NEXT IAS

anubhav-2025

(To be filled by candidate)

TEST CODE : ANV2503

Name of Candidate: Esha Jain Mobile No. [redacted]

Roll No. : ABUMT25E101 Start Time 9:00 End Time 12:00

Date of Examination: 3/7/25 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: .....

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FOR OFFICE USE ONLY

Student Concerns / Query	Evaluator's Feedback / Response
1	1 .....
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2	2 .....
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3	3 .....
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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

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 चेहतर 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

Tax buoyancy refers to change in tax rate with changes and improvement in GDP. (2.17.)

⇒ Recent proposals - impact on tax buoyancy & base

1) uniform slab rates upto 12 lac - ensuring less tax evasion and improving base number

2) introduction and reformation of GST increased tax base to 4 lac cr - by reducing & eliminating extra taxes

3) abolition of angel tax, has led to severe flipping increasing Startups in India

4) changes and updation in DTAA and Advance Pricing Agreement

Candidates must not write on this margin

has led to less tax evasion and profit-sharing.

5) enabling transfer pricing has prevented undue tax ~~red~~ loss.

6) streamlining slab rates under direct taxes and GST have led to improved tax collection boosting creditor confidence.

⇒ Yet, challenges remain

1) GDP ~~$~~ rate change is fluctuating due to world and global tax rate changes

2) tax evasion and profit-sharing continues by tax haven countries

3) cash economy unable to get calculated

4) informalisation (Tu T.) is not calculated effectively

Ways ~~to~~ ahead → improve tax base by formalising

↳ tax buoyancy enhance by GDP↑

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 USA 'Make America Great Again' & China's Dual circulation Policy has had led to protectionism and friend shoring policies.

⇒ Impact on India's trade competitiveness

I Positive impacts

1) diversification of trade exports - USA - 16% export share will diversify to developing countries.
2) increase FDI and MNC's coming to India (Eg): Apple shifting base from China to India under China+1
3) improve domestic market by enhancing growth potential (Eg: Make in India
4) strategic trade positioning - (Eg): FTA with UAE

Candidates must not write on this margin

II Negative impacts

1) global trade volatility (Eg): EU CBAM impact on steel

2) import dependency on China (Eg): 60% API from China.

3) exchange rate changes with global changes.

4) diversification to south east Asian nations of India.

⇒ Measures taken by India

1) rationalising and opening FDI sectors under auto route (Eg) Insurance - 100%.

2) infrastructure development (Eg): Gati shakti

3) inking bilateral agreement (Eg): BTIA with EU, CETA with UK

4) digitalisation & internationalisation of ₹ (Eg): Currency swap agreement, UPI switch

5) reduced logistic cost (Eg): 7.8% of GDP

Hence, India needs to prepare to navigate geopolitical-economic challenges effectively

Candidates must not write on this margin

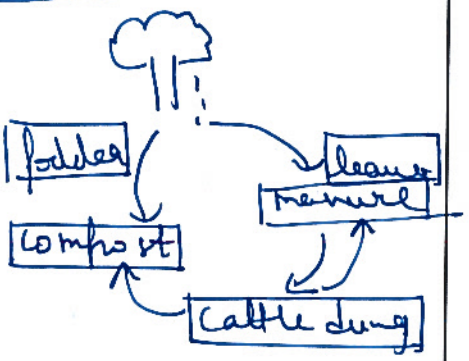
3. कृषि उत्पादकता में सुधार लाने और कृषि के पर्यावरणीय प्रभाव को न्यूनतम करने में एकीकृत कृषि प्रणाली (IFM) की भूमिका का परीक्षण कीजिए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

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 works on principle of "There is no waste, and waste is just an unused resource"

⇒ Improving Agriculture Productivity

1) focusing upon in house resources reduces external cost (Eg): manure from cattle



2) boost to natural farming and organic farming (Eg): Beejamitra & Jeevamitra

3) efficient utilisation of cattle, agro forestry, silvopastoral activities boost productivity and income

4) fodder for cattle from crops produced (Eg): Maize

Candidates must not write on this margin

5) improves irrigation intensity by use of composting (Eg: PM Krishi

⇒ Improving Environmental impact

6) reduces issue of stubble burning by using same for mulching

7) better carbon sequestration by trees and roots along with soil.

