Prelims Qualified
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NEXT IAS

MAINS TEST SERIES 2.0 - 2025 (FLT)

(To be filled by candidate)

TEST CODE : FLT2503 **Test No. : 03**

Name of Candidate: Aman Jhanwar .....Mobile No. .....

Roll No. : GS25 D1B39001 ..... Start Time ..... End Time.....

Date of Examination: 31/7/25 ..... 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, Email, 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, ईमेल, 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 .....
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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. सरकारी बजट में जेंडर बजटिंग की ओर हाल ही में किए गये प्रयास महिला सशक्तिकरण के लिए इसके महत्व को दर्शाता है। भारत में जेंडर बजटिंग की दिशा में हालिया पहल और उनके महत्व क्या हैं? (उत्तर 150 शब्दों में दीजिए) 10 अंक

The recent push towards gender budgeting in the Government Budget reflects its importance for women empowerment. What are the recent initiatives towards gender budgeting in India and their importance? (Answer in 150 words) 10 Marks

Gender Budgeting was introduced in India in 2005-06. In FY'25 Budget – it ~~was~~ was allocated 8.8% of Budget.

Gender Budgeting
- Gender Neutrality
- Gender Responsiveness
- Outcomes of policies

Recent Initiatives

Part A schemes : 100% budget for women

(1) PM - Matru Vandana Yojana
- → focus on pregnancy & feual reproductive health
- → MMR reduced to 97 per lakh

(2) Namo Drone Didi scheme
- → SHGs empowerment in agriculture
- → 15,000 SHGs to get subsidised drones & training

Candidates must not write on this margin

Part B : 30% - 99% Budget

(3) PM SHRI

→ women enrollment in schools has increased due to better infrastructure

(4) PM POSHAN

→ focus on food & nutritional security.

Part C : less than 30% allocation

(5) PM - KISAN

→ Providing ₹6000 to landholding farmers
→ ~~focus on~~ women-sensitive allocation

(6) PM - Fasal Bima Yojana

→ ~~increasing insurance penetration~~
→ Special provision for women farmers

Importance of Gender Budgeting
- → Improved LFPR of women
- → Productivity of work
  IMF → Gender diversity increase productivity by 35%.
- → ~~Better~~ Gender equality & equity

However, share of Part A schemes must ~~be~~ increased which is less than 20%.

~~It~~ 'Empowered women will make India empowered!

Candidates must not write on this margin

2. बंदरगाह आधारित विकास को भारत में आर्थिक विकास और क्षेत्रीय एकीकरण के प्रमुख चालक के रूप में देखा जाता है। चर्चा कीजिए कि सागरमाला पहल किस प्रकार बंदरगाह आधारित विकास और तटीय अर्थव्यवस्था को बढ़ावा दे सकती है। (उत्तर 150 शब्दों में दीजिए) 10 अंक

Port-led development is seen as a key driver of economic growth and regional integration in India. Discuss how the Sagarmala initiative can promote port-led growth and the coastal economy. (Answer in 150 words) 10 Marks

Sagarmal initiative was launched in 2015-16 to improve India's port connectivity and boost ~~Gto~~ trade.

Pillars of Sagarmala
- → Improved Port infrastructure
- → Port Connectivity
- → Industrialisation near port
- → Inland Trade & waterways

Benefits of Sagarmala

① Increased no. of major ports
6 new major ports are planned

② Reduced turnaround time to 30 hours (2025) from 48 hours

③ Focus on international transshipment ports.

Recent : commission of vizhinjam port
India's first deep water transshipment facility

Candidates must not write on this margin

④ Doubled cargo loading capacity to near 1500 metric tonnes.

⑤ Improved connectivity for inland water trade Eg: NW-1 & NW-2 are operational now.

Challenges Persist

① Delay in completion of project leads increased costs

② Lack of connectivity between ports & industrial regions.

③ Obsolete infrastructure & old technology : each port have different issue Eg: Haldia port suffers from silitation

~~A country~~ India is aiming $ 1 Trillion exports of goods by 2030, without success of Sagarmala, the target will be ~~has~~ a challenge to achieve.

Candidates must not write on this margin

3. गैर-कृषि अर्थव्यवस्था में पशुपालन के महत्व पर चर्चा कीजिए। पशुपालन को बढ़ावा देने के लिए हाल ही में प्रस्तावित पशुधन जनगणना की क्या आवश्यकता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss the importance of livestock farming in a non-farm economy. What is the need for the recently proposed livestock census in promoting animal husbandry?

