



GENERAL STUDIES (Test-23)

निर्धारित समय: तीन घंटे
Time allowed: Three Hours

GSM (M-I)-2423

अधिकतम अंक: 250
Maximum Marks: 250

Name: Giose Akash

Mobile Number: [REDACTED]

Medium (English/Hindi): Eng

Reg. Number: 16616

Center & Date: Korol Bagh

UPSC Roll No. (If allotted): 6300397

प्रश्न-पत्र के लिये विशिष्ट अनुदेश

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

इसमें बीस प्रश्न हैं तथा हिन्दी और अंग्रेज़ी दोनों में छपे हैं।

सभी प्रश्न अनिवार्य हैं।

प्रत्येक प्रश्न के अंक उसके सामने दिये गए हैं।

प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहियें 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 अंकित निर्दिष्ट स्थान पर किया जाना चाहिये। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिखे गए उत्तर पर कोई अंक नहीं मिलेंगे।

प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिये।

प्रश्न-सह-उत्तर-पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिये।

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instruction carefully before attempting questions:

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

All the questions are compulsory.

The number of marks carried by a question 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.

Word limit in questions, wherever 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.

केवल मूल्यांकनकर्ता द्वारा भरा जाए (To be filled by Evaluator only)

Question Number	Marks	Question Number	Marks
1.		11.	
2.		12.	
3.		13.	
4.		14.	
5.		15.	
6.		16.	
7.		17.	
8.		18.	
9.		19.	
10.		20.	
Grand Total (सकल योग)			

मूल्यांकनकर्ता (हस्ताक्षर)
Evaluator (Signature)

पुनरीक्षणकर्ता (हस्ताक्षर)
Reviewer (Signature)

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Feedback

- | | |
|---|--|
| 1. Context Proficiency (संदर्भ दक्षता) | 2. Introduction Proficiency (परिचय दक्षता) |
| 3. Content Proficiency (विषय-वस्तु दक्षता) | 4. Language/Flow (भाषा/प्रवाह) |
| 5. Conclusion Proficiency (निष्कर्ष दक्षता) | 6. Presentation Proficiency (प्रस्तुति दक्षता) |
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1. भारत उच्च व्यापार घाटे की चुनौती का सामना कर रहा है। भारतीय अर्थव्यवस्था पर इसके प्रभाव का विश्लेषण कीजिये।

(150 शब्द) 10

The challenge of a high trade deficit haunts India. Analyze its impact on the Indian economy. (150 words) 10

उम्मीदवार को इस
हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

Trade deficit occur when
a country imports more than it
Exports to others.

Challenge of trade deficit for India

- most of FTAs are showing negative
concerns and trade deficit.

(eg) Trade deficit with ASEAN

- Trade deficit with China around 95
billion dollar / year a huge amount.

- Import dependency of oil and crude
oil, fossil fuel creates more trade
deficit

(eg) Russia- India - crude oil

- low competitive advantage in Indian
Export and low manufacturing base.

Impact of trade deficit on Economy

- outflow of foreign exchange in order to fill gap of income-outflow
- High trade deficit lead to high inflation and increased vulnerability to global supply chain disruption and Exchange rate volatility
- ↓ investor confidence and reduce foreign investment in economy.
- Increased cost of borrowing for govt and higher interest rate
- Trade deficit along with fiscal deficit 'twin deficit' Complicate problem.

Comprehensive review of FTA, domestic export capabilities build up, self reliance, vocal for local will help curbing trade deficit

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
(Candidate must not write on this margin)

2. अनुसंधान नेशनल रिसर्च फाउंडेशन की स्थापना ने भारतीय विश्वविद्यालयों में अनुसंधान, नवाचार और उद्यमिता के क्षेत्र में कायाकल्प की संभावना को प्रकट किया था; हालाँकि वास्तविक तस्वीर निराशाजनक दिखती है। टिप्पणी कीजिये।

(150 शब्द) 10

The foundation of Anusandhan National Research Foundation promised an overhaul in the field of research, innovation and entrepreneurship in Indian universities; however, the real picture looks gloomy. Comment.

(Candidate must not write on this margin)

(150 words) 10

Budget 2024 allocated ₹ 1 lakh
Core for Anusandhan National research
foundation promotion in India.

ANRF promises overhaul

- It institutionalise research in various sectors with industry-academic linkage
- upgradation of infrastructure and laboratory for research purpose
- fostering ecosystem of innovation and nurturing new, young talent right from school level to PhD level
- more focus on emerging technologies like AI, Biotechnology, IoT etc for public, societal impact.

