# NEXT IAS

## anubhav-2025

[redacted]

(To be filled by candidate)

**TEST CODE : ANV2503** **Test Date : 03/08/2025**

Name of Candidate: VIKAS SINGH PANWAR Mobile No. .....

Roll No. : ANM 259001136 Start Time 9:00 End Time 12:00 noon

Date of Examination: 3 August 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

150

| 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 recent Budget 2025-26 saw the Government reform the Income Tax structure by changing the tax slabs.

New Tax Slabs

0 - 4 Lakh → 0 tax)
4 - 8 Lakh → 5%
8 - 12 Lakh → 10%
12 - 16 Lakh - 15%
16 - 20 Lakh - 20%
20 - 24 Lakh - 25%
Above 24 Lakh - 30%.

Also, GST rates on various goods were simplified to ensure better compliance.

GST collection in 2024-25 - ₹ 22 Lakh crore

These will help in Improving Tax Buoyancy and Tax Base

Candidates must not write on this margin

↳ (1) Income tax reduction will increase disposable income and investment → rising GDP.

**Tax Buoyancy** - when tax revenue rises due to rise in GDP,

↳ (2) Increased digitized filing and faceless assessment ensure better compliance.

In 2024, income tax returns filed by 8.1 cr people (19% increase from 2023)

↳ (3) Still the **GST tax** structure is complex creating tax avoidance.

In 2023-24, total indirect tax evasion amounted to ₹ 2 Lakh cr.

↳ (4) Tax Base will rise due to increasing formalization.

↳ (5) Tax simplification increases Ease of Doing Business improving FDI.

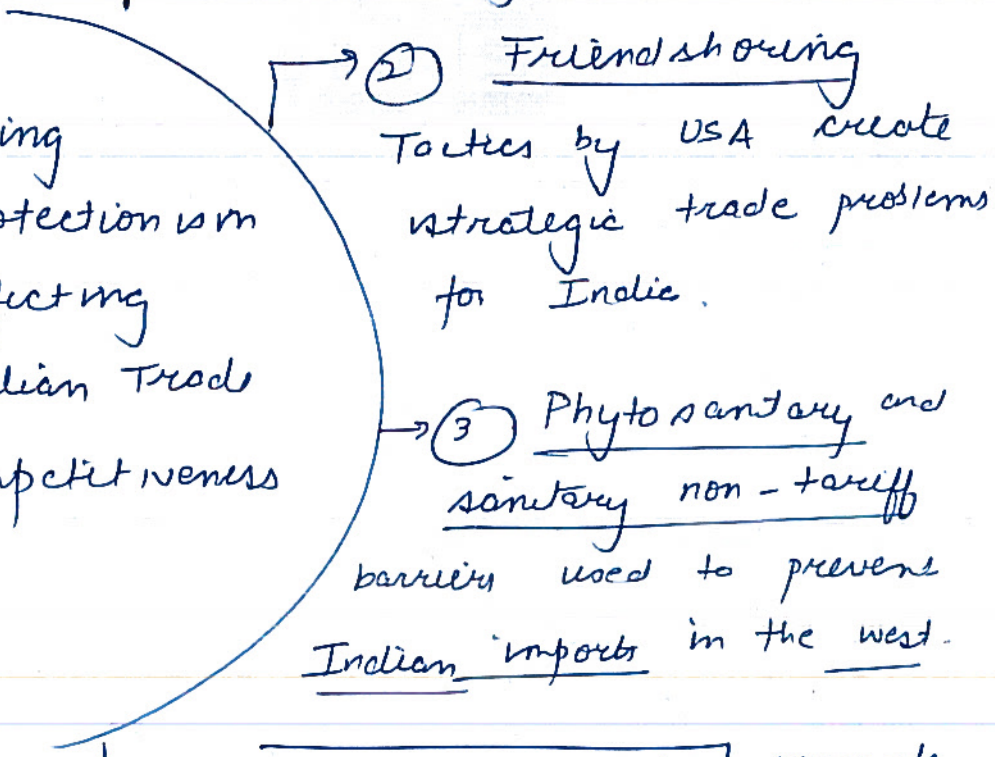
Therefore, recent tax proposals are a step in right direction.

