

Prelims qualified

0825 290



NEXT IAS

anubhav-2025

(To be filled by candidate)

TEST CODE : ANV2503

Test Date : 03/08/2025

Name of Candidate: NANCY SINGH Mobile No.

Roll No. : 6SPM23B10138 Start Time End Time.....

Date of Examination: 10-08-2025 Medium : English Hindi

Q. No.	Maximum Marks	Marks Obtained
1.	10	
2.	10	
3.	10	
4.	10	
5.	10	
6.	10	
7.	10	
8.	10	
9.	10	
10.	10	
TOTAL MARKS - 100		

Q. No.	Maximum Marks	Marks Obtained
11.	15	
12.	15	
13.	15	
14.	15	
15.	15	
16.	15	
17.	15	
18.	15	
19.	15	
20.	15	
TOTAL MARKS - 150		

GRAND TOTAL - / 250

EVAL CODE: EVAL DATE:

GENERAL INSTRUCTIONS

1. Immediately on receipt of the QCA booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.
2. Candidates must mention all relevant details like Name, Roll No, Mobile, etc. in the space allocated.
3. Candidate is expected to attempt all 20 questions within the given timeline.
4. Answers must be written in the medium authorized at the time of admission.
5. Candidates must write answers for the specific question under the respective question itself. Any answer written outside the space allotted may not be given credit.
6. Please write neatly. Avoid illegible writing.
7. Do not write/mark irrelevant matters in the QCAB.

सामान्य निर्देश

1. QCA पुस्तिका प्राप्त होने पर कृपया तुरंत जांच लें कि इस QCA पुस्तिका में कोई पृष्ठ या सामग्री आदि गलत छपी हुई या फटी हुई या गायब तो नहीं है। यदि ऐसा है, तो इसे एक नई QCA पुस्तिका से बदल लें।
2. अभ्यर्थियों को सभी प्रासंगिक विवरण जैसे नाम, रोल नंबर, मोबाइल नंबर आदि का आवंटित स्थान पर उल्लेख करना होगा।
3. अभ्यर्थियों से अपेक्षा की जाती है कि वह आवंटित समय-सीमा के भीतर ही सभी 20 प्रश्नों के उत्तर-लेखन का प्रयास करें।
4. प्रत्येक उत्तर, प्रवेश के समय चुनी गयी भाषा के माध्यम में ही लिखे जाने चाहिए।
5. अभ्यर्थियों को विशिष्ट प्रश्न के उत्तर संबंधित प्रश्न के नीचे ही लिखने होंगे। आवंटित स्थान के बाहर लिखे गए किसी भी उत्तर को क्रेडिट नहीं दिया जाएगा।
6. कृपया साफ-सुथरा लिखें। अपठनीय लेखन से बचें।
7. QCAB में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

FOR OFFICE USE ONLY

Student Concerns / Query

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Evaluator's Feedback / Response

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MARKING SCHEME *

Marks Per Ques	Below Average	Average	Above Average
10 Marks	Below 3.00	3.00 - 3.75	4.00 and above
15 Marks	Below 4.50	4.50 - 5.75	6.00 and above

* Subject to change without prior notice.

IMPORTANT QR CODES



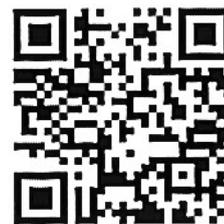
Topper's Copy



Common mistake and Correct Filled QCAB



Copy Scanner App



Next IAS Test Centre Location

MACRO COMMENTS

The Purpose of MTS 2.0 Score Improvement Program (SIP) is to provide constructive suggestions on 'How to improve Answer Writing and thereby score better marks.

Q1.

Introduction	Body	Conclusion

Q2.

Introduction	Body	Conclusion

Q3.

Introduction	Body	Conclusion

Q4.

Introduction	Body	Conclusion

Q5.

Introduction	Body	Conclusion

Q6.

Introduction	Body	Conclusion

Q7.

Introduction	Body	Conclusion

Q8.

Introduction	Body	Conclusion

Q9.

Introduction	Body	Conclusion

Q10.

Introduction	Body	Conclusion

Q11.

Introduction	Body	Conclusion

Q12.

Introduction	Body	Conclusion

Q13.

Introduction	Body	Conclusion

Q14.

Introduction	Body	Conclusion

Q15.

Introduction	Body	Conclusion

Q16.

Introduction	Body	Conclusion

Q17.

Introduction	Body	Conclusion

Q18.

Introduction	Body	Conclusion

Q19.

Introduction	Body	Conclusion

Q20.

Introduction	Body	Conclusion

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1. आपके विचार में भारत के कर ढाँचे में सुधार के हालिया प्रस्ताव भारत के कर उत्प्लावकता और कर आधार को बेहतर बनाने में किस सीमा तक सहायक होंगे? (उत्तर 150 शब्दों में दीजिए) 10 अंक
- How far do you think the recent proposals to reform India's tax structure will help in improving India's tax buoyancy and base? (Answer in 150 words) 10 marks

Recently, India's Finance Minister announced tax reforms in Budget 2025-26 by introducing New Income Tax Bill.

Recent proposals to reform India's tax structure

- ① Exemption from tax upto ₹ 12 lakh income.
- ② Taxing virtual digital assets like cryptocurrency at 30%.
- ③ Reduction in legal complexity of tax aligning with global norms.
- ④ Introduction of GST to subsume indirect taxes.
- ⑤ Faceless assessment & appeals.

Reforms helping in increased tax & buoyancy

① Increase in number of taxpayers

Eg: Number of taxpayers increased by 86% over the last 3 years.

② Subsuming of indirect taxes into GST led to record GST collection (₹ 2.51 lakh crore in 2025)

③ Increased tax compliance.

④ Revenue collection from crypto assets resulted in ₹ 1200 crore.

Issues & Challenges

→ ① Only 7-8% of population pays direct tax.

→ ② Fake invoicing → under & over invoicing

→ ③ Round tripping

→ ④ Multiple tax rates in GST

Tax collection is an important revenue for government. Reforms will ensure growth & development.

2.

आर्थिक राष्ट्रवाद और संरक्षणवाद की बढ़ती प्रवृत्तियाँ भारत की वैश्विक व्यापार प्रतिस्पर्धात्मकता को कैसे प्रभावित करती हैं? इन चुनौतियों से निपटने के लिए भारत ने हाल ही में क्या उपाय किए हैं? (उत्तर 150 शब्दों में दीजिए) 10 अंक

How do the rising trends of economic nationalism and protectionism affect India's global trade competitiveness? What recent measures has India taken to navigate these challenges? (Answer in 150 words) 10 marks

With the rise in global uncertainties, there has been rise of economic nationalism & protectionism worldwide.

Global world trade uncertainty index is 13 as compared to 2023 - 2.5.

→ ① High tariff by USA impacting the electronics goods exports

Eg: 57% of India's electronics to USA.

Rising trends impacting trade competitiveness

→ ② Use of non-tariff barriers

Eg: Issue of sanitary & phytosanitary reduces India's milk product exports,

CBAM of EU impacting iron

& steel exports.

③ supply chain disruptions causing production & being affected.

Eg: stopping of rare earth mineral by China.

④ also, cases of friendshoring & reshoring in advanced economies.

