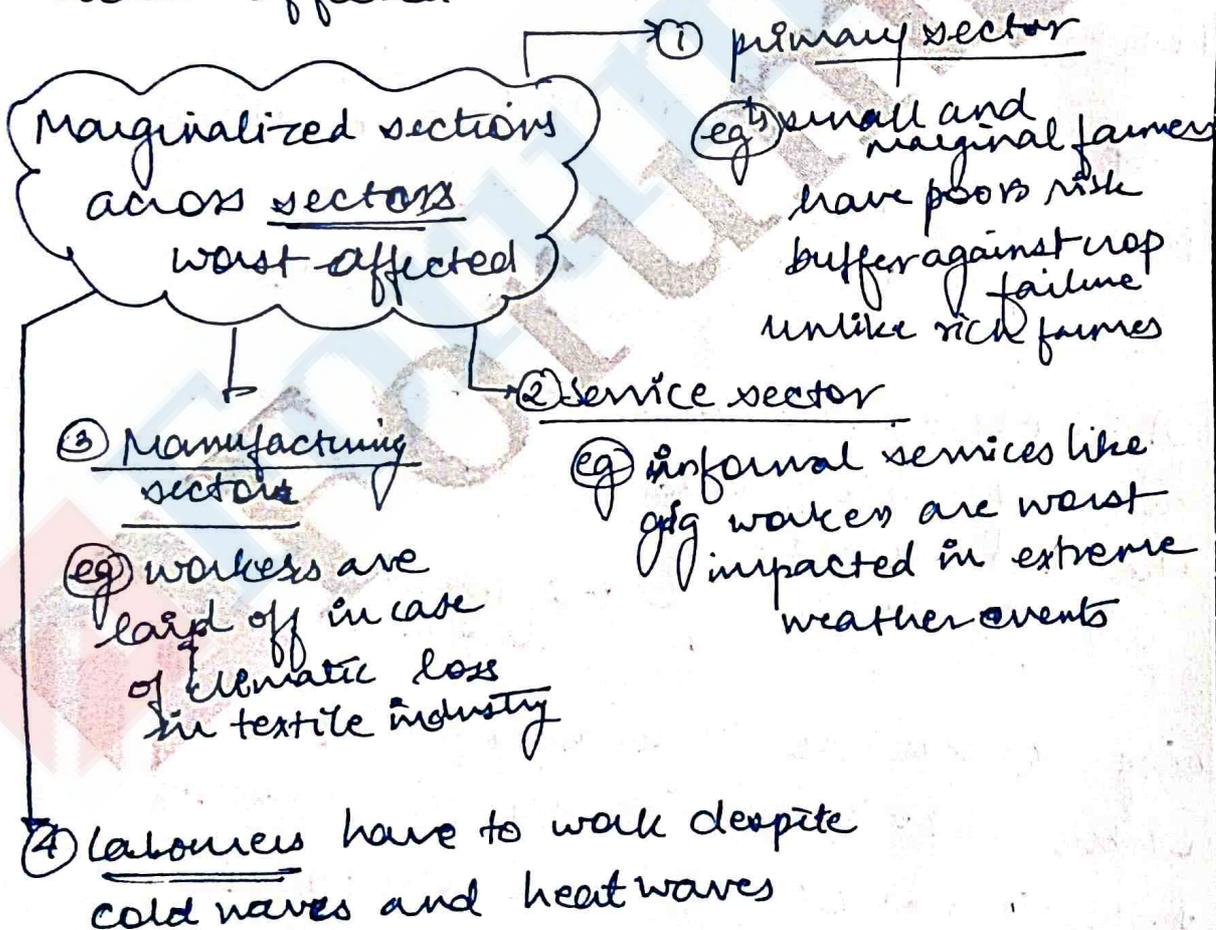
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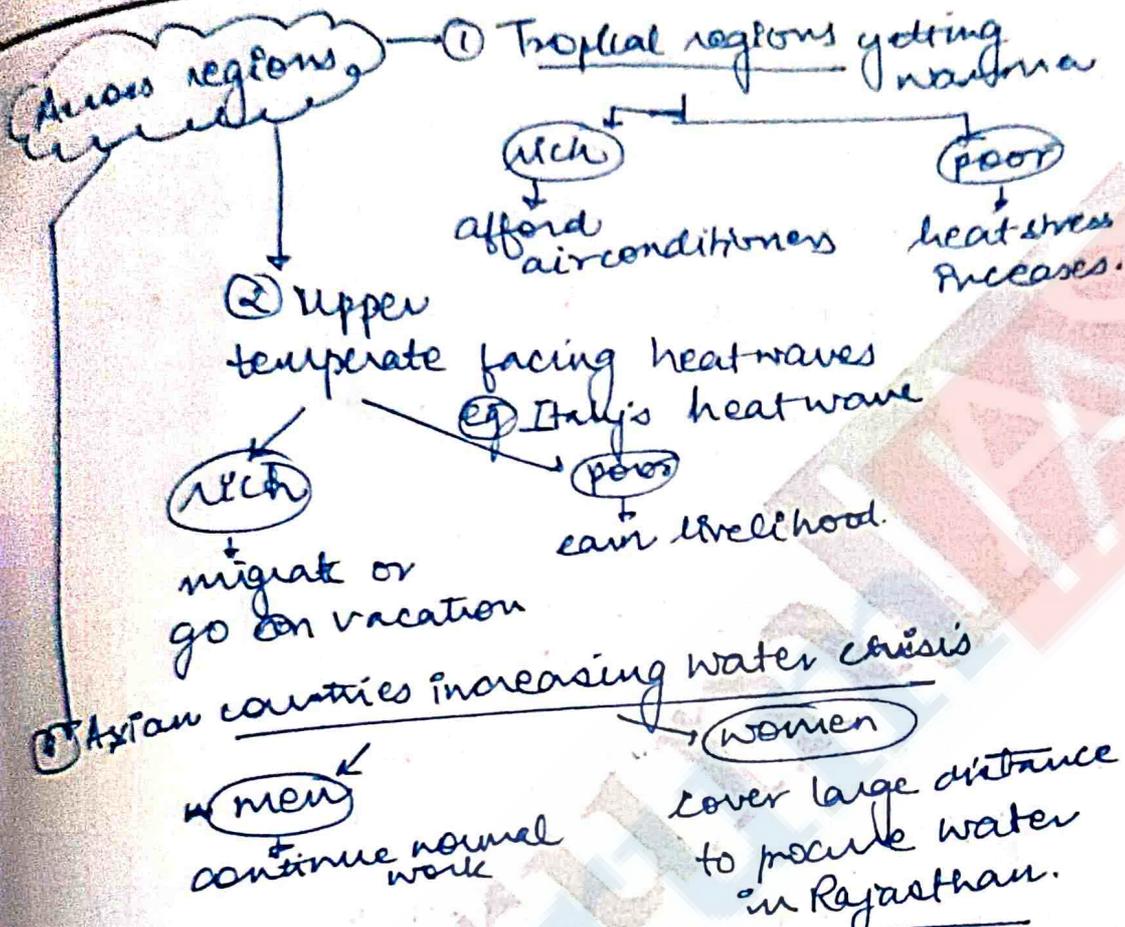


