NEXT IAS

anubhav-2025

(To be filled by candidate)

TEST CODE : ANV2503

Name of Candidate: Darshana singh Baghel Mobile N [redacted]

Roll No. : ANM2590010S-9 Start Time 9:00 End Time 12:00

Date of Examination: 03/08/25 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	Evaluator's Feedback / Response
1	1 .....
.....	.....
.....	.....
.....	.....
2	2 .....
.....	.....
.....	.....
.....	.....
3	3 .....
.....	.....
.....	.....
.....	.....

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

Candidates must not write on this margin

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

The 2025-26 budget proposed various reforms in India's direct tax structure to increase its tax buoyancy and base.

Tax buoyancy – $\frac{\%\text{ Change in tax}}{\%\text{ change in GDP}}$, India → 1.1%, OECD Countries → 3.5%

Tax Base – Total taxable enterprise

Recent proposals to reform India's tax structure :-

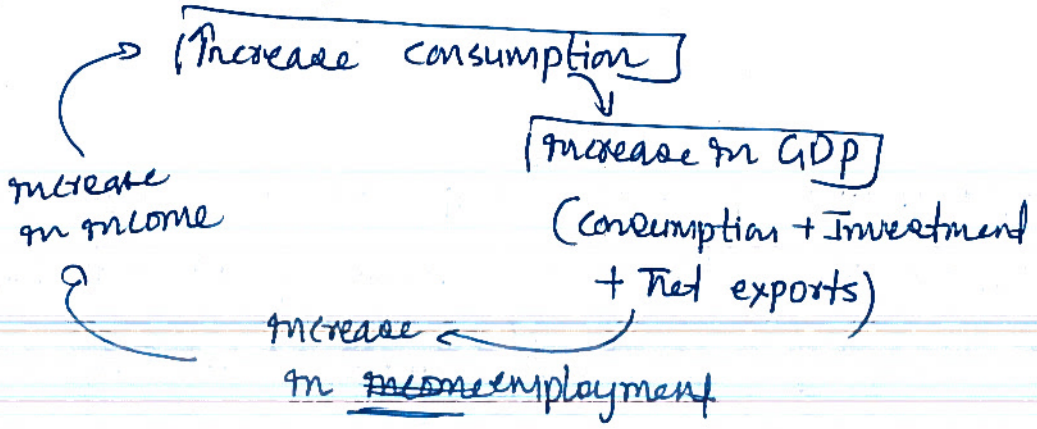
1. No tax till 12 lakhs of taxable income
2. Revision of IT rules – less number of articles and simplication
3. Decriminalisation of several tax related conflicts (Jan vishwas Bill)

Improving tax buoyancy :-

1. Reduction in tax burden → It will improve the consumption of middle class families

Candidates must not write on this margin

(2) Prosperous cycle in GDP



Improving tax base :-

(1) Higher wages & employment will push more people to taxable bracket

(2) Simplification of rules - better tax compliance

(3) Reduction in conflicts, better tax returns

Challenges → (1) Large revenue foregone → impact in capital expenditure

(2) Revised tax rules are still complicated for average middle class

(3) Limited impact on consumption, more savings may happen

Despite challenges recent reforms in India's tax structure showcase India's progression towards "Viaad se vishwaas".

Candidates must not write on this margin

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

Recent issues of trade tariffs between USA and India highlight the rising trend of protectionism and demand for resilient structural measures in Indian economy.

Rising trend of Nationalism & Protectionism
- (1) Reciprocal tariffs by USA
- (2) 27% blanket tariff on aluminium and steel
- (3) Reshoring and friendshoring
- (4) EU – Carbon Border Adjustment Mechanism.

Impact on India's Global trade Competitiveness :-

(1) Increased cost of exports.

e.g. India exports aluminium and steel to developed countries.

(2) Disruption of the supply chain

(3) Chance of dumping of cheap quality Chinese goods in other countries

Candidates must not write on this margin

(4) impact on foreign direct investments.

(5) MSME will suffers due to increased taxes
e.g. responsible for 45% of exports

Recent measures to navigate these challenges :-

(1) Negotiation and talks with USA for applicable free Trade agreement.

(2) Bilateral treaty signed with other Countries
e.g. UK-FTA trade deals.

(3) Diversification of Supply value chains.
e.g. Increased exports from Russia

(4) Benefiting from China + 1 Strategy
e.g. Semiconductor fab plants in Dholera, Gujarat

(5) Structural reforms in the economy
e.g. PLI, Make in India.

(6) Investment in advanced technology
e.g. National AI Mission.