Recent measures to navigate these challenges

① signing of FTAs to boost trade

Eg: India UK FTA, India EFTA

② deleveraging China +1 policy

③ Boost to make in India, PLI

④ MoU for building semiconductor units. Eg: Powerchip setting up display fab in Dholera, Gujarat.

⑤ RoBTEP scheme, Foreign Trade Policy

Trade & exports are the backbone in maintaining growth & development.

3.

कृषि उत्पादकता में सुधार लाने और कृषि के पर्यावरणीय प्रभाव को न्यूनतम करने में एकीकृत कृषि प्रणाली (IFM) की भूमिका का परीक्षण कीजिए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

Examine the role of Integrated Farming System (IFM) in improving agricultural productivity and minimizing the environmental impact of agriculture. (Answer in 150 words) 10 marks

Integrated farming system is a technique that encompasses different methods/sectors like agriculture, fisheries, livestock together to minimise the inputs.

Role of integrated farming in improving agricultural productivity

① **Minimising inputs requirement** :

The output of one sector can be used as input in other reducing costs.

eg: livestock & pulses - nitrogenous waste can be used as manure.

② **Boosting farmer income** :

M.S Swaminathan highlighted that integrated farming can boost farmer's income.

③ **Vertical farming** can enhance the forward & backward linkages.

Qq: Rice fish grown together aids in fisheries export, as well as, food security met.

④ Creates gainful employment as it is not seasonal.

↳ Benefit to small & marginal farmers.

Role of integrated farming in minimizing environmental impact of agriculture

① Use of chemical fertilizers can be reduced.

② The fodder requirement of livestock can fulfilled from the stubble which will reduce emissions due to stubble burning.

③ Reduction in emission intensity of agriculture

↳ integrated system sequester carbon effectively

M. S. Swaminathan's statement that integrated farming can bring evergreen revolution & double farmer's income must be adhered to to boost integrated farming.

4.

हाल ही के वर्षों में, भारतीय कृषि बेहतर उत्पादकता और किसानों की आय में सुधार की दिशा में एक परिवर्तन का साक्षी रही है। कृषि को अधिक लाभकारी और संधारणीय बनाने के लिए सरकार द्वारा कौन-से संस्थागत और संरचनात्मक सुधार किए गए हैं?

(उत्तर 150 शब्दों में दीजिए) 10 अंक

In recent years, Indian agriculture has been witnessing a transformation towards better productivity and improved farmer incomes. What institutional and structural reforms have been undertaken by the Government to make agriculture more rewarding and sustainable?

(Answer in 150 words) 10 marks

Indian agriculture sector witnessed a growth of % as highlighted by economic survey 2024-25. Also, the food production has increased to around 354 million tonnes.

Institutional reforms undertaken by the Government to make agriculture rewarding

- ① Use of subsidies like fertilizer subsidy aid in increasing productivity.
(₹1.67 lakh crore subsidy in 2025-26)
- ② Direct Benefit Transfers have given farmers choice to purchase the inputs. Eg: PM-KISAN (₹ 63K crore)
- ③ Also, use of Kisan Credit Cards for credit related to both agriculture & animal husbandry. (Recently limit of KCC raised to ₹ 5 lakh)

④ Emphasis on micro-irrigation through schemes like PM Kishi Sanchayi Yojana, Micro-irrigation fund.

⑤ Assured income support via MSP, Price deficiency payment system. \downarrow
1.5(A₂+F₁)

Structural reforms undertaken for agriculture

① Construction & maintenance of canals for assured irrigation.

② PM-KUSUM for providing electricity via solar panels.

③ Establishment of food parks under PM Kisan Sampada Yojana.

Eg. Currently 24 food parks operational
↳ It has state of the art cold storage infrastructure.

④ Development of FCI godowns, APMC mandis, e-NAM for procurement.

⑤ Agriculture Infra Fund - ₹ ~~100000~~ 100000
Agriculture is the backbone of Indian economy. Reforms like Dhan Dhanya Kishi Yojana, Atmanirbharata in pulses will promote Sabka Sath, Sabka Vikas.

5. वायु रक्षा प्रणालियों कैसे कार्य करती हैं? भारत के पास वर्तमान में कौन-कौन-सी विभिन्न वायु रक्षा प्रणालियाँ हैं?
(उत्तर 150 शब्दों में दीजिए) 10 अंक
- How do Air Defence systems work? What are the various air-defence systems that India currently possesses?
(Answer in 150 words) 10 marks

Air defence system refers to ^{safety &} security of air space from the threat of missiles, UAVs or any other attack via airspace.

Working of air defence system

- ① Ground based radars / other radars detects the missile
- ② It then uses long range active tracking radar for continuous detection.
- ③ This is connected to battle management system (BMS) which is further connected to missile firing unit.
- ④ On the instructions of BMS, missile firing unit shoots ^{fire} the interceptors to shoot down the missile.

Various air defence system of India

- ① Long range air defence system : S-400 which has a range of 400 km

② For tracking drones / UAVs :

②.1 There is electronic warfare for spoofing, jamming etc.

②.2 Anti drone system of DRDO

②.3 Anti-drone smash guns.

②.4 Skashter & Bhangavakra system

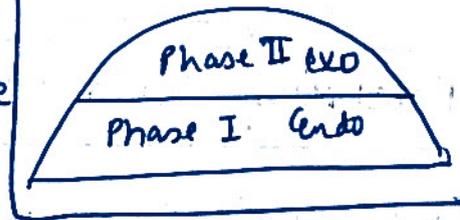
②.5 Direct energy weapon.

③ Anti-ballistic missile defence :

Phase I : Ashwin air defence, Prithvi air defence

Phase II : Pradyumn ^{Prithvi}

air defence vehicle, Air defence I & II



④ Short & medium range air systems

eg: SPYDER, QR SAM, AKASH

⑤ Also, there is man-portable system (MANPAD) to protect air defence.

The safety & security of air defence lies in the excellence of air defence system as witnessed recently in Op Sindoor. Project Kusha is in right direction.

6. आनुवंशिक विकारों के उपचार में आरएनए संपादन (एडिटिंग) की क्षमता पर चर्चा कीजिए। डीएनए संपादन की तुलना में इसके क्या लाभ हैं? (उत्तर 150 शब्दों में दीजिए) 10 अंक
- Discuss the potential of RNA editing in treating genetic disorders. What are its advantages over DNA editing? (Answer in 150 words) 10 marks

RNA editing refers to making changes in the messenger RNA formed after transcription of DNA to create an impact on protein synthesis.

Potential of RNA editing in treating genetic disorders

① Precision biotherapeutics :

RNA editing can aid in targeted intervention in genetic disorder.

Eg : sickle cell anaemia.

② It can aid in stopping virus based infections that are incurable

Eg : HIV → CCR5 gene mutation.

③ Also, the RNA virus like COVID virus can be tackled with RNA editing.

④ Treating non-communicable diseases like cancer.

⑤ Blood disorders like sickle cell anaemia, rare diseases can be targeted through RNA editing.

DNA based editing concern	Advantage of <u>RNA</u>
① It cause permanent irreversible change.	① It is temporary & flexible.
② It uses bacterial mechanism like that in <u>CRISPR</u> to cut DNA & make changes.	② It makes changes in the RNA of individual w/o itself without any external microorganism use.
③ It can cause severe risk in the form of inflammation.	③ It works on individual ADAR enzymes reducing risk.

However, RNA has challenges | ∴ Problem of specificity where it may altogether neglect the targeted intervention.