Issues with ANRF

- Still low spending of research, India only spends 0.7% of GDP on research while western countries spend around 2-3% of GDP
- lack of skilled workforce, scientist brain drain in foreign university and institute
- lack of supportive environment in India like handholding, incentive, subsidy
- Issues with IPR and plagiarism hinders research in India

Way forward → promote atal tinkering lab

- stipend for researcher as incentive
- strengthen domestic IPR regimes
- International Collaboration and exchange

3. राष्ट्रीय हरित हाइड्रोजन मिशन के प्रमुख उद्देश्य क्या हैं और इससे भारत के निम्न-कार्बन अर्थव्यवस्था की ओर संक्रमण पर किस प्रकार का प्रभाव प्रत्याशित है? (150 शब्द) 10

What are the key objectives of the National Green Hydrogen Mission, and how is it expected to impact India's transition to a low-carbon economy? (150 words) 10

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
(Candidate must not write on this margin)

Green Hydrogen is a hydrogen produced from electrolysis which powered by renewable energy like wind, solar.

Objective of National green hydrogen mission

→ 5 mmt production of green H₂ by 2030 in India.

→ SHIP - Strategic hydrogen Intersector Partnership b/w Public and Private sector

→ SEAH - Strategic intervention for green hydrogen technology and domestic electrolyser production capabilities.

→ India as hydrogen hub and hydrogen based economy

Impact of green H₂ mission

- Self reliance - building Domestic Capacity for H₂ production
- Low CO₂ emission and climate mitigation
It will help in fulfilling India's INDC and Panchamrit target at global forum.
- Electric mobility and transport via H₂ fuel cell in electric vehicle.
- reduce dependency on import of crude oil and fossil fuel.
- Boost to domestic industry and research growth in India.

This green H₂ mission is a right step toward low CO₂ economy
Self reliance and technological development

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हाशिये में नहीं
लिखना चाहिये।

(Candidate must
not write on this
margin)

4. भारत में कोयला क्षेत्र में व्यापक सुधार हुआ है परंतु यह अभी भी सभी समस्याओं से मुक्त नहीं है। टिप्पणी कीजिये।

(150 शब्द) 10

Coal sector in India has shown great improvements but it is still not free from all problems. Comment.

(150 words) 10

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
(Candidate must not write on this margin)

According to 'Energy mix' of India, Coal still constitute > 50% for electricity production and use

Improvement in Coal sector in India

- Private sector coal mining and relaxation of norms by govt
- transfer of leases and relaxation with end use of captive mining
- 100% FDI inflow allocation in Coal mining sector
- Sustainable and green Coal mining technology in India

Issues with Coal mining and sector

- monopoly of Coal India limited in market

- demand-supply mismatch of coal, frequent shortage of coal at power plant despite 5th largest reserve of coal in India
- Lack of technological upgradation and safety issues with coal mining.
- Environmental, local people displacement issue
- low quality of coal + ↑ sulphur content and non available coking coal for steel, manufacturing.

Way forward → EIA, SEA and local environmental concern should be taken

- technology upgradation and green coal mining technology
- more research and exploring new coal mining
- Promote private sector coal participation

उम्मीदवार को इस
हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

5. कारखानों में दुर्घटनाओं में वृद्धि गंभीर चिंता का विषय है। स्पष्ट कीजिये कि निरीक्षण से संबंधित मुद्दों ने किस प्रकार इस समस्या को बढ़ाया है एवं स्थिति से निपटने के लिये कुछ प्रभावी उपाय संबंधी सुझाव प्रदान कीजिये। (150 शब्द) 10

The increase in the incidence of factory accidents raises serious concerns. Explain how issues related to inspection have contributed to the problem and suggest some effective measures to handle the situation.

(150 words) 10

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।

(Candidate must not write on this margin)

Recent chemical factory blast
at Andhra Pradesh killing 5 men raises
Concerns over factory safety. Recent
Bhopal gas tragedy local remains
in memory of people

Inspection issues contribute to accident

- Bribery, Corruption among public official and factory owners
- Lack of frequent visit to chemical factory
- lack of updation of safety protocol and framework regularly
- shortage of factory inspector and manpower
- Traditional method of inspection and less use of technology.

measures to handle situation

- frequent surprise visit at working site and ensure comprehensive inspection
- Increase penalty for non-compliance
- Use of digital inspection and technology for easy work
- Randomised allocation of Inspector to any factor to curb nexus and collusive corruption
- Immediate report uploading by inspector on online website to ensure integrity
- Regular updation of safety protocol and framework with industry worker, expert collaboration and discussion

उम्मीदवार को इस
हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

6. सीमित संसाधनों वाले विश्व में वैश्वीकरण और उभरती हुई प्रौद्योगिकी परस्पर संबंधित हैं। भारत के विशेष संदर्भ में स्पष्ट कीजिये। (150 शब्द) 10

Globalization and emerging technology are interconnected in a resource-limited world. Elucidate with special reference to India. (150 words) 10

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
(Candidate must not write on this margin)

Globalisation has facilitated free flow of money, capital, labour, culture and technology beyond boundary

Globalisation and emerging technology

- Techno imperialism by dominant western power who have well developed technology on which India is dependent
- Accessibility and affordability issue in India. Not all people are equally able to access and utilise technology.
- Emerging technology can widen and reinforce existing socio-economic disparities.

→ Issues with IPR laws and violation
emerges due to globalisation and emerging technology

① Compulsory licensing of
Patented drugs at Covid-19.