Q.14) Across sectors and regions, the most marginalised sections are also the most affected by the impacts of climate change. Explain. Also, present a case for a climate resilient model of development that integrates mitigation and adaptation measures. (15 marks, 250 words)

विभिन्न खंडों और क्षेत्रों में, सबसे अधिक हाशिए पर रहने वाले वर्ग भी जलवायु परिवर्तन के प्रभावों से सबसे अधिक प्रभावित हैं। व्याख्या कीजिए। इसके अलावा, विकास के जलवायु लचीले मॉडल के लिए एक मामला प्रस्तुत कीजिए जो शमन और अनुकूलन उपायों को एकीकृत करता है। (15 अंक, 250 शब्द)

Climate change impacts countries across the globe but due to poor preparedness and funds, marginalized sections are worst affected.

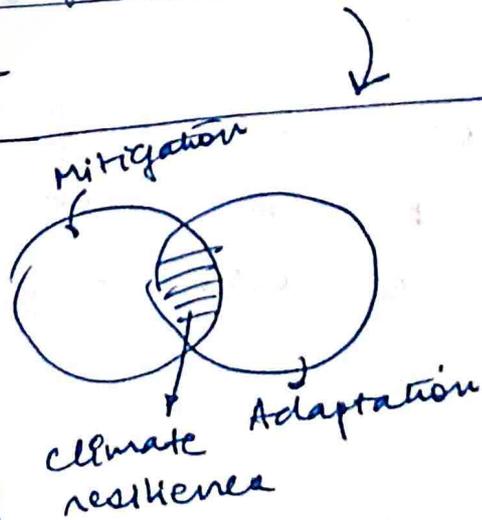




Ultimate resilient model of development

① Mitigation measures

① Reducing the greenhouse gas emissions
 ↓
 adoption of clean energy
 eg) ISA for solar.