8) offsetting methane emissions by improving soil sequestration.

9) improve technological methods for reducing pollution via use of AI etc for climate resilient agriculture.

Integrated farming system can be further enhanced by effective implementation of 'Krishnotti Yojna'

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 yield is improving at 4% with GDP contribution at 18% enhancing goal of doubling farmer's income (NITI)

⇒ Transformation of Agriculture → I Better productivity

① increased area under cultivation (51%)

② reduced post harvest loss (Dalwai committee)

③ nutritional (ans Eg) Millets production

↓

II Improved Farm Income

① allied activities (30% GPP)

② reduced disguised employment - food processing

⇒ Institutional reforms by Government

1) boost to credit availability under NABARD, Regional rural banks, PLI (18% of ANBC) by scheduled banks.

Candidates must not write on this margin

2) Export reforms by NPOP and APEDA for organic products increased due to grading and branding.

3) Food procurement by NAFED and FCI has been streamlined.

4) improved R&D by ICAR and Krishi Vigyan Kendras.

II Structural reforms by Government

5) enhanced 'custom hiring centres' for improving mechanisation (48%) (USA – 93%)

6) focus on micro irrigation to improve irrigation intensity (42%) (Eg: PM Krishi Sinchayi)

7) decentralised storage facilities – (Eg: negotiable warehouse receipt, private warehouse centres)

8) adoption of AI and tech (Eg: Agristack)

9) land consolidation initiatives (Eg: Model land leasing law)

Hence, Agri productivity has seen improvement to focus on evergreen revolution (Swaminathan)

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

Air defence system ~~are~~ work on principle of precision targetting to reduce collateral damage and improve striking capability.

Recent, DRDO, IDEX, BEL-HAL initiatives for Air defence led to creation of indegenous defence system (Eg) Bhargavastra.

⇒ Operating of Air defence :-

location of missile in endo-exo atmosphere → drone targetting system utilised

↓

detonates the missiles in mid air ← use of radars to locate efficiently

Candidates must not write on this margin

⇒ Various air defence India possesses

I Ballistic defence system

1) Prithvi – Air to air mechanism.

2) Akash – Air to surface.

3) Trishul – air to surface

4) Naag – anti tank guide missile

5) Agni P – long range air to air, light weight defence.

II Cruise defence System

1) Brahmos – hypersonic speed targetting from air, water, land.

III Exo atmospheric – Ballistic missile system at above 2000 km.

India ~~has~~ is improving its air defence by investing in R&D and bringing private players in realm.

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

RNA editing is a transcriptome editing system which utilises ADAR enzymes found inside body to unwind, cleave and rewind genetic material.

⇒ Potential of RNA editing in treating genetic disorders

1) it enables in testing of rare diseases effectively.

2) vaccine development for genetic disorders like Haemophilia A can be done effectively

3) predictive analysis of genetic disorders enable in precision medicines

Candidates must not write on this margin

4) utilized to carrying out stem cell researches for treating sickle cell anemia.

Yet, RNA editing does not create permanent changes in genome which increase risk of revival of disease.

⇒ Advantages over DNA editing

RNA editing	DNA editing
(1) less risky procedure	(1) more risky
(2) create temporary changes which are reversible	(2) create permanent changes that are irreversible and harmful
(3) utilised inside ADAR enzymes - less chances of rejection by body	(4) utilised outside bacterial enzyme - ZFN, Crisper - more chances of body rejection.

Hence, RNA editing can become a safer alternative for disease treating, requires more R&D investment

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

According to NITI, 65% urban areas have developed without planning which has led to increasing susceptability of disasters.

⇒ Urban areas - more vulnerable to disaster

I [Due to unplanned growth]

1) increase vulnerability of slum areas (17%) due to lack of access to proper drainages (Eg): Dhaka flooding.

2) increasing population density hampers carrying capacity of cities (Vikram Sarabhai panel).