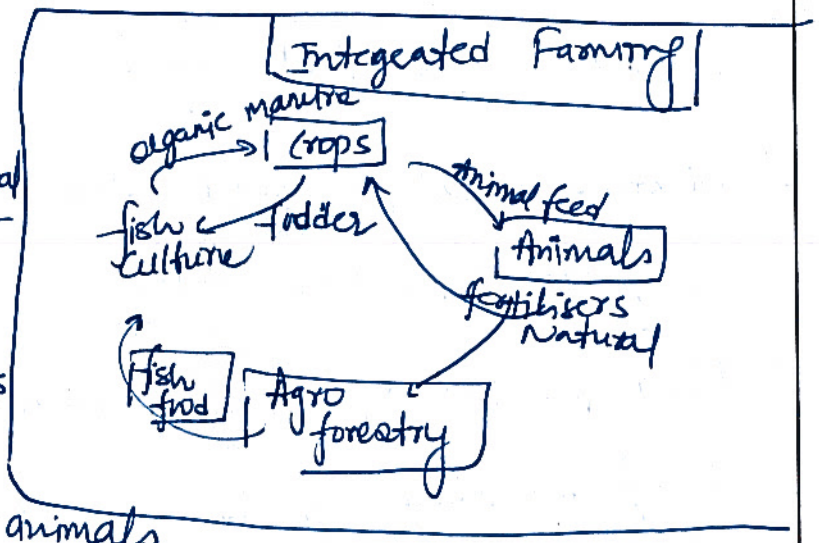
Navigating economic Protectionism with balance Strategy shows India's resilience in economy to realise the vision of Viksit Bharat by 2047

Candidates must not write on this margin

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 refers to integration of Agriculture, livestock, forestry at one plate to maximise productivity & reduce environmental impact.



Role of IFM in improving agricultural Productivity :-

(1) Better fertilisers (Natural and organic) through animals

(2) Increase in agricultural income through diversification of activities

e.g. Fish-Rice Culture (Kuttanad)

(3) Better ecosystem to sustain crops through pollinators.

e.g. Beekeeping with onion farming

(4) Prevention from pest attack

e.g. Integrated pest management

Candidates must not write on this margin

IFM in minimising environmental impact of agriculture :-

(1) less use of fertilizer → reduction in Nitrogen emissions

(2) Agroforestry → Carbon farming and Carbon sequestration.

(3) Reduced wastage → Circular farming Model

(4) Reduced reliance on monocropping of rice and wheat.

Challenges to IFM :-

(1) Lack of awareness among farmers
(2) High initial setup cost
(3) Less government support
(4) Supply chain fragmentation → Other products get wasted.

Way forward :-

(1) Government support → Rashtriya Krishi Vikas Yojana
(2) Integrated Horticulture Development fund
(3) Role of technology to generate awareness (Krishi samwaad) and precision agriculture

IFM can play an important role is ushering an Evergreen revolution as envisioned by Dr. MS Swaminathan

Candidates must not write on this margin

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 grew at a CAGR of 4.5% showing resilience in productivity and improvement of farmer incomes on the back of streamlined structural reforms

Institutional reforms - agriculture more rewarding + structural ~~sustainable~~

(1) Income Support to the farmers
- PM AASHA → (a) Price deficiency payment system for oilseeds.
  - (2) Price support scheme for pulses & oilseeds.
  - (3) Market intervention scheme to manage supply of perishable products

(2) Integration of technology
- Digital agricultural Mission
- Agri stack & e-RUPI under CDP Suraksha for better enumeration

(3) Market connectivity;
- e-National Agricultural Market for better price realisation

Candidates must not write on this margin

Reforms for agriculture more Sustainable :-

1. Soil health card scheme
2. Paramparagat Krishi Vikas Yojana to promote Zero budget natural farming
3. Institutions under National Program for Organic production → to promote organic products. certification
4. National Mission for Millets - to promote drought resistant traditional crops

Existing Challenges

1. Monocropping due to MSP
2. Fragmental of land (>89% small and marginal farmers)
3. Limited access to markets (Only 6% farmers benefit from MSP)
4. Unsustainable irrigation (e.g. Power Subsidies)

Way forward

1. Farm to fork Model - Supermarket Supply value chain
2. Contract farming regulation to increase income
3. Supporting cooperatives and Farmer Producer organisation.

Implementation of Dalwai Panel recommendation can help in achieving the goal of Doubling farmers income

Candidates must not write on this margin

5. वायु रक्षा प्रणालियाँ 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-defense systems that India currently possesses? (Answer in 150 words) 10 marks

Candidates must not write on this margin

Candidates must not write on this margin

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

Editing of RNA has emerged has a new tool to treat inherited disorders and rare diseases in less intrusive manner.

RNA editing in treating genetic disorders :-

(1) RNA → Transcription → mRNA (messenger RNA) → Translation → transfer RNA tRNA → Protein formation (Ribosomal RNA)

(2) RNA editing gives the opportunity to interfere in this process to modify the defects at the genetic level.

(3) The transcription and translation steps can be controlled to remove genetic disorders

e.g. treating muscular atrophy by targeting the muscle formation protein.

Candidates must not write on this margin

Advantages over DNA editing

DNA editing	RNA editing
(1) Difficulty in DNA extraction	(1) RNA can be easily replicated in Labs.
(2) Permanent changes	(2) Non permanent changes
(3) Changes are inheritable in the next generation	(3) limited to one generation
(4) Intrusive technology is used e.g. ZFN, Tallens, CRISPR-Cas-9	(4) less intrusive technology. e.g. Bridging mechanism.

Thus, the evolution of RNA editing offers great opportunities in treating genetic disorders

Candidates must not write on this margin

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

Vulnerability can be defined as inversely proportional to capability to cope. overcrowding, unplanned growth and infrastructure collapses has increased this vulnerability.

Urban areas are more vulnerable to disasters :-

(1) **Unplanned growth** -

↳ Lack of planned architecture, urban sprawl and overcrowding.

e.g. increased risk of urban flooding due to lacking storm drains and senage drain blocking.