(Don't Write in this Area)

② Reducing pollution

eg) NCAP for air pollution

eg) MARPOL for marine pollution

③ Global dialogues and funding mechanisms

eg) Loss and Damage @ COP27 Fund

④ Adaptation

① Climate smart agriculture

eg) Millet production

② Climate friendly worker policies

eg) #paid leaves during heat waves

③ Climate resilient infrastructure

eg) CDR1 by India

Mitigation and adaptation should reach the last mile and ensure an inclusive model of green growth.

Feedback (For OFFICE use)

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Q15) Despite the potential to check the triple whammy of nutritional deficiency, environmental degradation, and receding farm incomes, the adoption of Millets has been abysmally low. Analyse. (15 marks, 250 words)

पोषण की कमी, पर्यावरणीय गिरावट और घटती कृषि आय की तिहरी मार को रोकने की क्षमता के बावजूद, गेहूँ अनाज की स्वीकृति बेहद कम रही है। विश्लेषण कीजिए। (15 अंक, 250 शब्द)

Millet production in India is currently 20% of global share and 80% of Asia's production.

Millet's potential to check

① Nutritional deficiency

① Highly nutritious with adequate ratio of carbs and fibre

② Gluten free → ↓ non communicable disease burden (currently 70% deaths = NCD)

③ Health benefits → anaemia ↓
→ brain health ↑

↓ blood pressure
↑ metabolism
↑ immunity

(eg) Jowar flour boosts digestion

B Environmental degradation

- ① Water efficient crop (70% less water than rice)
- ② Soil nutrient rejuvenation
- ③ Drought resilient and can be used to prevent desertification
- ④ Reduced GHG emissions
- ⑤ Low fertilizer requirement
⇒ ↓ eutrophication

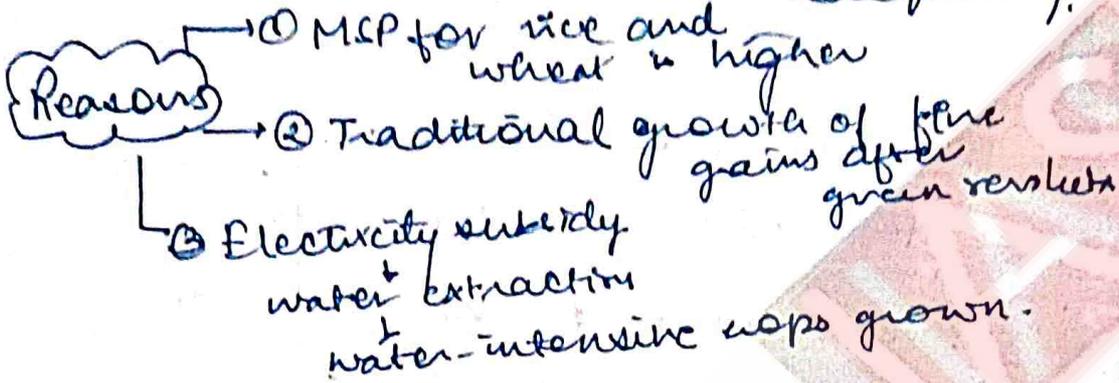
C Receding farmer incomes

- ① Risk aversion against droughts
- ② Smaller crop cycle
- ③ International Year of Millets
⇒ ↑ market

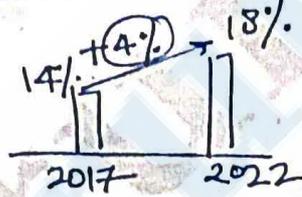
Adoption of millets abysmally low

- ① Only 18% of the area under millet cultivation as against 38% for (rice + wheat)
- ② Poor utilization of millets in everyday meals

③ Food processing industry not utilizing millets as raw material adequately.



However with concerted efforts, the production of millets has increased:



International Year of millets (2023)

recognizes the need for millet production and consumption check the problems of health, environment and economy