3) improper coordination between Municipal corporations and state agencies (Eg): Rajendra Nagar flood

II [Due to infrastructure collapse]

Candidates must not write on this margin

4) weak material used for construction violates building codes and lives of people who come under (Eg) Morbi bridge

5) disaster resilient infrastructure mining (Eg): Survey – Delhi building can survive a 6.5 richter earthquake

⇒ Strategies to enhance Urban resilience

I Proactive measures → ① retro fitting of building with BIS norms.

② use of water corrosive substance in building (Eg) safeguard from floods

③ Drainage construction streamlined

④ early warning and hazard mapping

II Prospective measures → ⑤ coordination among SDMA and DDMA

⑥ creation of Urban disaster Management Authority

⑦ conducting carrying assessment (Vikram Gauba Pannel)

Investment in mitigation will save ₹3-5 short on recovery & rehabilitation

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

India produces 62 mn of solid waste yearly out of which only 12 mn waste is treated.

Success of Swach Bharat Mission
→ (1) focused on solid waste treating
→ (2) industrial zero waste discharge promote
↳ (3) awareness among citizen for segregation (solid waste management rules, 2016)

Yet, sub optimal level

(1) lack of monitoring ← of measures
(2) increasing dumping ← and land fills (41%)

⇒ long-term technological solution to treat solid waste management

(1) use of membrane reactors by industries to treat solid

Candidates must not write on this margin

waste before dumping

2) technology like 'AI Sanjeevni' enable segregation of solid waste

3) filtration process and use of nanosensors pads to segregate and treat waste

4) adoption of biomethanation technique under Gobardhan; incineration, pyrolysis and plasma arc gasification - for converting waste to fuel.

⇒ Institutional methods

5) Municipal corporation to install digital flow meters in industries

6) 3-step guideline for segregating biodegradable, non biodegradable, hazardous waste.

7) spreading awareness, fine cult, capping waste disposal

Here, a comprehensive procedure with enhance solid waste disposal

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

Social Media effects has been led to transformation of traditional warfare system and introducing grey zone warfare.

⇒ Role of Social Media - in Conflicts

I [Shaping narrative] –

1) use by proxy and frontier groups to spread propaganda and misinformation (Eg) Urban naxalism.

2) use for digital radicalisation (Eg): Twitter ISIS

II [Influencing Perception]

3) OWS are terrorised and brought into terror groups

Candidates must not write on this margin

by playing with their radicalisation (Eg) SIMI target.

4) creating citizenry unrest impacting defense outreach

(Eg): Syrian conflicts - ousting of PM.

III | Impacting national security |

5) creating global network of terror groups

6) anonymity of finance terror through deep fakes

7) organised crime network (Eg): Dawood company.

Measures taken by India

→ (1) Institutional - Cyberdome, Kerala

→ (2) Cyber Suraksha Kendra & Cyber warriors

→ (3) 24/7 social media monitoring cells

(4) strengthening IT rules for deactivating social media

A comprehensive taxonomy of Tallinn model will enable India to strengthen social media outreach

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 is a paramilitary force under CAPF which is deployed at India – Pakistan border

⇒ Role and Mandate of BSF



1) BSF force is responsible for supporting military operations against Pakistan and Bangladesh border.

2) It is involved in conducting Counter terror operation alongside NSG

3) enable in better intelligence gathering effort for RAW at border

Candidates must not write on this margin

4) ensures implementation of border area development project - social and physical infrastructure (eg: Roads, buildings)

5) ensures effective monitoring of borders and smart fencing, integrated check posts & border outpost.

⇒ Issues faced by BSF

1) infiltration and exfiltration attempts through underground passage

2) climatic changes across POK makes it harsh and difficult to patrol

3) use of drones and hybrid warfare not effectively equipped.

4) arms smuggling and drugs trafficking difficult to tackle due to anonymity

5) issue of coordination with Army, state police..

Hence, BSF should be strengthened with proper training and technology

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's growth at current 6.4%, (IMF) needs to be improved to 8.3% (IMF) for ensuring the achieve Viksit Bharat, 2047 target.