(2) **Infrastructure collapse** :-

(a) Old buildings - e.g. Noida - building collapse

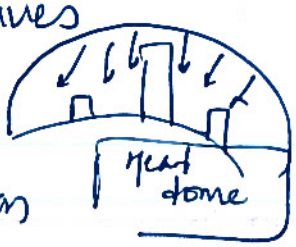
(b) over burden on bridges e.g. Bridge collapses

(c) lack of safety mechanisms and protocols at railway stations

e.g. Delhi railway station stampede

Candidates must not write on this margin

Other Challenges
- ④ Climate change
  e.g. urban heat island and heat waves
- ⑤ Overcrowding
  17% Population of slum - risk of communicable diseases transmission
  e.g. Covid pandemic and its disastrous impact
- ⑥ Encroachment of wetlands



Strategies to enhance urban resilience :-

① **understanding the risk** -
e.g. Hazard mapping of heat zone areas.

② **Structural measures : Disaster risk reduction** -
- → Retrofitting of old buildings
- → Maintenance of sewage drains

③ **Non-structural measures**
- → Guidelines and protocols for effective training and capacity building

④ **Interagency coordination**
- → for emergency response
  e.g. fire-fighters, National Disaster Response Force

⑤ **Climate risk management**
e.g. sponge cities to prevent urban floods

Hazards are natural, but disasters are man-made due to lack of due diligence and efforts. Structural reforms are required to prevent disasters.

Candidates must not write on this margin

8. स्वच्छ भारत मिशन की सफलता के लिए इसकी महत्ता के बावजूद, भारत में ठोस अपशिष्ट प्रबंधन अब भी उपेष्टतम (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

Solid waste management is one of the core components under Swachha Bharat Mission, but only 20% recycling and management of solid waste highlighted its sub-optimal achievement.

Success of Solid waste management under Swachha Bharat Mission

1. Sewage treatement Plants under Namami Ganga program
2. Extended Producer responsibility under Battery waste management rules for complete value chain regulation
3. Ban on single use plastics under 200 microns.

Challenges to solid waste management:-

1. Limited access to rural areas.
2. Continued use of plastics by small traders
3. Limited implementation of Extended Producer responsibility.

Candidates must not write on this margin

(4) Large dumping grounds of waste.
e.g. Ghazipur landfills.

(5) limited waste collection efforts.

Long term technological solutions :-

(1) Advancement in research for bioremediation, Biosparging etc.

(2) Use of bio-toilets.

(3) recycling of products
e.g. Use of Plastics in road construction

(4) Use of blockchain technology to track movement of electronic items

Long term institutional Solution :-

(1) Building of sewage treatment plants.

(2) Strict regulatory controls on use of single use plastics.

(3) Promote Corporate Social responsibility in Solid waste management.

(4) Coordinating body for implementation of effective Solid waste management Protocols.

Management of Solid waste is essential for a greener and cleaner India

Candidates must not write on this margin

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

PM Modi argue that digital space should not become a playground for dark forces of terrorism and organised crimes.

Role of Social media →
- Modern warfare
  - hybrid warfare
  - Cyber espionage by Countries like China
- Shaping narratives
  - fake propaganda
- Influencing perception
- Interference in the internal politics.

Way forward →
- Public awareness
  - cyber Jagrukta diwas
- IT rules
- NCIIPC, Cyber Swachhta kendra
- CERT-In

Candidates must not write on this margin

Candidates must not write on this margin

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



Role → To protect the Indian borders of Pakistan & Bangladesh

→ Stop smuggling, drug-trafficking, Arm trafficking in the region

issues → (1) Hard/Rough terrain

(2) multiple agency control

Lack of resources and capacity building.

Candidates must not write on this margin

Candidates must not write on this margin

11. भारत की संवृद्धि गाथा असमानता और मध्यम आय-जाल की दीर्घस्थायी चुनौतियों से प्रभावित है। चर्चा कीजिए। मध्यम आय के जाल से बाहर निकलने और समावेशी एवं सतत् 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

India showed a resilient growth of 6.5% but it is also marred by wealth and income inequality leading to a middle income trap.

Inequality → wealth → Top 1% have 40% of wealth

→ Income → Top 1% have 26% of all income

→ Bottom 50% has only 3% of total wealth.

Middle income trap → $2500 per capita GDP ↓ needs $13000 per capita GDP for upper income status as per word bank.

Challenges of inequality and Middle income trap :-

1. **unemployability of youth** :- (45% are unemployable :- NITI Ayog report
2. **Lack of rural non-industrialisation** e.g. 46% population employed in agriculture

Candidates must not write on this margin

(3) Lack of credit support to Micro small and medium enterprises

(4) Lack of participation of women in economic activities.
e.g) 40% Female Labor force participation

(5) Structural constraints in industrial sector
- high logistical cost (14%)
- Bureaucratic hurdles
- labor reforms delayed

(6) Lack of foreign direct investment, exports
⇒ Burden on current account deficit.