BiDE3 policy will promote research in RNA based treatments.

7.

अनियोजित विकास और बुनियादी ढाँचे के ढहने के कारण नगरीय क्षेत्र आपदाओं के प्रति अधिक सुभेद्य होते हैं। चर्चा कीजिए।
ऐसी आपदाओं के प्रति नगरीय समुत्थानशीलता बढ़ाने के लिए आप कौन सी रणनीतियाँ प्रस्तावित करते हैं?

(उत्तर 150 शब्दों में दीजिए) 10 अंक

Urban areas are more vulnerable to disasters due to unplanned growth and infrastructure collapses. Discuss. What strategies do you recommend to enhance urban resilience to such disasters?

(Answer in 150 words) 10 marks

Urban areas constitute 36% of India's
population. They contribute 60%

to India's GDP. However, unplanned
urbanisation has made it vulnerable
to disasters.

Vulnerability of urban areas

① Encroachment of wetlands → Floods

Eg: Dal Lake encroachment causing
floods.

② Concretization & deforestation →

ineffective ground water recharge

Eg: Bengaluru water crisis.

③ Urban Heat Island & associated

heatwaves.

Eg: 730 deaths due to heatwaves

NCRB.

④ Fire accidents due to construction against building bye-laws.

Eg: Delhi building fire.

⑤ Urban floods caused drowning of people, electric shock Eg: Delhi urban floods (2024).

⑥ Collapse of bridges like Morbi.

Strategies to be recommended

① Blue-green infrastructure to ensure sustainable development.

② EIA, Fire safety audit of buildings, following building standards by NBC.

③ Eco-Viwas Samhita: Rating of buildings according to their sustainability.

④ Miyawaki technique for afforestation.

⑤ Heat wave Action Plan, transit oriented development, AMRUT,

Sustainable & planned infrastructure to tackle climate change (SDG 13)

& ensure SDG 11.

8.

स्वच्छ भारत मिशन की सफलता के लिए इसकी महत्ता के बावजूद, भारत में ठोस अपशिष्ट प्रबंधन अब भी उपेक्षित (Sub-optimal) स्तर पर है। इस संदर्भ में, प्रभावी ठोस अपशिष्ट प्रबंधन हेतु दीर्घकालिक प्रौद्योगिकीय और संस्थागत समाधान सुझाइए।

(उत्तर 150 शब्दों में दीजिए), 10 अंक

Despite its criticality for the success of the Swachha Bharat Mission, solid waste management in India remains at a sub-optimal level. In this context, suggest long-term technological and institutional solutions towards effective solid-waste management.

(Answer in 150 words) 10 marks

Swachhha Bharat Mission was launched in 2015 to promote safe health & sanitation & make India ODP free.

Sub-optimal level of solid waste management

→ TERI: 62 million tonnes solid waste generated but only 41 mn. tonnes is collected & 12 mn. tonnes is treated.

→ Open landfills eg: Okhla
↳ lack of civic sense →

↓ insufficient segregation of wastes
↓ lack of recovery of metals from municipal solid waste.

Technological solutions

① Waste to wealth and waste

to energy →

↳ Plasma gasification

↳ Incineration, Pyrolysis

- ② Polycrack technology to burn multiple waste together at high temperature
- ③ Use of microbial fuel cell to treat solid waste
- ④ Refuse derived fuel (RDF).
- ⑤ Waste segregation through conveyor belts.

Institutional measures

- ① Promote awareness : Swachhta hi Swaksha.
- ② Swachh Sarvekshan Awards for recognition of efforts.
- ③ Door to door segregation → Solid Waste Management Rules
- ④ Adopt best practices eg. Indore.

Clean city, green city should be the motto to tackle solid waste.

9. "सोशल मीडिया आधुनिक युद्ध में एक नए आयाम के रूप में उभरा है, जो अभिभाष्यों को आकार दे रहा है, धारणाओं को प्रभावित कर रहा है तथा राष्ट्रीय सुरक्षा को प्रभावित कर रहा है।" इस संदर्भ में, समकालीन संघर्षों में सोशल मीडिया की भूमिका का विश्लेषण कीजिए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

"Social media has emerged as a new frontier in modern warfare, shaping narratives, influencing perceptions, and impacting national security". In this context, analyse the role of social media in contemporary conflicts. (Answer in 150 words) 10 marks

Social media which is borderless has emerged as a new menace & is a means for modern warfare.

With second largest Internet subscribers, India has become more susceptible to social media shaping narratives, perceptions:

Negative role of media

① Used for spreading misinformation, creating false narratives

Eg: Attack on migrants in Tamil Nadu.

② Creating echo chambers & filter bubbles causing polarization.

③ Use of social media to create

anti-India sentiments. Eg: PoK PM spreading ~~the~~ agenda of water jihad by India.

- ④ Social media is being used to radicalise youth & recruit them by spreading ideologies.
- ⑤ Use of social ~~st~~ media for cyber espionage Eg: Hancey trapping of DRDO scientist.
- ⑥ Misused by state actors Eg: Information ~~by~~ of border incursions. ⑦ Spreading hate speech.

Positive
impact

- ① Provides fast information updates
- ② Used to reach far flung areas → North East.

Initiatives: PIB FCO, Deepfake detection, IT Rules, 2021

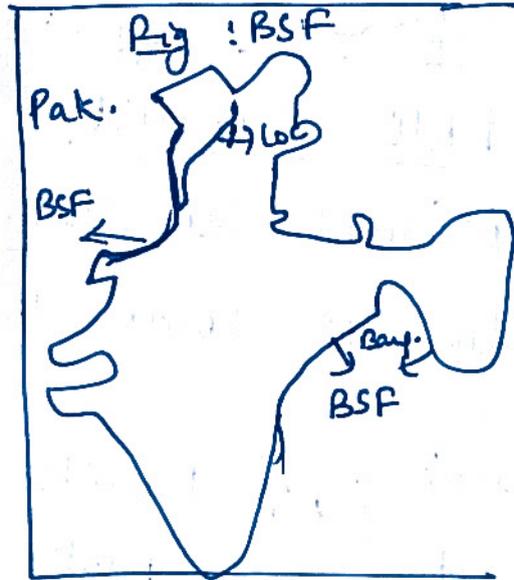
Social media is a double-edged sword. Critical thinking, think before clicking, should be the norm.

10. सीमा सुरक्षा बल (BSF) ने अपने क्षेत्राधिकार और रणनीतिक महत्त्व, दोनों में ही सीमा प्रबंधन और आंतरिक सुरक्षा ढाँचे के संदर्भ में उल्लेखनीय विकास किया है। BSF की भूमिका और अधिदेश की व्याख्या कीजिए। सीमावर्ती राज्यों में कार्य करते समय बीएसएफ को किन समस्याओं का सामना करना पड़ता है? (उत्तर-150 शब्दों में दीजिए) 10 अंक
- The Border Security Force (BSF) has evolved significantly in its jurisdiction as well as its strategic importance in border management and the internal security framework. Explain the role and mandate of BSF. What are the issues BSF faces while operating in the border States? (Answer in 150 words) 10 marks

Border security forces is deployed in borders of Pakistan & Bangladesh for security and safety of nation

Role of BSF

- ① guarding borders to prevent infiltration
- ② Tackle narco-terrorism
- ③ Tackling terrorist attack & anti-insurgency in East if required.



