

(Mains Appearing)

TEST CODE 7 1 3 3 0 4



MGP 2024

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	SHATAKSHI SINHA		
Roll No./अनुक्रमांक	1910106757	Medium/माध्यम	English ☒ हिंदी ☐
Center Code/परीक्षा केंद्र	1901	Date/दिनांक	07/09/24

*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

Q. No. प्र.सं.	Max. Marks अधिकतम अंक	Marks Obtained प्राप्तांक
1		
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Total/कुल अंक	250	

INSTRUCTION / अनुदेश

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।

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।

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।

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।

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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Start Time/प्रारंभ करने का समय : 9:00 am
End Time/समाप्त करने का समय : 12:00 am

Examiner's Discretion/मूल्यांकन कर्ता का विवेक :

Mode Of Examination/
परीक्षा की विधि :

Online/ऑनलाइन

Offline/ऑफलाइन

Total Marks/कुल अंक :

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ECN CODE/
ईसीएन कोड :

EG/ईजी :

① ② ③ ④ ⑤

Evaluation Date/
मूल्यांकन तिथि :

*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 आंकड़ों या समय रूप किसी अन्य विषय वस्तु, जो मूल्यांकन कर्ता को आपकी कॉपी में परामर्श आदी के आधार पर (लेकिन इसकी तक सीमित नहीं) पर दिए गए अंक हैं।

Note: Students are expected to incorporate suggestions from the feedback provided in the answers. Discussion classes for the tests are also available online in your portal to aid in your preparation. Further, students are requested to see the good copies of the tests and learn from them. You can also discuss your copy with a Mentor and discover ways and means to improve your answers, or if you have any issues with this test / copy Ask specific questions, to get specific answers.

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) Why has there been an increased focus on negotiating, renegotiating and concluding Free Trade Agreements (FTAs) by India in recent years? (10 marks, 150 words)

हाल के वर्षों में भारत द्वारा मुक्त व्यापार समझौतों (FTAs) पर बातचीत, पुनर्वार्ता और समापन पर ध्यान क्यों दिया जा रहा है? (10 अंक, 150 शब्द)

Recently India concluded Trade Agreements with Australia and UAE which has brought the focus to the salience of FTAs.

Increased focus on negotiating, renegotiating and concluding FTAs.

- ① To pursue the sustainable Development Goals target of India
↳ EAFTA with 4 European countries (Iceland, Liechtenstein, Switzerland)
- ② Export led growth model and converge with domestic policies like DEH (District as export hub), etc. PLI.
- ③ Convergence with FTP 2023 (Foreign Trade Policy)
- ④ Reach the export target of \$2tn from the presently \$760bn.
- ⑤ Realise the goal of India as a manufacturing hub.

- ⑥ Capitalize on opportunity of China + 1
ie emerge as an investment destination
Eq: Apple shifted its major units to India
- ⑦ Competitive advantage with other regional players
↳ Eq: Bangladesh-EU FTA led to its emergence as major apparel exporter.
- ⑧ Exploit the complementarities
↳ Eq: UAE CEPA → export of skills and import of crude.
- ⑨ Overcome the restrictions → tariff as well as non tariff.
↳ Eq: EU FTA negotiations to overcome CBAM tax.
- ⑩ Overcome the supply chain weaponisation amidst global polycrisis → war, covid, protectionism
Thus, FTAs are seen as a means in the journey of developed country by 2047.

Feedback

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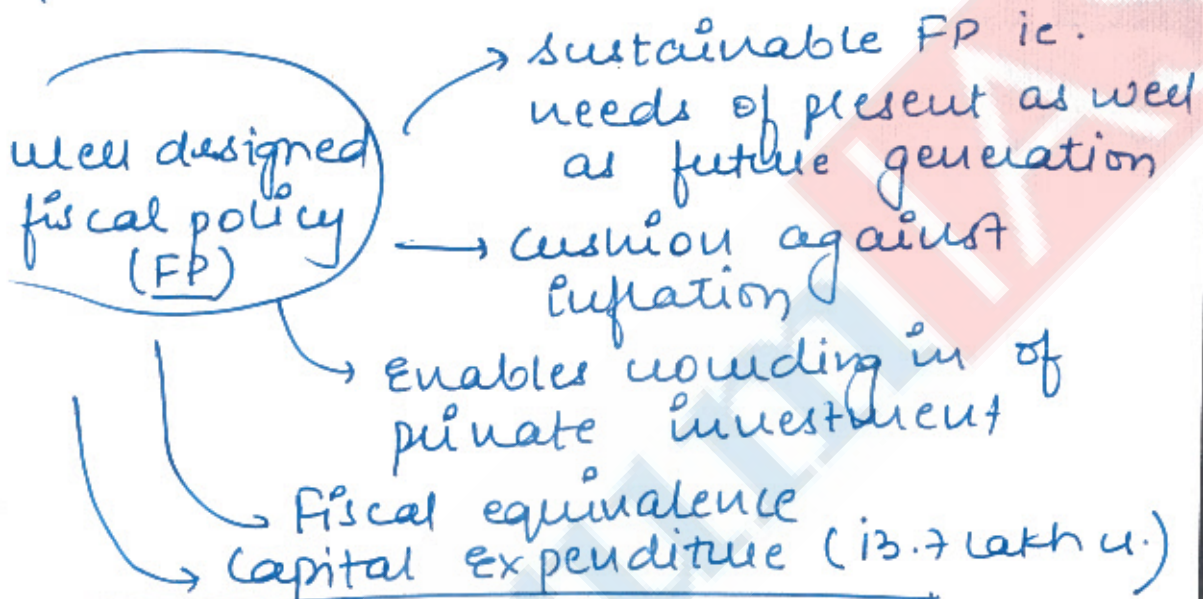
#	G	A	P
AWIS			
CD & VA			
S & F			
P & R			
Please put tick marks in the above table. Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			

Q.2) A well-designed fiscal policy can serve as a vital instrument to facilitate the equitable distribution of resources and ensure the welfare of all sections of society. Elaborate. (10 marks, 150 words)

एक अच्छी तरह से डिज़ाइन की गई राजकोषीय नीति संसाधनों के समान वितरण को सुविधाजनक बनाने और समाज के सभी वर्गों के कल्याण को सुनिश्चित करने के लिए एक महत्वपूर्ण साधन के रूप में काम कर सकती है। विस्तार से वर्णन कीजिए।

(10 अंक, 150 शब्द)

Fiscal policy is the manifestation of the social contract between the Government and the citizens.



Instrument to facilitate :

(A) Equitable distribution of resources

① Public goods provisioning for vulnerable sections

↳ Eg: PVTG development mission.

② Saturation approach of reaching the last mile.

↳ Eg: PM-DIVINE, NE Development Mission.

(3) Sustainable resources provisioning
 ↳ Eg: Solar rooftop subsidies (Green growth)

(B) Welfare of all sections :

(1) Creation of employment opportunities for low skill labour.

↳ Eg: Employment linked incentive.

(2) Rural development via agriculture and farmer welfare

↳ Eg: PM-PRAAN.

(3) Focus on women led development.

↳ Eg: SHGs promotion.

Thus, with fiscal policy, the government aims to ensure & uphold its Yogakshema duty i.e. welfare of all.