(Answer in 150 words) 10 Marks

Livestock farming refers to practice of raising & breeding animals for human use. It has been growing with 6% (approx.) per annum in India.

Importance of Livestock Farming in non-farm economy

① Provides nutritional security

Specially when economy does not have ~~agri~~ crop production

② Provides livelihood & employment in rural areas

③ Provides raw material to Food ~~Foods~~ Processing Industries. (FPI)

Eg: Dairy, Frozen meat, etc.

Around 4.5 crore dairy farmers are present in India

④ Provide ~~raw material~~ Stimulus to labour Intensive Industries

Candidates must not write on this margin

Eg: wool from sheep in Textile industry

Need for Livestock Census

① Database regarding information about types of cattle, population, etc. will help in policy formulation

② Understand Genetic diversity
→ Better health of livestock
→ Bio-bank for R & D

③ Vaccination Programmes in case of outbreaks

④ Modernisation of animal husbandry sector

⑤ Direct Benefit Transfer to farmers for required purchase of quality grains & feedstock for livestock.

Livestock farming has been a major employment generator in India. Integration of livestock with cropping is necessary to ensure nutritional security for India in future

Candidates must not write on this margin

4. न्यूनतम समर्थन मूल्य किसानों की आय को बढ़ाने में कैसे मदद कर सकते हैं? न्यूनतम समर्थन मूल्य का लाभ प्राप्त करने में किसानों को किन चुनौतियों का सामना करना पड़ता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

How can minimum support prices help in promoting farmers' income? What are the challenges faced by farmers in accessing the benefits of minimum support prices?

(Answer in 150 words) 10 Marks

MSP was introduced in 1970s to provide relief to farmers ~~for~~ in crisis time. However it has become a point of tension between farmers & govt as farmers demand statutory backing of MSP.

MSP benefits farmer's income

① Provide assurity & guarantee of a minimum price that farmers will get

② $ Helps in times of crisis when market prices fall below cost of production

③ Motivates farmers to grow particular crops which ensures food security of nation Eg: Rice & wheat

④ Open - procurement provides a fixed customer to farmers

Candidates must not write on this margin

Challenges faced by farmers

① Collusion between traders at APMC — leads to exploitation of farmers

② Low penetration of MSP

Acc to Business Standard, only 19.5% paddy farmers & 9.6% wheat farmers avail benefits under MSP

③ No open-procurement policy on all MSP crops leads to mono cropping & increased supply & prices fall

④ Lack of awareness & logistics

80% farmers are micro & small — either have logistics issue to reach APMC or Government markets.

MSP has been politicised by various organisations leading low benefits & policy paralysis. Govt must emphasise on infra development & capacity building to double farmers income.

Candidates must not write on this margin

5. कृत्रिम तंत्रिका नेटवर्क क्या हैं? मशीन लर्निंग और कृत्रिम बुद्धिमत्ता में उनके महत्व पर चर्चा कीजिए।

(उत्तर 150 शब्दों में दीजिए) 10 अंक

What are artificial neural networks? Discuss their importance in machine learning and artificial intelligence. (Answer in 150 words) 10 Marks

Candidates must not write on this margin

Candidates must not write on this margin

6. रक्षा क्षेत्र और आधुनिक युद्ध में मानव रहित हवाई वाहनों (यूएवी) के महत्व पर चर्चा कीजिए।
(उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss the importance of Unmanned Aerial Vehicles (UAVs) in the defense sector and modern warfare. (Answer in 150 words) 10 Marks

Recent Operation Sindoor ~~used~~ witnessed massive UAV warfare from both India & Pakistan side — highlighting the increasing role of UAV in defense.

Importance of UAVs

① Asymmetrical Damage

Operation Spider web by Ukraine — $ 1000 FPV drones destroyed $ 200 million russian ~~ffg~~ fighter planes.

② Unhumanise war

Reduce loss of human life as these can be controlled from ~~a~~ far away of battlefield.

③ Surveillance & Intelligence

It has been reported — India used Harop drones to gather intelligence before Operation Sindoor.

Candidates must not write on this margin

④ Reduced cost of warfare

Generally UAVs are relatively cheaper than other means like missiles & rockets Eg: Shaheed drone by Iran

⑤ Integration of emerging technologies in Defense for better accuracy

Eg: AI used to take immediate action in response to changes.

