

TEST CODE 7 1 3 3 0 2

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	Jadhav Anket Keshavrao		
Roll No./अनुक्रमांक	1910160229	Medium/माध्यम	English ☒ हिंदी ☐
Center Code/परीक्षा केंद्र	Online	Date/दिनांक	9/7/2024

*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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Total/कुल अंक	250		For Student Only / केवल परीक्षार्थी प्रयोग हेतु	
Examiner's Discretion/मूल्यांकन कर्ता का विवेक :			Start Time/प्रारंभ करने का समय : 9:00 am	End Time/समाप्त करने का समय : 12:15 pm
Total Marks/कुल अंक :			Mode Of Examination/ परीक्षा की विधि :	Online/ऑनलाइन ☒ Offline/ऑफलाइन ☐
*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, तथ्या 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 : ① ② ③ ④ ⑤	Evaluation Date/ मूल्यांकन तिथि :

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) How far do you agree that a robust domestic demand is the most important driver of India's economic growth? What are other factors that influence the growth trajectory of the country?

(10 marks, 150 words)

आप इस बात से कहां तक सहमत हैं कि मजबूत घरेलू माग भारत की आर्थिक वृद्धि का सबसे महत्वपूर्ण चालक है? अन्य कौन से कारक हैं जो देश के विकास पथ को प्रभावित करते हैं?

(10 अंक, 150 शब्द)

Economic growth expressed in the form of GDP includes, Sum total of Internal consumption, Govt. spending, Investment and net exports.

In the developing economy like India, the internal consumption i.e. domestic demand constitute almost 40-50% of GDP.

Thus, it is most important driver of India's economic growth as evident in :-

- 1) Broad consumer base
[India is 3rd largest economy in terms of Purchasing power parity]
- 2) Booming middle class with increasing disposable income.
- 3) Government support through NFSA and other

Welfare programme.

It leads to greater disposable income in lower middle and lower class

NSSO - Expenditure survey :- Rural Household consumption increasing at almost 6-7% annually

However, other factors also influence growth trajectory :-

1) Exports

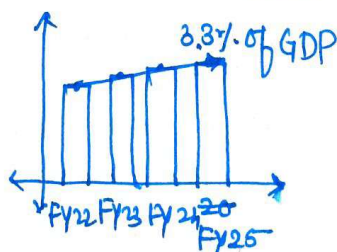
↳ Almost 30% contribution, lead by IT sector and other services exports.

2) Investment Capital Expenditure

↳ Driven by strong government led Capex

pus

Ex. Almost 11 lakh crore in Budget FY 24-25.



But 'decreasing' GFCF (Gross Fixed capital formation) as % of GDP by private sector [34% 2011-2 to 28% (2023-24)] is cause of worry.

It should be addressed for sustained economic growth

Feedback

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#	C	A	P
AWIS			
CD & VA			
S & F			
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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.2) Macroeconomic stability is not solely dependent on the quantity of foreign exchange reserves, but also on the strategy and sources on which they are built. Discuss in an Indian context.

(10 marks, 150 words)

व्यापक आर्थिक स्थिरता न केवल विदेशी मुद्रा भंडार की मात्रा पर निर्भर करती है, बल्कि उस रणनीति और स्रोतों पर भी निर्भर करती है जिस पर वे निर्मित होते हैं। भारतीय संदर्भ में चर्चा कीजिए।

(10 अंक, 150 शब्द)

India's strong forex reserves [₹550 Billion]

Ensure resilience of India's economy to external currency shocks.

Thus, to a certain extent they ensure macro-economic stability

1) Sustainability of Imports

↳ Energy security - Major imported commodity is crude oil.

2) Balance of trade by keeping import value stable.

3) Insulating from monetary policies of other countries to certain extent.

Ex. Federal tapering - RBI sold forex reserves of dollar.

But, the strategy and the sources are major determinant of macroeconomic stability

1) Forex reserves built on sustained export growth.

↳ Health of economy is maintained.

2) Forex reserves with diversified basket containing dollar, SDR, gold and other ~~currencies~~ currencies.

↳ Insures sustained supply chains.

Hence, export diversification and promotion of Indian rupee in international market are ~~key~~ key imperatives to ensure sustainable macro-economic stability.

Feedback

(For OFFICE use only)

#	(C)	(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.3 DPI (Digital Public Infrastructure) is a critical enabler of digital transformation for both businesses and citizens; however, it comes with its own set of challenges. Examine. (10 marks, 150 words)

DPI (डिजिटल पब्लिक इंफ्रास्ट्रक्चर) व्यवसायों और नागरिकों दोनों के लिए डिजिटल परिवर्तन का एक महत्वपूर्ण प्रवर्तक है, हालाँकि, यह चुनौतियों के साथ आता है। परीक्षण कीजिए। (10 अंक, 150 शब्द)

Digital public infrastructure hinges on three key components of Digital Identity, Financial inclusion and ICT enabled service delivery.

Ex. India stack API

DPI: Critical enabler of digital transformation

For Businesses

- ① Reduced compliance Burden and ease of doing business.
Ex. SWIFT platform
- ② Broadening of consumer base thus widening the market reach
Ex. Non personal data with consent → Directed Consumer reach.

For Citizen

1) Enhanced grievance redressal and ease of service delivery

Ex. Maha BBT portal

My Gov portal

2) Accessible administration and trust based governance by reducing government-citizen interface

Ex. CPGRAMS portal

Aple Sarkar portal [Maharashtra Government]

However it grapples with following challenges

1) Digital Divide : Only 35% of rural population have access to internet [TRA, 2022]

2) Digital illiteracy : ~ 25% Rural
35-40% Urban

3) Cyber Threats : Ex. Covid Data leak - COWIN platform.

As justice D.V. Chandrachud remarks "Digital initiatives have power to revolutionise service delivery but should not be exclusionary"

Feedback

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TOTAL MARKS	
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Q.4) The skewed emphasis on certain crops has distorted the cropping pattern in India, which has led to grave socio-economic and environmental consequences. Elaborate. (10 marks, 150 words)

कुछ फसलों पर असंतुलित जोर ने भारत में फसल पैटर्न को विकृत कर दिया है, जिसके कारण गंभीर सामाजिक-आर्थिक और पर्यावरणीय परिणाम सामने आए हैं। विस्तार से चर्चा कीजिए। (10 अंक, 150 शब्द)

India's cropping pattern is dominated by cereal centric 'Rice-wheat system' thus hindering crop diversification.