Candidates must not write on this margin

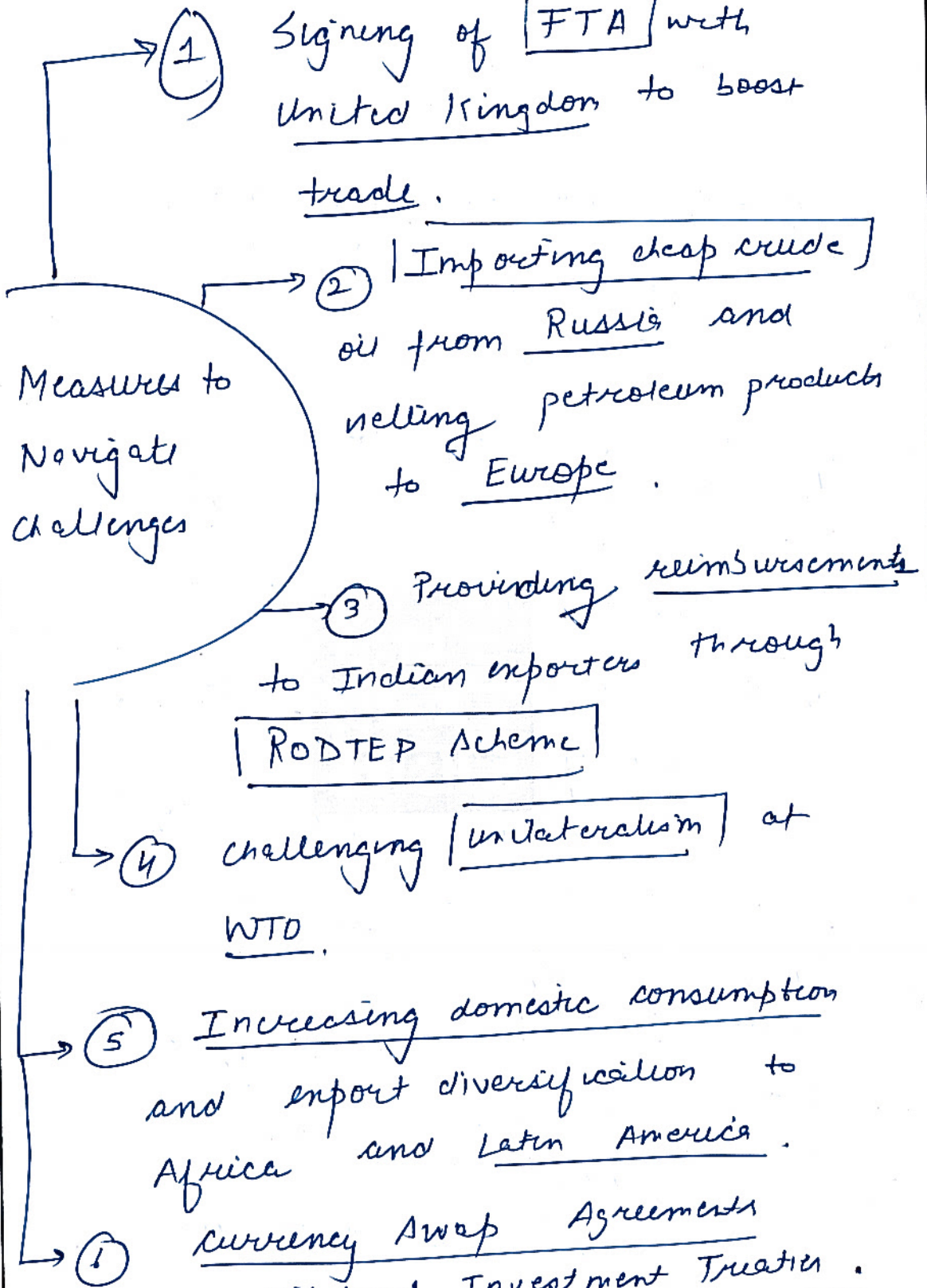
2. आर्थिक राष्ट्रवाद और संरक्षणवाद की बढ़ती प्रवृत्तियाँ भारत की वैश्विक व्यापार प्रतिस्पर्धात्मकता को कैसे प्रभावित करती हैं? इन चुनौतियों से निपटने के लिए भारत ने हाल ही में क्या उपाय किए हैं? (उत्तर 150 शब्दों में दीजिए) 10 अंक

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

Recently, American President imposed 25% tariffs on Indian exports to the United states showing rising economic nationalism and protectionism.