⇒ Challenges in growth story

I Persistent inequality

1) urban-rural gap is increasing -
Per capita income - $4200 (Rural)
$7000 (Urban)

2) lack of inclusive growth opportunities
(Eg): digital divide - 35%.

3) gender women stressed unemployed and living standard (Eg): gender pay gap - 34%.

4) credit access to MSME - only 14% (NABARD)

Candidates must not write on this margin

II Middle income trap

5) Jobless growth due to capital intensive but labour utilisation hampered (Eg) 27% female not in education, employment, training (NEET)

6) reduced investment potential due to crowding out impact (Eg) Government borrowing fiscal deficit 4.8%

7) inflation constrtency reduced demand generation in economy

8) service led growth hampering — (27% GDP) premature deindustrialisation

⇒ Approaches India should follow

I Inclusive growth

1) focus on education and skill improvement (48% - India skill report)
(Eg): SAKALP, PM Kaushal, PM Yuva

2) health sector and social security
(Eg): Jan Arogya, New Pension scheme.

Candidates must not write on this margin

3) creating labour intensive employment
Eg: textile sector, toy making

4) infrastructure growth for attracting investment (Eg): Gati Shakti, Make in India, PLI

II | Sustainable economic growth |

5) formal or circular economy
(Eg): reviving textiles sector — ZARA

6) integrated and improvement mechanisation in agriculture

7) private involvement and PPP for creating job economy

8) reduce crowding out and fiscal deficit by fiscal consolidation FRBM act

9) invest in MSME and exports — zero effect zero defect

Hence, India should be guided by spirit of inclusivity to achieve and a vibrant bharat

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

MSME are institutional sectors with investment layout between 2.5 lac ~~or~~ – 125 lac ~~or~~ & annual turnover of 10 lac – 500 lac.

⇒ MSME – central to succ of Make in India
- → ① improve employment potential (11 mn)
- → ② focus on labour intensive growth sector (Eg. textile, toys.
- → ③ enhance ancillary industry and economic of scale
- → ④ 45% exports

⇒ MSME – challenges faced in supply chain

1) lack of credit access – only 14% (2024)
2) Skill efficiency is poor (48% are employable)

Candidates must not write on this margin

3) lack of integration with global markets due to branding not available

4) issue of quality products hamper scaling up

5) informalised nature of work does not attract investment (95% informal sector)

6) issue of import dependency reduces viability

7) market volatality hamper growth.

⇒ Structural reforms to make MSME competent & resilient

1) formalise credit availability
(Eg): SRI (self-reliant India) funds

2) enhancing skill level (Eg):
PM Kaushal, Sankalp

3) Integrating with supply chain globally (Eg): zero effect zero defect

Candidates must not write on this margin

4) incentivising MSME growth
(Eg): RAMP scheme
ASPIRE

5) focussing on need based income availability (Eg): ECLGS-credit line scheme & CGTMSM for interest subvention

6) integrating MSME with private market to enhance reach and connectivity

7) investing in R&D sector to boost export market

8) increase branding and marketing (Eg) GeM portal, ONDC

9) Treds scheme for bill of receivable invoices

Hence, MSME should serve as backbone for growth manufacturing

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

PM Krishi Sinchayi Yojna was inaugrated in 2015 to improve irrigation intensity of water (52%)

⇒ PM KSY - achieve per drop more crop

→ (1) micro irrigation - reduce water usage by 30%.

→ (2) ground water recharge by acquifer

(3) enhance water harvesting tech through sprinkler irrigation

(4) encourage fertigation

⇒ Irrigation yet remain sub optimal

1) increase exploitation of ground water (89% used in agriculture).

Candidates must not write on this margin

2) canal water not integrated due to diversion from source

3) increased pollution of water irrigation ineffective

4) proper awareness is missing on use of micro irrigation system

5) fragmented land holding (80% < 2ha) reduces viability of irrigation potential

6) high cost of irrigation equipment discouraging farmer to change.