Skewed Emphasis :- 32-40% of net sown area is dominated by cereals Rice and wheat.

Lesser emphasis on oil seeds, horticulture and pulses.

Despite having favourable agronomic factors and climate India imports about 50% of oilseeds and 30-40% of pulses

It has led to following consequences

① Socio-economic

① persistent Agricultural poverty
(22-25%)

(ii) Low farm mechanisation and limited agri employability

Ex. Agri sectors contributes to almost 17% of GDP but employs 45% of workforce.

(iii) Economic consequences like high subsidy burden (2.5 lakh crore) to purchase excess cereals by Govt at MSP.

(iv) Market distortion [Economic survey 2016-17]

Environmental Consequences

① Soil health distortion

Soil organic carbon constitution in Punjab, Haryana soil - less than 0.1%

Required 2-3% = NABARD data

② Paddy stubble burning - particulate matter pollution in northern belt.

③ Alkalisation of soil & Eutrophication

Promoting crop diversification with revamped MSP regime can prevent above menace.

Feedback

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TOTAL MARKS



Q.5) Private participation in propelling India's space journey is widely acknowledged but is yet to be fully tapped. In light of the statement, analyse the hurdles faced by the private sector and also recommend measures to unlock greater private participation in the space economy.

(10 marks, 150 words)

भारत की अंतरिक्ष यात्रा को आगे बढ़ाने में निजी भागीदारी को व्यापक रूप से स्वीकार किया गया है लेकिन अभी तक इसका पूरी तरह से दोहन नहीं किया गया है। कथन के आलोक में, निजी क्षेत्र के सामने आने वाली बाधाओं का विश्लेषण करें और अंतरिक्ष अर्थव्यवस्था में अधिक निजी भागीदारी को बढ़ाने के उपायों की भी सिफारिश कीजिए।

(10 अंक, 150 शब्द)

Government push with INSPACE [public sector company] and facilitation for other space startups acknowledges space sector's role in economy.

But India's space sector faces following hurdles limiting its economic imprint :

- ① Requires Higher capital investment
↳ In the form of fuel, software, Human capital.
- ② Space supply chain is not matured enough
- ③ Tough competition from other companies
Ex. Space X falcon Rocket
Almost 100 satellites are propelled into space every year.

Still there is ray of hope in the form of India's venture startups like, Antarix 'Dronacharya'.

Measures to Unlock greater private participation

- ① Venture Capital funds for space startups.
- ② Incubation centres and laboratory infrastructure for budding scientists.
- ③ Collaboration with ISRO and other space agencies.
- ④ Promoting spirit of entrepreneurship and innovation in institutions of eminence.
Ex. IIT Madras

This can propel India's journey to emerge as major player in space economy.

Feedback

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TOTAL MARKS			



Q.6) With recent advances in technology, robots are now equipped to perform more than just conventional and routine tasks, which brings new opportunities as well as risks. In this context, evaluate the future potential of the robotics sector. (10 marks, 150 words)

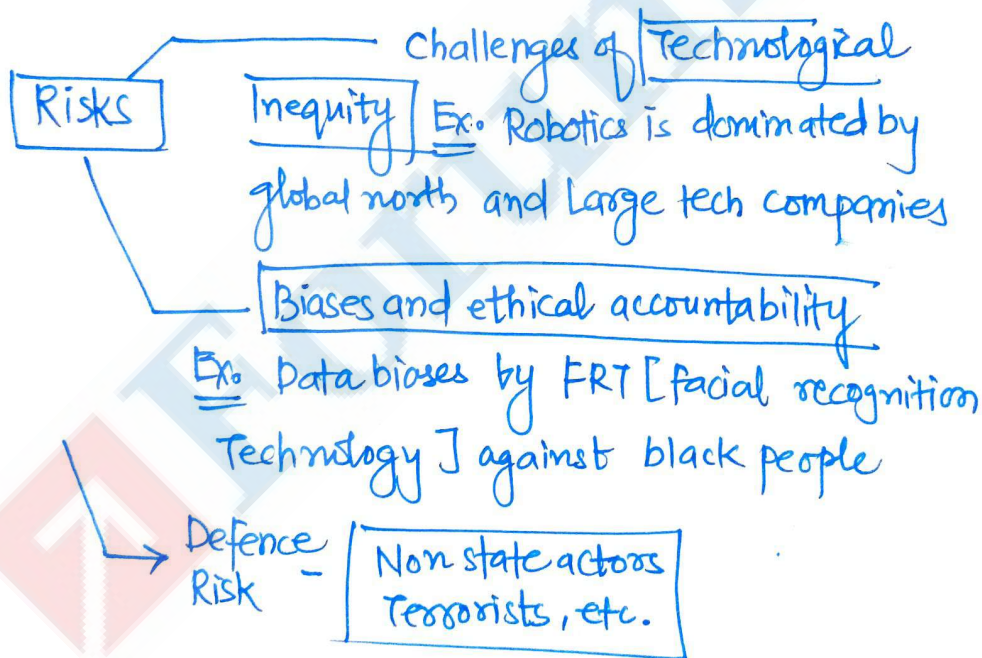
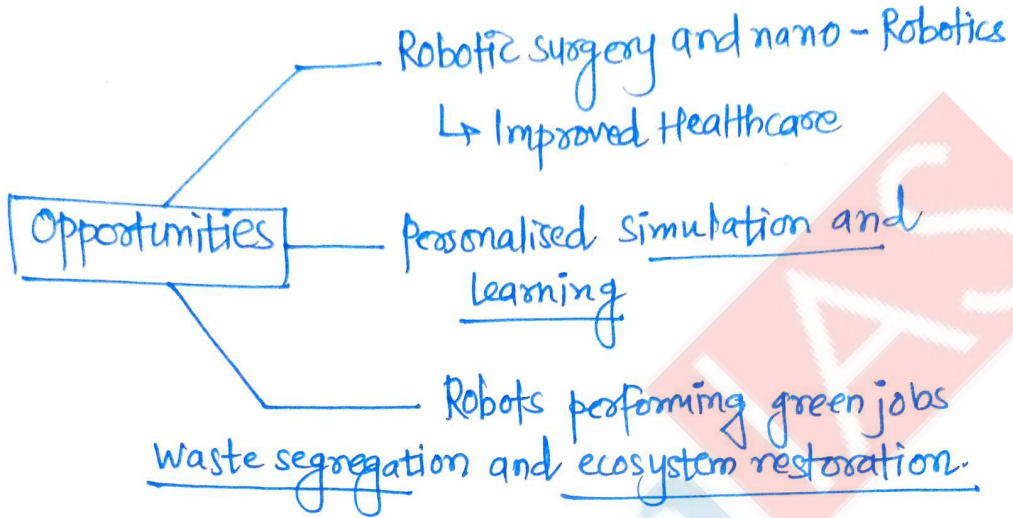
प्रौद्योगिकी में हालिया प्रगति के साथ, रोबोट अब पारंपरिक और नियमित कार्यों के अलावा और भी बहुत कुछ करने में सक्षम हैं, जो नए अवसरों के साथ-साथ जोखिम भी लाता है। इस संदर्भ में रोबोटिक्स क्षेत्र की भविष्य की संभावनाओं का मूल्यांकन कीजिए। (10 अंक, 150 शब्द)