⑥ Precision-guided attacks

→ Saves civil infrastructure from destruction

India's mechanisms to counter UAVs

- AKASHTEER
- Bhargavastra
- Electronic warfare
  - Jamming
  - Spoofing
  - Hijacking access
- Drone guns

The UAV industry is growing at unprecedented rates — an opportunity for India to make defense "Atmanirbhar" and showcase India's military superiority at global level.

Candidates must not write on this margin

7. समुद्री और तटीय पारिस्थितिकी तंत्र पर तेल रिसाव के पर्यावरणीय प्रभावों की जांच कीजिए। तेल रिसाव की सफाई के लिए इस्तेमाल की जाने वाली विभिन्न विधियाँ क्या हैं? (उत्तर 150 शब्दों में दीजिए) 10 अंक

Examine the environmental impacts of oil spills on marine and coastal ecosystems. What are the various methods used for cleaning-up of oil spills?

(Answer in 150 words) 10 Marks

UNDRR explains oil spills as accidental or deliberate leakage of oil in sea or oceans from ships, refineries or pipelines. The recent oilspill at Kerala coast - highlights the damage it can cause.

Impact of Oil spills on Marine ecosystem

① Increased sea ~~temperatu~~ Temperature in the region due to reduced insulation

② May ~~can~~ create dead zone due to reduced oxygen infusion from atmosphere

③ May ~~can~~ create diseases in marine biodiversity.

④ Destroys phytoplanktons, seagrass & zooplanktons.

Impact on coastal ecosystem

① Harm coastal coral reefs, may lead to coral bleaching

Candidates must not write on this margin

② Contaminate seafood & fisheries industry adversely.

③ Contaminate food chain & may lead to hazardous diseases in humans if come in contact

Methods for cleaning-up of oil spills

① Use of Microbes like Oiliovirus which break down oil

② Using skimmers & physical methods to restrict oil spreading

③ Chemicals to breakdown oil molecules ~~Remediation~~

④ In-Situ burning of oil
→ however may have adverse consequences.

India must update its Coastal oil spill contingency plan, 1996 to adapt modern technology for cleaning oil-spill as it endangers biodiversity, economy & human livelihood.

Candidates must not write on this margin

8. भूकंप संबंधी आपदाओं के प्रति उत्तरी भारत की संवेदनशीलता पर चर्चा कीजिए। उनके प्रभावों को कम करने में भारत की तैयारियों पर प्रकाश डालें। (उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss the vulnerability of northern India to earthquake-related disasters. Highlight India's preparedness in mitigating their impacts. (Answer in 150 words) 10 Marks

Northern Indian states ~~aspect~~ due to associated with himalayas fall in zone V of earthquake mapping in India.

Earthquake related disasters



Earthquake prone areas

① Landslide : Earthquake can initiate landslide in slopy and oversaturated soil Eg: Uttarakhand witness most landslides in India.

② Avalanche : Land shaking may lead to avalanche specially in himachal pradesh

③ Rock flow : In case soil is dry and slopes are very steep.

Candidates must not write on this margin

India's Preparedness in mitigation

1. Micro-mapping of Earthquake prone areas : Dividing zones based on ~~increa~~ more vulnerability.

2. Early warning systems installed in high crowd spaces

   Eg : Delhi metro have automatic sensors which stops trains in case of shaking

3. Trained dedicated workforce

   SDRF and NDRF in case SDRF alone is not enough

4. Community awareness of training

5. Dedicated funds like National Disaster Response funds for rehabilitation & reconstruction

India's transition from reactive to pro-active approach after 2005 has led to drastic fall in economic & social losses due to Earthquake & other disasters

Candidates must not write on this margin

9. चर्चा करें कि क्रिप्टोकरेंसी और अन्य उभरती प्रौद्योगिकियां मनी लॉन्ड्रिंग और आतंकवाद के वित्तपोषण के खतरे में कैसे योगदान करती हैं। इस समस्या से निपटने के लिए भारत सरकार द्वारा क्या कदम उठाए गए हैं?

(उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss how cryptocurrency and other emerging technologies contribute to the menace of money laundering and terror financing. What steps have been undertaken by the Government of India to tackle this issue? (Answer in 150 words) 10 Marks

Cryptocurrency is often misused to appropriate funds as these are untraceable & secured.