→ Data sovereignty and Right to
Privacy may be hampered due to it

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

7. भारत में कृषि वस्तुओं का एक बड़ा वैश्विक निर्यातक बनने की अपार संभावनाएँ हैं। चर्चा कीजिये। (150 शब्द) 10
India has tremendous potential in becoming a large global exporter in agricultural commodities. Discuss.

(150 words) 10

उम्मीदवार को इस
हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

Indian agri export has surpassed
> 50 billion \$ in 2023 and has
much more potential for export

India's potential for agri export

- 2nd largest producer of wheat, rice, fruits, vegetable and record break production of > 320 MT grains in 2023.
- Annual 68% of workforce still engaged in agriculture sector.
- Diversification of agriculture sector with aquaculture, horticulture, pastoralism
- Diverse food variety production and indigenous variety premium value
(9) Basmati rice famous for aroma.

Issue - high diversification and low
Specialisation in agri export

- Issue with storage and post harvest
loss management
- Quality issue of sanitary and
Phyto sanitary norms (e.g. MDH Malaysia)
- WTO subsidies restriction and allegation
market distortion.

Way forward → Linkages of farmer with
food processing industries for
value addition and export

- Credit support and guarantee schemes
for exporters
- RODTEP for remission of duties and
taxes of exporters
- Commercial Contract farming and
Commodity exchange for agricultural product

8. संहनीय कृषि पद्धतियों के संदर्भ में मृदा स्वास्थ्य के महत्व पर चर्चा कीजिये।

(150 शब्द) 10

Discuss the significance of soil health in the context of sustainable agricultural practices.

(150 words) 10

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
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margin)

According to ISPO report, around
30% of Indian land mass is undergoing
soil degradation and desertification.

Significance of soil health for
sustainable agriculture

- good soil health - better agricultural
yield and productivity per hectare
- Ensure adequate replenishment of
nutrients and micronutrients so
reduce need for chemical fertilizer
application
- It will reduce subsidy burden for
govt and input cost for farmer
- ~~It will~~ Soil help in supporting rich
biodiversity and ecosystem in agriculture

(c) Agroforestry

- application of organic manure from livestock will ensure good soil health

Issue with soil → Soil degradation and desertification

- Excessive irrigation and alkalinisation in Punjab, Haryana region
- Exhaustion of soil nutrients
- Imbalanced use of NPK fertiliser

way forward - Natural and organic farming like mulching, crop rotation etc

- soil health card and frequent lab testing of soil nutrient
- Avoid flood irrigation method
- use of organic manure and livestock waste

Soil health holds importance for productivity, sustainability, efficiency in sustainable agriculture.

9. लाभों, चुनौतियों एवं पर्यावरणीय प्रभावों के संदर्भ में अपतटीय और तटीय पवन ऊर्जा की तुलना कीजिये। (150 शब्द) 10
Compare and contrast offshore and onshore wind energy in terms of their benefits, challenges, and environmental impacts. (150 words) 10

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

India has offshore wind policy
which focuses on developing offshore
wind energy like onshore in India.
Offshore wind energy means wind
mills installed deep in sea water.

on shore wind	off shore wind
→ <u>located near</u> Coastal or inland	→ located away from Coast in deep water
→ <u>low speed of</u> wind and low efficiency	→ <u>High wind speed.</u> and high efficiency
→ <u>Low cost</u> of installation and maintenance	→ <u>High cost of</u> installation and maintenance

→ on shore wind
geographically
restricted to
few states TN,
Gujarat, Rajasthan

→ Issue of
land acquisition
and local people
displacement

→ Can result in
deforestation and
forest loss

→ well established
in India

→ Huge sea water
and holds immense
potential

→ No issue of land
acquisition and
people rehabilitation

→ Can damage local
marine biodiversity
and pollution

→ In nascent stage
of development in
India

Both have their pros and cons
govt. should support wind energy
via PLZ, subsidy, domestic manufacturing
and research for Carbon neutrality by 2070

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

10. एक सुपरिभाषित राष्ट्रीय सुरक्षा कार्यनीति (NSS) समकालीन सुरक्षा चुनौतियों से निपटने में किस प्रकार योगदान दे सकती है? भारत के लिये एक व्यापक राष्ट्रीय सुरक्षा कार्यनीति के महत्त्व पर चर्चा कीजिये। (150 शब्द) 10

How can a well-defined National Security Strategy (NSS) contribute to addressing contemporary security challenges? Discuss the significance of having a comprehensive National Security Strategy (NSS) for India. (150 words) 10

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

There has been a growing demand for India to have a comprehensive National security strategy. (NSS).

NSS can help in addressing contemporary challenges

- Comprehensive analysis and segregation of security risk like external, internal, state sponsored risk
- Plan of action and framework for non-state actor which is growing threat in India
- Prioritising of security, resources and efficient resource and manpower allocation to deal with effectively
- Comprehensive NSS will show firm stand by India on global issue and threat

- Contemporary misuse of technology
and rise in organised crime can
be managed with comprehensive security
strategy.