Advent of Artificial Intelligence with predictive analysis and machine learning has made robot equipped with human equivalent skills.

Robots performing more than conventional Tasks

- ① Care Robots : Nursing needs of elderly and children.
- ② Robots with human like face expressions
Ex. Sofia
- ③ Data analysis and creativity
Ex. Sora by Open AI
Can create innovative videos by text prompt

Future potential of Robots



Any technology is double edged sword, mindful consumption with enhanced regulation can keep its unintended effects at a minimum.

Feedback

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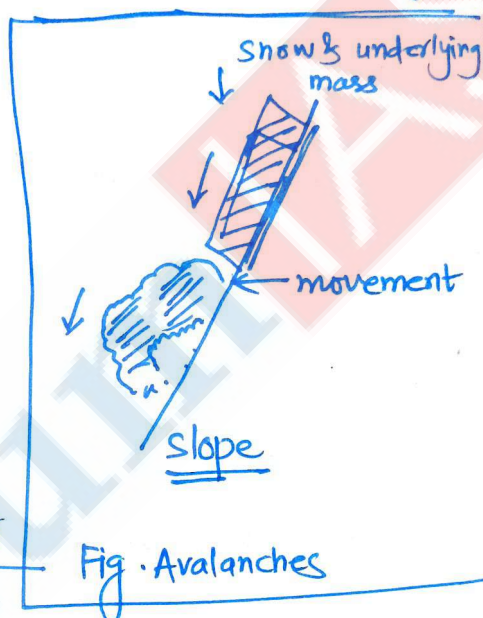
Q.7) Write an explanatory note on the causes and impacts of avalanches. Also, highlight the various strategies to mitigate its impact, with a special emphasis on NDMA guidelines. (10 marks, 150 words)

हिमस्खलन के कारणों और प्रभावों पर एक व्याख्यात्मक नोट लिखिए। साथ ही, NDMA के दिशानिर्देशों पर विशेष जोर देते हुए इसके प्रभाव को कम करने के लिए विभिन्न रणनीतियों पर प्रकाश डालिए। (10 अंक, 150 शब्द)

Avalanches refer to rapid downslopping of large snow and ice with boulders and underlying mass.

Impact of Avalanches

- 1) Livelihood and Life Loss downslope
- 2) Altering water movement
↳ changing course of river.
- 3) Seismic Activity - may lead to small dam failures
- 4) Can cause Glacial lake outburst flood.
- 5) Can lead to snow storm



Strategies to Mitigate

NMDA guidelines

- 1> Zonation mapping and measuring susceptibility of zones.
- 2> Retrofitting existing Infrastructure in tune with Avalanches.
- 3> Mitigation measures like Afforestation of downslope.
- 4> Sustainable Infrastructure development by taking into account future risk

Other

promoting sustainable Tourism

Tourist guidelines for new comers and Trekkers.

Special emphasis is needed due to climate change induced changed snowfall pattern and seismically active region of Himalayas.

Feedback

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TOTAL MARKS			



Q.8) Technology plays a multidimensional role in augmenting the disaster management apparatus of the country. Discuss. Also, bring out the measures needed to enhance the usage of such technologies in managing disasters. (10 marks, 150 words)

प्रौद्योगिकी देश के आपदा प्रबंधन तंत्र को बढ़ाने में बहुआयामी भूमिका निभाती है, चर्चा कीजिए। साथ ही, आपदाओं के प्रबंधन में ऐसी प्रौद्योगिकियों के उपयोग को बढ़ाने के लिए आवश्यक उपाय भी बताएं। (10 अंक, 150 शब्द)

Technological solutions offer enhanced mitigation, Response, Rehabilitation of the disaster.

Role of Technology in Augmenting disaster management Apparatus

1) Improved surveillance : Mitigation

Better data gathering through satellites

↳ Help in creating disaster zone maps.

2) Technological solutions

↳ Earthquake resistant homes build of lighter metals.

3) Improved warning through Digital technology

Ex: NDMA warning for floods

Yellow Orange Red Alert.

4) Data Analysis and prediction of disasters

Ex. World Meteorological Organisations prediction of drought through El Nino assessment.

5) Better Rehabilitation

Ex. NGO Arooj through Digital crowd funding helped Rehabilitation of flood affected people in Bihar.

Challenges → Poor quality of data and outdated infrastructure

Ex. Delhi based temperature indicator showing wrong reading of 52°C

↳ Lack of co-operation between response and analysis

Technology has power to promote disaster resilient India.

Feedback

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TOTAL MARKS



Q.9) Outlining the various cyber threats faced by India, assess the state of the country's preparedness to deal with the same. (10 marks, 150 words)

भारत के सामने आने वाले विभिन्न साइबर खतरों को रेखांकित करते हुए, उनसे निपटने के लिए देश की तैयारियों की स्थिति का आकलन कीजिए। (10 अंक, 150 शब्द)

Recent cloudstrike outage at microsoft
and resultant paralysis of critical infrastructure
has highlighted impact and scale of cyber threats.