[Approaches = To escape Middle trap] :-

(1) promote skilling of youth
e.g) National skill qualification framework

(2) Promote labor intensive sectors and rural industrialisation e.g) Footwear, textile, toys

(3) promote women participation for extra income in family
e.g) Lakhpati didi scheme

Candidates must not write on this margin

(4) Support to MSME - through Credit (Mudra yojana)

Inclusive and Sustainable growth -

Bharatiya model of development - NITI Ayog

- **Cultural roots for economic development**
  - e.g. Sarvodaya and Sustainable methods
  - e.g. Organic farming
- **Indic-Market economics**
  - e.g. Minimum government & Maximum governance approach
  - Government - NO business being on business
  - Strategic disinvestment to stimulate private investments (Crowding in)
- **Antyodaya**
  - (1) Social security schemes
    - e.g. Kisan Manthan and
  - (2) formalisation of workforce
    - e.g. eshram portal
  - (3) Capacity building of population through
    - Health
    - Education & Skilling
- **Holistic approach**
  - Last mile service delivery

Through sustained capital investment and structural reforms India can achieve the objective of inclusive and sustainable growth

Candidates must not write on this margin

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 Contribute 45% of exports and employ 30% of population highlighting their significand in Make in India initiative

MSME Central to success of Make in India → ① Promote employment = labour intensive

→ ② Manufacture Products like textile, food processing toys - necessary for exports and economic growth.

→ ③ Help in reach target of 25% Contribution of manufacturing in GDP (current 14%)

Challenges to MSME in scaling up :-

① Lack of capital, informal credits available

② unskilled workforce

③ Burden of green technology
e.g. EU carbon tax hamiH exports.

Candidates must not write on this margin

(4) Perceived fear of loosing small industry advantage (tax incentives)

(5) Inverted duty structure (increase production cost)

Integrating into formal supply chain :-

(1) Dominance of large multinational corporation
e.g. Big Basket etc for groceries.

(2) Lack of technology access and capacity
e.g. use of AI and Digital infrastructure

(3) Lack of bilateral treaties to enable entry of MSME into formal supply value chains.

Structural reforms to make MSME more resilient and competitive :-

(1) Enhanced credit access
e.g. Emergency credit line guarantee Scheme

(2) Help during bankruptcy and issues in balancesheet
e.g. Tailor made Solutions under IBC

Candidates must not write on this margin

(3) Promote exporting capabilities of MSME
↳ e.g. Remission of Duties and tariff on exported products (RODTEP)

(4) Streamlining grievance redressal mechanisms
e.g.) Champions portal.

(5) Enable innovations in MSME
e.g.) Atmanirbhar collaboration with IIT kanpur to provide financial and Lab infrastructure support

(6) Reducing ~~logistical~~ logistical costs (National Logistics policy)

(7) Enable MSMEs to grow in size
e.g.) Current relaxation under Mudra scheme and Tarun loans (20 Lakhs)

(8) Skilling of youth to provide with better workforce

(9) Better integration with global supply value chains e.g.) FTA with USA, UK, EU etc

MSMEs are one of the engines of growth (Budget 2025-26) reach the destination of Viksit Bharat by 2047

Candidates must not write on this margin

13. "प्रधानमंत्री कृषि सिंचाई योजना (PMKSY) का लक्ष्य 'प्रति बूँद अधिक फ़सल' प्राप्त करना है, फिर भी भारत में सिंचाई दक्षता अभी भी उपेष्टतम 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

India agriculture utilises nearly 80% of ground water for irrigation which shows the suboptimal efficiency of irrigation in India.

PMKSY → (1) Per drop more crop strategy

→ (2) Promote irrigation access to farmers (55% is rainfed)

→ (3) Provides Power subsidy to discoms to reduce disparity.

Suboptimal irrigation efficiency :-

(1) water guzzling crops

e.g. Rice, wheat, sugarcane - 80% of the area

(2) flooding method used for kharif crops like rice

(3) Lack of awareness among farmers regarding new techniques

(4) limited access to precision agriculture techniques

Candidates must not write on this margin

(5) unrestricted use of power subsidy - tubewells, borewells
e.g. creation of deadzones in Punjab Haryana regions.

(6) virtual water export e.g. export of crops like Basmati rice.

(7) Intercropping methods not followed

Reforms to strengthen its implementation :-

(1) ~~Access to techniques~~ at subsidised costs
e.g. Micro Irrigation, Drip irrigation.

(2) link it with advanced technology
e.g. Drone based irrigation, IOT for Sensor based irrigation

(3) Awareness among farmers.
e.g. Krishi Samvaad

(4) Involve Private Participation and investment
e.g. e-chaupal by ITC for farmers

(5) Training of local youth to install this System
e.g. PM Kaushal vikas yojana

Candidates must not write on this margin

Other steps to enhance irrigation efficiency :-

(1) Integrated watershed management

e.g. recommended by Mihir Commission

(2) Promote drought resistant and water efficient crops.

e.g. Millets Promotion

(3) Promote integrated farming methods for increasing water use efficiency

(4) Reduction of use of fertilisers to improve recyclability of water.

e.g. Organic farming, zero budget Natural farming.

(5) use of renewable energy to reduce power wastage

e.g. PM-kusum - Solar pumps Promotion

Irrigation efficiency is necessary to achieve for sustainable growth of Indian agriculture

Candidates must not write on this margin

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 is the largest producers of pulses but at the same time, we have one of the highest import bills for oilseeds and pulses

[Rising import of oilseeds and pulses - unremunerative Cultivation] :-

1. Import dependence on pulses and oilseeds
2. Cheap products from other ~~sta~~ countries - lack of demand for Indian pulses and oilseeds
3. Lack of MSP support to the farmers.