~~Cryptocurr~~ Menace of Money laundering & terror financing

① Money influx from foreign origin parties is often channelised into India using crypto currency or cyber space

② Anonymity of ~~trans~~ transaction does provides safe haven to such deviants

③ Untraceability of money transfer makes it challenging for Government agencies to trace the transactions

~~④ often government agen~~

Candidates must not write on this margin

Steps taken by Govt of India

1. Implementation ~~FAF~~ FATF guidelines of standards to be followed internationally
2. Established CERT-In (Computer Emergency Response Team) India for pro-active security to public infrastructure
3. Regulation by RBI over banks to not conduct in cryptocurrency
4. Set up of NPCIIL under PMO to act of intelligence against Money laundering of terror financing
5. Increased expenditure on Human resource training for competent agencies.

Emerging technologies are often used as antithetical means however India must focus on coordination between various agencies of global community to deter such organised crimes.

Candidates must not write on this margin

10. हाइब्रिड युद्ध क्या है? यह पारंपरिक युद्ध से किस प्रकार भिन्न है? भारत हाइब्रिड युद्ध की चुनौतियों का सामना किस प्रकार कर सकता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

What is hybrid warfare? How is it different from conventional warfare? How can India navigate the challenge of hybrid warfare? (Answer in 150 words) 10 Marks

Hybrid warfare was first conceptualised in 2007. It refers to use of multiple spaces (cyber space, diplomatic channels, intelligence, etc.) as theatre of ~~a~~ war.

Hybrid	Conventional
① Use of multiple spaces in addition to spaces used in conventional wars	① Used land, air & water as theatre of war
② ~~Uses~~ May not be explicity violent Eg: Hacking critical infrastructure	② Has to be violent involving arms & ammunition
③ Target critical digital as well as physical infrastructure	③ Target physical fields only
④ Means — Hacking, Cyberwarfare, Conventional warfare, Diplomacy.	④ Means — Fighter jets, Tanks, Submarines

Candidates must not write on this margin

How India can navigate challenge

① Strengthening protection of cyberspace

Eg: CERT-In, SNSC, I4C, etc.

② Increase expenditure of Defence R&D

~~Be~~ less than 1% of GDP unlike global developed economies

③ Training Human resources & regular exercises for updation

④ Multilateral & Bilateral agreements for implementing international standards & practice

⑤ Investing in emerging technology like AI, Machine learning in defence sector

⑥ using blockchain technology for protection of critical information

modern warfare methods need modern solutions, India must focus on indigenous as well global collaboration to upgrade its deterrence in all theatres of war

Candidates must not write on this margin

11. भारत द्वारा मजबूत डिजिटल अर्थव्यवस्था के लिए प्रयास करने के बावजूद, भारत को डिजिटल समावेशन के संबंध में चुनौतियों का सामना करना पड़ रहा है। चर्चा कीजिए। डिजिटल संसाधनों तक समान पहुँच सुनिश्चित करने के उपाय सुझाएँ।
(उत्तर 250 शब्दों में दीजिए) 15 अंक

Despite India's push for a robust digital economy, India faces challenges with regard to digital inclusion. Discuss. Suggest measures to ensure equitable access to digital resources.
(Answer in 250 words) 15 Marks

Only 37% population of India is digitally literate while network penetration covers 99.2% districts acc to GOI.

Challenges persisting in Digital inclusion

① Regional divide
Urban areas — 67% digital literacy
Rural areas — around 30% only.

② Lack of literacy
2011 census states literacy rate 74% which hampers digital empowerement of inclusion

③ Gender inequality — patriarchal norms
only 65% women have used phones even for once — while 90% + men have used phones once.

④ Lack of regional connectivity
Optical fibre lower penetration has

Candidates must not write on this margin

restricted digital economy in remote areas.

(5) Poor performance of Government policies at grass root level due to bureaucratic cholestrol.

Measures to ensure equitable access

(1) Improve connectivity to remotest regions

→ Increase optic fibre penetration in plain areas

→ Satellite based internet for hilly regions.

(2) Education Programmes

→ PM GDIKSHA aims to empower global child digitally.

(3) Awareness campaigns

Eg: Digital India - making people aware

Candidates must not write on this margin

of benefits of Digital economy.

④ Protection from Digital threats like scams of digital arrest which ~~dis~~ demotivates people to digitalise.