Candidates must not write on this margin




In the de-globalizing world, it is important to build self-reliance through NAKE IN INDIA

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 agriculture along with allied practices like animal husbandry, poultry, agro forestry in a way that one's waste becomes input for the farm.

Role of Integrated Farming in Improving Productivity

1. Increases nutrient enrichment of soil through cowdung, poultry waste.
2. Pest removal and insect management by poultry and chickens
3. Natural Farming practices using cow dung as manure.
4. Income from animal husbandry used to mechanise farm and irrigation.

Candidates must not write on this margin

## Minimizing environmental impact of agriculture

1) Prevents excessive irrigation and over-exploitation of ground reserves.

2) Agriculture waste not burnt but given as feed to the poultry and cows.

3) Less use of chemical fertilizer preventing soil and water contamination.

4) Prevents use of pesticides as poultry used for pest removal.

### Steps taken by government

1) Paramparagat Krishi Vikas Yojana

2) PM-PRANAM to promote integrated farming

3) Rashtriya Gokul Mission

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

In the recent years, the agriculture sector has shown an annual growth rate of around 5% and was the only sector showing growth during Covid-19.

Institutional Reforms to Make Agriculture Rewarding and Sustainable.

1) E-NAM for better market outreach and higher prices for farmers.

2) Kisan Credit Card limit rose to ₹ 5 Lakh.

3) Better storage facilities and cold storage through PM Matsya Sampada.

4) Use of AI, Drones and Digital Technology:
- National Pest Surveillance System
- Digital AI Bhashini.

Sandesh Pathak.

Candidates must not write on this margin

Structural Reforms

1) Better marketing facilities through Farmer Producer Organisations.

2) National Program on Organic Production and Jaivik Kheti Portal.

3) PM-PRANAM to promote natural farming.

4) Increase Minimum Support Price on various crops.

5) Promoting export growth (₹100 billion in last 2 years)

6) PM Kisan Samman Nidhi Yojana for credit access for working capital requirement.

Problems remaining

1) RBI 2023 - 61% farm lending informal

2) Lack of extension services.

3) Lack of mechanisation due to fragmentation.

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

The Air Defence systems work by intercepting incoming missiles and aircrafts attacking a country and launching counter missiles and weapons to neutralize them.

In Recent Operation sindoor, aftermath crisis, India demonstrated the resilience of its Air Defence system

↳ 1) S-400

Built with Russian collaboration, it is a multi layered, multi-missile, multi-tactical defence system that launches hundreds of surface to air missiles to target the enemy objects.

Candidates must not write on this margin

↳ 2) **AAKASH** - Surface to Air Missile

- Involves remote tracking of opponents aircrafts and targeted firing

↳ 3) **Harop Loitering Ammunition**

Drones and light weight air crafts having smooth manoeuvreability.

↳ 4) **Directed Energy Waves**

Laser beams targeted at enemy fighterjets to cause mid-air destruction.

India must upgrade its defence preparedness for strategic leverage in South Asia and to deter hostile opponents,

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

Candidates must not write on this margin

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

The World Bank Report suggests that by 2040, India's population living in cities will be around 600 million.

This will increase vulnerability to disasters due to overurbanization unplanned growth and infrastructure collapses

**Potential Disasters**

↳ 1) **Urban Flooding** due to poor drainage

↳ 2) **Landslides** due to construction of vulnerable slopes (Eg - Shimla landslides)

↳ 3) **Heat Wave** due to Urban Tunnel effect

↳ 4) **Earthquakes** impact may increase due to unsustainable buildings

Candidates must not write on this margin

Strategies to enhance urban resilience

1) Follow the Green Building code in building.

2) Seismic strengthening and retrofitting of old buildings

3) Increasing water retention capacity through pond construction.
AMRIT DHAROHAR, SPONGE CITY

4) Build Back Better strategy

5) Bureau of Indian Standards model with urban planning.

6) NDMA Guidelines and Proper Hazard Zoning through Satellite

7) Evacuation drills and shelters

8) Preventing over the top construction in hills.