Feedback

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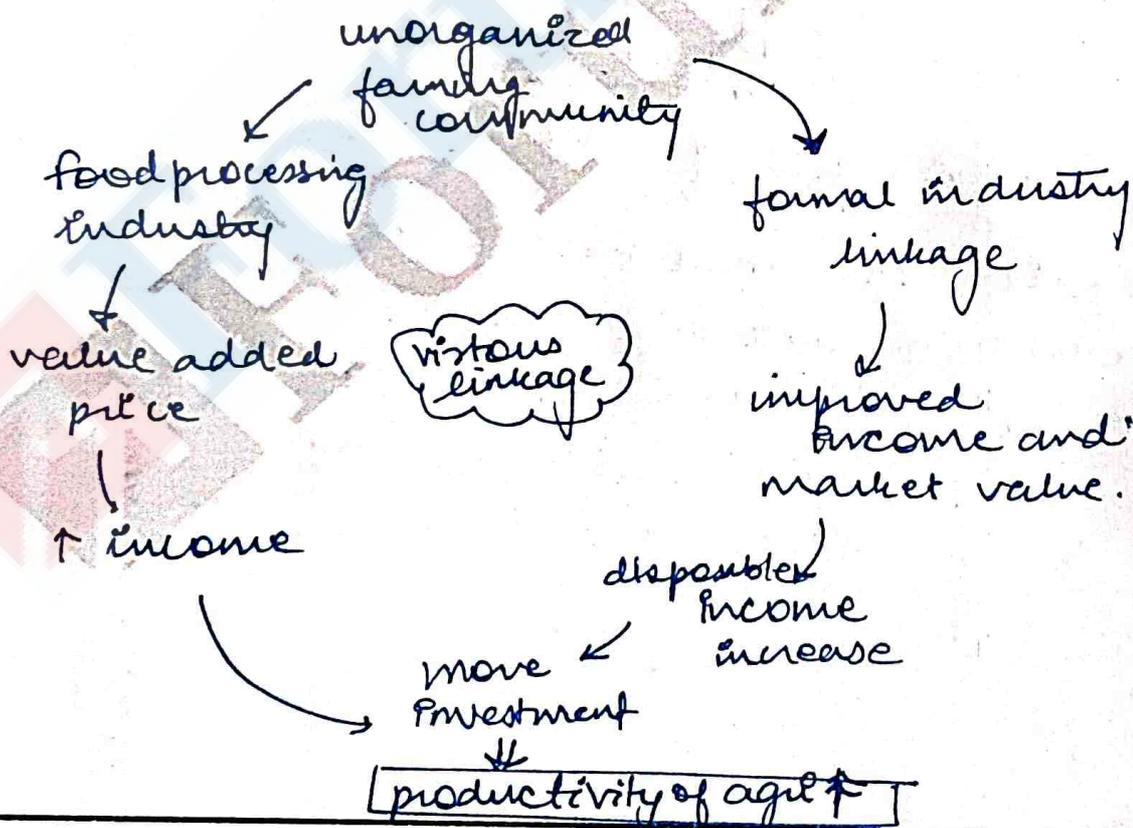
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Q.16) A link between unorganized farming community and formal industrial sector, Food Processing Industries (FPI) can play a key role in advancing the rural economy. Evaluate.

(15 marks, 250 words)

असंगठित कृषक समुदाय और औपचारिक औद्योगिक क्षेत्र के बीच एक कड़ी, एफपीआई ग्रामीण अर्थव्यवस्था को आगे बढ़ाने में महत्वपूर्ण भूमिका निभा सकती है। मूल्यांकन कीजिए। (15 अंक, 250 शब्द)

Average farmer income is a mere Assessment ₹10,000/month (National Situational Survey) which is about 3 times less than non-farm households. This recognizes the need for advancing rural economy.



Linkages: benefits

① Farmer income enhanced due to market access

(eg) eNAM.

② Backward linkages (farm to farm)

↳ demand based production

↳ crop diversification

↳ risk diversification

↳ ecological benefit

↳ soil fertility

③ Industry linkage ⇒ ↑ employment in rural areas

④ Better social security

(eg) model contract farming

⑤ Need for services to ensure linkage

{ transport, communication, banking }

↳ rural economy boost

⑥ Forward linkages would help in better industry growth and resultant dividends for farmers

Issues in realizing the potential

- ① Poor private sector participation in agri credit (only 9% of total)
- ② Technology-deficit in food processing industry
(eg) old shredding instead of mechanized chips making
- ③ Poor mobilization of farmer producer organisations (FPO)
- ④ Financial constraints on panchayati raj and civil society.

Suggestions

- ① Farmer producer organisation and cooperatives lead linkages
(eg) Kudumbashree
- ② Technology transfer from academia to field
- ③ Scheme consolidation (eg) PUSA Biodecomposer.
(eg) 3 departments → MORD, MoFPI, MoAgricult } uniform processing schemes.