Mandate of BSF

- ① support during war & peace

- ② Expanded jurisdiction : BSF's authority extended from 15km to 50 km in states like Punjab, West Bengal, Assam.

Issues faced by BSF

- ① Dual purpose : Guarding border & tackling insurgency.
- ② Weather constraints : To guard in the border of Pak → extremely high temperature is a challenge.
- ③ lack of modernised equipments & warfare
- ④ skills to operate non-traditional devices like UAV etc.
- ⑤ Perception of CAPF & Paramilitary not treated at par. ⑥ Burnout.

BSF guards our borders & we must respect their services as it is the army that we are able to sleep peacefully.

11. भारत की संवृद्धि गाथा असमानता और मध्यम आय-जाल को दीर्घस्थायी चुनौतियों से प्रभावित है। चर्चा कीजिए। मध्यम आय के जाल से बाहर निकलने और समावेशी एवं सतत आर्थिक संवृद्धि सुनिश्चित करने के लिए भारत को किन उपायों का पालन करना चाहिए, इस पर प्रकाश डालिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

India's growth story is marred by persistent challenges of inequality and the middle-income trap. Discuss. Highlight the approaches India should follow to escape the middle-income trap and ensure inclusive and sustainable economic growth.

(Answer in 250 words) 15 marks

As per the Economic Survey 2024-25, India's growth is around 6.8%. and it is estimated that India requires growth of 7.4% per annum till 2047 to come out of middle income trap.

→ 43% workforce in agriculture.

→ **Inequality in income**: Oxfam Report : Top 1% owns 22.6% of income.

→ **Oxfam** : Top 1% owns 40% of wealth

→ **ES 2023-24** : 51% of youth is unemployable.

→ **NITI Aayog** : ~12% of people are multidimensionally poor.

→ **Regional inequality**:

→ Stagnated manufacturing - 17% of GDP

→ R&D - 0.64% of GDP

Persistent challenges of inequality & middle income trap

Approaches that India should follow
to escape middle-income trap

- ① Focus on manufacturing sector
as Indian economy has leapfrogged
from agriculture to services
- ② Leverage schemes like Make in India,
Production-linked incentive to
promote Atmanirbhar.
- ③ Focus on food processing industry
to tackle ^{zero} marginal productivity in
agriculture. Eg: PMFME
- ④ Industry-academia linkage to tackle
structural unemployment.
- ⑤ Boost to MSMEs - Engine of economic
growth. Eg: Credit Guarantee Fund
- ⑥ 3I: Investment, innovation, infusion
to tackle infrastructural gaps,
logistics cost. (currently 13% of GDP)

Approach for inclusive & sustainable economic
growth

- ① Digital inclusion : Promoting digital

literacy among men & women, rural & urban. (Rural - 24% internet penetration)

- ② Emphasis on female labour force participation as only 27% participation as STEM workforce.
- ③ Promoting natural farming, integrated farming to boost rural income.
- ④ Financial inclusion through PM Jan Dhan Yojana, JAM trinity, UPI enabled payments, MUDRA loans.
- ⑤ Social security to gig workers
- ⑥ Upgrading skills for future jobs like Big Data Analytics.

Government
steps in
this regard

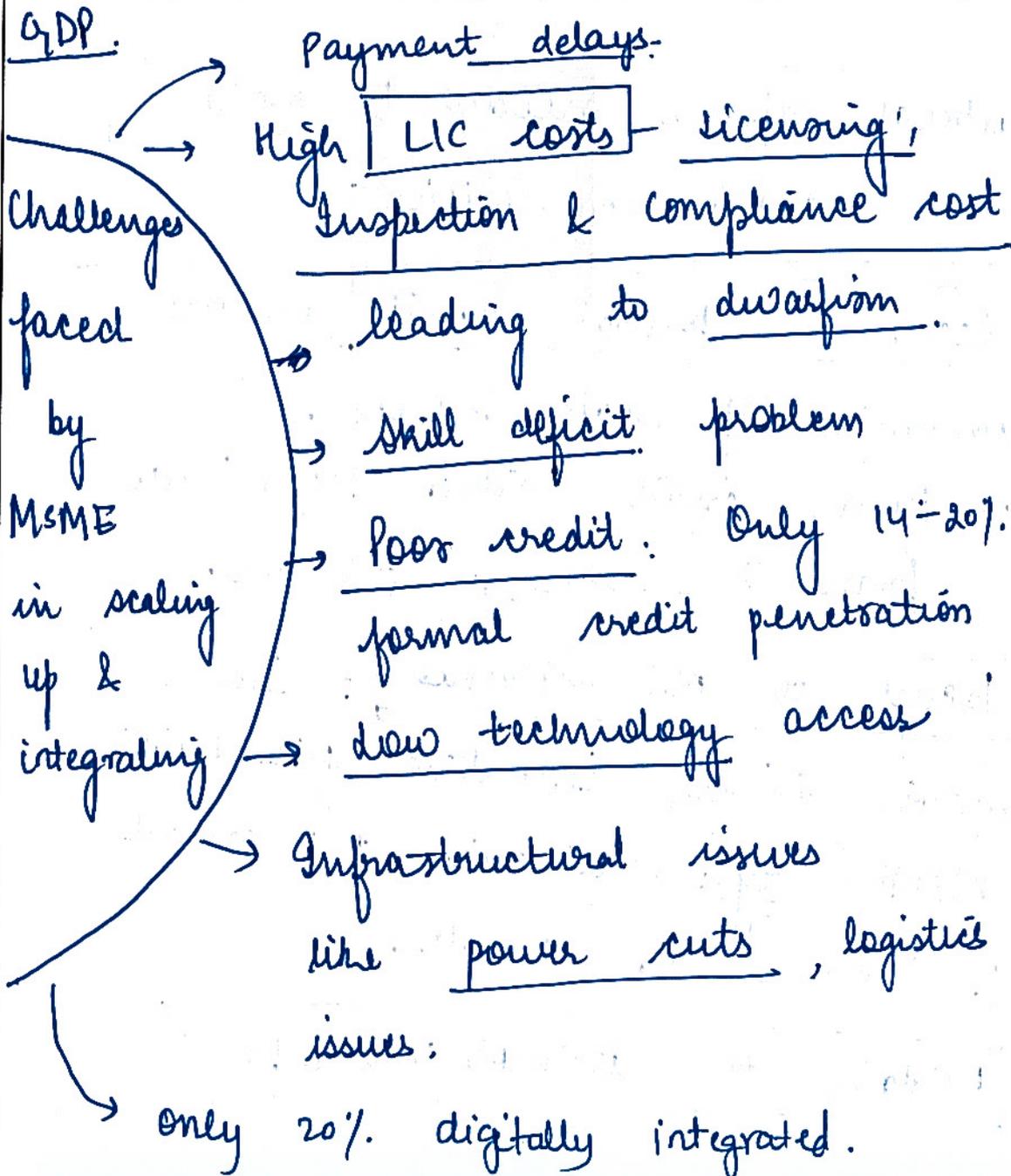
- ① Focus on leather & footwear industry - labour intensive
- ② National Institute of Food Technology, PMFME
- ③ PM Kaural Vikas Yojana, NSDC
- ④ Udyam, AgriSTACK, ZBNE

The above reforms are crucial for Bharat to become Viksit by 2047.