Urban planning must be done by taking consultation from all stakeholders.

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

Waste Management in urban areas is a serious problem causing health problems ; vector borne diseases and pollution.

Long Term Technological solutions

→ 1) NAMASTE scheme for mechanisation of waste management.

→ 2) Large Trolleys for Landfill Management than human labour.

→ 3) Segregating solid and liquid waste at home.

→ 4) Separate municipality dustbins for solid and liquid waste.

Candidates must not write on this margin

↳ 5) Use of Robotics - Kerala's AI - Bandicoot Robot.

Institutional solutions

→ 1) Prohibition of Employment in Manual Scavenging Act 2013

↳ 2) Community based cleanliness drives.

↳ 3) Incentivizing solid waste management.

Eg) - Indore cleanest city for 10 years.

↳ 4) Prevent Burning of waste and ensure recycling and infusion into supply chain.

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

With the Mordern Warfare emergence, Social Media has played a serious and critical role in impacting national security.

**Role of Social Media in Contemporary Conflicts**

↳1) Misinformation spreads through social media like wild fire. (Ex - operation sindoor fake video)

↳2) Deepfakes and AI to fuel communalism, misunderstanding between national leaders.

↳3) Youth ideological radicalization through social media apps

Candidates must not write on this margin

↳ 4) **Terrorist Recruitment** through Telegram by ISIS shows negative use of social media

↳ 5) **Media sensationalism** and Yellow press perpetuates tensions and creates 'unpeace'.

## Positives in current conflicts

↳ 1) Help in impression of National Solidarity.
Eg- Pahalgam attack, aftermath

↳ 2) Effective and quick communication of vulnerabilities and help.

↳ 3) Protects freedom of speech amongst conflicts.

↳ 4) Can be used for spreading harmonious messages for peace.

Social Media is a double edged sword, its good use can help, its bad use may destroy.

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

The Border Security Force in India is a paramilitary Central Armed Force that monitors the India - Pakistan border.

**Role of BSF**

1) Monitor and Patrol India - Pak Border.

2) Develop roads and border infrastructure through Border Roads organisation.

3) Prevent illegal infiltration across borders.

Candidates must not write on this margin

## Issues faced by BSF

1) Porous borders (Sir Creek) can create conflict and skirmishes

2) High Attrition rates and Lack of holidays.

3) Lack of technological equipments to better monitor and surveillance.

4) Local population may feel disenchanted and resist BSF orders.

5) Harsh conditions of work.

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

The Multi-Dimensional Poverty Index 2024 by UNDP shows that still 230 million people in India live under multi-dimensional poverty.

---

Approach to escape Middle Income Trap

---

↳ 1) India still in the Low-Middle Income country. To change this requires -

A) Investment in Human Resource Development

↓

Educational upliftment

(1) Academia - Market Linkage (PMKVY)

(2) Research and Development (ANRF)

(3) Skill based (NEP 2020) vocational learning

Candidates must not write on this margin

↳ B) Health Infrastructure will betterment improve productivity

↳ 1) Mobile Medical Units

(Eg)- Chattisgarh Mitanin Program)

↳ 2) e-sanjeevni, Sickle Cell Elimination

↳ c) Capital Expenditure

- Increased to ₹ 11 Lakh crore in Budget 2025-26
- Inviting FDI in road development, ports, insurance and banking.

↳ D) Rural Areas Income Enhancement

- Jal Jeevan Mission
- PM Awas Yojana
- Reduce out of Pocket Expenditure
- Digital Agriculture Mission to enhance farmer income.

---

Approach to ensure inclusive and sustainable growth

---

1) PM JANMAN for tribal area

Candidates must not write on this margin

development.

↳ 2) Women upliftment through scholarships (PM Vidya Laxmi), and skill enhancement (SVAVLAMBINI)

↳ 3) SC and ST empowerment through Adarsh gram Yojana, Eklavya Residential schools, PM Yasasvi yojana.

↳ 4) Ensuring environmental sustainability through transition to ~~Non~~

A) Renewable Energy:

A) ↳ Surya Ghar Muft Bijli [Turning energy consumers to producers i.e PROSUMERS (Prahlad Joshi)

B) Nuclear Energy Mission 2047

5) Environmental Impact Assessment for Great Nicobar Project, Inter Linking River Projects.