⇒ Reform to strengthen implementation of PMKSY

1) increase awareness and training - use of agri-extension services by Krishi Sakhis

Candidates must not write on this margin

2) enhance credit availability through DBT mechanism to prevent blackmarketing

3) integrated watershed management to be combined to ensure intensity improvement of irrigation

4) innovative methods of recirculatory water usage - encourage integrated farming system

5) institutional coordination among Municipality and Panchayat for regularisation of irrigation flow

6) proper monitoring and water audits of irrigation usage to incentives

7) switch from price support to income support subsidy.

Hence, an integrated irrigation approach will ensure Adarsh Dhara and Nirmal Dhara to agriculture modules

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 imports 65% of it oilseeds and it's the largest importer of pulses despite being the largest producer as well.

⇒ Rising import → unremunerative

I Oilseeds
① industries preferring refined oil for products
② lack of incentives due to low remuneration
③ high cost of seeds and inputs

II Pulses
① regional disparity in production
(Eg): concentrated in MP
② increasing population demand – supply gap.

⇒ Steps needed to promote production

Candidates must not write on this margin

I Oilseeds

1) adoption and effective implementation of National Mission on Oilseeds - Palm oil

2) use of rice and potato bassen land to increase production

3) providing ₹ cost effective seeds and manure after R&D

4) enhancing crop rotation practice (Eg): Paira cropping, Osima

II Pulses

5) leguminous crops to be included in mixed cropping pattern

6) bringing more area under pulses diverting land from rice and wheat cultivation

7) providing irrigation efficiency to grow pulse out of season

Candidates must not write on this margin

8). enhance credit availability to encourage HM use of pulses.

⇒ Promoting consumption

1) enhance MSP for pulses and bring oilseeds MSP further

2) awareness about use of healthy consumption and protein rich diets

3) grading and branding to ensure effective sales as well as exports

4) reducing post harvest losses by efficient storage and transport facilities

5) PDS and MDM diets to enhance use of pulses in cooking.

Hence, an integrated and climate sensitive approach will ensure healthy production and consumption

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 technique is an growing methodology for enhancing rains with objective of alleviating pollution and global warming

⇒ Scientific principle behind cloud seeding

1) use of silver iodide, potassium iodide eh injection into atmosphere increase particulate matter.

2) This is usually ~~don~~ successful when relative humidity is high (>50%)

3) water particle in air condenses quickly due to iodide and form clouds and precipitate

4) This method aims to enhance artificial rain system to

Candidates must not write on this margin

regulate environment and weather

⇒ Role in alleviating pollution

1) frequent rains reduces dust particles in atmosphere

2) condensation on air particulate matter enables to disperse the pollutants

3) enhances carrying capacity of atmosphere while sequestrating particulate matter and pollution.

⇒ Role in global warming

4) cooling of atmosphere reduces. brings global dimming

5) less heat budget and insolation due to heavy cloud formation.

6) reducing particulate matter, reduces heating impact

Candidates must not write on this margin

⇒ Cloud seeding - potential limitations

1) focussed in limited area.
1) It can lead to instances of increase rainfall and floods
(Eg): UAE flood due to cloud seeding
2) requires effective calculation of weather condition, Relative humidity etc for cloud seeding; else it may hamper environment proces.
3) increasing particulate matter of artificial rain are unsuccessful
4) ~~lake~~ can lead to disruption in natural water cycle and provisional security of ecology
5) extreme temperature instead growing.

Hence, cloud seeding to be effective, R&D and awareness needs to be enhanced.

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

The 3 stage nuclear power program was launched in 1958 by Dr. Homi Bhabha, under BARC (Babha Atomic Research Centre) to enhance India's nuclear capabilities.

⇒ Evolution of 3 stage program

	I Stage	II Stage	III Stage
1) Fuel	Uranium-U235	plutonium from remains of 1st stage	Thorium-from U233
2) Moderator	heavy water	heavy water	light water
3) coolant	~~light~~ heavy water	X	sodium salt
4) reactor	Pressurised heavy water reactor	fast breeder reactor	Normal thorium based reactor.