Farm to fork and fork to farm linkage is essential for doubling farmer's income (Ashok Dalwai)

Feedback (For OFFICE)

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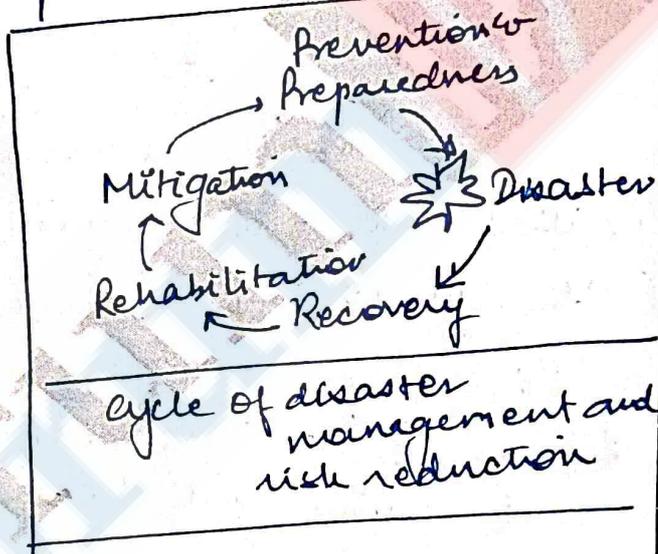
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Q.17) A multi-sectoral and multi-tiered process, Disaster Risk Reduction (DRR) is beset with a plethora of constraints. Identifying these constraints, recommend measures for building a robust DRR strategy. (15 marks, 250 words)

एक बहु-क्षेत्रीय और बहु-स्तरीय प्रक्रिया, आपदा जोखिम न्यूनीकरण (डीआरआर) कई बाधाओं से घिरी हुई है। इन बाधाओं की पहचान करते हुए, एक मजबूत डीआरआर रणनीति बनाने के उपायों की सिफारिश कीजिए। (15 अंक, 250 शब्द)

Disaster Risk Reduction according to UNIDRR refers to reducing the risk and increasing the preparedness and resilience of the global community against disasters

(eg) CSRI for resilient infrastructure



DRR process

Multi sectoral

- economic resilience (eg) disaster bonds
- social resilience (eg) Odisha's against Amphan
- political resilience (eg) PFI to industry

Multi tiered

- International (eg Sendai framework)
- National (NDMA)
- State (SDMA)
- Local bodies (DDMA)

Constraints in DRR

A Prediction stage

- ① Technology deficit → level of tech, reach of tech
 eg) limited IR-tech radar sensors in India

- ② ~~Less~~ Erratic and increased intensity and frequency of extreme weather events
 ↓
 prediction models fail.

- ③ limited risk zone mapping
- ④ EWS system lags (Early warning systems)

B During Disaster

- ① Rescue limitation due to small window of action and heavy population density

eg) Turkey and Syria earthquake.

- ② Information sharing across nations

eg) Afghanistan earthquake shocks felt in Delhi

C Post disaster

- ① Buildings are less-disaster resilient ⇒ rehabilitation takes time

- ② ~~Less~~ Piece-meal approach over holistic management.

Measures for building a robust strategy

A Prediction and Preparedness

① DRR knowledge across all tiers (Sendai framework)
 state ← district → nation

② increased technology transfer
 eg) Dvorak technique for cyclones

③ New and emerging technology usage
 eg) GIS mapping → landslide zonation Atlas (ISRO)

④ Risk zonation mapping and

⑤ EIA for construction

B During disaster

① Early warning systems
 eg) iflows @ Mumbai for floods

② Evacuation mock drills to reduce mortality (Sendai)

③ International cooperation (Sendai)
 eg) Operation Dost of India for Turkey

④ Post disaster - ① Reason mapping eg. Jashimath land subsidence
 ② Rehabilitation

Disaster Risk Reduction and Humanitarian aid (DAHR) are India's priority as enshrined in Sendai Framework.