India's Leap to VIKSIT BHARAT in 2047 Shoulb be based on INCLUSIVITY, SUSTAINABILITY AND 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

As per the Economic survey 2024-25, MSMEs contribute

30% to Gross value Added

42% to manufacturing output

45% to export value

6 cr MSME registered on UDYAM Portal providing employment to 24 crore individuals.

MSME is central to MAKE IN INDIA

**Challenges faced by MSME**

1) **Scaling Up**

A) Problem of **Missing Middle**

Disproportionately small number of medium enterprises, 90% micro units disable scaling.

Candidates must not write on this margin

B) Lack of Institutional Financing and Formal credit mechanisms

C) Lack of processing facilities, grading, testing and packaging.

D) Scarcity of Digital Integration due to Lack of digital literacy.

E) Non-payment of dues

2) Problems in integrating in Formal Supply chains

A) Lack of export potential due to compromised quality.

B) Informal sector dominance impedes integration in formal supply chains.

C) Lack of Skill Development for formalization.

D) Poor e-commerce integration with MSME.

Candidates must not write on this margin

STRUCTURAL REFORMS TO MAKE MSME RESILIENT AND COMPETITIVE

1) **Credit Development** through MUDRA Loans [Shishu (50,000), Kishor (5 lakh) Tarun and Tarun+ (20 Lakh)]

2) **Modified Interest Subvention Scheme** - collateral free loans at interest subvention of 3%.

3) **SFURTI Scheme** for traditional artisanal industries.

4) **TREDS Portal** - uploading bills to take credit

5) **Build Infrastructure** - PM Gati Shakti, National Logistics Policy and Bharat Mala.

6) **PM Vishwakarma** to support craftsmen and artisans through professional support

7) **MSME SAMADHAN Portal** for skill upgradation.

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 उपेप्टतम 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

A study published in the Economic Survey 2024-25 on the impact of Drip Irrigation on Tomato, Brinjal, Banana and Mango highlighted -

55% reduction in water consumption

41% increase in crop yield.

114% increase in profit margin

However, despite the Pradhan Mantri Krishi Sinchayee Yojana, area under Micro-Irrigation is just 8%. (ECO-SURVEY)

SUBOPTIMAL IRRIGATION EFFICIENCY IN INDIA

↳ 1) Flood Irrigation causes water logging and salinization.

Candidates must not write on this margin

↳ 2) High irrigation subsidy causes water wastage. and reduced efficiency.

↳ 3) Lack of fertigation techniques

↳ 4) Lack of ₹ credit for micro-irrigation projects - sprinklers, drip pipes

## PROS OF PER DROP MORE CROP

↳ 1) Uniform application of water to plant increases growth.

↳ 2) Reduces water consumption by (30-40)% than overhead irrigation.

↳ 3) Increases photosynthetic efficiency

↳ 4) Enables fertigation → fertilizer + irrigation

↳ 5) Prevents Nitrogen Runoff ie/ Pollution

Candidates must not write on this margin

## Reforms needed to strengthen implementation

↳ 1) Rationalize Irrigation subsidy to incentivize micro irrigation.

↳ 2) Micro-Irrigation Fund to buy sprinklers and equipments.

↳ 3) Increase limit of Kisan credit card.

↳ 4) Promote awareness about cultivation compatible with agro-climatic conditions.

↳ 5) Use of digital technology.

AI-BHUVAN SOIL DATA by ISRO for soil moisture and irrigation.

Micro-Irrigation can increase water use efficiency.

Extension services must be provided to strengthen implementation.

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

As per the Economic Survey 2024-25

- India imports more than 90% of palm oil from rest of the world.
- India is the largest producer, yet it imports pulses because of low productivity and yield.

---

STEPS NEEDED TO PROMOTE PRODUCTION OF OILSEEDS

---

↳ 1) National Mission on Oil seeds - Edible Oil (NMEO)

> To increase the productivity through use of HYV seeds.

> Providing irrigation at subsidized rates.

Candidates must not write on this margin

↳ 2) Better institutional financing through Kisan credit card (limit increased to ₹ 5 Lakh)

↳ 3) Better MSP realization on sunflower, Niger seeds, safflower, and coconut.