Various cyber threats faced by India

Data vulnerability

Ex. COWIN
Data leak

Infrastructure vulnerability

Ex. Mumbai
power outage

Internal security and political sovereignty

Ex. pegasus

privacy related issues

cyber bullying

Ex. Bulli
Bai App

Deep fakes

Ex. Rashmika
Mandana's video

India's preparedness is evident in

1) Data sovereignty : Establishing state of
the art data centre Yotta D1

- 2) Emergency Response - Computer Emergency Response Team
- 3) For financial frauds - Finance Intelligence Unit
↳ RBI Digital ombudsman
- 4) Dedicated cyber cell for each police station
- 5) SHE box - women related issues.
Mission shakti

However, NCRB data projects 130% rise in cyber incidents in last year this directs further steps as :-

- 1) Enhancing fiduciary responsibility through stringent implementation of Digital Data Protection Act.
- 2) Cyber deterrence - Offensive spectrum of cyber world.

By implementing recommendations of Kris Gopal Krishna Committee and Justice Shrikrishna Committee India can secure its cyber space.

Feedback

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TOTAL MARKS



Q.10) Explain how the geographical location of India makes it extremely vulnerable to the menace of drug trafficking. What are the various internal security threats posed by drug trafficking?

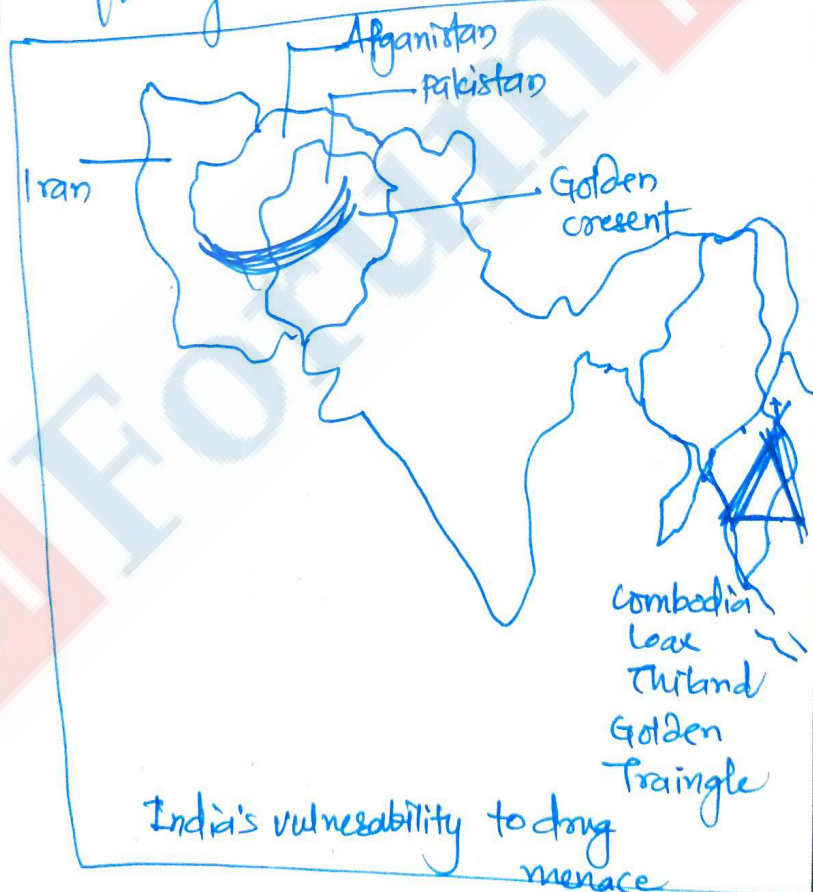
(10 marks, 150 words)

समझाइए कि भारत की भौगोलिक स्थिति इसे मादक पदार्थों की तस्करी के खतरे के प्रति बेहद संवेदनशील बनाती है।

मादक पदार्थों की तस्करी से उत्पन्न विभिन्न आंतरिक सुरक्षा खतरे क्या हैं?

(10 अंक, 150 शब्द)

India's is in the midst of ~~the~~
Golden triangle and ~~the~~ golden crescent
making it extremely vulnerable to menace
of drug trafficking



Internal security threats due to drug trafficking

1) Funding source for terrorist and extremist organisations.

Ex. LeT and Jem promoting opium trade in J & K, Punjab.

Correlation of Khalistan movement & Drug menace.

2) Linkages with other organised crime syndicates

Ex. Involvement of human trafficking and drug trafficking, counterfeit currency

3) Sources of societal lawlessness and conflict

Ex. Kuki to conflict with Meiti as former are accused of drug trade and opium farming

Improved intelligence gathering and deterrence by force to route out drug trafficking is a security imperative for India.

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.11) Inclusive growth is a roadmap to intergenerational equity, redistribution of wealth, and employment generation. Explain. Also, discuss the steps taken by the government towards achieving inclusive growth. (15 marks, 250 words)

समावेशी विकास अंतरजनपदीय इक्विटी, धन के पुनर्वितरण और रोजगार सृजन के लिए एक रोडमैप है, समझाए। साथ ही, समावेशी विकास प्राप्त करने की दिशा में सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए। (15 अंक, 250 शब्द)

OECD defines inclusive growth as, growth which generates opportunities for all and distributes fruits of economic prosperity across all strata of society.

Inclusive growth as road map to intergenerational equity

Inclusive growth ensures economic growth which is sustainable.

Thus it keeps ~~it~~ or enhances the capability of future generations for sustained growth ensuring intergenerational equity.

Ex. Green growth as explained in Budget 2024-25 emphasises low carbon emissions with enhanced focus on energy efficiency, renewable energy, etc.

For redistribution of wealth

By progressive taxation and welfare schemes, Inclusive growth enhances the capacity of have nots.

Ex. PM Ujjwala yojana

NULM (National urban livelihood mission)

Employment Generation

By focusing on human resource development through affordable and accessible healthcare and skill development.