12. MSMEs (सूक्ष्म, लघु एवं मध्यम उद्यम) "मेक इन इंडिया" पहल की सफलता के केंद्र में हैं, फिर भी उन्हें आमाप वर्धन और औपचारिक आपूर्ति शृंखलाओं में एकीकरण में चुनौतियों का सामना करना पड़ रहा है। चर्चा कीजिए। MSMEs (सूक्ष्म, लघु एवं मध्यम उद्यमों) को अधिक समुत्थानशील और प्रतिस्पर्धी बनाने के लिए आवश्यक संरचनात्मक सुधार प्रस्तावित कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

MSMEs are central to the success of the Make in India initiative, yet they face challenges in scaling up and integrating into formal supply chains. Discuss. Suggest structural reforms needed to make MSMEs more resilient and competitive. (Answer in 250 words) 15 marks

MSMEs provide employment to 28.2 crore people & 45% exports are from MSME and contribute 30% to India's



MSME
central
to make
in India

- ① MSME contribute 40% to India's manufacturing GDP.
- ② MSME have potential to make India a part of global supply chain — as they are auxiliary units.
- ③ They can bring Atmanirbhar

Structural reforms needed to make MSME more resilient

- ① Access to formal credit ensures economies of scale, leverage.
Eg: Faster credit within 59 minutes from ₹ 1 lakh to ₹ 1 crore.
- ② Boost to PLI schemes: The production-linked incentive gives boost to MSME. Eg: Electronics PLI caused 100% increase in growth.
- ③ Bridging the technological gaps

through continuous skilling, upskilling.

eg: Kaushal Vikas Kendras.

④ Addressing the grievance redressal

of MSMEs : eg: CHAMPIONS portal.

⑤ Ensure timely payment of money
by big companies.

⑥ Reduce compliance burden to
ensure smooth operation

⑦ Leveraging schemes like Credit
Guarantee fund, Zero defect, Zero
defect, Ro DTEP.

⑧ Connecting MSMEs to ONDC platforms

⑨ Branding of MSME goods to ensure
purchase of goods.

eg: GeM procurement through MSMEs.

As highlighted by the Economic survey,
deregulatory reforms & reducing
regulatory cholesterol can help in
giving boost to India's MSME.

13. "प्रधानमंत्री कृषि सिंचाई योजना (PMKSY) का लक्ष्य 'प्रति बूँद अधिक फ़सल' प्राप्त करना है, फिर भी भारत में सिंचाई दक्षता अभी भी उपेक्षित बना हुआ है।" आलोचनात्मक विश्लेषण कीजिए। इसके कार्यान्वयन को सुदृढ़ बनाने के लिए किन सुधारों की आवश्यकता है? (उत्तर 250 शब्दों में दीजिए) 15 अंक
- "The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) aims to achieve 'more crop per drop', yet irrigation efficiency in India remains suboptimal." Critically analyse. What reforms are needed to strengthen its implementation? (Answer in 250 words) 15 marks

The Pradhan Mantri Krishi Sinchayee Yojana was launched in to give boost to irrigation & increase agricultural productivity.

Success of PMKSY in achieving more crop per drop

- ① Increased irrigation intensity from 145% to 154%.
- ② Recharge of underground water has increased (CGWB report).
- ③ Assured irrigation to 55% of land area. (gross cropped area)
- ④ Micro-irrigation techniques have increased the efficiency & productivity of crops.

- Reasons why efficiency remains sub-optimal
- ① lack of motivation among farmers to reduce intensive water crops in areas of low water due to irrigation subsidy.
 - ② lack of skills for maintenance of modern micro-irrigation techniques.
 - ③ High ^{installation} cost of drip irrigation, bubbler irrigation, sub-surface irrigation.
 - ④ Climate change and weather vagaries impacting rainfed area development through aquifer recharge.
 - ⑤ Irregular de-siltation of canals.

Structural reforms required for strengthening

- ① Rationalising irrigation subsidy
- ② Use of Krishin Vigyan Kendras to

promote awareness about pros of micro irrigation. eg ICAR : Micro-irrigation leads to 20% increase in yields.

③ Keeping in PACS for maintenance of micro-irrigation system & installation

④ Weather extension services via e-AGV, Krishi App to promote cultivation of crops based on agro-climatic conditions.

⑤ Using MGNREGA for construction of artificial ponds; aquifer recharge via catch the rain campaign.

⑥ Regular de-siltation of canals.

Both supply side & demand side reforms can go a long way in rationalising irrigation & conserving water - the pearl of India.

14. तिलहन और दलहन के बढ़ते आयात ने इनकी कृषि को अलाभकारी बना दिया है। इस कथन के आलोक में, भारत में तिलहन और दलहन के उत्पादन और उपभोग को बढ़ावा देने के लिए आवश्यक कदमों का विशदीकरण कीजिए।

(उत्तर 250 शब्दों में दीजिए) 15 अंक

The rising import of oilseeds and pulses has made their cultivation unremunerative. In the light of this statement, elucidate the steps needed to promote the production and consumption of oilseeds and pulses in India.

(Answer in 250 words) 15 marks

India's import of oilseeds was around \$ 16 bn. and that of pulses was around \$ 6.8 bn as highlighted by Economic Survey (2024-25).

Rising import reasons

→ lack of cultivation of oilseeds & pulses as per the demand

→ Fragmented landholdings limit oilseeds cultivation \approx 89% of small & marginal < 2ha.

→ More than 50% of is imported.

→ Pest infestation on both is very high.

Steps needed to promote production

① Assured remuneration & MSP on
oilseeds & pulses

Eg: Recently growth rate of MSP on
oilseeds is more as compared
to wheat, rice.

② Procurement of oilseeds via PM-
ASHA

③ Use of price deficiency payment
system - Bhavantar Bhugtan Yojana
to tackle price crisis.

④ Promoting high yielding few
varieties of oilseeds & pulses

⑤ Leveraging schemes like
Atmanirbharata in pulses - tur,
~~soya~~, urad, National
Mission on Edible Oil.

- ⑥ Providing weather extension services to farmers eg: YES, WINDS
- ⑦ FPOs promotion to have cluster based cultivation.
- ⑧ Inter cropping eg: legume & wheat.

Steps needed to promote consumption

- ① Distributing oilseeds via PDS
- ② Promoting food processing to have protein snacks made of pulses
- ③ Awareness about benefits of olive oil.
- ④ Connecting consumers with edible oil brands via ONDC.

Pulses & oilseeds will not only help in increasing farmer income but also tackle malnutrition via protein consumption of pulses.

15. मेघ बीजन के पीछे के वैज्ञानिक सिद्धांतों की व्याख्या कीजिए। वायु प्रदूषण और वैश्विक तापन के उपशमन में इसकी भूमिका पर प्रकाश डालते हुए, इसकी संभावित सीमाओं पर चर्चा कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

Explain the scientific principles behind cloud seeding. Highlighting its role in alleviating air pollution and global warming, discuss its potential limitations.

(Answer in 250 words) 15 marks

Cloud seeding is an artificial method of producing rainfall in a particular region using materials like silver iodide, silver nitrate.

Scientific principles behind cloud seeding

- ① Spreading Ag I, Ag KNO₃, solid ice ~~causes~~ → acts as condensation nuclei
- ② Condensation causes coalescence of water droplets.
- ③ When water droplets become heavy, they come down as rainfall.