Feedback

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CD & VA			
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P & R			
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TOTAL MARKS			

Q.3) What are the primary factors contributing to India's significant reliance on imported edible oils? What measures do you suggest to increase domestic production and to reduce India's reliance on imported edible oils? (10 marks, 150 words)

आयातित खाद्य तेलों पर भारत की महत्वपूर्ण निर्भरता में योगदान देने वाले प्राथमिक कारक क्या हैं? घरेलू उत्पादन बढ़ाने और आयातित खाद्य तेलों पर भारत की निर्भरता को कम करने के लिए आप क्या उपाय सुझाएंगे? (10 अंक, 150 शब्द)

Surge in palm oil imports from Indonesia has increased the debate on self-sufficiency in edible oils.

Primary factors for reliance on imported edible oils:

- ① Monocropping practice in agriculture with skewed focus on cereals like wheat & rice.
- ② Distorted government support in promoting few grains
↳ Eg: MSP highest for cereals & cash crops.
- ③ Increasing urbanisation leading to more demand of oils due to lifestyle change.
↳ Eg: Olive oil → health conscious
- ④ Environmental issues associated with certain edible oils
↳ Palm oil → water stress & deforestation

- ⑤ low preference for domestically produced oils.
 ↳ e.g. Mustard oil → pungency

Measures to increase domestic production and reduce reliance on imports:

- ① Government support → increase MSP for edible oils.
- ② R&D to refine and evolve domestic indigenous oils.
 ↳ e.g. Biotechnology to reduce mustard oil pungency
- ③ Awareness about missions like NMEO etc. via FPOs.
- ④ Incentivising use of domestic edible oils via food processing units via PLI like scheme.
- ⑤ use of traditional knowledge & practices
 ↳ Baahunga multicropping (Gachwal)

Thus, Atmanirbhar Bharat is a necessity to ensure a Viksit Bharat.

Feedback

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TOTAL MARKS			

Q.4) With the growing water crisis in India, micro irrigation offers a sustainable solution for water conservation; however, its adoption remains skewed and below its potential. Discuss.

(10 marks, 150 words)

भारत में बढ़ते जल संकट के साथ, सूक्ष्म सिंचाई जल संरक्षण के लिए एक स्थायी समाधान प्रस्तुत करती है; हालाँकि, इसका उपयोग अभी भी विषम है और इसकी क्षमता से कम है। चर्चा कीजिए।

(10 अंक, 150 शब्द)

Chennai extracted 127% of its ground water resource in 2023 compared to national average of 60% (ICAR) pointing towards water crisis.

Micro irrigation: sustainable solution for water conservation

- ① Targeted water delivery to the roots will reduce water needs.
- ② Drip irrigations instead of sprinkler irrigation will prevent water wastage.
- ③ Drone based need assessment of water will enhance water application efficiency.
- ④ In-farm water recycling mechanisms to harness water reuse efficiency (Israel model).

skewed & below potential adoption!

- ① Micro irrigation penetration remains at 22% only (ICAR)
- ② Lack of awareness about the practices.
- ③ High initial capital costs prevents investments.
- ④ Land fragmentation & disputes hinders private investments.
- ⑤ Lack of access to formal credit
- ⑥ Feminisation of agriculture but defeminisation of land titles (Only 13.7% landholding) $\Rightarrow$ no credit.

Way forward

→ Promoting FPOs to enhance input & credit needs.

→ Government subsidy support on lines of solar subsidy

→ International co-operation
Eg: Israel.

Thus, There is a need to address tech-fatigue in agriculture to ensure tech-led transformation vision.

Feedback

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TOTAL MARKS			

Q.5) The recurring railway accidents highlight the urgent necessity for addressing the myriad challenges related to safety, undercapacity and lack of modernization within Indian Railways. Analyse.

(10 marks, 150 words)

बार-बार होने वाली रेल दुर्घटनाएँ भारतीय रेलवे के भीतर सुरक्षा, अल्प-क्षमता और आधुनिकीकरण की कमी से संबंधित असंख्य चुनौतियों के समाधान की तत्काल आवश्यकता को उजागर करती हैं। विश्लेषण कीजिए। (10 अंक, 150 शब्द)

Railways is called the lifeline of India. However recent rail accidents have led to loss of lives by this lifeline.

Myriad Challenges:

- ① Lack of installation of KAVACH anti collision systems in the recent cases.
- ② > 60% rail routes operating above 100% capacity.
- ③ Underutilisation of Rail breakdown cost with an outlay of ₹20000 cr.
- ④ Manned crossing stations in some areas.
- ⑤ Only 4500 km electrified in the 6500 km tracks.

⑥ Delay in submission of ATR (Action Taken Report) by Railway Safety Commission.

Necessary measures to address:

① Kakodkar Committee recommend:
 ↳ National Railway Safety Authority. ⇒ safety.
 ↳ National Railway R&D Council to foster modernisation

② Bibek Debroy Committee
 ↳ Independent Rail Regulator to manage capacity.

③ Inclusion of private players in incubating technology.

Thus, measures need to be taken in light of National Rail Plan as guide

Feedback

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TOTAL MARKS	
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Q.6] How does NISAR mission exemplify international cooperation in space exploration and scientific research? In what ways will it help in climate change monitoring and natural hazard management? (10 marks, 150 words)

NISAR मिशन अंतरिक्ष अन्वेषण और वैज्ञानिक अनुसंधान में अंतर्राष्ट्रीय सहयोग का उदाहरण कैसे प्रस्तुत करता है? यह जलवायु परिवर्तन की निगरानी और प्राकृतिक आपदा प्रबंधन में किस तरह से मदद करेगा? (10 अंक, 150 शब्द)

NISAR mission is a collaborative effort between NASA and ISRO to foster co-operation in space exploration.

Exemplify international co-operation

- ① Effective exploitation of space diplomacy.
- ② Converging on the common idea of rules based space governance.
- ③ Using technology for the benefit of humanity.
- ④ Prevent weaponisation of space domain which will be detrimental to all.

⑤ Efficiency in operation by cost cutting of ISRO and tech-transfer of NASA.

Help in climate change & natural hazard management:

- ① Synthetic aperture radar will provide real time data.
- ② Data driven decision making.
- ③ Preparation of hazard vulnerability map.
- ④ Real time data transfer to respective authorities like NDMA etc.
- ⑤ Prevent disasters like forest fires by enhanced monitoring.

Thus, NSAR mission has potential which needs to be leveraged.

Feedback

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TOTAL MARKS			

Q.7) Nuclear technology can play a transformative role in enhancing food security and agricultural sustainability. Discuss.
(10 marks, 150 words)

परमाणु प्रौद्योगिकी खाद्य सुरक्षा और कृषि स्थिरता को बढ़ाने में एक परिवर्तनकारी भूमिका निभा सकती है। चर्चा कीजिए।
(10 अंक, 150 शब्द)

Nuclear technology has seen tremendous growth in past few decades.