Candidates must not write on this margin

5) locate	• Kakrapara, GJ • Narora, UP • Tarapur	• Kudankulam fast breeder reactor	• Bhavani Kudankulam reactor
6) Operator	NPCI	BHAVANI ~~NPCI~~	BHAVANI

IV stage nuclear plant :-

1) Bharat small reactor capable of generating 300 GHz energy which is a factory assembled nuclear energy reactor.

2) utilises processed heavy water reactor and is less risky.

⇒ Advantages of Thorium III stage

1) Thorium nuclear plant - produces less waste than first two stages

2) uses 300 times less land than solar

2) due to high availability of Monazite soil, India will not have to be dependent upon export

high base load factor — no intermittency

Candidates must not write on this margin

3) reduce IAEA control since indegenous resource will be utilized

4) encourage private tech. R&D to improve nuclear energy capabilities

5) fast breeder reactor (BHAVAN) has more capability to sustain chain reaction.

⇒ Strategic imperatives.

6) enhance India's capability in global nuclear deals - NSG, NPT

7) enable other countries to capitalise and take India's help (Eg: UAE - Barakha nuclear plant by India

8) Improve energy security and reduce import dependence.

However, careful disposal process needs to be ensured for effective and efficient use

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

2014-2024, being the warmest decade have surpassed the ecological tipping point making it difficult for us to restore to earlier weather limits.

Why rapid warming — 2014-24

→ ① increasing population - demand supply gap

→ ② Vehicular emission - 23%.

→ ⑤ energy sector - 70%.

↓

④ consumerism pollution and unsustainable practices (Eg): fast fashion discards.

⇒ Impact of climate change on biodiversity

1) changes in geological patterns: -

1.1) droughts increase 3x 4x times

1.2) rainfall reduced 6.5%.

hampering natural vegetation, desertification.

Candidates must not write on this margin

2) Habitation pattern impacted

2.1) increase human-animal conflict

(Eg): Polar bears conflict - Greenland

2.2) change in migration pattern

(Eg): Olive ridley turtles nesting period shorted.

3) destruction & extinction of biodiversity

3.1) corals - 14% damaged due to sea temperature increase 1°C

3.2) mangroves growth reduced due to water cycle impact.

⇒ Measures to ensure

I Ecological resilience

1) adhering and abiding by paris climate goals

2) switching to less pollution renewable energy source

(Eg): biogas, biomethane, solar etc

Candidates must not write on this margin

3) increasing afforestation and regenerative carbon farming

(Eg): poly culture – Milpa ~~by~~ in Mayan

(Eg): green credits for forest growth

4) circular economy – Carbon capture and storage practices (Eg): enhancing geological sequestration.

II Conservation of species diversity

5) species relocation practices –

(Eg): Panama

6) assisted coral gardening

7) enhancing protected area protection

8) coastal ecosystem safeguard – CRZ rules (Shailesh Nayak)

9) encourage specific target

(Eg): Mangrove alliance, Coral breakthrough initiative

Here, 2021-30 should be our UN decade of ecosystem.

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

Forest fire intensity has increased 35% in recent year (Indian Forest Survey) (Eg): Uttarakhand, 2023

Forest fire challenges
→ ① increase air pollution
→ ② disrupt carbon sequestration
→ ③ destroys forest biodiversity
④ reduces economic potential for timber under FRP (Forest right act)
⑤ destroys timber available for construction.

⇒ Causes of Forest fire

I Natural factors

1) increase sunshine and evaporation
2) lightning effects Eg: Odisha forest fires

Candidates must not write on this margin

3) reduce water content in soil due to transpiration.

4) rolling of stones

II Anthropogenic factors

5) recreation activities (Eg) Bonfire

6) cigarette bud disposal

7) shifting cultivation practices (Eg): Jhum.

8) global warming & climate change.

⇒ Measures followed to prevent forest fires

(1) Proactive measures

1.1) MGNREGA workers used to collect dry twigs which have potential for fire

1.2) changing trees of pine to broad leaf trees

Candidates must not write on this margin

1.3) water pond nearby forest to ensure access to water for drying fire

1.4) road construction for access by fire brigades.