(Significance of NIS)

→

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हाशिये में नहीं
लिखना चाहिये।

(Candidate must
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margin)

11. विश्व के सबसे बड़े कृषि उत्पादक देशों में से एक होने के बावजूद, कृषि निर्यात के मामले में भारत का श्रेणीक्रम निम्न है। इस संदर्भ में, भारत में फसलोपरांत हानियों की समस्या पर विशेष ध्यान केंद्रित करते हुए कृषि विकास के समक्ष विद्यमान समस्याओं पर चर्चा कीजिये। (250 शब्द) 15

Despite being one of the largest agricultural producers in the world, India ranks much lower in terms of agricultural exports. In this context, address the issues faced in agricultural growth with special focus on the problem of post-harvest losses in India. (250 words) 15

India ranks second in terms of rice and wheat as well as fruits production in world but agriculture export is around 50 billion, below the potential of India.

Indian agriculture contribute to about 18% of GVA and shows constant growth rate of 4-5% per year

Issues with agricultural growth in India

- Lack of infrastructure for post harvest management like cold storage chain, facilities, godown, room etc.
- Inadequate storage capacity of FCI. Currently India produces about 320 mt of grain but we have 140 mt storage capacity. overloading of 165 mt grain occur

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- Lack of scientific management of storage
still 70% of farm produce is managed and stored by farmer at farm level only
- Quality issue of food grains - Pest and disease infestation lead to compromised quality which could not qualify the sanitary phytosanitary norms of outer world.
- High diversification and low level of specialisation is seen in Indian agri export
- Issues of Credit crunch, lack of fund of formal nature and guidance adds further.
- Low level of mechanisation (40%) as compared to European countries 70-80%.
Reduced economics of scale in India.

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हाशिये में नहीं
लिखना चाहिये।
(Candidate must
not write on this
margin)

- reliance of traditional, poor quality seeds, low level of scientific agri-research and Start up.

Way forward for agri growth
Ashok Dalwai Committee

- Diversify agriculture into Livestocks, aquaculture, horticulture.
- reforms in MSP and Procurement Policy and subsidy regime by govt
- focus on agri research and promote new Startup turning into agri Entrepreneur
- Storage and decentralised procurement and Private Sector utilising outsourcing for storage and transport.

Above measures are necessary to address challenges of low productivity, stagnation of growth and farmer distress. It will help in doubling farmer income boosting export.

12.

वंचित आबादी तक डिजिटल भुगतान सेवाओं के विस्तार से संबद्ध चुनौतियों का परीक्षण कीजिये और डिजिटलीकरण के माध्यम से वित्तीय समावेशन के संवर्द्धन हेतु कार्यनीतियाँ प्रस्तावित कीजिये। (250 शब्द) 15

Examine the challenges of extending digital payment services to underserved populations and propose strategies to enhance financial inclusion through digitization. (250 words) 15

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e-governance model is focusing on extending welfare services via digital mode to increase efficiency, effectiveness and transparency, but inclusivity and last mile connectivity remains concern.

Digital Payment service use of biometric model via IAM Trinity. Jan Dhan Bank account + Aadhar + mobile. Use of UPI has revolutionized these sector.

Challenges in digital Payment services to underserved population

- Digital divide → rural-urban
rich-poor. young-old. male-female

According to India Inequality report only 31% of rural people have access to internet as compared to 67% in urban counterpart.

→ Growing financial fraud and lack of financial literacy among poor people

Ministry of finance reported that in 2022-2023 around 98K UPI frauds were detected and reported by citizen.

→ Infrastructure issue lack of broadband services in tribal area and backward region and lack of smart phone access,

→ Issues of biometric ~~mismatch~~ and authentication mismatch problem.

Strategy for financial inclusion via digitisation

→ differentiated or Niche banking promote SFBs, RBBs and payment bank model.

- Promote digital and financial literacy by using banking correspondent and outreach activities at community service centre (CSG)
- Strengthen data protection framework and cyber fraud reporting and resolving mechanism
- Building up infrastructure and connectivity using Digital Bharat Nidhi and ensure broadband connection to all (Bharatnet)
- Provision of more service on Jordan bank account differentiated Insurance and credit facility

Digitalisation and e-governance is indispensable for good governance in today's world but efforts must be taken to ensure it is inclusive, accessible and affordable to all

Sabke Sath, Sabke Vikas

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।

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13.

हाल में प्रवाल विरंजन की परिघटनाएँ चिंताजनक स्थिति का संकेत हैं। प्रवाल विरंजन की परिघटना के पश्च में निहित कारणों की व्याख्या कीजिये। इस समस्या से निपटने के क्या उपाय हैं? (250 शब्द) 15

The recent episodes of coral bleaching are signs of an alarming situation. Explain the reasons behind the phenomenon of coral bleaching. What are the ways to tackle this problem? (250 words) 15

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।

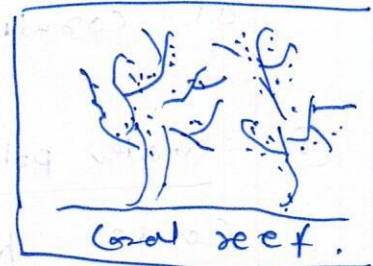
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Coralals are symbiotic relationship between coral polyp colony and zooxanthellae algae living in harmony. But climate change and human activities are causing break down of this symbiotic relation leading to bleaching.