It aims to enhance employability and productivity of the workforce

Ex. PM-KVY 4.0

PM-Vishwakarma

Steps taken by govt for inclusive growth

1) Poverty Reduction $\left\{ \begin{array}{l} \text{NULM (Urban \& Rural)} \\ \text{NRLM (Livelihood missions)} \end{array} \right.$

providing - credit for small enterprises
SHE led growth

2) Sectorally
balanced
growth

i) Employment linked Incentive
Scheme (Budget 2024-25)

ii) PLIS (production Linked Incentive)

3) Healthcare

— Ayushman Bharat (PM-JAY)
Insurance for poor and lower middleclass

4) Education & skilling

— PM KVVY 4.0

5) Social security

— e-shram card
— Atal pension yojana
— PM swamidhi - Street vendors

However, further steps like skilling and reskilling

for industry 4.0, Geospatial Healthcare, monetisation

of care economy, etc are needed to reap limited

demographic window for India.

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			



Q.12) Discuss the significance of Multimodal Transport System in achieving last mile connectivity, improving logistics efficiency, and addressing the twin problems of pollution and congestion. What measures can be taken to ensure efficient multimodal transport connectivity in India?

(15 marks, 250 words)

अंतिम मील तक कनेक्टिविटी प्रदान करने, लॉजिस्टिक्स दक्षता में सुधार करने और प्रदूषण और भीड़भाड़ की दोहरी समस्याओं के समाधान में मल्टीमॉडल ट्रांसपोर्ट सिस्टम के महत्व पर चर्चा कीजिए। भारत में कुशल मल्टीमॉडल परिवहन कनेक्टिविटी सुनिश्चित करने के लिए क्या उपाय किए जा सकते हैं?

(15 अंक, 250 शब्द)

Recent ~~unenv~~ initiative of Unified Logistics Interface and Ease of Logistics by Union government promises robust multimodal transport system.

Significance of multimodal transport system

1) For achieving last mile connectivity

① Through appropriate modal mix and transit oriented development

Ex. PMGSY - linking with National and State highways

② streamlining infra investment in untouched localities like North-east, Odisha

Ex. Viability gap funding for projects in North east

2> Improving Logistic efficiency

① Through Hub and spoke model → Reducing
logistic cost

= Current logistic cost stands at 14%, aims
to reduce to single digit

② Tech driven management

= Ex ONDC - Transit management

3> Addressing pollution and congestion

① Decongestion of road with increased
thrust on Railways and waterways

= Currently road amount for 60% of freight

② Better management and ↓ delays
→ decreasing pollution

= ~~Water~~ Transport sector contributes to
almost 25% of emissions.

Measures need to be taken

1) Addressing concerns with regulatory hurdles
for infra projects

Ex: 60-70% time spent on land acquisition
and environmental clearance.

2) Government sustained capex push for infra

As in budget 2024-25 2.4% of GDP - step
in right direction

3) streamlining Public Private Partnership

Liability Gap funding

Hybrid Annuity model

4) Ensuring real time monitoring
through interministerial co-ordination

Ex: PM GATI SHAKTI master
plan for multimodal transport

Case study:-

Japan: logistics cost
under 10%.

Appropriate modal
mix of waterways,
High speed rail
and roadways

Aforementioned initiatives are must for ensuring

SDG #9 Infrastructure development & sustained
economic growth and livelihood.

Feedback

(For OFFICE use only)

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Please put tick
marks in the above
table.

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Poor.

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Q.13) Highlighting the rationale behind declaring MSP, discuss various issues related to the MSP regime in the country. Also, critically analyse the efficacy of legalizing MSP towards ensuring financial sustainability in farming. (15 marks, 250 words)

MSP घोषित करने के पीछे के तर्क पर प्रकाश डालते हुए देश में MSP व्यवस्था से संबंधित विभिन्न मुद्दों पर चर्चा कीजिए। साथ ही, कृषि क्षेत्र में वित्तीय स्थिरता सुनिश्चित करने की दिशा में एमएसपी को वैध बनाने की प्रभावकारिता का भी आला-चनात्मक विश्लेषण कीजिए। (15 अंक, 250 शब्द)

MSP refers to direct subsidy support whereby govt ensures procurement at announced price when market price decreases below it.

Rationale behind MSP

1) Income support for distressed farming community

Data = poverty rates among farming community
→ 22.5%

2) Food security and Buffer stocks

By procurement at MSP, Govt secures continuous operation of public distribution system.

3) Promoting crop diversification and intended reforms in cropping pattern

Ex. PM-ASHA ↑ MSP for other crops than rice and wheat

Issues with MSP

1) Market distortion

Economic survey 2016-17 mentions MSP
"hurts more than it helps"

Fuelling food inflation and distortion of
agri market.

2) Cereal centric policy — MSP is kept high for
rice and wheat due to populist reasons.

↳ India is turning virtual water exporter

3) Regionally skewed

Disproportionate share (40-50%) of Punjab,
Haryana and western UP.

4) Fiscal Burden

Data:- Around 2.4 lakh crore subsidy burden
each year.

5) Legalisation of MSP ⇒

Yes — Right step

1) Doubling farmer income (Ashok Dalwai
Committee)

2) predictability and price support for distressed farm sector.

3) Democratic aspiration of farming community

No not a right step

1) Further increase in subsidy burden - Reduced spending on other welfare schemes.

2) Diverts attention on pressing Agri issues of
- market dynamics
- export policy

3) Govt is bending to populism and short sightedness

4) Issue at WTO = ↓ India's negotiating power

5) scope for Environmental concerns [soil health, input intensiveness]

Considering above argument legalising MSP
~~does~~ not be a wanted step rather sustained
focus on crop diversification and increasing
productivity of Agriculture is way ahead.

Feedback

(For OFFICE use only)

#	G	A	P
AWIS			
CD & VA			
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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) Food Processing Industries (FPIs) can act as a bridge between the informal farming community and the formal industrial sector, which can help boost the rural economy. Examine.

(15 marks, 250 words)

खाद्य प्रसंस्करण उद्योग (FPIs) अनौपचारिक कृषक समुदाय और औपचारिक औद्योगिक क्षेत्र के बीच एक पुल के रूप में कार्य कर सकते हैं, जो ग्रामीण अर्थव्यवस्था को बढ़ावा देने में मदद कर सकता है। परीक्षण कीजिए। (15 अंक, 250 शब्द)

With almost 12% of sustained growth potential year on year, Food processing sector promises to be flagbearer of agricultural prosperity in coming time.