[Other challenges to production of oilseeds and Pulses:-

1. Rice, wheat dominated agriculture
2. Lack of research on high yielding variety of seeds
3. ~~Land~~ Land fragmentation - lack of economy of scale required for oilseed production

Candidates must not write on this margin

④ Crops damage due to pest and locust attack (MP - locust attack on mustard)

⑤ Fragmented Supply value Chain

⑥ Lack of processing of Products into high value products

⑦ Lack of rural connectivity

⑧ High post harvest losses (around 20%)

Steps to promote production :-

① Aatmnirbharta in pulses

Promote production through price Support scheme of pulses

↙ ↓ ↘

Tur | Urad | Masoor

② National mission on edible oil - Oil palm

To reduce import dependence on oil seeds

③ Supply value Chain integration

↳ Promote processing of oilseeds through Mega food Parks

Candidates must not write on this margin

(4) ~~Factor~~ Price support to all farmers producing - Gram and Moong as well

(5) Promote Market demanded Oilseeds e.g. sesame oil, Sunflower Oilseed

(6) Branding and packaging to marked on domestic and international marked.

Promoting Consumption -

(1) Inclusion in the Public distribution System

(2) Awareness regarding protein benefit of Pulses.

(3) Marketing of Indian products "Shuddh Mustard Oil"

(4) fortification of pulses to provide More nutrients.

(5) improve Organic certification to match urban demand patterns

Through targeted approach Indian can achieve Self reliance in Production of Oilseeds and Pulses

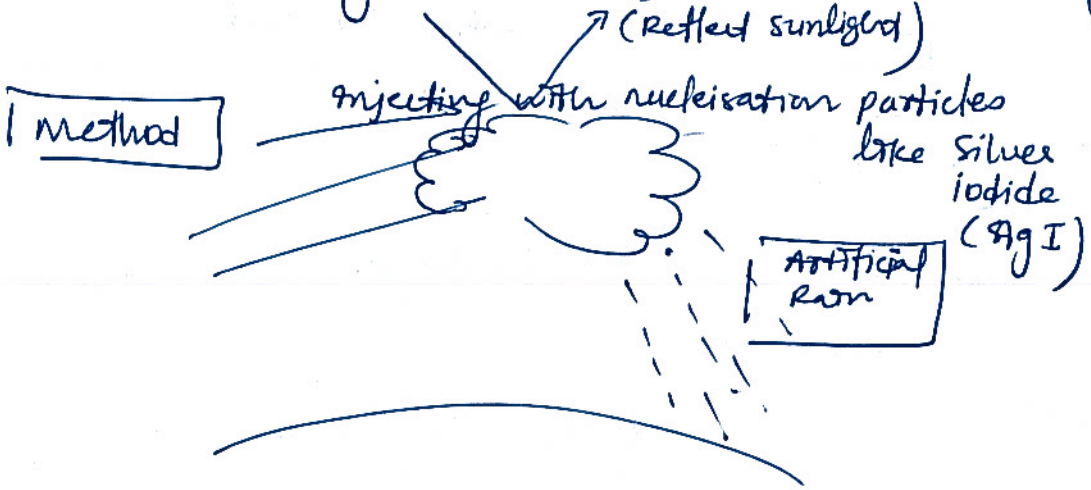
Candidates must not write on this margin

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

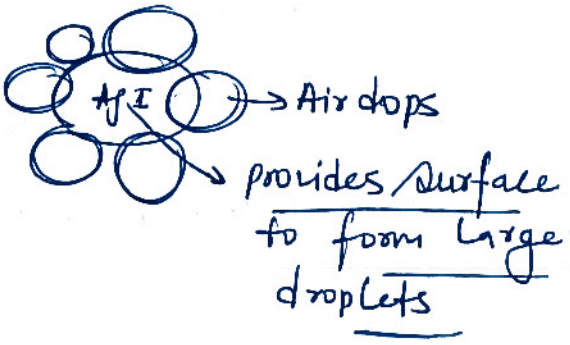
Cloud seeding is the technique for artificial impact having significant implications for alleviating air pollution & global warming



~~Sebi~~

[Scientific Principles] :-

(1) Particles of AgI, $AgNO_3$ helps in nuclei formation in the cloud



(2) once the air droplets reach a critical level (sufficiently heavy)

Candidates must not write on this margin

they may fall down under the force of gravity.

Role in alleviating air pollution

(1) Settling the pollutants.

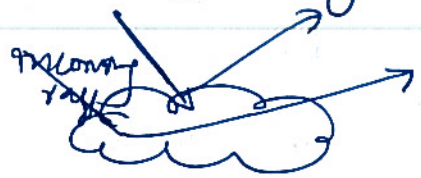
PM2.5 PM10 NO_2 SO_2 CO

Rain helps in Settling down the above particles that remain Suspended in air by forming Solution - Aerosols

(2) Dissolution of air pollutants into the rain.