Role in alleviating ~~of~~ pollution

- ① Causes settlement of dispersed pollutants eg: PM 2.5 & PM 10.
- ② Can aid in dealing with smog & fog in airports.
- ③ Tackling pollution caused due to volcanic eruption, forest fires → also fire fire can be controlled via artificial rainfall.

Role in alleviating global warming

- ① Can tackle drought & desertification
eg: Marathwada region → artificial rain can help in water stress.

② Temperature regulation via artificial rain to reduce impact of heatwaves

③ It can help in growth of forest & trees → microclimate regulation

- Potential limitations
- ① Spraying of solid ice (dry CO_2) can cause more ice melting
 - ↳ ② Problem of bioaccumulation & biomagnification
 - ↳ ③ Global dimming may reduce insolation
 - ↳ ④ Not aware about long term impacts if any.

Artificial is a useful tool to tackle climate change (SDG 13)

16. भारत के त्रि-चरणीय परमाणु ऊर्जा कार्यक्रम के क्रमिक विकास का विवरण दीजिए। थोरियम-आधारित तृतीय चरण को साकार करने के क्या लाभ और रणनीतिक अनिवार्यताएँ हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Give an account of the evolution of India's 3-Stage Nuclear Power Programme. What are the advantages and strategic imperatives of realising the thorium-based third stage?

(Answer in 250 words) 15 marks

Recently government of India launched Nuclear energy mission which aims to have 100 GW of nuclear energy by 2047.

Evolution of 3-stage nuclear power programme

① 1st stage

→ It used BWR, PHWR & enriched Uranium (U^{235}) as the fuel.

② 2nd stage

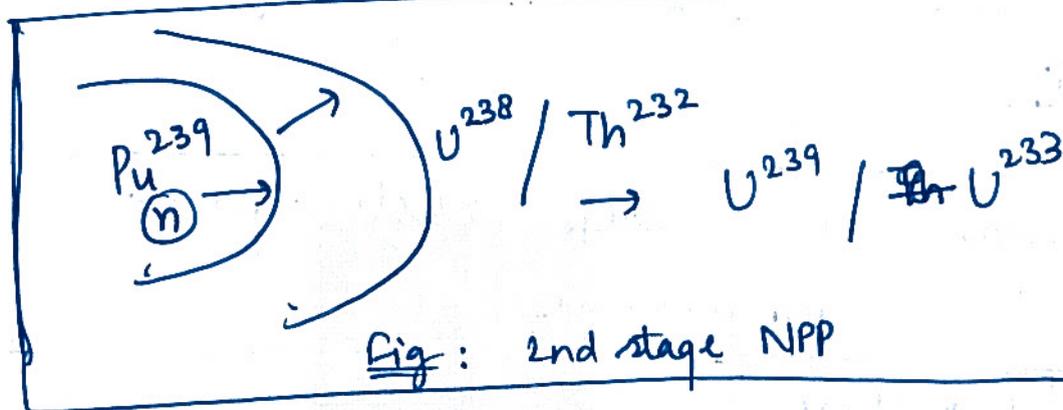
→ It uses Pu^{239} obtained from reprocessing as the fuel.

→ It is also known as fast breeder reactors and recently there has been 1 operational Kalpakkam Nuclear Plant has FBR.

→ Output is more than input

③ Third stage NPP :

- ↳ It uses Thorium as fuel
- ↳ It encompasses reactors like Molten salt water, Advanced Heavy water reactor, Accelerated driven system.



Thus India's NPP is a closed-loop cycle.

Advantages of using Thorium based third stage

① Thorium is abundant in India

eg: 1.06 mn. tonnes in India found in waste sands of Odisha, Andhra.

② It does not produce harmful

nuclear waste like other reactors.

③ It will promote Atmanirbharta
in energy

↳ Reduce dependence on fossil
fuel like gas, petroleum

④ Aid in achieving India's NDC
and ~~part~~ Panchamrit targets.

Strategic imperatives of realising
thorium based third stage

① Membership of NSG to have
enrichment & re-processing technology.

② Participation of private sectors

③ Changes in CLINDA, atomic
energy act to ensure private
participation.

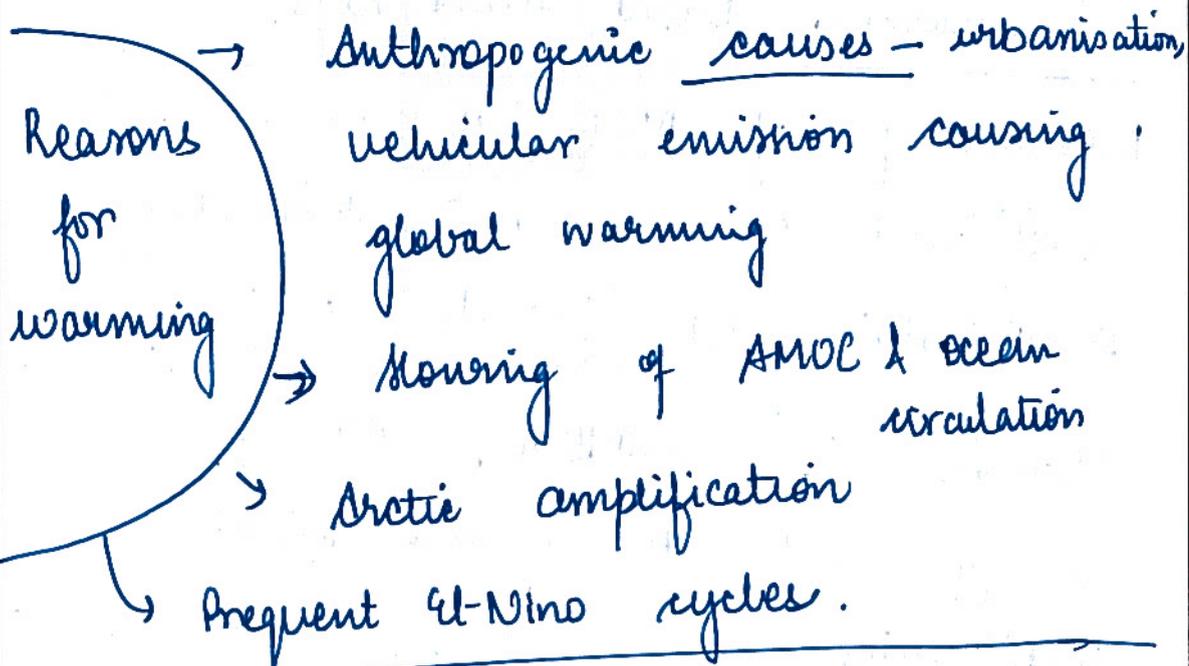
④ Funds to harness thorium.

Thorium based reactors has been set
up by China in Gobi Desert. India
needs to boost its strategy to come
at par with China

17. हाल ही के अध्ययनों से संकेत मिलता है कि 2014-2024 का दशक अब तक का सबसे गर्म दशक और 2024 अब तक का सबसे गर्म वर्ष रहा है। तेज़ी से बढ़ते वैश्विक तापन के आलोक में, जलवायु परिवर्तन का जैव-विविधता पर क्या प्रभाव पड़ेगा? पारिस्थितिक समुत्थानशीलता और प्रजाति विविधता के संरक्षण को सुनिश्चित करने के लिए आवश्यक उपायों पर चर्चा कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

Recent studies indicate that the 2014-2024 decade is the warmest decade and 2024 is the warmest year on record. In the light of rapid global warming, what are the impacts of climate change on biodiversity? Discuss the measures needed to ensure ecological resilience and conservation of species diversity. (Answer in 250 words) 15 marks

As per IPCC, the last decade of 2014-2024 has been the warmest decade & the breach of ^{limit of} Paris agreement of 1.5°C has been breached.