⑤ Providing smartphones at subsidised rate

Many state govts like Rajasthan provide smartphones ~~to~~ at discounts to widows to empower them financially & socially.

⑥ Steps to reduce gap between urban & rural regions

⑦ Digital literacy through PM DIKSHA programmes - providing digital resources to teachers & students

Digitalisation of Indian economy is important for "Sabka Sath, Sabka Vikas, Sabka Vishwas".

Candidates must not write on this margin

12. जैसे-जैसे कृत्रिम बुद्धिमत्ता अर्थव्यवस्था के विभिन्न क्षेत्रों में प्रवेश कर रही है, वैसे-वैसे नौकरियों का खत्म होना एक वास्तविकता बनती जा रही है। रोजगार पर एआई के प्रभावों का विश्लेषण करते हुए, इस चुनौती से निपटने और रोजगार वृद्धि को बढ़ावा देने के उपाय सुझाएं। (उत्तर 250 शब्दों में दीजिए) 15 अंक

As artificial intelligence penetrates into various sectors of the economy, job losses are becoming a reality. Analysing the impacts of AI on employment, suggest measures to navigate this challenge and promote job growth. (Answer in 250 words) 15 Marks

Recently, Microsoft has released list of 40 occupations that can be completely ~~diminat~~ replaced by AI - highlighting how AI can reform job market.

Impact of AI on employment

① Mass layoffs

Recent announcement by TCS of 12000 layoffs due to integration of AI

② Improved productivity than men

AI provides better productivity than human workforce

③ Reforming employment structure

may lead to replacing lower - end jobs like : Data entry, translation etc.

Candidates must not write on this margin

④ Reduced burden ~~of~~ on ~~labourfo~~ skilled workforce

Skilled workforce like software designers use AI to do repetitive task or find loopholes - making tasks easier

⑤ May impact Innovation & creativity as AI leads to cognitive debt & brain rot.

Measures to navigate Challenges

① Upskilling & reskilling workforce to make them competent in evolving scenario

② Integration rather than Replacing workforce must be trained to integrate AI to improve productivity rather than replacing human from AI.

③ Promotion of programmes like PM DIKSHA & PM GIDISHA to

Candidates must not write on this margin

empower students with evolving technology.

④ Industry - academia collaboration

for making students industry ready

Eg: PM internship programme.

⑤ Promoting labour - intensive industries

to create employment where AI can not be ~~integrated~~ a replacement Eg: Automobile, leather & cement industries etc.

Increasing emergence of newer technology has led to social tensions regarding job loss. However ∵ History states that no Industrial revolution has led to job loss rather than job restructuring the same will be the case with AI.

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13. भारत में फसल-उपरांत होने वाला नुकसान प्रतिवर्ष लगभग ₹1,52,790 करोड़ है। भारत में फसल-उपरांत होने वाली हानियों के लिए किस हद तक कृषि उत्पादों के परिवहन और विपणन में आने वाली बाधाओं को जिम्मेदार ठहराया जा सकता है? (उत्तर 250 शब्दों में दीजिए) 15 अंक

India's post-harvest losses amount to approximately ₹1,52,790 crore annually. To what extent can post-harvest losses in India be attributed to the constraints in the transport and marketing of agricultural products? (Answer in 250 words) 15 Marks

Post harvest losses refers to wastage or losses incurred after harvesting crops but before reaching end customers or market.

Reasons for High Post-Harvest losses

① Lack of cold-storage facility leads to wastage of crops due to rotting.

② Lack of proper connectivity between farms & markets — slow transportation

③ ~~too~~. Lesser / smaller shelf life also leads to post-harvest losses

④ Lack of Food processing industries (FPI) in India which leads to lower processing & improving of sustenance of food

Candidates must not write on this margin

⑤ Regional Disparity

often foodcrops production is concentrated in few states - which requires transportation & logistics to ~~the~~ make ~~food~~ crops available PAN India.

Measures taken by Govt to reduce Post-Harvest resources

① Improving road connectivity through PM-Gram Sadak yojana

→ Phase IV launched in 2024

② Establishing e-NAM for online procurement of foodcrops and better prices to farmers.

③ Encouraging FPI setup through schemes like ~~PM~~ PM-FME.