Significance of Food processing sector as bridge between informal and formal sector

- 1) Income generation : Through sustained demand and better price realisation
- 2) promoting crop diversification
Predominance of horticultural crops as raw material for food processing sector
~~Ex~~ AP : Mango processing
- 3) Reduced wastage -

FPI → Boosting Rural Economy

- i) By developing agro-supply chains
↳ Boosting rural economic growth
- ii) Employment generation esp. women empowerment
- iii) Connecting rural economy to urban markets
and export markets
Ex: West Maharashtra - Grape processing
and wine industry
- iv) Development of Allied industry = Transport
logistics, Hospitality at rural level.

However following challenges hinder growth
of FPI in rural area

1) Regulatory hurdle

Oppressive acts like Essential Commodities Act 1961

↳ stocking limits on FPI

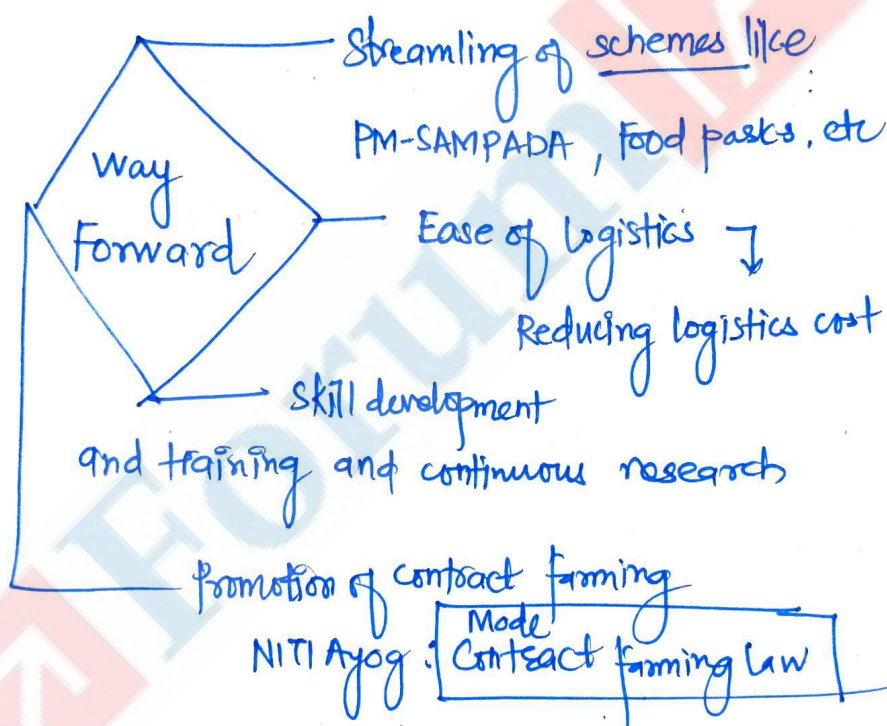
2) Export issues

High fertilizer & pesticide residue - phytosanitary
concerns in western markets.

3) Infrastructure bottlenecks

warehouses, cold storage, improperly maintained rural roads — connectivity issues.

4) Low R&D - High prices, ↓ market potential (0.7% of expenditure on R&D)



Untapped potential of India vis à vis FPI can be realised through aforementioned measure projecting it as 'Food processor of the world'

Feedback

(For OFFICE use only)

#	Q	A
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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) Discuss the role of biotechnology in enhancing agricultural productivity. Also, highlight the concerns regarding the application of biotechnology in agriculture. (15 marks, 250 words)

कृषि उत्पादकता बढ़ाने में जैव प्रौद्योगिकी की भूमिका पर चर्चा कीजिए। साथ ही, कृषि में जैव प्रौद्योगिकी के अनुप्रयोग से संबंधित चिंताओं पर प्रकाश डालिए। (15 अंक, 250 शब्द)

Biotechnology refers to use of biological systems and processes for intended use after relevant modifications.

Role of Biotechnology in enhancing agricultural productivity

1) Improving seed quality

Resulting in better yields and per acre productivity

Exo G.M. mustard 1.5-2 times more yield/ hectare

2) Reduction in inputs - Resource Rationalisation

Biotechnologically modified plant — better resistance against pest and fungi

Exo ~~Bollagard~~ Bollguard — Resistant against bollworm

3) Bio-Fortification - Nutritional security

Exo Golden rice with high Iron content
→ Fight against Anemia.

4) Climate and draught resistant

↳ Reduced sensitivity to vagaries of monsoon and rainfall nature of agriculture.

However following concerns hinder its applicability

1) Biodiversity and Ecological concerns

Can disturb food chains and ecological cycle of Agro zone.

Exo BT Brinjal

2) Health Issues

Unintended and Unknown health impacts due to toxic components.

3) May escalate input cost

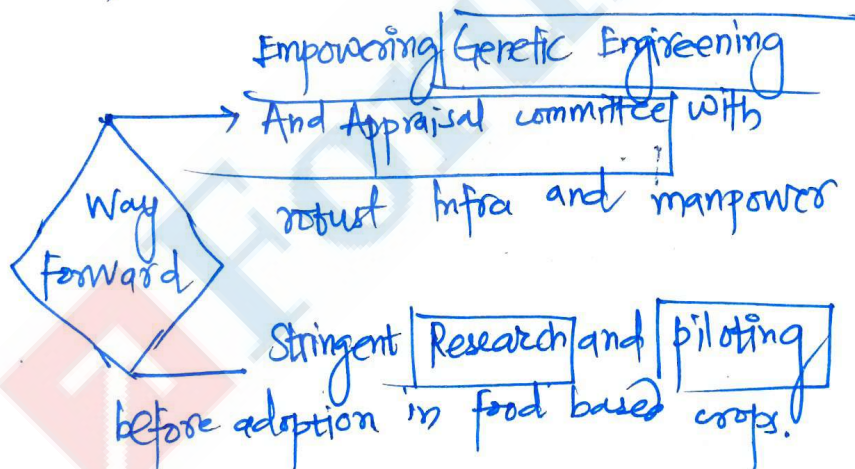
Hybridised seeds cannot be resown due to expression of recessive genes in successive generation.

High input cost in successive seasons.

4) Lower adoption and false perceptions

↳ Due to low awareness

Ex. protests against GM mustard.