Impacts of climate change on biodiversity

① Impact on migratory animals like birds. Eg: Siberian

bird - shift in migratory patterns.

② Desertification of lands due to excessive forest fires because of climate change.

Eg: India's 29% land → degraded.

③ Climate change → rising marine heat waves → warming ocean surfaces causing coral bleaching

Eg: Currently 4th mass coral bleaching.

④ Climate changes → tropical cyclones → destruction of coastal ecosystem, mangroves causing coastal erosion & disruption of ecosystem services.

⑤ Impact on fauna: Climate change induced wildfires caused death of fauna in Australia. (Koala bear)

↳ Heatwaves associated deaths.

⑥ Declining productivity of animals.
Eg: livestock.

Measures needed to ensure ecological
resilience & conservation of species

- ① Afforestation & reforestation to
preserve the natural habitat of
fauna. Eg: Great green wall in
Sahara,
Bonn Challenge
- ② Urban spaces need to go with
blue-green infrastructure, promotion
of Miyawaki technique.
- ③ Reducing man-animal conflict by
preserving forest areas & not diversion
of forest land for non-forest purposes.
- ④ Promoting conservation programmes
& species recovery eg: Recovery
of Tiger (TX2), Project Snow leopard
- ⑤ Rationalising GHG emissions to
tackle climate change. eg: PMe-drive
Efforts for conservation are crucial
to implement SDG 13, 14, 15.

18. भारत में वनाग्नि की आवृत्ति और तीव्रता में वृद्धि हो रही है, जिससे गंभीर पारिस्थितिक और आर्थिक चुनौतियाँ उत्पन्न हो रही हैं। वनाग्नि के विभिन्न कारणों का वर्णन कीजिए। भारत में वनाग्नि को रोकथाम और प्रबंधन के लिए क्या उपाय किए जाते हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Forest fires in India are increasing in frequency and intensity, posing severe ecological and economic challenges. Describe the various causes of forest fires. What measures are followed to prevent and manage forest fires in India? (Answer in 250 words) 15 marks

According to FSI, 36% of India's forests are ~~extreme~~ prone to fires while 4% are highly prone.

Recent forest fires → increasing frequency.

- ① Uttarakhand forest fires
- ② Santa Ana caused forest fires in North America.
- ③ Forest fires in Bandipur (2019), Simlipal (2021).

Ecological & economic challenges

- ① loss of biodiversity, causing man-animal conflict too.
- ② loss of timber & non-timber resources.
- ③ GHG emissions eg. Increased CO₂ post Bandipur fires.
- ④ Desertification & soil erosion

⑤ loss of habitat of tribal communities

Causes of forest fires

① Natural causes

- (i) Dry conditions causing fires
- (ii) Heatwaves causing fire of inflammable material - spine tree needles
- (iii) Hydroclimatic whiplash - sudden dry & rainfall conditions
- (iv) lightning can cause fires

② Anthropogenic fires

- (i) Unattended campfires
- (ii) Lack of civic tourism → leaving cigarette butts in open.
- (iii) Traditional practices - slash & burn agriculture.
- (iv) Fire from from electric spark of industries.

Measures followed to prevent & manage

- ① Deploying remote sensing techniques & sensors to have surveillance.
- ② Using techniques like MODIS, SUNIIPS
- ③ Creating fire shelters to avoid fire spread.
- ④ Artificial rain to control fires.
- ⑤ Using bambi buckets to extinguish
- ⑥ Regular fire safety audits of industries
- ⑦ Removing dry leaves during dry season
- ⑧ NDMA guidelines on forest fires.
- ⑨ National forest fire alert → FF 30.
SMS alert to forest officials

Afforestation & reducing climate change is the need to preserve the forest from destruction & degradation.

19. संगठित अपराध क्या हैं? संगठित अपराध और आतंकवाद के बीच संबंधों पर चर्चा कीजिए। ये संबंध भारत के लिए आंतरिक सुरक्षा संबंधी चुनौतियाँ कैसे उत्पन्न करते हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

What are organized crimes? Discuss the linkages between organized crime and terrorism. How do such linkages pose internal security challenges to India?

(Answer in 250 words) 15 marks

Organized crime refers to a centralised framework of illegal activities that is spread nationally & internationally to commit crime & is organised like a company.

linkage between organized crime & ~~terrorism~~ terrorism

① The routes of organized crime are used by terrorist to enter

eg: Mumbai 26/11 attack → route of drug peddlars

② Aid in terror financing:

Organised crime provide funds for engaging in terrorism.

eg : Taliban governing opium for funds.

③ Drug trafficking.

Terrorism supply of drugs aid in committing terrorist attack as, it is difficult to commit attack in full senses.

④ Arms smuggling : Arm supply to terrorist through organised crime.

⑤ Crimes like money laundering, hawala transfer provide funds for buying arms & ammunition (Black hole syndrome)

⑥ Recruitment of people in terrorist organization via human trafficking.

linkages posing internal security challenges

① Difficult to trace as organised

crime has strong & deep network.

② Narco-terrorism → affecting youth
and leading to radicalisation &
terror attacks.

③ Causing dual challenge

Eg: On one hand money laundering
is a loss to public ex-cheker
and on the other side terrorism
causes loss of lives, radicalisation.

④ Proliferation of sleepers cells, overground
workers limiting the capacity to
tackle the menace.

Hence, a multi-pronged strategy is
required to challenge the linkage
of organised crime & terrorism.
Steps like WHAM, BAVP, BADP are
in right direction.

20. भारत का उत्तर-पूर्वी क्षेत्र विवादास्पद मुद्दों और सुरक्षा चुनौतियों से परिपूर्ण है। इस क्षेत्र में वर्तमान में व्याप्त विभिन्न सुरक्षा चुनौतियों का परीक्षण कीजिए। इन चुनौतियों से निपटने हेतु किए जाने वाले उपायों पर चर्चा कीजिए।

(उत्तर 250 शब्दों में दीजिए) 15 अंक

India's north-eastern region is fraught with contentious issues and security challenges. Examine the various security challenges currently prevailing in the region. Discuss the steps to counter these challenges. (Answer in 250 words) 15 marks

India's North-eastern region due to historical factors has been struggling with insurgency issues and ethnic conflicts creating security challenges.

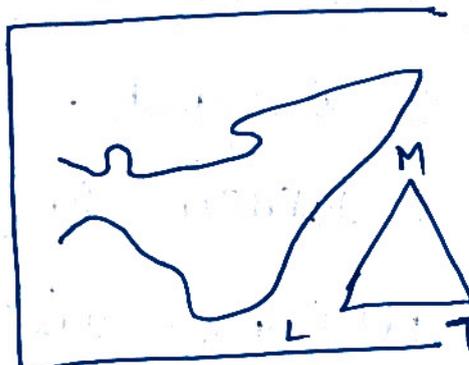
Security challenges prevailing in the region

① Ethnic conflict

↳ Recent demand of Meitais for ST status in Manipur caused severe ethnic clashes between Kukis & Meitais.