---

Steps to promote consumption of oilseeds

---

↳ 1) Better marketing facility through Agriculture Marketing Fund (2021).

↳ 2) Proper storage facility for oil seeds, grading and packages.

↳ 3) Krishi Vigyan Kendras to collaborate with Farmer Producer Organisations for better advertisements and market reach

---

Steps to increase production of Pulses

Candidates must not write on this margin

↳ 1) Rashtriya Krishi Vikas Yojana to provide better irrigation facilities and seeds

↳ 2) Development of cold storage chains for preservation.

↳ 3) Increased MSP on tur, urhar, urad, moong to incentivize production.

↳ 4) use of AI in increasing productivity

Eg) - Digital AI Bhashini and E-SAHV

## Steps to Promote ~~Production~~ Consumption of Pulses

↳ 1) National Pulses Mission for protein enrichment.

↳ 2) Integrating pulses in PM POSHAN

↳ 3) Pulses provisioning in Mid Day Meal and Integrated child Development scheme.

↳ 4) Better packaging (Bharat Dal)

To increase health and well being (SDG-3) and nutrition, oilseeds and pulses must be promoted.

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

The concept of cloud seeding involves injecting a large number of hygroscopic nuclei in the atmosphere to form clouds or increase their size.

**Scientific Principles**

↳ (1) **Condensation.**

Compounds like Silver Iodide or Potassium Iodide attract water vapours & which get condensed on these compounds.

↳ (2) When these water vapours become heavy, the fall on the ground as **precipitation** due to influence of gravity.

Candidates must not write on this margin

Role in Alleviating Air Pollution

1) Precipitation caused by cloud seeding purifies the air.

2) Reduces concentration of $SO_2$, $NO_2$ and $CO_2$ in the atmosphere

Role in Alleviating Global Warming

1) Reduces concentration of green house gas

2) Precipitation will increase vegetation, increasing evapotranspiration, rejuvenating the hydrological cycle.

3) Brings coolness during heat waves or abnormal temperatures.

PTO

Candidates must not write on this margin

## Potential Limitations

↳ 1) May cause cloudbursts causing floods, and excessive rainfall.

↳ 2) Controlling the process of cloud formation is difficult, which is affected by many factors.

↳ 3) can cause lightning strikes.

↳ 4) Proper technological resources not available.

## Steps to ensure cloud seeding properly

↳ 1) Perform cloud seeding in an uninhabited terrain to check feasibility.

↳ 2) Using non-harmful chemical as hygroscopic nuclii

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

India's 3 stage Nuclear Programme was envisioned by Homi J. Bhabha with the objective to use the Thorium in the monozite sands in India's coast.

---

Evolution of 3-Stage Nuclear Power Programme

---

1) **Uranium Use** - 1st Stage **Reactors** - Pressurized Heavy Water Reactor, Boiling Water Reactor and Light Water Reactor.

2) **Plutonium use** in 2nd Stage The Fast Breeder Reactor in ~~Kat~~ Kalpakkam, T.N called

Candidates must not write on this margin

KABINI.

↳ It uses Plutonium and generates more energy than consumed.

3) Thorium - 3rd stage

↳ Plutonium in the Th 2nd stage will be used in the third stage along with Thorium from the monazite sands to achieve energy self-reliance.

↳ Reactors -

- Advanced critical Reactors.
- Molten Salt Reactor

---

Advantages and Strategic Imperatives of Using Thorium - 3rd Stage.

---

↳ 1) India has one of the world's highest reserves of thorium (more than 5 million tonnes).

Candidates must not write on this margin

↳ 2) As per International Energy Agency, India's energy demand will double by 2040.

↳ 3) India recently achieved 50% non-fossil ~~nuclear~~ installed power capacity 5 years ahead of target.

↳ 4) Current share of nuclear energy is 8GW.

Nuclear Energy Mission announced in Budget 2025-26 seeks to increase it to 100 GW by 2047.

↳ 5) Important for reducing import dependence (85% crude oil imported)

↳ 6) Achieve decarbonisation of industrial sector.

↳ 7) Achieve Net Zero by 2070

Thus, to achieve the goals of Paris Agreement outlined in Glasgow, thorium based 3rd stage has to be realized.