④ Improving cold-storage facility using SHGs, co-operatives, etc

Candidates must not write on this margin

⑤ Improved insurance penetration

PM-FBY has provisions regarding post-harvest losses too.

⑥ Using e-commerce platforms

Eg: Amazon & Flipkart have launched dedicated portals for ₹ crops.

① KISAN RAIL

Dedicated trains for transportation of agricultural production

③ Truck on Train scheme

To load loaded trucks on train wagons to reduce transportation cost & improve connectivity.

According to NITI aayog, 25-30% produce gets wasted in agriculture – this highlights the need to reduce post-harvest losses to empower farmers & ensure food security of increasing population.

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14. भारतीय कृषि में प्रत्यक्ष और अप्रत्यक्ष सब्सिडी क्या हैं? इन सब्सिडी ने देश की फसल विविधता और कृषि अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (उत्तर 250 शब्दों में दीजिए) 15 अंक

What are the direct and indirect subsidies in Indian agriculture? How have these subsidies impacted the cropping diversity and farm economy of the country? (Answer in 250 words) 15 Marks

India ~~to~~ provides over ₹5 lakh + subsidy to agriculture each year through various schemes of policies.

Direct Subsidies & Indirect Subsidy

① Price subsidy

→ in form of MSP for 22 crops

→ FRP for sugarcane

→ Price deficiency payment system (PDPS)

② Fertiliser subsidy

→ GOI has fixed prices for urea which has remained unchanged since last decade.

→ Nutrient based subsidy on DAP & ~~the~~ other fertilisers.

③ Irrigation Subsidy

→ GOI provides canal services at

Candidates must not write on this margin

negligible prices of free at many places.

④ Electricity subsidy

→ For utilisation of ground water using electric pumps.

⑤ PM - KISAN scheme

₹6000 cash in form of DBT in 3 installments to every landholding farmer.

Impact on Cropping Diversity of Farmers

① Lead to reduced cropping diversity to Rice & wheat

→ Due to open-procurement guarantee

→ Fertiliser & irrigation subsidy enables farming of wheat & rice in unsuitable areas also.

② Land degradation of soil fertility reduced due to over-fertilisation & salination due to over-irrigation

Candidates must not write on this margin

③ Low production of vegetable & fruits

→ issues over food inflation
→ Nutritional security hurdles.

④ Reduced ~~use~~ Ground water levels

Avg. depth increased from 6.8 m to 9.4 m in ground water levels.

⑤ Contamination of local reservoirs

due to run off of fertilisers.

⑥ ~~Reduced share of~~ Skewed Distribution of crops

Eg: Sugarcane grown in U.P. which is not suitable for sugarcane

~~Irrational~~ Benefits of Subsidy

→ Increased farmers income
→ Food production improved
→ self-sufficiency & food security
→ Agriculture as major export industry.

However, expenditure must be done on capacity building & farmer training for scientific & sustainable agriculture.

Candidates must not write on this margin

15. भविष्य के अंतरिक्ष संचालन और मिशनों में पुन: प्रयोज्य प्रक्षेपण वाहनों की क्षमता पर चर्चा कीजिए। पुन: प्रयोज्य प्रक्षेपण वाहनों के विकास की दिशा में भारत की क्या पहल है? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Discuss the potential of reusable launch vehicles in future space operations and missions. What are India's initiatives towards the development of reusable launch vehicles?
(Answer in 250 words) 15 Marks

According to US media house, reusable launch vehicles have reduced cost from $65000/kg to $1500/kg in space operations.

Potential of Reusable launch vehicles

① Making future operations feasible and cost-effective

② Sustainable space
lessen debris in space

③ Environment friendly
As same launch vehicle can be used several times - saving crucial resources.

India's initiatives

① Developing PUSHPAK
Reusable launch vehicle in which

Candidates must not write on this margin

the initial stages of launch vehicle will be brought back either through vertical ~~landing or~~ parachute landing or aeroplane type landing on airstrip

(2) NGLV will also have one variant which will be reusable.

(3) ISRO currently working on next project with higher capacity than PUSHPAK

Reusable launch vehicles ~~are~~ will mark significant steps in India's future missions like Gaganyaan and Bharatiya Antariksh Station (BAS).