Biotechnology can usher an era of 'evergreen revolution' in agriculture with its prudent use.

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			

Q.16) 5G technology is a breakthrough that finds applications across diverse sectors. Elaborate. How is 5G technology different from its predecessor? Also, list the various challenges associated with its effective rollout. (15 marks, 250 words)

5G तकनीक एक ऐसी उपलब्धि है जिसका अनुप्रयोग विभिन्न क्षेत्रों में होता है। विस्तार से चर्चा कीजिए। 5G तकनीक अपने पूर्ववर्ती से किस प्रकार भिन्न है? साथ ही, इसके प्रभावी कार्यान्वयन से जुड़ी विभिन्न चुनौतियों को भी सूचीबद्ध कीजिए। (15 अंक, 250 शब्द)

5th Generation [5G] rollout across India
has potential to catalyse democratisation
of digitalisation and industrialisation for
4th Generation (Industry 4.0)

Applications of 5G across various sectors

1) Education :- Simulational learning
lot of education
personalised AI mentoring

2) Healthcare Telemedicine
 Telesurgery
Novel Drugs discovery through AI models

3) Industry : Automation . Digital manufacturing
 Industry 4.0 Robotics

4) Agriculture : Remote farming
Climate smart Agriculture

5) social : Virtual spaces
Virtual museums
Augmented Reality guided social interactions

Key differences vis a vis 4G

5G	4G
speed upto 100 GB	speed upto 1 GB
lesser penetration more density of network towers	Better penetrability last mile connectivity possible
High frequency band	medium to High frequency

Challenges associated with Rollout

1) Infrastructure shortages

Mobile tower density and decentralised towers density remains a concern.

2) High capital outlay

High gestation period - low output

3) Potential Duopoly

With extensive predominance of Reliance Jio and Bharati Airtel.

4) Low revenue consumer base

Cost escalation may hinder its effective adoption. - concerns of widening digital divide

5) Last mile connectivity issues

High tower density required.

6) Health concerns

7) security to critical infra

Ex. e Aviation disturbances.

It's effective rollout will ~~usher~~ fuel digital economy to \$1 trillion

Feedback

(For OFFICE use only)

#	Q	A
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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.17) Discuss the repercussions on marine ecosystem and economy resulting from the combined effects of ocean acidification, ocean warming, and oxygen loss. (15 marks, 250 words)

समुद्र के अम्लीकरण, समुद्र के गर्म होने और ऑक्सीजन की हानि के संयुक्त प्रभावों के परिणामस्वरूप समुद्री पारिस्थितिकी तंत्र और अर्थव्यवस्था पर पड़ने वाले प्रभावों पर चर्चा कीजिए। (15 अंक, 250 शब्द)

Anthropogenic global warming and climate change has accelerated the hazardous trinity of ocean acidification, warming and oxygen loss.

Repercussions of ocean acidification, warming and O_2 loss on marine ecosystem & Economy

① Marine ecosystem

① Coral bleaching

As harbinger of marine biodiversity —
leading to massive loss to marine ecosystem

② Reduced oxygen holding capacity

Threat to fish population and
Invertebrates.

iii) Phytoplankton loss

↓ CO_2 buffering capacity

iv) Reduced marine productivity and marine resource recycling

↳ Vicious cycle of more acidification warming and ecological loss.

② Marine Economy

i) Livelihood loss to fishermen

↳ Depleted fishing stocks

ii) Reduced yield of marine sea weeds and pearls

iii) Increased likelihood of tropical cyclones

↳ Threatening navigational security

↳ Disaster impact at coastal community

However, following initiatives can help to mitigate above impacts

1) Coral seeding and Regrowing

Ex: Biorock technology at Gulf of Kutch

2) Sustainable Fishing

Ex: Kerala model of sustainable fishing

3) Nature based Initiatives

Great Blue Wall
Initiative at
eastern coast of Africa

4) Innovation in
marine economy

Kenya, Zanzibar,
Ethiopia, etc

Ex: 4th Generation Algal

biomass, sea weeds growth, etc

5) Intensive mitigation of climate mitigation
goals, net zero by 2050 (Paris Agreement)

It can lead to inclusive sustainable life under
sea as envisaged in SDG # 14.

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			



Q.18) The invisible nature of groundwater is a major obstacle in the path towards achieving the twin objectives of building climate resilience and meeting the Sustainable Development Goals (SDGs). Elucidate. (15 marks, 250 words)

भूजल की अदृश्य प्रकृति जलवायु लचीलेपन के निर्माण और सतत विकास लक्ष्यों (SDGs) को पूरा करने के दोहरे उद्देश्यों को प्राप्त करने की राह में एक बड़ी बाधा है। स्पष्ट कीजिए। (15 अंक, 250 शब्द)

India, despite being water stressed country continues to be world's biggest groundwater extractor often beyond replenishment levels.

With 17% of units as being over stressed

~~Geological~~
National Groundwater survey

Invisible nature of groundwater - as a

a major obstacle :-

1) Affects effective mapping and data collection.

↳ Hindering tailored policymaking

2) Replenishment requires sustained efforts over long term.

3) Policy contradiction vis a vis Agri, Industry
to water stress affect conservation imperative

Ex. Sugarcane cultivation in draught
prone region of Maharashtra

4) Balancing livelihood security in Agri
and climate resilient resilience

Ex. Hard to reform MSP regime and
water subsidy regime due to populist pressures.

5) Inadequate awareness regarding
groundwater sustainability and use.

Ex. failure of Jal shakti Abhiyan
directed to bring behavioural change
in groundwater extraction and recharge.

6) Poor capacity building and will for ground-
water as pressing issue. often limited
to river water sharing.

WAY AHEAD

1) Rainwater Harvesting and Groundwater recharge

Ex: Vishalchappattam ground well injection programme.

2) Community engagement for restoring of watershed Ex: Pani Foundation Maharashtra

3) Ground water Budgeting and water auditing through Improved water governance

— Mihir Shah Committee

4) Tech adoption for real time monitoring and ground water recharge

Water has potential to fuel societal unrest in upcoming decade as the water stress is projected to Quadruple in 2050.

— World Bank report.