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

As per UN-FCCC, the year 2024 was the warmest year and in 2025, the temperature limit crossed the 1.5°C limit above pre-industrial era.

Impacts of Climate change on Biodiversity

→ 1) causing mass migration of species from natural habitat. (Eg) - Siberian cranes

→ 2) Coral Bleaching in Marine Areas due to rising temperature

→ 3) Marine fishes and organisms dying because of low Biotic Oxygen content.

Candidates must not write on this margin

↳ 4) Climate change causing erratic rainfall → agricultural and ecological drought causing extinction and endangerment.

↳ 5) Landslides, cloudbursts causing disruption and destruction of habitat. (Eg - Kerala Wayanad landslides).

↳ 6) Pollution in water and air and causing changes in life cycles and circadian rythms of organisms.

---

Measures needed to ensure ecological resilience and conservation of species diversity

---

↳ (1) UNCBD : UN convention of Biological Diversity for International collaboration for protection

Candidates must not write on this margin

↳ 2) Natural Farming and reducing use of chemical fertilizers.

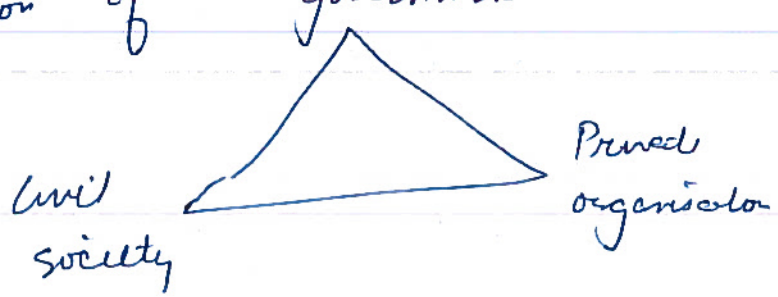
↳ 3) Preventing the illegal trade of ivory, & panda and other vulnerable species.

↳ 4) World Wide Fund - collaborating with international NGOs for species protection.

↳ 5) Expanding the National Parks and Wildlife Sanctuaries.

↳ 6) Expanding Botanical Gardens and Zoos.

~~↳ 7)~~ Thus, species diversity can be preserved through combination of



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

Recently, forest fires in Nainital, (Uttarakhand) revealed the increasing frequency and intensity of wild fires.

Causes of Forest Fires

1) Natural Causes
   1) Lightning strikes can lead to fires.
   2) Excessive drought conditions and temperature

2) Man-Made Causes
   A) Fires are ignited to rejuvenate soil health. They overspread and cause massive fires.
   B) Tourist mischiefs like cigarettes dumping, and

Candidates must not write on this margin

bon-fires sometimes get spilled over to larger areas.

c) Burning of wood and fodder in local areas.

D) Global warming due to green house effect increases the potential of catching fire.

E) Wood houses construction in amidst forest. Short circuits can cause house fire spreading to forest.

## Measures to prevent and Manage Forest Fires

↳ 1) Use of Bambi - Bucket

↳ Helicopters carrying large water holding buckets

↳ 2) Preventing Neglect through smoking and bon-fires.

Candidates must not write on this margin

↳ 3) Awareness among villagers to not burn fields for soil rejuvination.

↳ 4) Transition to Renewable Energy through PM-KUSUM Surya Ghar Muft Bijli Yojana.

As responsible citizen, it is imperative that forest fires are prevented to prevent loss of life, biodiversity and livelihood.