Transformative role in food security & agricultural sustainability:

- ↳ Sustainable power supply.
- ↳ Food processing units.
→ better hygiene testing.
- ↳ Doubling farmer income
- ↳ Reduce methane emissions from paddy fields.
- ↳ Micro-targeting & application

Thus, nuclear technology
can ensure food security
to security 18% undernourished
population in India

Feedback

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TOTAL MARKS			

Q.8) Increasing frequency of forest fires in India underscores the urgent need for sustainable forest management practices. In light of the statement, bring out the causes and multidimensional impact of forest fires. Also, suggest measures for their prevention and management. (10 marks, 150 words)

भारत में जंगल की आग की बढ़ती आवृत्ति स्थायी वन प्रबंधन प्रथाओं की तत्काल आवश्यकता को रेखांकित करती है। इस कथन के प्रकाश में, वनाग्नि के कारणों और बहुआयामी प्रभावों का उल्लेख कीजिए। साथ ही इनकी रोकथाम और प्रबंधन के उपाय भी सुझाएं। (10 अंक, 150 शब्द)

48% forests in India are vulnerable to forest fires (ISRO satellite data).

Causes:

- ① Change in rainfall patterns due to climate change.
- ② Increased incidences of heatwaves.
↳ e.g.: Delhi summer = $> 50^{\circ}\text{C}$ temperature.
- ③ Slash & burn agriculture practices.
- ④ Lack of data based efforts.

Multidimensional impact:

- ① Loss of flora species & Threat to biodiversity of the area.

- ② Loss of lives of local tribals.
- ③ May lead to disruptions in transport & communication
- ④ loss of livelihood dependent on minor forest produce.

Measures:

- ① Co-ordination with ISRO for satellite data.
- ② Use of drones to extinguish fire.
- ③ Communication with local tribes to prevent slash & burn.
- ④ Artificial rains (Cloud seeding)
- ⑤ Buffer plantation to stop forest fire.

Thus, forest fire needs to be prevented with active interventions.

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TOTAL MARKS			

Q.9) What reasons can be attributed to the recent surge in terror related violence in Jammu and Kashmir? What strategies would you suggest to counter it? (10 marks, 150 words)

जम्मू-कश्मीर में हाल ही में आतंकवाद से संबंधित हिंसा में वृद्धि के क्या कारण हो सकते हैं? इसका मुकाबला करने के लिए आप क्या रणनीति सुझाएंगे? (10 अंक, 150 शब्द)

Recent attack on civilians & security forces highlight the menace in Jammu & Kashmir.

Reasons for the surge:

- ① Emergence of new terrorist outfits with political orientation rather than religious.
↳ Eg: The Resistance front, Kashmir Tigers.
- ② Re-assertion by Pakistan in post Article 370 period.
- ③ Nano-terrorism channels.
↳ Eg: BSF intercepted 119 drones carrying drugs.
- ④ Spread of virtual terrorist outfits of JeM and LeT.
↳ Eg: The Resistance front.
- ⑤ Re-emergence of OGWs and lone wolf attackers as a support base.

Strategies to counter!

- ① Fostering international cooperation
↳ Listing of terrorists on UNSC 1267 resolution.
- ② Enhanced intelligence on social media.
- ③ Drafting a National Security Strategy.
- ④ Infrastructure development in the area to foster community support.
- ⑤ Inter agency co-ordination between RAW, IB, ED, NCB.
- ⑥ bi-service command and theatrisation.

Thus, an efficient security architecture needs to be put in place.

Feedback

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TOTAL MARKS			

Q.10) In the light of recent events, throw light on the possible implications of 'cyber slavery' on internal security of India. (10 marks, 150 words)

हाल की घटनाओं के आलोक में, भारत की आंतरिक सुरक्षा पर 'साइबर स्लेवरी' के संभावित प्रभावों पर प्रकाश डालिए।

(10 अंक, 150 शब्द)

Cyber slavery has emerged as an internal security problem with the advent of digital age.

Implications of cyber slavery on internal security:

- ① Threat to critical infrastructure
eg: Nuclear, banking etc.
- ② Massive and rapid deployment of activities due to wide network.
- ③ Borderless nature ⇒ difficult to counter.
- ④ Anonymity ⇒ difficult to trace.
- ⑤ May fuel the insurgency in the North-east.

- ⑥ May aggravate the LWE in red corridor.
- ⑦ Increased radicalisation of Youth
↳ eg: ISIS → Kerala recruitments.
- ⑧ widens the scope for drug trafficking & maritime terrorism.

Way forward

→ Updating the National Cybersecurity Policy 2015
→ Dedicated cadre of cyber force.

→ Fostering international cooperation
eg: Israel's cyber security architecture.

Thus, cyber navy is a manifestation of grey zone warfare which needs to be nipped in the bud.

Feedback

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TOTAL MARKS			

Q.11) "The liberalization policies of 1991 significantly enhanced India's economic dynamism, but the evolving global and domestic landscape necessitates 'Reforms 2.0' for sustained economic development and prosperity." Comment. (15 marks, 250 words)

"1991 की उदारीकरण नीतियों ने भारत की आर्थिक गतिशीलता को महत्वपूर्ण रूप से बढ़ाया, लेकिन उभरते वैश्विक और घरेलू परिदृश्य में सतत आर्थिक विकास और समृद्धि के लिए 'सुधार 2.0' की आवश्यकता है।" टिप्पणी कीजिए।

(15 अंक, 250 शब्द)

New Economic Policy was adopted by India in 1991 which enabled the LPG reforms and a new era was unveiled in growth story of India.

Enhanced India's Economic Dynamism

- ① Paved way for export led growth
↳ \$760 bn exports in 2023.
- ② Increased the inward FDI leading to employment & technology opportunities.
↳ \$83 bn FDI in 2022 (Goal of \$100 bn by 2030).
- ③ Emergence of India as 3rd largest world economy (in PPP).
- ④ Strengthening the MSMEs growth base
↳ contribute 42% to exports.

Evolving Global Landscape

→ Global polycrisis - COVID,
Russia Ukraine war.

→ Protectionist 'fortress'
economies

Eg: CBAM tax of EU

→ Weaponisation of
supply chain

Eg: semiconductor

Evolving Domestic Landscape

→ Need for high skills but
not sufficient

Eg: Only 5% formally
skilled (Skills India Report)

→ Robust Digital Public
Infrastructure

Eg: DNDI, e-NAM.

→ Continue government policies
Eg: PLI, FPI 2023.

→ Dwarfism of MSMEs → 96% are
micro enterprises.

→ Motherhood Penalty → low FLFPR of
37%.

Eg: Foxconn unit not employing
married women.

Necessitates Reforms 2.0 :

- ① Proactive conclusion of FTA to overcome trade barriers.
- ② Utilizing the comparative advantage in low skills manufacturing.
↳ eg: Vietnam → textile & leather goods ⇒ high development.
- ③ Creating a brand India to promote export led growth.
↳ eg: "Pharma of the world".
- ④ Exploiting China + 1 opportunity by "network products".
↳ "Assemble in India for the world".
- ⑤ Promoting the platform & gig economy model to exploit potential of service sector export.

Thus, Reforms 2.0 are an imperative for India as a Golden Bird 2.0.

Feedback

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#	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			

Q.12) Infrastructure development is essential not just for economic transformation but also for sustainable development and societal well-being. Elaborate with examples. (15 marks, 250 words)

बुनियादी ढांचे का विकास न केवल आर्थिक परिवर्तन के लिए बल्कि सतत विकास और सामाजिक कल्याण के लिए भी आवश्यक है। उदाहरणों के साथ विस्तार से समझाइए। (15 अंक, 250 शब्द)

Infrastructure is considered as a base for capital formation and consequent growth & development in country.