Coral reef bleaching events

① Bleaching of grt barrier reef in australia

② coral coral bleaching in malasia, Lakewdweep.



Bleaching result in removal of colorful algae from coral polyp reef. This bleaching threatens local biodiversity and marine life as it supports local marine ecosystem and food cycles.

Reasons for Coral bleaching rise

- ① Global warming - Corals require moderate to mild warm water, too much high temperature results in bleaching.
- ② Ocean acidification - acidic nature of ocean water due to more CO₂ capture hamper CaCO₃ reef building process of corals.
- ③ Water pollution - turbidity and pollutants cause harm to pores of polyp resulting in damage. as they block sunlight for corals.
- ④ Human activities like unsustainable tourism and bottom trawling fishing causes damage to bottom lying coral reefs.
- ⑤ Sewage and waste water discharge into Ocean, streams from industrial outlet

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Ways to tackle coral bleaching

- ① Climate change mitigation and adaptation measures will help in slowing down their rate of bleaching.
- ② Involving local community in coastal management and protection.
- ③ Technological methods like Bioreock and cryopreservation, cryomesh technology to promote coral growth.
- ④ Blue Economy to ensure sustainable use of marine resources.
- ⑤ Coral reef monitoring and international, local collaboration with all stakeholders.

Coral reefs are critical for marine life and biodiversity. Various factors currently are threatening them. Monitoring and awareness about it will help protecting huge biodiversity.

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14.

जलवायु परिवर्तन के कारण लगातार खतरे का सामना कर रहे मैंग्रोव पारिस्थितिकी तंत्र की रक्षा के लिये हम क्या कदम उठा सकते हैं? इनके संरक्षण के लिये राष्ट्रीय एवं अंतर्राष्ट्रीय स्तर पर आरंभ की गई कुछ पहलों का भी उल्लेख कीजिये?

(250 शब्द) 15

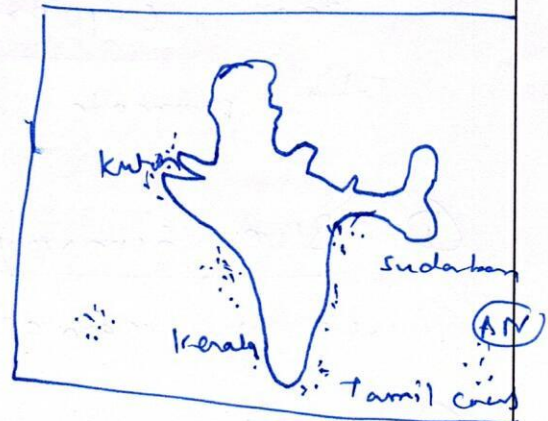
What steps can we take to protect mangrove ecosystems, which are increasingly threatened by climate change. Also mention some initiatives at national and international level to support their conservation?

(250 words) 15

mangrove Salt tolerant plant
mostly found in marshy coastal places
which provides important ecological and
nutrient recycling services in aquatic life.

Mangroves in India

- Sundarban (WB)
- Kutch Gujarat
- Tamil and Kerala Coast



Threats to mangroves due to climate change

- Sea level rise and thermal pollution
- Ocean acidification
- Extreme events like cyclon, storm surge
flood, etc.
- Coastal erosion and flooding

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Steps to protect mangroves in India

- Integrated coastal management and development of coastal area in sustainable manner
- Involvement of local community and leveraging their cultural aspect of people
 - ⑨ Sacred groves
- Preventing encroachment and aquaculture on coastal land
- Sustainable fishing practices like green fishing, avoiding trawling, cydrie blast
- Creating marine protected area or Coastal sensitive zone, mapping area into zones and regulating human and developmental activities there
- Use of technology for monitoring and preservation of mangrove in habitat

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Some national and International Initiative

National → Coastal regulation and management
rules by govt.

→ MISHTI Scheme to promote sustainable
local livelihood.

→ Amrit Dasgupta to preserve mangrove

International → mangroves for future (mtf)
Post 2004 tsunami attack

→ Global mangrove alliance (GMA)
Partnership of countries, ngo, instituting
and research.

Sustainable use of mangrove
along with Conservation is in line
with India's vision of Blue economy
multi stakeholder and holistic approach
will help in protecting mangrove

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15. तकनीकी वस्त्र बाजार में भारत की वैश्विक स्थिति को सुदृढ़ करने में राष्ट्रीय तकनीकी वस्त्र मिशन के महत्व पर चर्चा कीजिये। भारत में इस क्षेत्र के समक्ष कौन-सी प्रमुख चुनौतियाँ विद्यमान हैं? (250 शब्द) 15

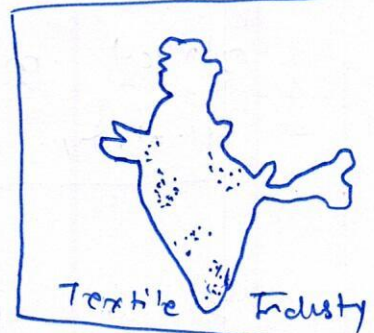
Discuss the significance of the National Technical Textiles Mission in enhancing India's global position in the technical textiles market. What are the key challenges faced by this sector in India? (250 words) 15

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India ranks first in Cotton Production in world and has dominant textile export in world.