Role in alleviating global warming

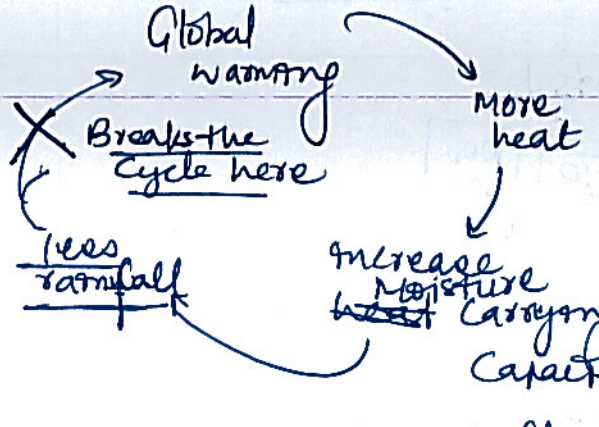
(1) Low lying clouds also help in reflecting the Sunlight by increasing albedo



Less radiation reaching the earth

Candidates must not write on this margin

(2) Helps in reducing the heating caused due to global warming stopping the positive feedback loop..



(3) Helps in controlling erratic rainfall patterns

Potential limitation

→ (1) Monsoon interference

→ (2) may cause flash floods

→ (3) Increase humidity due to high altitude cloud formation



(4) May cause acid rain in highly polluted area

(5) May disturb the natural rainfall Pattern

Despite the limitation cloud seeding experiment conducted by IIT Kanpur offers ray of hope against global warming and air pollution.

Candidates must not write on this margin

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

HJ Bhabha developed India's 3-Stage Nuclear Programme vision to ensure energy security for India in the longer run

3 Stage Nuclear Programme

Stage-1

Pressurised heavy water reactor (low enriched Uranium)

Produced plutonium U^{239}

Stage-2

Fast Breeder reactor

↓

Produces more fuel than it consumes

↓

Production of Pu^{239} + Introduction of Th^{232} to make it ~~fertile~~ fissile

U^{233}

Stage-3

Thorium based reactor by using produced fissile U^{233} from Second Stage.

Candidates must not write on this margin

Advantages of thorium based third stage

(1) Abundance of Thorium supply
e.g. Monazite sands of Kerala

(2) Reduced import dependence

(3) Cleaner fuel than fossil fuel based reactor

(4) Promote private participation and investment
e.g. Bharat small Modular reactor (≤300 Mev)

(5) Realise the panchamrit goal
e.g. 500 GW non fossil fuel energy

Strategic imperative of thorium based third stage

(1) less regulation of IAEA due to indegenious technology

(2) ~~Emergence~~ necessary for deterrance capabilities

Candidates must not write on this margin

(3) India's nuclear capabilities demonstration for peaceful purpose i.e. energy related.

Challenges

(1) Lack of public acceptance for nuclear energy
"not on my backyard's effect.

(2) Disaster scare
- Fukushima

(3) Delays on foreign collaboration on nuclear projects
e.g. France, US projects not materialised.

(4) Extraction of thorium from the sand is a challenge.

Despite challenges, India opened the nuclear energy sector for private participation to realise the vision of "100 GW of nuclear energy" by 2047.

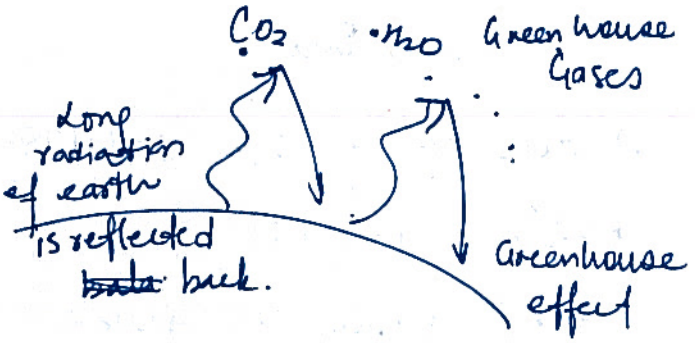
Candidates must not write on this margin

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

2024 emerged as warmest year on relord, which challenged the goal of achieving <1.5°C from pre-industrial levels.

Rapid global warming



Impact of climate change on biodiversity :-

(1) Habitat fragmentation

e.g. floods in kaziranga national park

(2) Extinction of species due to erratic changes in temperature

e.g. 6th Anthropocene led mass extinction

Candidates must not write on this margin

(3) Biodiversity loss → forest fires
due to excessive heat
e.g. California fires.

→ Drought
e.g. vulnerable areas like Ranthambore Park & drying up of Chambal river

(4) Impact on ecosystem specific species
e.g. melting of Antarctica → impact on penguins

(5) Marine biodiversity → Migration Pattern of fishes
→ coral bleaching
→ food supply chain disruption.

Measures for ecological resilience :-

(1) Protection of biodiversity hotspots.

(2) Respecting the ecological carrying system.
e.g. e-pass system introduced in ooty

Candidates must not write on this margin

(3) use of Geoengineering to conserve the biodiverse areas

e.g] Biorock for coral reefs.

Conservation of species diversity -

(1) Survey to understand species loss

e.g] Dolphin survey recently conducted

(2) preserving the ecosystem - In-situ protection

e.g] National park, wildlife protection areas

(3) Ex-situ protection of highly endangered species

e.g] Introduction of cheetas from Namibia

(4) use of traditional knowledge and community participation

e.g] Gir National park

(5) International community participation

e.g] world wildlife fund

Prevention of biodiversity should be the Centre of conservation efforts

Candidates must not write on this margin

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 की 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

Survey shows 48% vulnerability of Indian forests to forest fires

Ecological Challenges → (1) Biodiversity loss
→ (2) Carbon emission
→ (3) Extinction of species

Economical Challenges → (1) Loss of livelihood
→ (2) reconstruction efforts
→ (3) harm to infrastructure - roads, buildings.