Essential for economic transformation

- ① Employment opportunities to the people.
↳ construction activities → low skill jobs.
- ② Reduce the logistics cost from presently 16% to 8% global average.
- ③ Forward & backward linkages with agriculture growth.
↳ e.g.: roads, cold storage etc.
- ④ Better ICOR → improved from 7.5 in 2011 to 8.5 in 2023 (CMIE)

Essential for sustainable develop

- ① "Green growth" vision of Saptarishi for Amrit Kaal.
 - ↳ Promotion of electric mobility via EVs.
- ② Sustainable transportation & mobility
 - ↳ RTIs between Delhi & Meerut.
- ③ Energy transition (Eg)
 - ↳ 6500 km out of 65000 km of rail routes electrified (MoRailways)
- ④ Green buildings to reduce energy needs and urban heat island.
 - ↳ India has maximum LEED certified buildings.

Essential for societal well being:

- ① Social Infrastructure of education & health to build capabilities (Amartya Sen capability approach)
- ② Reduce urban-rural divide via roads & transport.

↳ Eg: 70% hospitals in urban areas could be accessed

(3) Digital public infrastructure used as DFPG i.e. Digital for public good.
(Economic survey)

↳ Eg: National Digital Health Mission, ONDC $\Rightarrow$ e-commerce

(4) Promotes regional development and service delivery to last mile.

↳ Eg: PM-DIVINE for development of North east.

(5) To reduce inequalities and relative deprivation.

↳ Eg: Eklaun schools, AIIMS in remote areas like Maharaigang (NP).

Thus, Infrastructure development transforms a vicious cycle to a virtuous cycle of development of the country.

Feedback

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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			

Q.13) Bring out the significance of aquaculture towards nutrition security, livelihood generation, and economic growth. Also, mention various measures taken by the government to promote aquaculture in the country. (15 marks, 250 words)

पोषण सुरक्षा, आजीविका सृजन और आर्थिक विकास के लिए जलीय कृषि के महत्व पर प्रकाश डालिए। साथ ही, देश में जलीय कृषि को बढ़ावा देने के लिए सरकार द्वारा उठाए गए विभिन्न उपायों का उल्लेख कीजिए। (15 अंक, 250 शब्द)

Aquaculture is seen as a way to infuse life in agriculture & allied activities and goal of doubling farmers income.

Significance : Nutrition security

① Tackle the impact of climate change in decreasing agriculture productivity.

↳ Eg: Dehradun Basmati yield reduced by 60-70%. (ICAR).

② Forward linkage to food processing units ⇒ nutrition security via value addition.

③ Micro-nutrition to tackle hidden hunger.

↳ Omega-3 in fish.

Livelihood generation:

- ① Alternative to reduce disguised unemployment in agriculture.
- ② Opportunities for women as the work involves women labour force.
- ③ Exports of the produce $\Rightarrow$ doubling farmers income.

Economic growth:

- ① Export led growth model $\Rightarrow$ forex.
- ② Increased GDP contribution from agriculture & allied activities (from presently 2 less than 20%).
- ③ Development of connected industries $\Rightarrow$ industrialisation
 $\hookrightarrow$ Eg: food processing industries.
- ④ Increased private sector investment in agriculture $\Rightarrow$ capital efficiency

Measures taken by Government:

- ① MISHTI initiative → mangroves along with aquaculture.
- ② SAIME initiative by West Bengal government in partnership with Bangladesh and local communities.
- ③ District as export hubs, one District one product.
- ④ Promoting institutions like MSSRF (M. S. Swaminathan Research Foundation) to promote R&D.
- ⑤ Inclusion in Kisan credit card scheme to enhance formal access to credit.

Thus, aquaculture plays a key role in Blue Revolution 2.0 to transform to a Blue Economy.

Feedback

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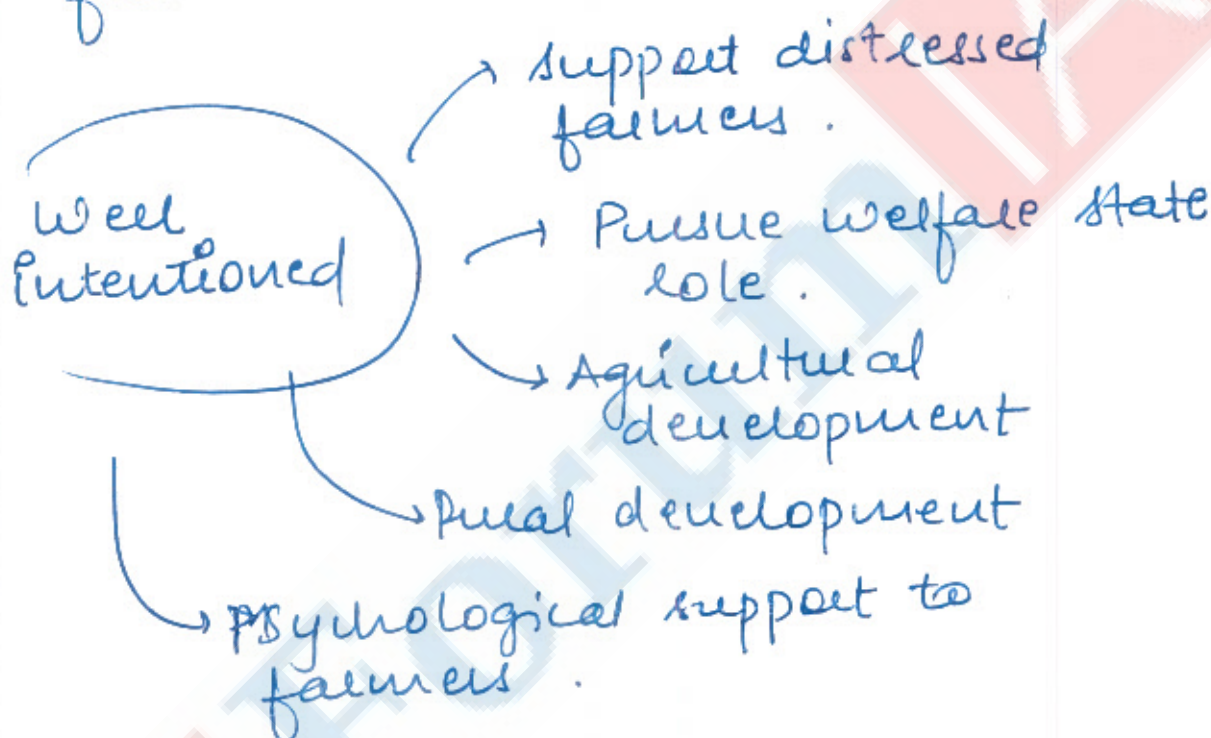
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Please put tick marks in the above table. Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			

Q.14) The MSP system, though well-intentioned, has led to market distortions and ecological stress, necessitating reforms to make it more inclusive and efficient. Examine. (15 marks, 250 words)

MSP प्रणाली, हालांकि अच्छी नीयत से बनाई गई है, लेकिन इसने बाजार में विकृतियां और पारिस्थितिकी तनाव पैदा किया है, जिससे इसे और अधिक समावेशी और कुशल बनाने के लिए सुधारों की आवश्यकता है। परीक्षण कीजिए।

(15 अंक, 250 शब्द)

MSP system is a minimum support price mechanism which guarantees a cushion support to farmers.



led to market distortions!