National technical textile mission focuses on promoting professional and ergonomic textile that will help in Comfort and ease with efficiency in work place.

(e) PPP kit, space suit



Significance of mission in enhancing India Position

- It promote Indian Export in global market and will make a large share of Indian Export in world.
- It will result in technological growth and skill specialisation among semi skilled textile worker

- will meet growing ~~need~~ demand for professional textile in world and earn foreign exchange
- mission will pave way for global collaboration and exchange with other textile producing countries like Bangladesh, Brazil, etc.
- Creating Indian Brand product in global market by ensuring highest quality standard and product quality
- It will promote cost effective textile, or competitive advantage in global order

Key challenges faced by sector

- lack of skilled manpower and knowledge about technical textile.
- lack of infrastructure and poor mechanisation of cotton textile mills in India

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हाशिये में नहीं
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→ Geographical limited coverage to Gujarat, MH, Tamilnadu like states are dominant rest are lagging

→ Credit facility crunch and lack of govt support incentive

→ Lack of known India Brand that can compete with MNCs in world

Way forward → PLI scheme upgradation for textile

→ SKilling, reskilling, upskilling of textile worker

→ govt support, incentive, Transport and market access (TMA)

→ Credit facility and liquidity in market

Natural technical textile mission holds immense importance for global position. above challenges need to be addressed.

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लिखना चाहिये।
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16. ट्रांस-फैट क्या हैं? इनसे संबद्ध स्वास्थ्य संबंधी चिंताओं पर चर्चा कीजिये और बताइये कि इनके उपभोग को सीमित करने के लिये कौन-से कदम उठाए जा रहे हैं? (250 शब्द) 15

What are Trans-fats? Discuss the health concerns associated with them and what steps are being taken to limit their consumption? (250 words) 15

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
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Trans fats are harmful category of fatty acid with Esterification to enhance their shelf life and quality

(e) Palm oil. Junk food has transfat

Transfat are mostly animal origin fat and are Saturated fat which undergo esterification and chemical process to enhance palitibility and shelf life

Health Concern with transfat

- ↑ LDL and cholesterol level in body
- Prone to heartattack, stroke, CVD and Hypertension, atherosclerosis in young people especially.
- overweight, obesity, malnourishment.

- Hidden Hunger - Energy dense but poor in nutrient content
- deposition of fatty acid in liver, kidney
long term effects like fatty liver,
Diabetes mellitus

Stake taken for replacing it

- FSSAI awareness and 'Eat Right'
Campaign among people
- FSSAI standards and regulation regarding
content of fatty acid in product
- mandatory public disclosure of Transfat
on junk food, processed food with
relative percentage content %.
- WHO strategy 'REPLACE' to replace
replace Transfat with good Polyunsaturated
saturated fatty acid, by 2030.

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→ Global norms to limit Trans fat content
upto 2% level in food product.

→ WHO awareness programme and international health research programme to ↓ NCD.

Thus, Public awareness, persuasion
Unprocessed oil consumption promotion
one ways to tackle menace of trans fat

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हाशिये में नहीं
लिखना चाहिये।
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17. भारत में खाद्य प्रसंस्करण उद्योग की व्यापकता एवं महत्त्व पर विस्तृत चर्चा कीजिये। खाद्य प्रसंस्करण क्षेत्र की चुनौतियों को संबोधित करने के लिये भारत सरकार द्वारा कौन-से नीतिगत उपाय किये गए हैं? (250 शब्द) 15

Elaborate the scope and significance of the food processing industry in India. What are the policy measures taken by the government of India to meet the challenges of the food processing sector. (250 words) 15

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food processing industry is one of the sunrise sector in India with CAGR of 10-11% annually

Scope and significance of food processing

- India is 2nd largest producer of wheat rice and fruit vegetable in world.
- Huge workforce still employed in agriculture (4%).
- growing 'middle class' and demand for ready to eat food product in India
- Westernisation culture and demand for processed food globally and export potential.
- Health conscious among people and demand for nutrient dense food

Significance → Export potential is high

- Employment opportunities in market
- boost agriculture sector growth
- Creating backward-forward linkages in India
- Public health nutrition interventions
eg. food fortification

Issues with FPL → Lack of Linkages
with up stream and down stream market

- quality and safeguard issue in international market
(e) MDH masala Controversy
- Strict Sanitary phytosanitary norm (SPS)
- Informal nature of FPL
- Land fragmentation and low mechanisation
lack of storage, cold chain facility to farmers.