Feedback

(For OFFICE use only)

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

TOTAL MARKS	
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Q.19) Despite various efforts a lasting solution to the insurgency in the north-eastern region of India remains elusive. Analyse the reasons behind the continuation of insurgency in the region. Also, suggest effective measures to tackle it. (15 marks, 250 words)

विभिन्न प्रयासों के बावजूद, भारत के उत्तर-पूर्वी क्षेत्र में उग्रवाद का स्थायी समाधान अस्पष्ट बना हुआ है। क्षेत्र में उग्रवाद जारी रहने के पीछे के कारणों का विश्लेषण कीजिए। साथ ही इससे निपटने के लिए प्रभावी उपाय भी सुझाएं। (15 अंक, 250 शब्द)

North eastern region continue to turmoil
in ethnic clashes and insurgencies despite
sustained politico-socio-economic efforts.

Reasons behind continuation of insurgency in the
region :-

1) Complicated ethnic divisions and historical
roots to insurgent movement

Exo Kuki-Meitei clashes were continuing
from pre-independence time on different occasions.

2) Less hearted integration into national
ethos

Exo In Delhi Northeastern students were
beaten and death.
people referring north easterners as chinese
during covid time.

3) Resource scarcity

↓ slash and burn agriculture
population growth and perceived sense of deprivation

4) Foreign non state actors

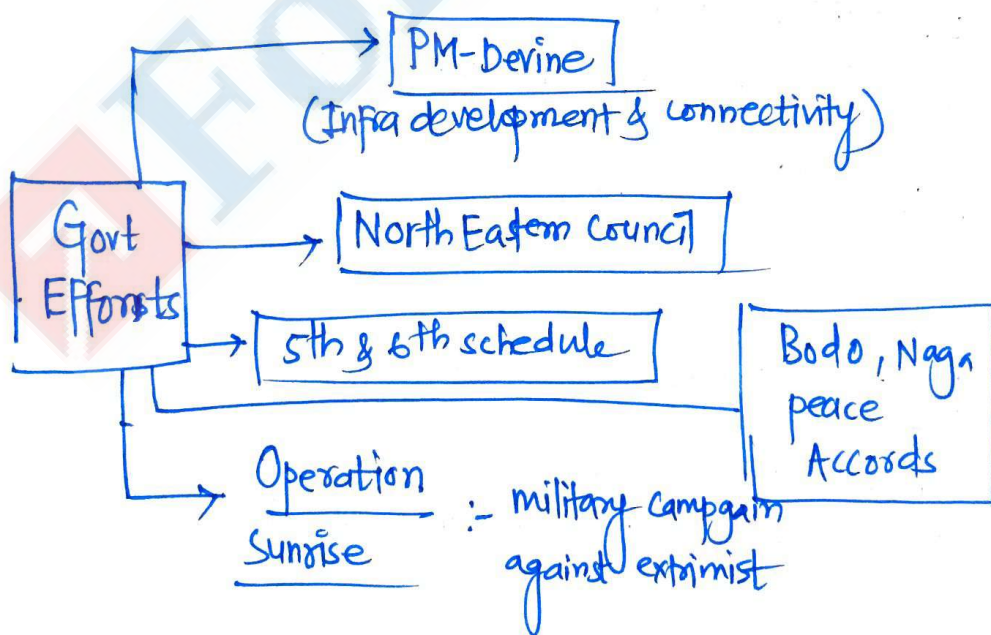
Insurgents have cross links with Maoists and Pak based terrorists.

Involvement of china.

5) Refugee influx and migration

post partition and still continuing

Ex: Significant Bengali population in Tripura



Effective measures to tackle NE Insurgency

- 1) Co-ordinated military approach with political dialogue
- 2) Growth as an antidote
Integration with ASEAN, Infrastructure boost
Emerging sectors - Oil Palm
organic farming, etc
- 3) Comprehensive Integrated Border Management (Shekatkar Committee) for immigration and refugees.
- 4) Effective implementation of FESA, FRA 2006
fostering democratic decentralisation.
- 5) Integration with National Ethos [sports, cultural programmes, etc].
Aforementioned initiative suits well with
PM's Agenda 'Act Fast for North east, Act first for North East'

Feedback

(For OFFICE use only)

#	G	A	P
AWIS			
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P & R			
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TOTAL MARKS			



Q.20) While developmental initiatives have a significant role to play, they alone cannot root out terrorism/militancy in Jammu and Kashmir. Comment. (15 marks, 250 words)

हालांकि विकासात्मक पहलों की महत्वपूर्ण भूमिका है, लेकिन वे अकेले जम्मू-कश्मीर में आतंकवाद/उग्रवाद को जड़ से खत्म नहीं कर सकते हैं। टिप्पणी कीजिए। (15 अंक, 250 शब्द)

Reinvigoration and increased intensity of terror incidents in J & K post Raisi Attacks highlights, development can't be a single factor to play in tackling the menace.

Still, Development have significant role as

1) Sense of economic justice = Winning Hearts and minds through growth

Ex. UAE investment in Srinagar Super market.

2) Tackling problem of youth unemployment
↳ Fulfilment of Aspirations. — Lesser inclination towards militancy.

3) Generates social capital and economic interdependence

↳ Erodes support from local community

Ex. Tourists Tourism industry's support to militants is very low.

However, other efforts are required to root out terrorism in J & K

- 1) Political representation ^{Article}
As SC court observed in 370 case, expeditious completion of elections in UT of J & K.
- 2) Diplomatic channels for Ex. FATF
to boycott international support to Pakistan
- 3) Strengthening security infrastructure and Intelligence gathering
Ex. Intelligency Complacency in 2019 pulwama terror attack.
- 4) Tech ready response - vis a vis emerging threats like UAVs, AI, etc

5) Truth and Reconciliation Commission as
observed by SC - to decrease sense of
alienation.

6) Skilling and reskilling of youth for Industry
4.0.

7) Nuanced challenges of Terror Funding
and Radicalisation and Religious fundamentalism
requires sustained societal nudging
and goodwill formation

Post revocation of Article 370, India has
clarified its resolve and determination to
make J & K as prosperous and ~~inalienable~~
inalienable part of Indian Union.

Feedback

(For OFFICE use only)

#	G	A	P
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P & R			
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TOTAL MARKS			

Mentor Feedback Questions

1

2

3

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5

Test Goal		Outcomes
1	☐	
2	☐	
3	☐	

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.