- ① skewed price discovery mechanism.
- ② wastage of food grains in warehouses $\Rightarrow$ inflation.
- ③ Benefits rich farmers more than vulnerable $\Rightarrow$ regressive.

- ④ Not following FIFO principle (First in First Out) $\Rightarrow$ scarcity due to wastage
- ⑤ less availability for food processing due to buffer stock.

led to ecological stress:

- ① Production of water guzzling crops in water deficit region
 $\hookrightarrow$ eg: Telangana and region but rice farming.
- ② Over-extraction of groundwater
 $\hookrightarrow$ Punjab & Haryana.
- ③ Monocropping leading to reduced soil fertility.
- ④ Increased pest infestation due to use of excess water.
- ⑤ Air pollution due to stubble burning in Dellhi NCR.

Reforms Necessitated:

- ① Ashok Dalwai committee:
 - ↳ Capital expenditure in agriculture should be increased
 - ↳ MSP is just a means not an end
 - ↳ FCI to work as an innovative institution rather than procurement institution
- ② Construction of cold storage to prevent wastage.
- ③ Blockchain to manage FIFO in warehouses.
- ④ R&D institutions like MCSRF to study soil fertility & water needs for region specific recommendations.
- ⑤ Regional MSP rather than pan India.
- ⑥ MSP for millets to be increased.

Thus, There is a need to move beyond MSP to proper a Green Revolution 2.0.

Feedback

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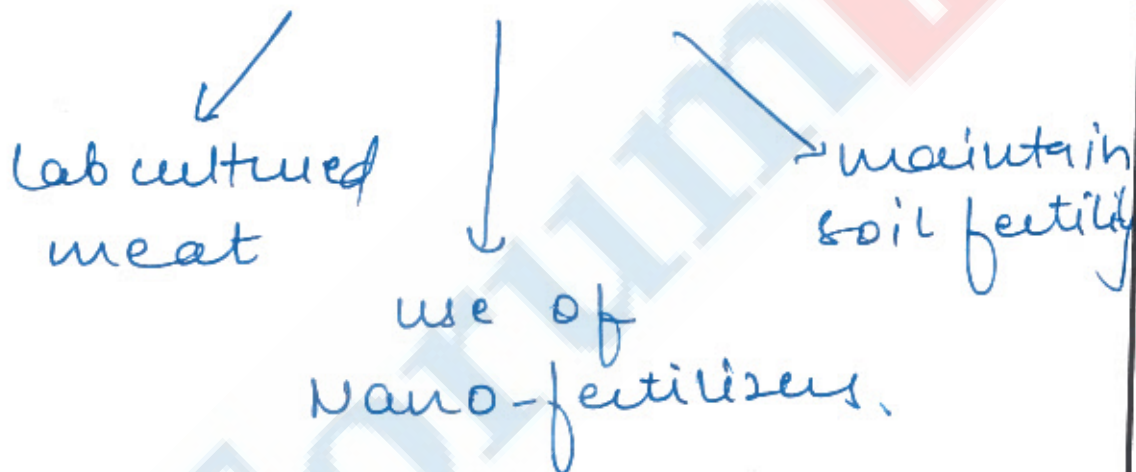
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Please put tick marks in the above table. Here G is Good, A is Average and P is Poor.			
TOTAL MARKS			

Q.15) Biotechnology holds immense potential for achieving sustainable food production, efficient waste management and significant advancements in human health. Elucidate. (15 marks, 250 words)

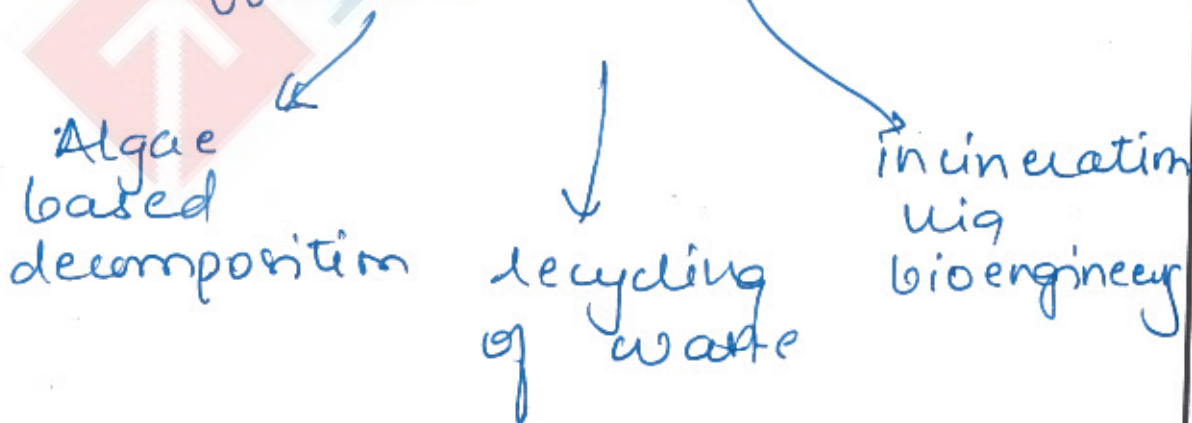
जैव प्रौद्योगिकी में टिकाऊ खाद्य उत्पादन, कुशल अपशिष्ट प्रबंधन और मानव स्वास्थ्य में महत्वपूर्ण प्रगति हासिल करने की अपार संभावनाएं हैं। स्पष्ट कीजिए।
(15 अंक, 250 शब्द)

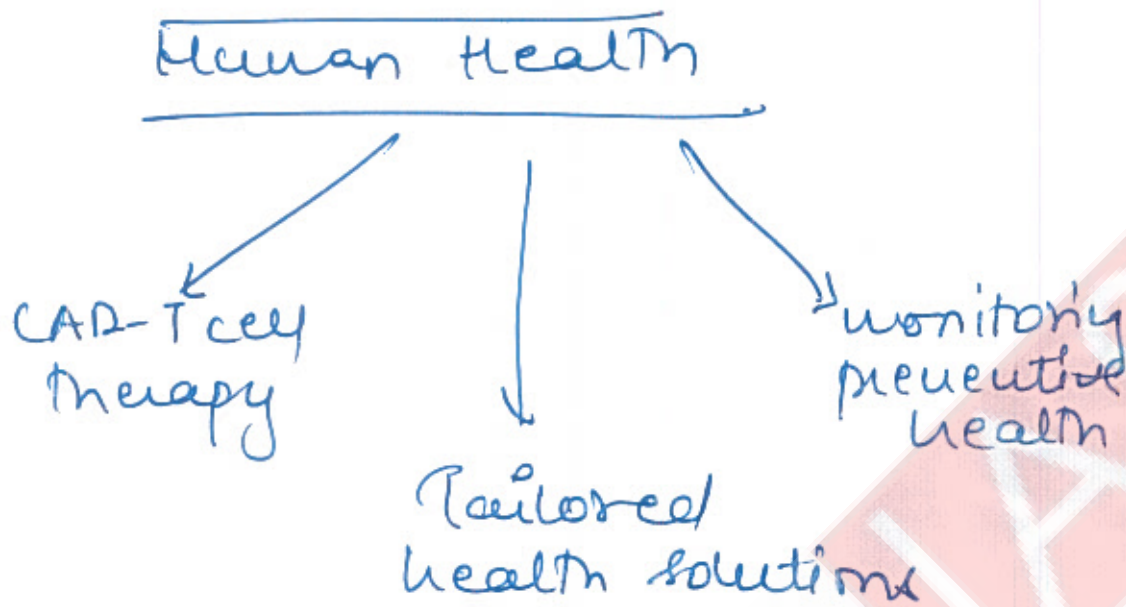
Biotechnology utilizes biological aspects to further the scientific advancements.