② Drug trafficking

↳ Nearness to golden Δ causes drug trafficking & narco-terrorisim.



M- Myanmar
L- Laos
T- Thailand

③ Emergency :

The insurgents like ULFA, NSCN have bases in NE states.

↳ Also, support to insurgents from state actors & non-state actors further fuels the problem.

④ Rugged terrain & problem of

human trafficking ~~has~~ porous borders with Myanmar & Bangladesh causes human trafficking

⑤ Demand for more autonomy causes law & order problem.

eg: Bodoland demand, Greater Nagalim.

⑥ FMR regime causes infiltration of insurgents.

⑦ Instability in Myanmar causing Rohingya crisis.

Steps to counter these challenges

- P → Security & peace accords eg: Tripura Peace Accord 2024
- A → Administrative & effective governance eg: Community engagement
- U → Utilizing institutions eg: NEC, ADCs, North East Forum
- IS → Securing international collaborations eg: Op All Clear
- E → economic development eg: RM-DevINE, NESIDS.
- D → Development via perception management eg: Winning heart & mind approach.

→ Increasing connectivity: Kaladan Multimodal, IMT highway

→ Scholarship to youth → Rationalise AFSPA

→ Ishan Utkas Programme

→ Celebrating culture of North East to minimise alienation

North East is the gateway of South East Asia. Peace & stability in North East is inevitable.

NEXT IAS

Space for Rough Work

NEXT IAS

Space for Rough Work

NEXT IAS

IMPORTANT INSTRUCTIONS

CANDIDATES SHOULD READ THE UNDERMENTIONED INSTRUCTIONS CAREFULLY. VIOLATION OF ANY OF THE INSTRUCTIONS MAY LEAD TO PENALTY.

DONT'S

1. Do not write your name or registration no. anywhere inside this Question-cum-Answer Booklet.
2. Do not write anything other than the actual answers to the questions anywhere inside your QCA Booklet.
3. Do not tear off any pages from your QCA Booklet, if you find any page missing do not fail to notify the supervisor/invigilator.
4. Do not leave behind your QCA Booklet on your table unattended, it should be handed over to the invigilator after conclusion of the exam.

DO'S

1. Read the Instructions on the cover page and strictly follow them.
2. Write your registration number and other particulars, in the space provided on the cover of QCA Booklet.
3. Write legibly and neatly. Do not write in bad/illegible handwritings.
4. For rough notes or calculation, the last two blank pages of this booklet should be used. The rough notes should be crossed through afterwards.
5. If you wish to cancel any work, draw your pen through it or write "Cancelled" across it, otherwise it may be evaluated.
6. Handover your QCA Booklet personally to the invigilator before leaving the examination hall.

SPECIAL REQUEST FOR CANDIDATE AVAILING ONLINE FACILITY

1. Scan the QCA booklet properly. We suggest the uses of the app CAM scanner (Scan QR code in page 2) based on our previous experiences.
2. Please scan the QCA booklet in ample light. Copies scanned under moderate light can hamper evaluation quality.
3. Any page/pdf having shadow needs to be rescanned. Please make sure that the pdf that you upload is as clean as possible.
4. **Candidates not using the QCA booklet** must mention their details on the front page. And leave the next page blank for the macro comments. It must be understood that the answer should start from Page no. 3 in of the scanned pdf.
5. Candidates not using the QCA booklet must follow the sequence of the answer as per the question paper.
6. Please check the sequence of the answer and total number of pages in the scanned version. Make sure it is in consonance with the physical version of the same.

NEXT IAS

महत्वपूर्ण निर्देश

अभ्यर्थियों को निम्नलिखित निर्देशों को ध्यानपूर्वक पढ़ना चाहिए। किसी भी निर्देश का उल्लंघन करने पर दण्डित किया जा सकता है।

क्या न करें-

1. इस प्रश्न-सह-उत्तर पुस्तिका के भीतर कहीं भी अपना नाम या पंजीकरण संख्या न लिखें।
2. अपनी QCA पुस्तिका में कहीं भी प्रश्नों के वास्तविक उत्तरों के अलावा कुछ भी न लिखें।
3. अपनी QCA पुस्तिका से कोई भी पृष्ठ न फाड़ें, यदि आपको कोई पृष्ठ गायब लगे, तो पर्यवेक्षक/निरीक्षक को सूचित करना न भूलें।
4. अपनी QCA पुस्तिका को अपनी टेबल पर न छोड़ें, परीक्षा समाप्त होने के पश्चात इसे निरीक्षक को सौंप देना चाहिए।

क्या करें-

1. कवर पृष्ठ पर दिए गए निर्देशों को ध्यान पूर्वक पढ़ें और उनका सख्ती से पालन करें।
2. QCA पुस्तिका के कवर पृष्ठ पर दिए गए स्थान पर अपना पंजीकरण नंबर और अन्य विवरण लिखें।
3. स्पष्ट और पठनीय तरीके से लिखें। खराब/अपठनीय लिखावट में न लिखें।
4. रफ नोट्स या गणना के लिए, इस पुस्तिका के अंतिम दो खाली पृष्ठों का उपयोग किया जाना चाहिए। रफ नोट्स को बाद में क्रॉस कर देना चाहिए।
5. यदि आप किसी कार्य को रद्द करना चाहते हैं, तो उस पर अपना पेन चलाएं या उस पर "रद्द" लिखें, अन्यथा उसका मूल्यांकन किया जा सकता है।
6. परीक्षा हॉल छोड़ने से पहले अपनी QCA पुस्तिका व्यक्तिगत रूप से निरीक्षक को सौंप दें।

ऑनलाइन सुविधा का लाभ उठाने वाले अभ्यर्थियों के लिए विशेष अनुरोध

1. QCA पुस्तिका को ठीक से स्कैन करें। हम चाहेंगे कि आप स्कैनिंग के लिए कैमस्कैनर ऐप (CAM SCANNER) का प्रयोग करें। (यह कोई प्रमोशन नहीं है)।
2. कृपया QCA पुस्तिका को पर्याप्त रोशनी में स्कैन करें। कम रोशनी में स्कैन की गई पुस्तिकाएं, उनके मूल्यांकन की गुणवत्ता को बाधित कर सकती हैं।
3. स्कैन के दौरान छाया वाले किसी भी पृष्ठ/पीडीएफ को फिर से स्कैन किया जाना चाहिए। कृपया सुनिश्चित करें कि आपके द्वारा अपलोड की गई पीडीएफ यथा संभव स्पष्ट हो ।
4. QCA पुस्तिका का उपयोग नहीं करने वाले उम्मीदवारों को अपना विवरण पहले पृष्ठ पर देना चाहिए और मैक्रो टिप्पणियों के लिए अगला पृष्ठ खाली छोड़ दें। यह समझना चाहिए कि उत्तर स्कैन की गई पीडीएफ में पृष्ठ नंबर 3 से शुरू होना चाहिए।
5. QCA पुस्तिका का उपयोग नहीं करने वाले उम्मीदवारों को प्रश्नपत्र के अनुसार उत्तर के अनुक्रम का पालन करना चाहिए।
6. कृपया स्कैन किए गए संस्करण में उत्तर के अनुक्रम और कुल पृष्ठों की संख्या की जाँच करें। सुनिश्चित करें कि यह उसी के भौतिक संस्करण के अनुरूप है।