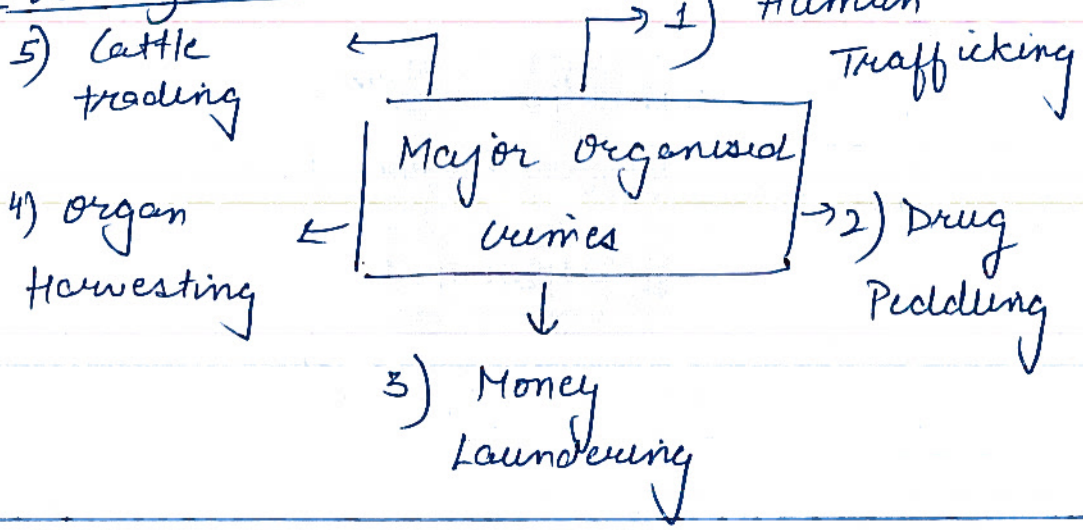
Candidates must not write on this margin

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 crimes done by ~~an~~ a systematic process and networking involving various actors and mechanisms to realize the objective.




Linkage between Organised and Terrorism –

↳ (1) Drug Trafficking money used to fund terrorism

Ex- Taliban used opium trade for weapon acquisition.

Candidates must not write on this margin

↳ 2) Money Laundering through NGOs for better anonymity and terror funding.

↳ 3) Hovala Networks used for funding terrorist organisations (ISIS using Hovala for attacks in Syria).

↳ 4) Human Trafficking proceeds used for striking terror and buying ammunition.

## Internal security Threat Posed to India

↳ (1) Jammu and Kashmir Militancy fuelled through youth radicalisation and brain washing.

↳ (2) Funding Naxalite groups by outside actors in neighbouring states.

Candidates must not write on this margin

3) Cyber Terrorism and Malware attacks on Indian critical infrastructure.

4) Terrorist events like 26/11 ~~are~~ helped by hawala funding.

## Steps to Counter

1. Indian Cyber Crime coordination Portal.
2. Immoral Trafficking Prohibition Act 1956
3. Prevention of Money Laundering Act
4. Unlawful Activities Prevention Act, 1967
5. Winning Hearts and Minds in J&K and Left Wing areas.

Organised crimes can be tackled through developmental & strategic countermeasures

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

India's North-East region is a vulnerable area due to its geographical isolation from the rest of India and the borders with unstable neighbours.

VARIOUS SECURITY CHALLENGES IN THE NORTH EAST

1) **Militant Insurgency**

→ Groups like National Socialist Council of Nagaland demanding separate nation of greater Nagalim.

→ Kuki's demand of Zalengam.

→ Insurgency for separate identity recognition.

2) **Organised crimes**

- Human Trafficking, drug peddling,

Candidates must not write on this margin

cattle trading, fake Indian currency notes at the borders causing security problems.

3) ETHNIC conflagration in the N-E seen in the Manipur crisis between Kukis and Meities, Nagas - non nagas, Bodos and Non-bodos makes the region vulnerable.

4) Chinese inroads in Arunachal and aggressive posturing

5) Illegal migration from Myanmar and Bangladesh causing demographic anxiety.

6) Unstable borders and lack of proper demarcation fuells radicalism from across the border.

## STEPS TO COUNTER THE CHALLENGES

1) Security Front

- BOLD QIT - border management system at Bangladesh borders.

Candidates must not write on this margin

→ Scrapping (FMR / Free Movement Regime) in Myanmar.

→ Deployment of Assam Rifles at Myanmar Border.

→ Better military outposts, infrastructure development, observation towers at the borders.

**Developmental Front**

↳ 1) Min. of North-East. Development - PM-Devine Scheme.

↳ 2) North-East Venture Capital Fund for infrastructural development.

↳ 3) North East Bankers conclave and development of 100 Indian Post Payment Banks

↳ 4) Ek Bharat shresth Bharat campaign (Hornbill festival)

↳ 5) Eklavya Model Schools.

Thus, the North-East region can be integrated for inclusive development and national unity.

*Space for Rough Work*

*Space for Rough Work*

## 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.

## 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 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।