Potential : sustainable food production



efficient waste management





Thus, biotechnology
has answers to scientific
quest of man in his
development ,

Feedback

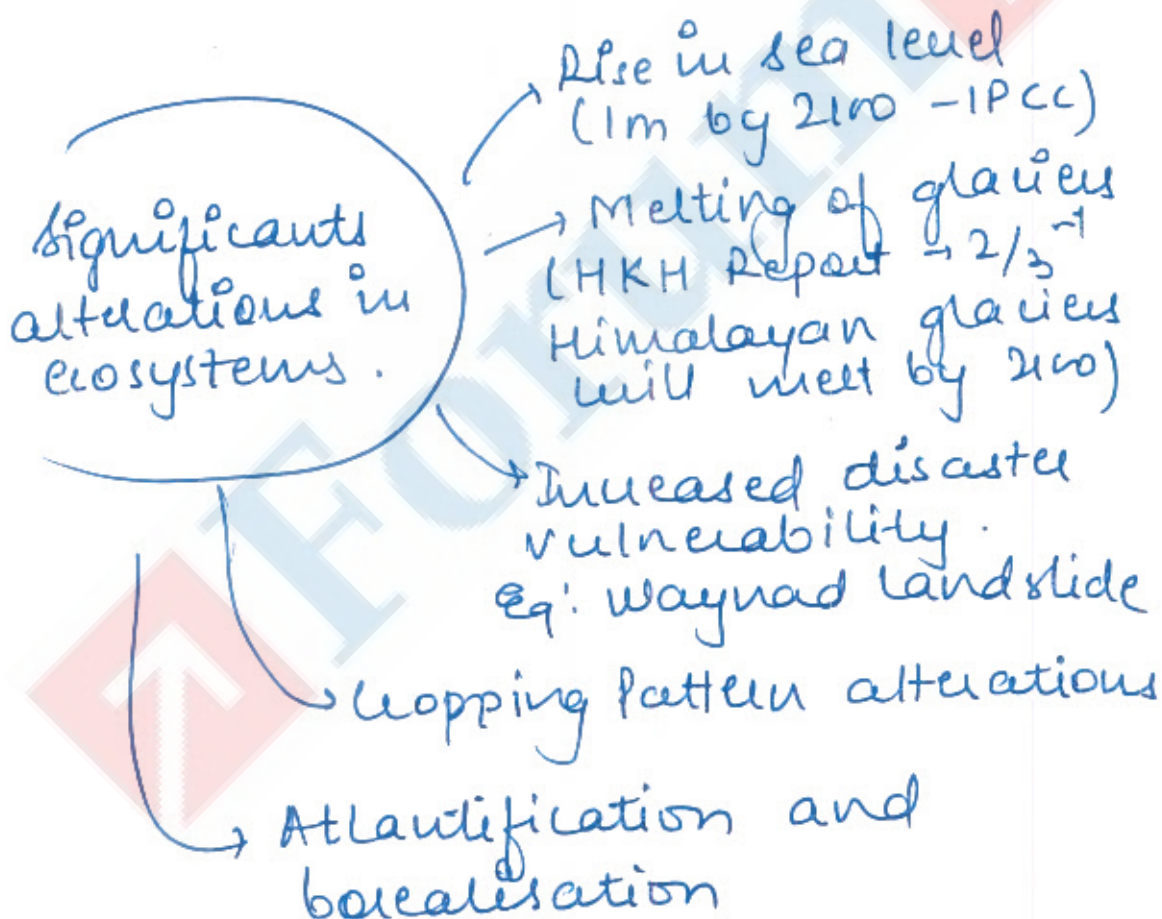
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TOTAL MARKS			

Q.16) Climate change is leading to significant alterations in ecosystems, resulting in cascading effects on biodiversity, ecosystem services, and human livelihoods, necessitating integrated approaches to conservation and climate adaptation. Analyse. (15 marks, 250 words)

जलवायु परिवर्तन के कारण पारिस्थितिकी तंत्र में महत्वपूर्ण परिवर्तन हो रहे हैं, जिसके परिणामस्वरूप जैव विविधता, पारिस्थितिकी तंत्र सेवाओं और मानव आजीविका पर व्यापक प्रभाव पड़ रहा है, जिसके कारण संरक्षण और जलवायु अनुकूलन के लिए एकीकृत दृष्टिकोण की आवश्यकता है। विश्लेषण कीजिए। (15 अंक, 250 शब्द)

IPCC 6th Assessment Report highlighted that the world may breach the 1.5°C climate temperature by 2040 which has come as a code red about human activities.



Cascading effects:

- ① change in habitation and adaptation of species & biodiversity.
↳ eg: snow leopard habitat shifting to upper latitudes.
- ② Extinction of species.
↳ eg: coral bleaching → 2016, 17 event → 50% corals died in Great barrier reef.
- ③ change in rainfall patterns has altered climatic phenomena.
↳ eg: AMOC, triple dip minima.
- ④ Neg. feedback loop leading to consequent impacts.
↳ eg: Munroe Muttu sinking Island in Kerala.
- ⑤ Reducing agricultural productivity.
⇒ livelihood threat.
- ⑥ Reduction in tourism activities.
↳ eg: late Gulmarg snow in 2023 winters.

Integrated approach : Conservation & Climate adaptation

- ① Including traditional knowledge for conservation
↳ eg: Assam → Ban bibi (Sacred groves)
- ② Artificial methods via R&D
↳ Chawang Nophel Artificial glaciers in Ladakh
- ③ Community mobilisation to hold government accountable.
↳ eg: Fridays for Future (G. Thunberg)
- ④ Enhanced climate discussions by involving vulnerable communities
↳ eg: Vanuatu climate emergency
- ⑤ Behavioural changes at individual levels.
↳ eg: LiFE → Pro-planet-people.

Thus, it is high time to make climate interventions because we do not have another planet to go on.