Feedback

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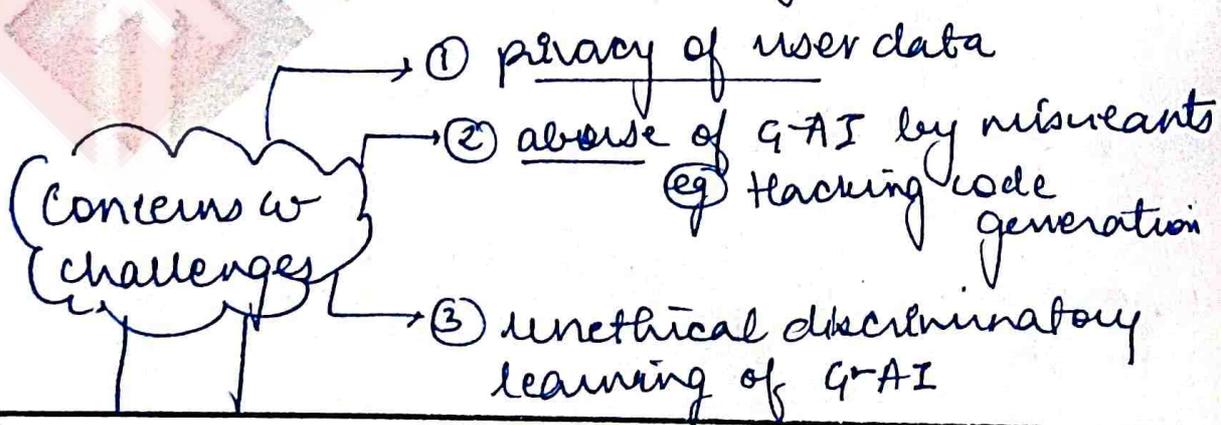
Q.18) What do you understand by generative Artificial Intelligence (AI)? How can policymakers and regulatory bodies effectively address the concerns and challenges posed by generative AI? (15 marks, 250 words)

जनरेटिव आर्टिफिशियल इंटेलिजेंस (एआई) से आप क्या समझते हैं? नीति निर्माता और नियामकीय निकाय जनरेटिव एआई द्वारा उत्पन्न चिंताओं और चुनौतियों को प्रभावी ढंग से कैसे संबोधित कर सकते हैं? (15 अंक, 250 शब्द)

Generative Artificial Intelligence (G-AI) refers to the newly developed AI technology which can generate responses just like humans based on its training data and machine learning algorithms.

- eg) Chat GPT by OpenAI
- eg) BARD by Google.

It usually runs on large language models to effectively generate responses



③ (eg) BARD generated anti scientific responses after learning from Twitter ~~google~~ for a day

④ loss of jobs due to G-AI
 ⑤ deep fakes
 @ misinformation
 (eg) Obama's deepfake.

(eg) customer care replaced by GAI in IKEA

Policy makers and regulatory bodies effectively addressing challenges

A Legislative level → job creation ^{by} upskilling

① Data Protection Act
 (eg) Digital India Act 2023

② Mandatory registration by digitech companies for operating a G-AI bot in a region

③ Privacy statement disclosure mandatory

B Regulatory institutions level

① Fact checking units to curb deep fakes and fake news
 (eg) PIB - Factcheck

② Safe harbour clause on social media intermediaries should

③ Responsibility of companies to control unethical use

be conditional on safe handling of data

⑥ grievance redressal, etc.

eg IT Rules.

④ Public awareness

① Cyber swatcha Kendras to be expanded to train people to identify deep fakes

② Educating people against misusing G-AI

③ Mandating companies to educate people about possible data privacy risks.

⑤ Others

① Excluding terrorist oriented keywords from search queries

② Use for good governance

Generative AI has great potential but its challenges need to be curbed to ensure safe cyberspace.

Feedback (For OFFICE use only)

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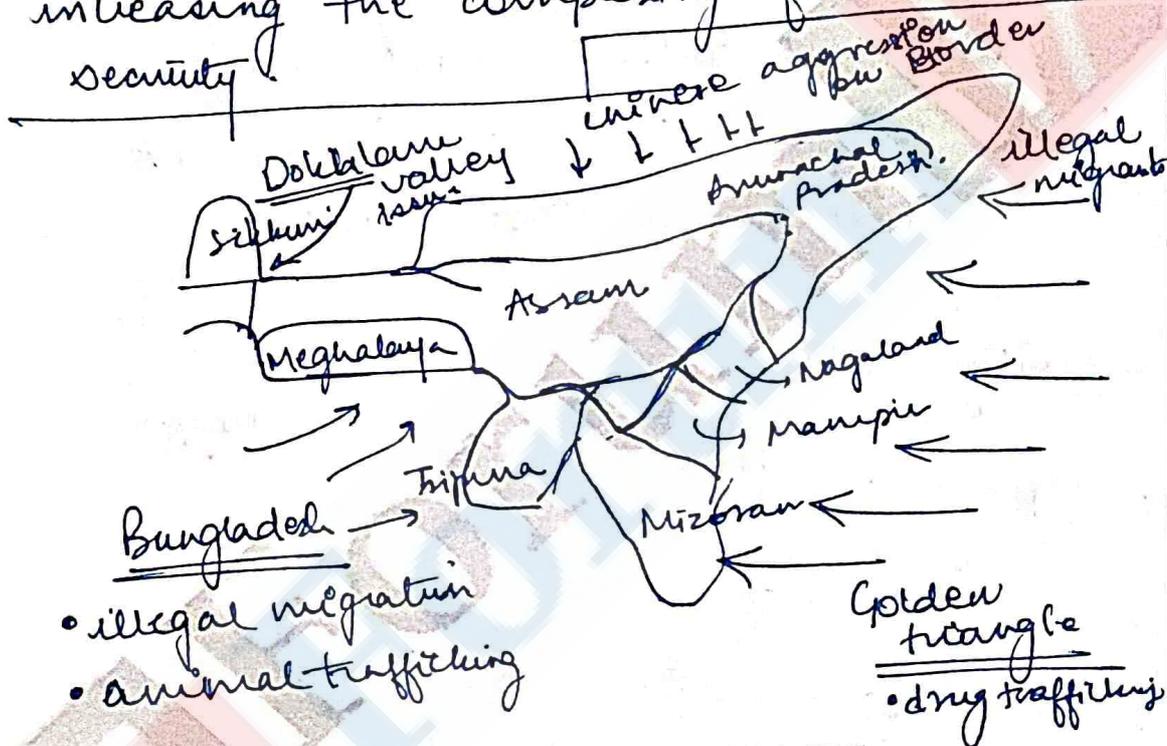
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Q.19) Though ethnic fault lines are a major threat, security challenges in the North-East are not confined to the same. Discuss the statement with special reference to Manipur. (15 marks, 250 words)