Various causes of forest fires -

Natural → (1) Dry leaves
→ (2) method to rejuvenate forest ecosystem
→ (3) Extreme heat conditions + Lack of rainfall

Candidates must not write on this margin

Anthropogenic
- (1) Careless campfires.
- (2) use by local people to clear forest for land
- (3) Introduction of non fire resistant plantations
- (4) Global warming - increase in temperature

Prevent forest fires :-

(1) Controlled burning by forest department to reduce the fodder for fire

(2) Banning campfires in tourist Places

(3) patrolling by forest departments.

Manage forest fires

(1) Early warning Systems

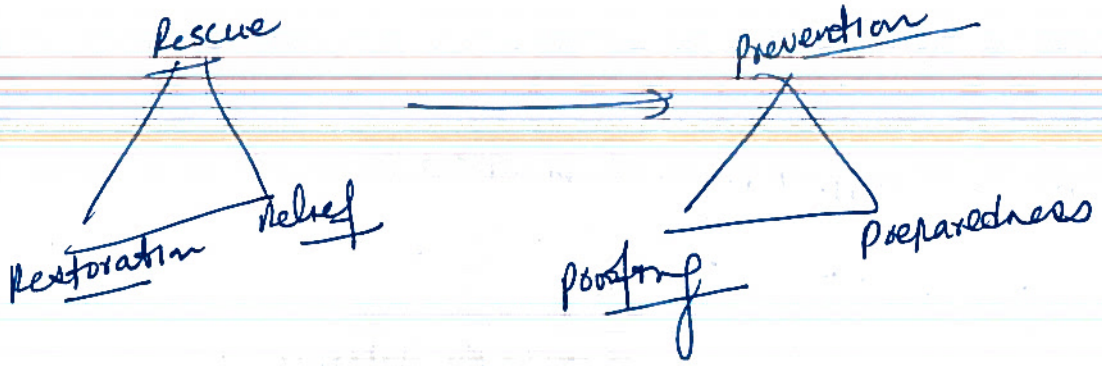
Candidates must not write on this margin

② Evacuation of nearby villagers

③ use of manual methods to extinguish fire

Way forward

need to shift from 3R → 3P approach



Candidates must not write on this margin

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

Organised crimes are defined as network of large scale illegal activities for financial / political purposes.

Organised crimes :-

(1) Arms Trafficking – Gun running

(2) Organs ——

(3) Human —— – forced prostitution

(4) Cyber Crime – ransome demands e.g. Wannacry

(5) Drugs trafficking – Golden triangle & Golden Crescend

Link between organised crime and terrorism :-

(1) Help in funding each other

e.g. Illicit fund from opium trade → JEM, LET terrorist propaganda

Candidates must not write on this margin

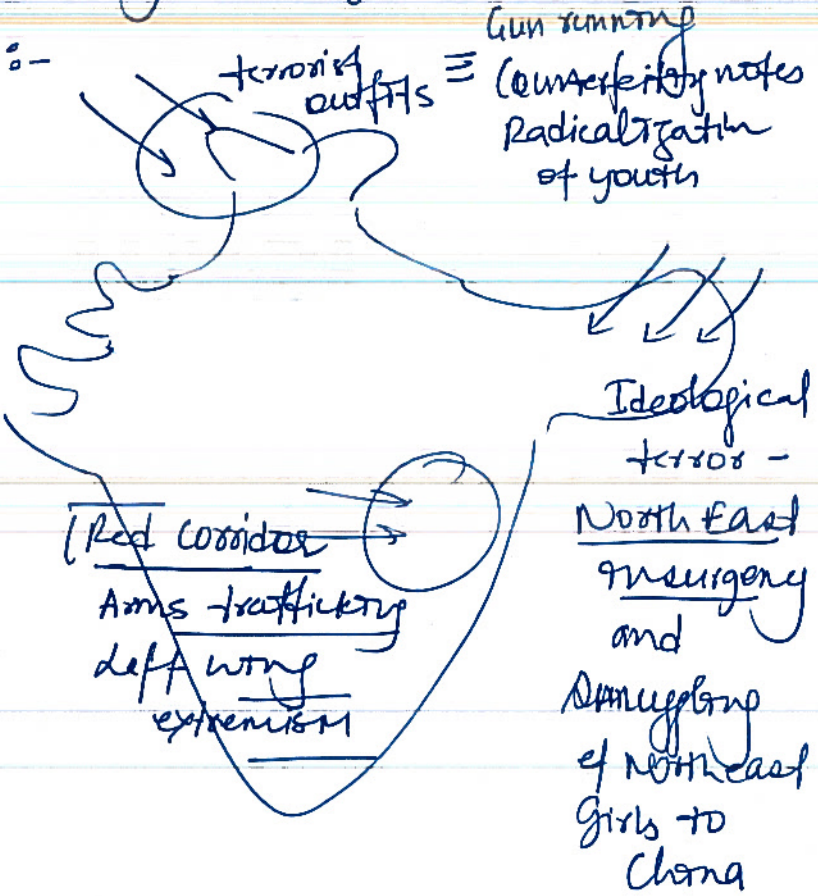
(2) Money laundering through organised crime for terrorist related activities