Feedback

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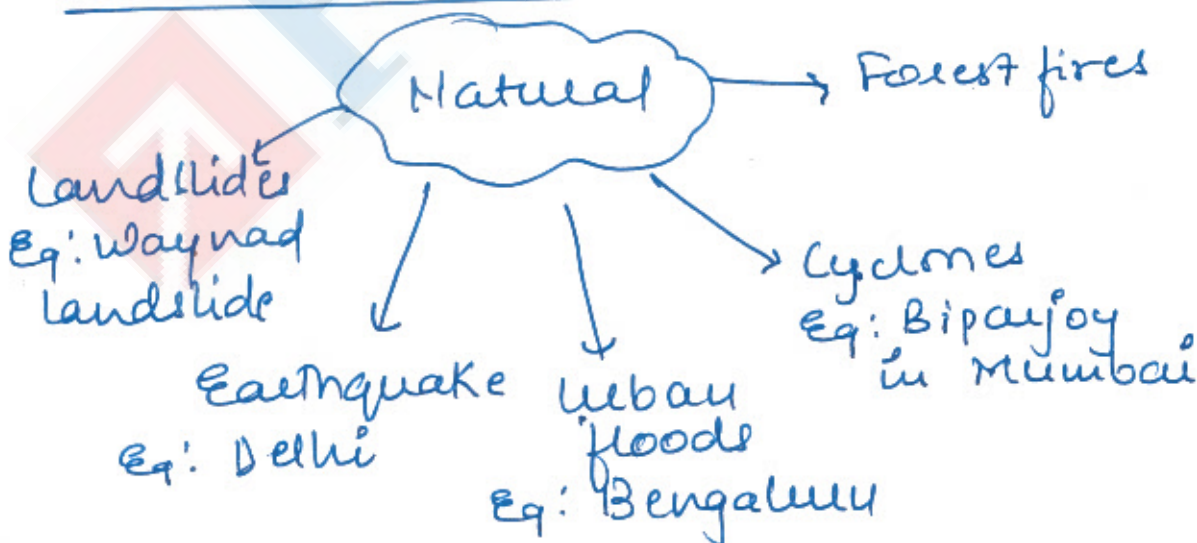
Q.17) Urban areas, often referred to as the cradle of civilization and growth engines, are increasingly experiencing various natural and man-made disasters. Discuss in the Indian context. Also, suggest suitable mitigation and management strategies. (15 marks, 250 words)

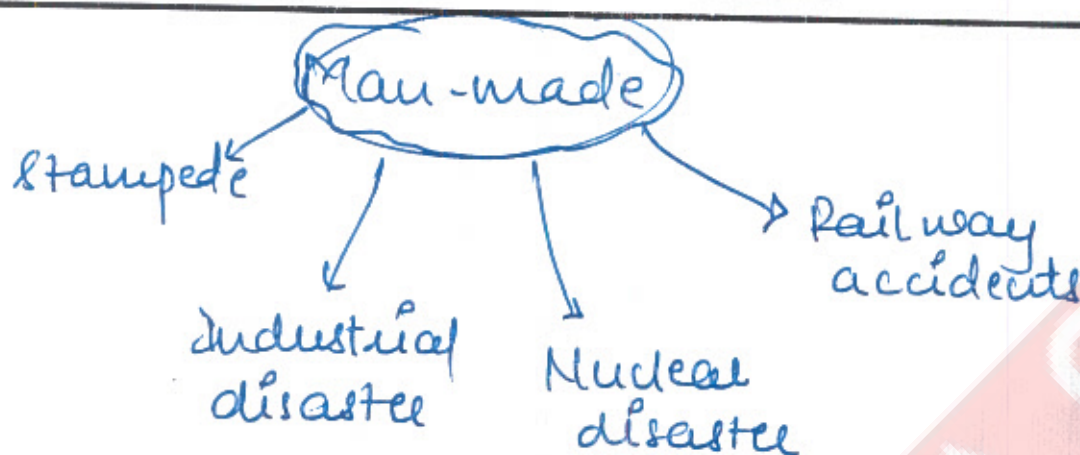
शहरी क्षेत्रों को अक्सर सभ्यता और विकास के इंजन के रूप में संदर्भित किया जाता है, जो विभिन्न प्राकृतिक और मानव निर्मित आपदाओं का सामना कर रहे हैं। भारतीय संदर्भ में चर्चा कीजिए। साथ ही, उपयुक्त शमन और प्रबंधन रणनीतियों का सुझाव दीजिए। (15 अंक, 250 शब्द)

ADB report mentions that by 2050 more than 60% population will be living in urban areas.



Experiencing various disasters :





Reasons :

- ① Increased population increases the disaster vulnerability.
- ② In urban sprawl → altering natural river courses → floods.
- ③ Emergence of slums → more vulnerable for stampedes etc.
- ④ Lack of effective urban and city planning.
- ⑤ Anthropogenic interventions increase the vulnerability from natural disasters.

Mitigation & management strategies

- ① effective city & urban planning with co-ordination between communities & authorities.
- ② Pre-planning an S.O.P. to be devolved when disaster strikes.
- ③ Community owned early warning system for better information dissemination.
- ④ Use of social media to enhance reach of mitigation strategies.
- ⑤ effective use of schemes like Aapda Mitra (NBMA).

Thus, effective mitigation and management can prevent a disaster to transform into a disaster.

Feedback

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#	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			

Q.18) "India's disaster management framework has made significant progress in the 21st century, yet challenges persist in ensuring timely response and effective coordination during crises." Comment.
(15 marks, 250 words)

"भारत के आपदा प्रबंधन ढांचे ने 21वीं सदी में महत्वपूर्ण प्रगति की है, फिर भी संकट के दौरान समय पर प्रतिक्रिया और प्रभावी समन्वय सुनिश्चित करने में चुनौतियां बनी हुई हैं।" टिप्पणी कीजिए।
(15 अंक, 250 शब्द)

Disaster management is the co-ordinated activity of disaster preparedness, response and relief measures.

Significant progresses in 21st century:

- ① A dedicated central & state level institution
↳ NDMA and SDMA.
- ② A separate cadre of disaster response force → NDRF
(National Disaster Response Force)
- ③ Conducive schemes & policies like Aapda Mit Scheme by NDMA.
- ④ Effective use of DPI (Digital Public Infrastructure) for information dissemination.

Ex: India quake app,

⑤ effective radar & monitoring networks.

Ex: Cyclone radars in east & west coast.

Persisting challenges:

① Lack of co-ordination between authorities and communities.