यद्यपि एथनिक फाल्ट लाइन्स (नृजातीय त्रुटिपूर्ण रेखाएँ) एक बड़ा खतरा हैं, उत्तर-पूर्व में सुरक्षा चुनौतियाँ यहीं तक सीमित नहीं हैं। मणिपुर के विशेष संदर्भ में कथन पर चर्चा कीजिए।

(15 अंक, 250 शब्द)

The North-Eastern region has 99% of its total borders as international border, increasing the complexity of threats to security.



North East Region threats

Ethnic fault lines as major threat

① Manipur: Meitei majority confined to 10% plain over 90% hilly
recognition of rights

↓
 ② Bme and Kiang tribes are in conflict over Tripura and Mizoram.

and inclusion of Meitei in ST is major issue leading to prolonged ethnic violence

③ Cross border ethnic ties : infiltration and refugee crisis (eg Myanmar Free Movement Regime) violence + separatist

Other security challenges

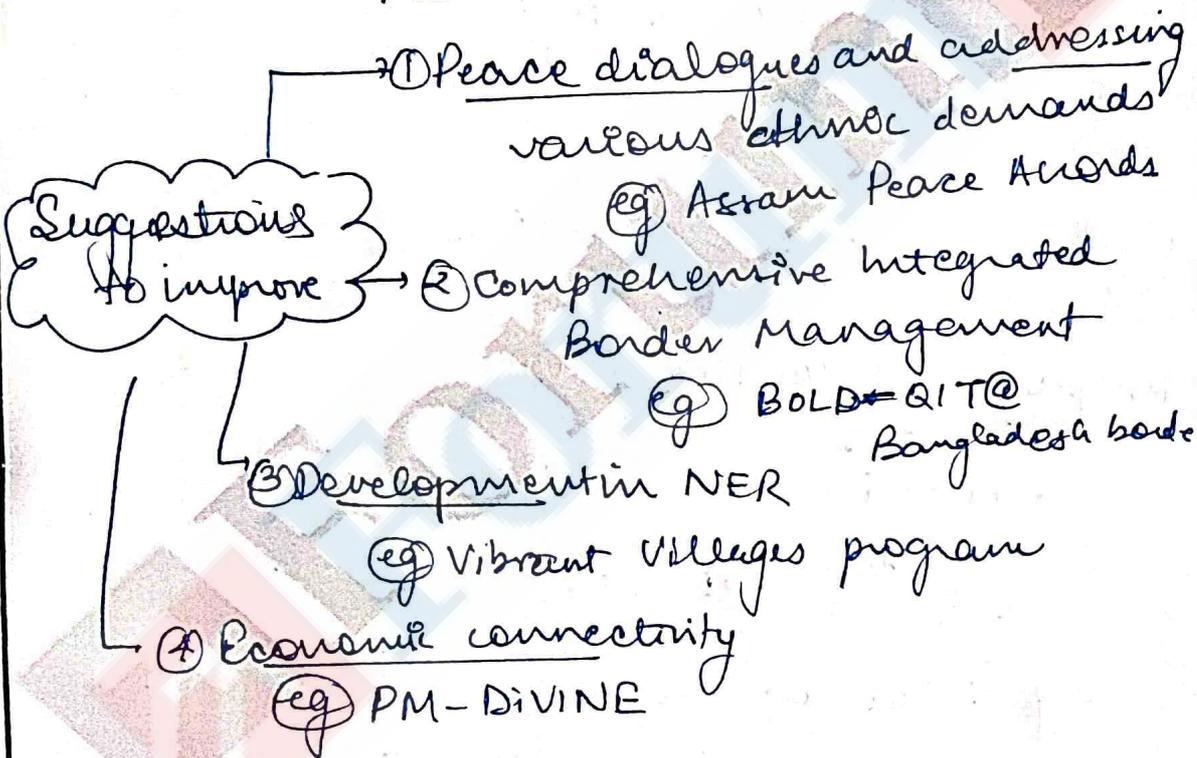
① Development deficit leading to mistrust, insurgency and violence