(2) Reactive / Management measures

2.1) use community help to take action in golden hour and knowledge about local resource available

2.2) forest guards on duty to report fire incident as soon as possible

2.3) awareness and mock drill training to prevent human loss.

Thus, a proactive community based approach as suggested by NDMA will enable control risk of forest fires.

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

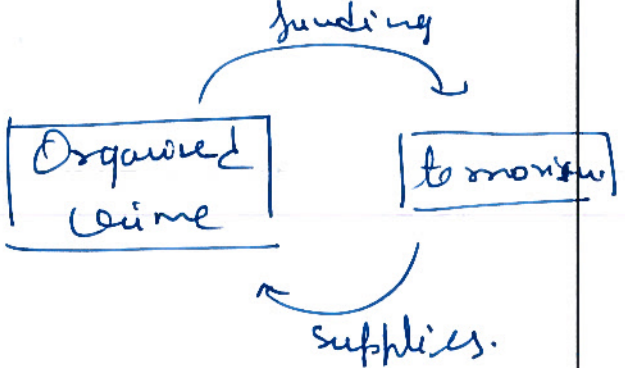
What are organized crimes? Discuss the linkages between organized crime and terrorism. How do such linkages pose internal security challenges to India?

(Answer in 250 words) 15 marks

Organised crime' has been defined in Bhartiya Nyaya Sanhita as acts of kidnapping, extortion, cyber crime which are carried on through formalise crime syndicates.

⇒ linkages between terrorism & Organised crime

1) enable terror financing through activities of kidnapping, extortion, mafia (Eg: Damoodi company → to JEM



2) provision of arms supply to organised syndicate by terror group.

Candidates must not write on this margin

3) encourage drug mafia and drug trafficking (Eg) Punjab group accessthrough death crescent - Pakistan, Afganistan, Iran

4) preparation of forged documents for terrorists and Over ground workers (Eg): Halal trust

5) cyber radicalisation and threat (Eg): SIMI encouraged by groups supported

⇒ Posing internal security challenges

1) rise of radicalisation especially through social media (Eg): Kerala story, Telegram ISIS

2) drugs smuggling narcotics groups hampering youth development and encouraging anti-social activities

Candidates must not write on this margin

3) Issue of propaganda giving rise to urban terrorism and urban naxalism

4) Eroding trust and credibility of Indian economy - due to hawala and money laundering.

5) Role of underground workers support for logistic factors.

Measures taken
- ① Legal - Eg: UAPA acts of state
- ② Quasi judicial - Eg: Judgments economic offenders, SFIO,
- ③ Community - trust building - NCRB, NCB Operation Sadbhavana.
- ④ Financial intelligence Eg: FATF + ED

Thus, organised crime control will ensure terrorism control upholding 'Sajagata, Samanyay, Sankalp' doctrine

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 account for 8% area, 2.4% population and various security challenges of insurgency and militant.

⇒ Security challenges



1) Governance challenges due to AFSPA contoversion causing harm to human rights (Eg): Manipur 14 person missing case

2) Sub regional conflicts for autonomy demand (Eg): Bodoland by ULFA

3) Ethnic clashes due to diverse tribal groups (Eg): Kuki - Meiti + Naga

Candidates must not write on this margin

4) National conflict of secession and seperation (eg): Greater Nagalim and Gorkhaland

5) Relative deprivation due to ineffective implementation of Schedule VI - autonomous regional ~~state~~ council

⇒ Steps to curb NE insurgency

I Security measures -

1) adopt Shyam Saran Multipronged model of security stratification



2) coordinate with state police and use of both banned drones for monitoring

II Developmental

3) effective implementation of schemes

Candidates must not write on this margin

like MGNREGA, PDS, Nai Roshni

III Legal measures

4) Gram sabha shakti to be strengthened

5) autonomy to regional councils

6) increasing permit monitoring

IV Community Measures

7) use of community policing

(Eg: Mera Raibari

8) NGO involvement for trauma healing (Eg): Zubaan

9) ~~coopt~~ Village defence program in border area and Bhratabori Sangathan

Hence, insurgency should be resolved by filling vacuum of trust, development and justice

Space for Rough Work

Space for Rough Work

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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।