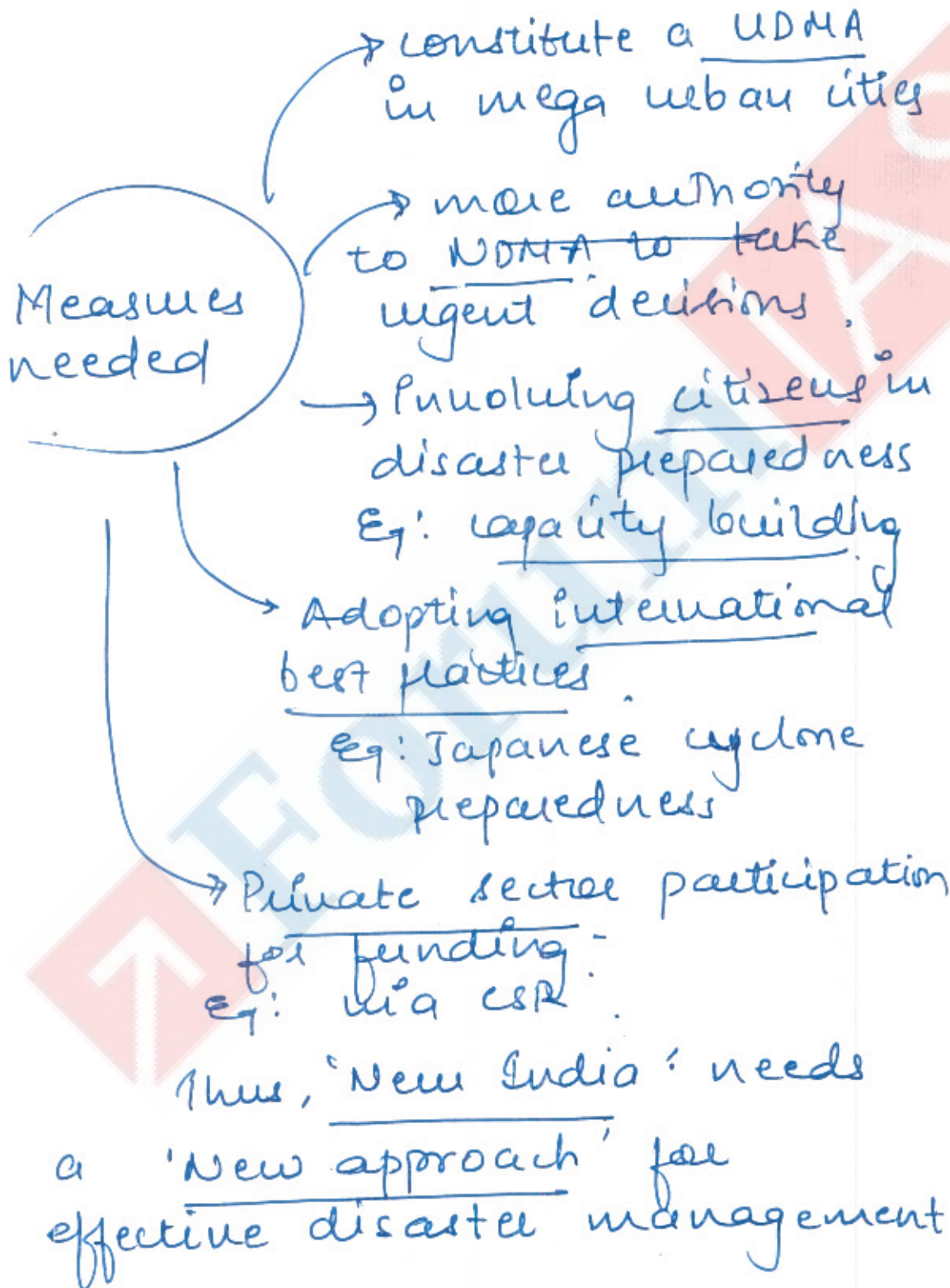
② Lack of a separate UDMA (Urban Disaster Management Authority).

③ Bureaucratic hurdles in deploying NDRF and lack of and DRF.

④ Inability to tackle man-made disasters.

Ex: Stampede, nuclear disaster.

⑤ lack of volunteering by citizens when disaster strikes.



Feedback

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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			

Q.19) Explain how the symbiotic relationship between organized crime and terrorism further aggravates internal security concerns. What steps can be taken to address this linkage and the threats emerging from it? (15 marks, 250 words)

बताइए कि संगठित अपराध और आतंकवाद के बीच सहजीवी संबंध किस तरह आंतरिक सुरक्षा संबंधी चिंताओं को और बढ़ाता है। इस संबंध और इससे उत्पन्न होने वाले खतरों से निपटने के लिए क्या कदम उठाए जा सकते हैं?

Terrorism is a pre-mediated, politically motivated act of violence perpetrated generally against non combatant target. (15 अंक, 250 शब्द)

While organized crime encompasses multitude of activities managed and controlled by a formal structure like money laundering, cyber crime, drug trafficking etc.

Symbiotic relationship between both:

↳ A crime-terror continuum is established which further interest of both.

↳ Terrorist activities use organized crime networks for resource generation → human & financial

↳ Organized crime utilize terrorist networks as a ready client base.

Aggravates internal security concerns:

- ① Nono-terrorism widens the
ambits of terrorism.
↳ eg: Operation Samudraagupta
→ ₹15000 u. drugs recovered
on western coast by NCB.
- ② Emerging warfare → drone
warfare.
↳ eg: BSF intercepted 119 drones
in 2023 along border.
- ③ Use of dark web and social
media for recruitment &
training.
- ④ Cryptocurrency networks for
fund generation via money
laundering.
- ⑤ Terrorist outfits exploiting
ungovernability to operate
↳ eg: Jamaah Islamiyah operating
from Golden Δ using drug
trafficking to further interests.

Steps to address the linkage:

- ① A national security strategy should be drafted to identify threats & employ measures.
- ② Inter-agency coordination between NCB, RAW, IB, ED
- ③ Joint operations with neighbours.
↳ eg: operation sunrise with Myanmar.
- ④ social media monitoring.
↳ eg: Operation Pigeon of Kerala.
- ⑤ International consensus on definition of terrorism to enhance the effects.

Thus, New Delhi Declaration's spirit of "Zero Tolerance for Terrorism" needs to guide efforts in tackling this menace.

Feedback

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TOTAL MARKS			

Q.20) Strengthening security apparatus in border areas and forging developmental partnerships with the locals are essential components of a robust and effective border management strategy. Discuss, with initiatives taken by the government in this regard. (15 marks, 250 words)

सीमावर्ती क्षेत्रों में सुरक्षा तंत्र को मजबूत करना तथा स्थानीय लोगों के साथ विकासवात्मक साझेदारी बनाना एक मजबूत और प्रभावी सीमा प्रबंधन रणनीति के आवश्यक घटक हैं। इस संबंध में सरकार द्वारा उठाए गए प्रयासों के साथ चर्चा कीजिए। (15 अंक, 250 शब्द)

Border management means
effectively planned & coordinated
attempts to guard and protect
the borders.

Strengthening security apparatus

- ① Dedicated border force for different theatres of threat
↳ Eg: ITBP for northern, Assam Rifles in North East.
- ② Coordination with the neighbours.
↳ Eg: Operation sunrise with Myanmar.
- ③ Alert intelligence networks.
↳ Eg: deciphering FICN (Fake Indian Currency Network) along Nepal border.

Forging Developmental Partnerships with locals:

① Border Infrastructure development programs

↳ Eg: Vibrant village programs which will enable better relation & communication with locals.

② Training & capacity building of locals.

↳ Eg: village guards program to enable self defence & complement the border security agencies.

③ Road building initiatives by BRO (Border Roads Organization) to ensure development of border areas.

Further measures needed

- Tri-service command for better & quick deployment & co-ordination
- Theatrisation to ensure dedicated focus to theatres of Threat -
(eg). Maritime borders
- Counter Chinese cartographic & nomenclatural aggression by further development & trust building.
- Modernisation of borders (Madhukar Gupta Committee) to prevent mass & mixed influx.

Thus, effective border management is important to uphold "Rakshan and Palan" duties of the State.

Feedback

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TOTAL MARKS			

Mentor Feedback Questions

- 1
- 2
- 3
- 4
- 5

Test Goal

- 1 ☐
- 2 ☐
- 3 ☐

Outcomes

-
-
-

Marking Scheme

Mark	Good	Average	Below average
10 Marker	3.75 - 5.0	3.0 - 3.5	< 3.0
15 Marker	5.75 - 7.0	4.0 - 5.5	< 4.0
20 Marker	7.75 - 10	6 - 7.5	< 6
✓✓	Key / Relevant Point		
✗	Vague / Irrelevant		

* Subject to change without prior notice.

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