(3) Network of organised crime used terrorism

e.g. Boko Haram - kidnapping of girls

Internal Security challenges to India :-

(1)



Such linkages threaten the sovereignty and territorial integrity of India

Candidates must not write on this margin

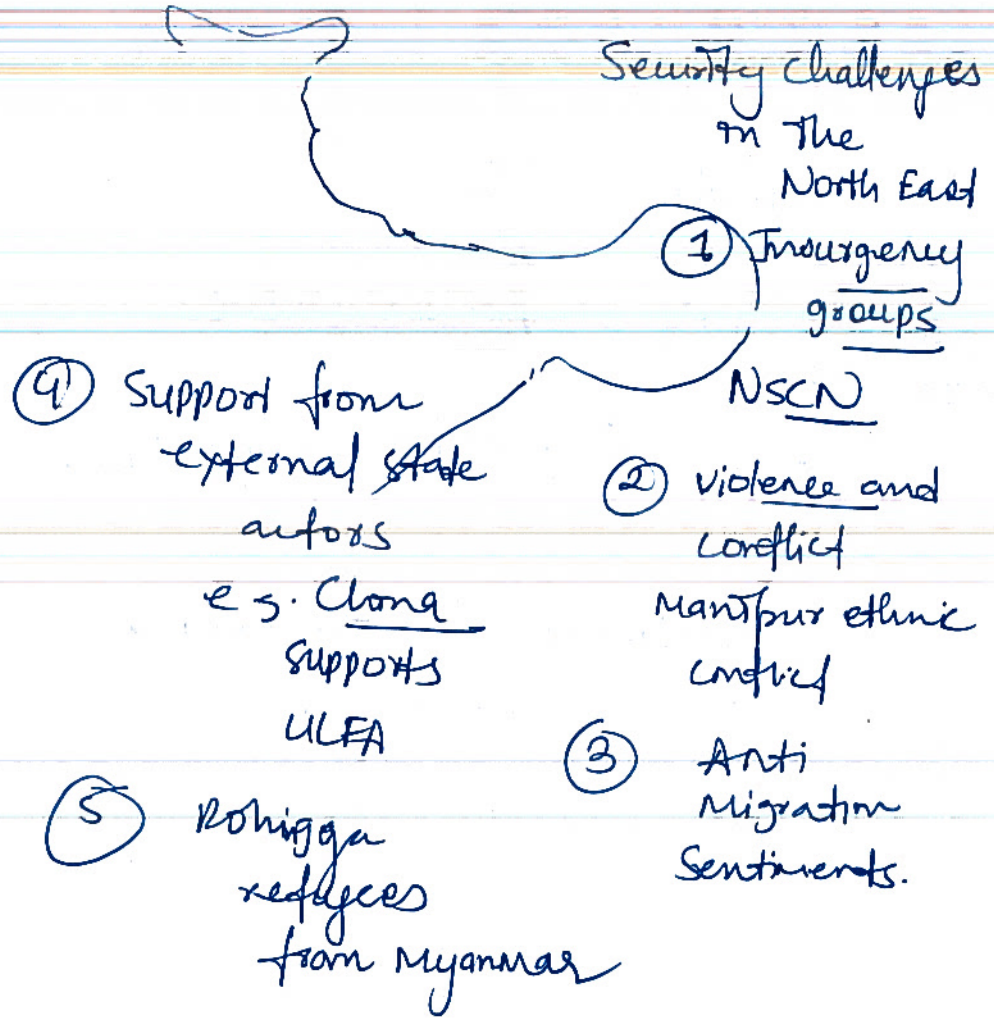
Candidates must not write on this margin

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

PM Modi argues that EAST stands for Empower Act, Strengthen and Transform highlighting the case to fight security challenges



Candidates must not write on this margin

Steps to counter these challenges

(1) Development work

(2) PM Devine - Industrialisation

(3) Cultural connect Hoabibill festival

(4) promoting dialogue and cooperation

e.g. Peace accords

(5) Connectivity

Strategy → NO compromise with security

→ Negotiation & Dialogue

→ legitimate Concern need to be heard.

Candidates must not write on this margin

Space for Rough Work

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 CamScanner (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.

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-	क्या करें-
1. इस प्रश्न-सह-उत्तर पुस्तिका के भीतर कहीं भी अपना नाम या पंजीकरण संख्या न लिखें।	1. कवर पृष्ठ पर दिए गए निर्देशों को ध्यान पूर्वक पढ़ें और उनका सख्ती से पालन करें।
2. अपनी QCA पुस्तिका में कहीं भी प्रश्नों के वास्तविक उत्तरों के अलावा कुछ भी न लिखें।	2. QCA पुस्तिका के कवर पृष्ठ पर दिए गए स्थान पर अपना पंजीकरण नंबर और अन्य विवरण 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।	3. स्पष्ट और पठनीय तरीके से लिखें। खराब/अपठनीय लिखावट में न लिखें।
4. अपनी QCA पुस्तिका को अपनी टेबल पर न छोड़ें, परीक्षा समाप्त होने के पश्चात इसे निरीक्षक को सौंप देना चाहिए।	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 SCANER) 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।