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Policy measures taken by govt

- Dedicated ministry of food processing industry
- PM 'Kisan Sampada Yojana' focus on cluster based approach mega food park, cold chain storage, processing, collection unit and market linkage
- PM formalisation of micro enterprise (PM FME) to get them formal recognition skill, training, credit etc
- PLZ Scheme, credit facility and guarantee scheme for msme growth

FPI holds importance for export potential, employment, agriculture growth, msme expansion and livelihood opportunity for millions. more support and intervention by govt is needed to realise its potential

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18. हिमालयी क्षेत्र में भूस्खलन की बढ़ती घटनाओं के पश्च में निहित कारणों और उनके संभावित प्रभावों पर विचार कीजिये। इस बढ़ती समस्या से निपटने के लिये अपनाई जा सकने वाली संवहनीय शमन कार्यनीतियों के सुझाव प्रदान कीजिये।

(250 शब्द) 15

Examine the reasons behind the rising occurrence of landslides in the Himalayan region and their potential impacts. Suggest sustainable mitigation strategies that could be adopted to tackle this escalating issue.

(250 words) 15

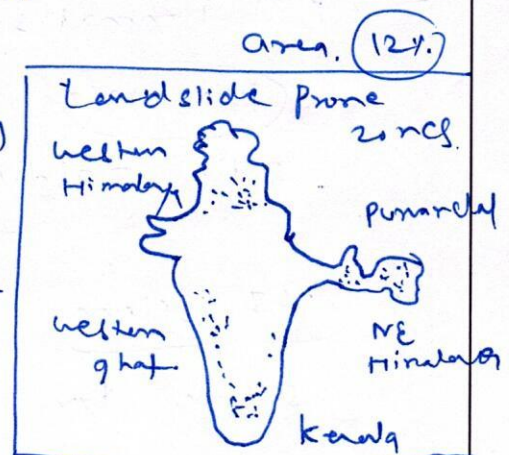
Landslide is a mass movement,
a flow of debris, rocky material down
slope under gravitational force.

Reasons for rising land slide in Himalaya

→ rising human activities in
Himalayan region like

Construction of Hydroelectricity
creation.

② Tarapongah hydropower
Plant near Joshimath
landslide subsidence



→ Geological plate tectonic movement the
Indian plate is moving at 2cm/year
toward European plate resulting in
collision and earthquake in Himalayan
region

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हाशिये में नहीं
लिखना चाहिये।

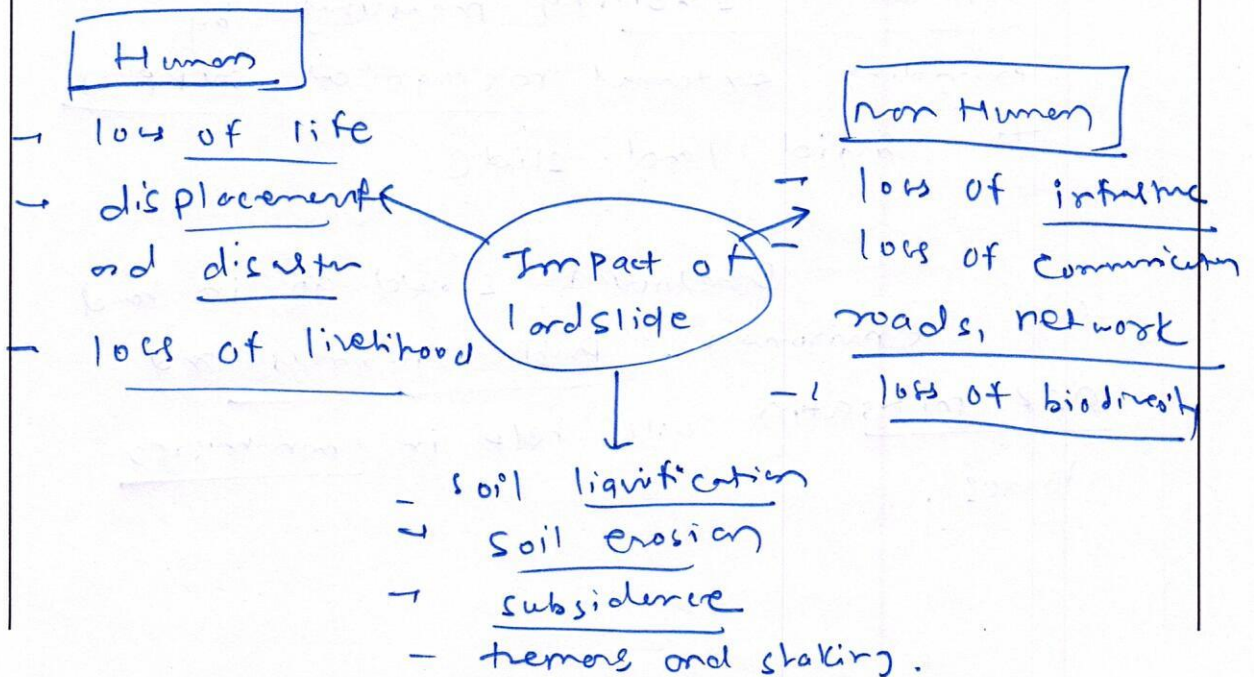
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→ Climate change and extreme weather like flash flood. cloud burst as seen in NE Himalayas. Sikkim flood