② Drug trafficking is a menace due to proximity with Golden triangle (Myanmar)

③ Illegal wildlife trafficking from Bangladesh (eg Kangaroo trade, turtle trade)

④ Refugee crisis due to Rohingya infiltrants from Myanmar's Boston Char.

⑤ Cross border threats from Chinese army on control over Arunachal Pradesh (not accepting McMahon line)



North Eastern Region's stability is imperative for a stable India.

Feedback

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P & R			
Please put tick marks in the above table. Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			

Q.20) Critically examine the role of development initiatives in addressing the root causes of militancy/ terrorism in Jammu & Kashmir. (15 marks, 250 words)

जम्मू और कश्मीर में उग्रवाद/आतंकवाद के मूल कारणों को संबोधित करने में विकासात्मक पहल की भूमिका का आलोचनात्मक परीक्षण कीजिए। (15 अंक, 250 शब्द)

Recent development initiatives and mainstreaming of the concerns of Jammu and Kashmir after Article 370 abrogation, militancy and terrorism incidents have reduced.

(Role of developmental initiatives)

① Employment for the youth

↓
reduction in radicalization

↓
reduced militancy + terrorism

eg) USTAD for minority skilling

② Basic amenities like WASH, internet, housing

↓
trust building in government

↓

reduced safe harbour for
terrorists

(eg) PAHAL scheme by army

③ Economic opportunities

↓
people will actively ensure
stability for ease of doing
business

↓
↓ terrorism. (eg) connectivity
projects

④ Citizen empowerment

(eg) Village Guards ⇒ atmanirbhar
defence.

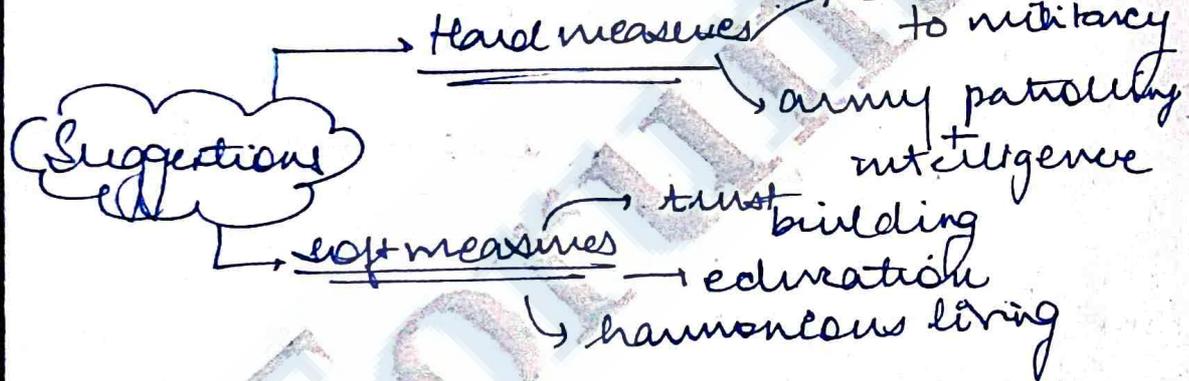
⑤ Right to information about the miscreants

⑥ Development deficit bridged ⇒
improved feeling of nationalism
⇒ ↓ terrorism harbour

⑦ Effect of overground workers would
be neutralized

However certain limitations

- ① Communal basis of mistrust will be little effected by development
- ② Limited decentralization and public participation
- eg) UT status of J&K reduces mandate for PRI
- eg) Kashmiri Pandit killings



In words of Kalhan's Rajtarangini,
 "Kashmir cannot be captured by sword but only by the power of love"

Feedback
(For OFFICE use only)

#	G	A	P
AWIS			
CD & VA			
S & F			
P & R			
Please put tick marks in the above table. Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			