→ Damming effect of rocks as seen in recent Kerala wayward landslide

→ Glacial lake outburst flow (GLOF) sudden release of dammed water causes landslide

→ Excessive rain cause 'soil saturation' and loosening ground support



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Suitable mitigation strategies

- Sustainable development / Considering ecological needs with development
- Demarcate ecologically sensitive zone in area and regulate human activities, settlement and industry
- Constant monitoring via satellite and imaging will help in mitigating losses
- Emergency rescue plan creation and public awareness, capacity building, mock drills
- Structural stability measuring by providing external mechanical support to avoid land slide

Development should go in hand with environment. Public awareness and risk mitigation will help in minimising losses.

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हाशिये में नहीं
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19. सीमा-पार घुसपैठ के प्रति सुभेद्यता को भारत के पूर्वोत्तर क्षेत्र में विद्रोह की लगातार घटनाओं के पश्च में निहित प्राथमिक कारण माना जा सकता है। टिप्पणी कीजिये। (250 शब्द) 15

Vulnerability to cross border infiltration can be termed as the primary reason behind frequent insurgencies in North-eastern region of India. Comment. (250 words) 15

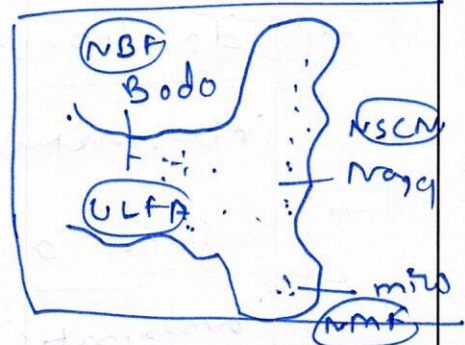
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Recently govt has scrapped the free movement Regime (FMR) with Myanmar over security concern.

Frequent Insurgency in NE India

- ULFA in assam
- VMLF in manipur
- NSCM (T) and (L) in malabarland
- mizo front in mizoram.



Cross border infiltration 1st reason

- Porous border nature and lack of strict checking in NE-border
- Geographical constraint hilly area, dense forest allow easy movement
- Cross cultural ethnic ties of Naga, mizo, people

- regional instability like military rule in Myanmar, Bangladesh crisis, Rohingya refugee
- Proximity to Golden Triangle, organised Crime

Other Causes of Insurgency in NE region

- developmental deficient lack of infrastructure industry growth unemployment
- lack of good governance and bureaucratic apathy
- state sponsored insurgency with ISI and Chinese help.
- Ethnic complexities and conflict for resource management
- LWE ideology and organised crime support insurgent movement
- devolution of power to local level

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Strategy to deal with it

→ "Security & development + intelligence"

should go in hand.

- Recent move of opening 100
Indian post payment banks in NE

region will help.

NE insurgency are complex
issue require multifaced solution like
border security, development, good governance
decentralisation, peace talks and negotiation
etc to ensure long time sustained peace
and growth

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हाशिये में नहीं
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20.

वित्तीय कार्रवाई कार्य बल (FATF) धनशोधन और आतंकवादी वित्तपोषण से निपटने के लिये वैश्विक मानकों के निर्माण को किस प्रकार आकार प्रदान करता है? इसके कार्यकरण को सुदृढ़ करने के उपाय संबंधी सुझाव प्रदान कीजिये।

(250 शब्द) 15

In what ways does the Financial Action Task Force (FATF) shape the creation of global standards for combating money laundering and terrorist financing? Suggest measures to strengthen its functioning.

(250 words) 15

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FATF is brain child of G7 Countries created to prevent money laundering and terror financing in world.

FATF role in creating standards for money laundering and terrorist finance

→ Classification of countries into black list and grey list

grey list - time to take action (eg) Pakistan

Block list - non-cooperative country (eg) Iran, N. Korea

→ It creates 'international pressure' on countries to strengthen domestic laws to curb money laundering process.

- It gives framework and plan of action in grey list country to deal with the menace
- global cooperation and intelligence sharing mechanism and platform creation
- strengthening domestic financial institution like bank, MF, NBFC and norms regarding KYC, AML compliance reporting suspected transaction (STR) to intelligence agency.

ways to strengthen its function

- strict sanction to non-cooperating countries.
- more enforcement power for FATF.
- more engagement with domestic security forces and intelligence agency

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हाशिये में नहीं
लिखना चाहिये।
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- avoiding political misuse of FATF Sanction and geopolitical rivalry.
 (eg) Sanction against Russia in ukrain war by USA
- Use of technology for curbing illegal activities
 (eg) Tech against terrorism
- more funding, infrastructure and research intelligence should be created.
- global consensus on terrorist definition
- (FATF) helps in strengthening and streamlining domestic AML norms and curb terror financing. global cooperation is need to deal with global problems operating without geographical boundary restriction.

उम्मीदवार को इस हाशिये में नहीं लिखना चाहिये।
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