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Candidates must not write on this margin

16. हाल ही में शुरू की गई BioE3 नीति के लक्ष्यों और उद्देश्यों की व्याख्या कीजिए। यह नीति अर्थव्यवस्था के "हरित विकास" को सुनिश्चित करने में किस प्रकार सहायक हो सकती है? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Explain the aims and objectives of the recently launched BioE3 policy. How can the policy help in ensuring "green growth" of the economy? (Answer in 250 words) 15 Marks

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Candidates must not write on this margin

Candidates must not write on this margin

17. क्योटो प्रोटोकॉल के अंतर्गत विभिन्न बाजार तंत्र क्या थे? पेरिस जलवायु परिवर्तन समझौते का अनुच्छेद 6 क्या है? नेट-शून्य लक्ष्यों को प्राप्त करने में वैश्विक कार्बन बाजार के महत्व की व्याख्या कीजिए।(उत्तर 250 शब्दों में दीजिए) 15 अंक
What were the various market mechanisms under the Kyoto Protocol? What is Article 6 of the Paris Climate Change Agreement? Explain the significance of the global carbon market in achieving net-zero targets. (Answer in 250 words) 15 Marks

Kyoto Protocol was adopted in 1997 while Paris agreement in 2015, both ~~the~~ have parent convention as UNFCCC established after Rio Summit.

Market Mechanisms under Kyoto Protocol

① Joint Development

→ Annexure -1 country will invest in Annexure -1 country

→ Emission reduction unit will be credited (ERU)

② Clean Development Mechanisms

→ Annexure 1 country invest in Non- Annexure -1 countries

→ Certified Emission Reduction (CER) will be credited.

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③ Credit Trading mechanism

→ only for Annexure - I countries

Paris Climate Change Agreement & Article 6

① Article 6.2 provides for market mechanism based on bilateral deals & agreements

② Article 6.4 – Market Mechanism

→ Provides for centralised Emission ~~carbon~~ market Trading mechanism

→ ~~For~~ Tradable by all countries

③ Article 6.8 – Non-Market Mechanism

→ involves capacity building, technology transfer, green investment, etc.

→ From one country which exceeds baseline to developing country

Candidates must not write on this margin

Significance of Global carbon Market

① Reduction in Carbon emission of GHGs emission

② Revenue earned from carbon credits can be used for capacity building

③ Encouraging countries to improve emission efficiency to save from ~~penalt~~ penalties.

Challenges of Global carbon Market

① May lead to Pay & Pollute system

② Results may be are only on paper & not in real

③ Lack of standard data monitory & info transparency system

④ No accounting for "reverse - emission"

Recent ~~de~~ developments at UNFCCC COP 29 regarding Article 6 operationalization are welcoming step for greener & sustainable future.

Candidates must not write on this margin

18. जलवायु परिवर्तन और तेजी से हो रहे शहरीकरण ने भारत में गर्मी की लहरों के प्रभाव और आवृत्ति को तीव्र कर दिया है। चर्चा कीजिए। हीट एक्शन प्लान (एचएपी) भारत में हीटवेव प्रबंधन को कैसे बेहतर बना सकते हैं?

(उत्तर 250 शब्दों में दीजिए) 15 अंक

Climate change and rapid urbanization have intensified the impact and frequency of heat waves in India. Discuss. How can Heat Action Plans (HAPs) improve heatwave management in India?

(Answer in 250 words) 15 Marks

According to Global reports, frequency of heatwaves has increased from every 10 years to 2.5 years due to climate change.

Role of Climate Change

① Global warming has led to increased surface temperature leading to more heatwave.

② Disruption of AMOC & ACC may further increase heatwave frequency
→ current developments may lead to stop of AMOC by 2100

③ Seasonal variations & unpredictability

This year, no heatwave formed in May while first heatwave came in April — first time in history

Candidates must not write on this margin

Role of Urbanisation

① Increased concretisation

→ less albedo of increase Global Temperature.

② Urban Heat island formation

③ Encroachment over water reservoirs

Reduced latent heat transfer mechanisms

④ Increased temperature inversion frequencies and Heat Dome infacts

Heat Action Plan

① Creating shelters at roadside for people for relief from heatwaves

② Mapping Heatwave prone areas for pro-active approach

③ Creating Green Infra

Eg : Open Parks, Fountains, etc.

Candidates must not write on this margin

④ Reviving water reservoirs (Blue infra) for latent heat cooling system

⑤ Afforestation & Greenery in urban areas

Eg: Delhi's plan to afforest Delhi-NCR under "Ek Ped Maa ke Naam" initiative.

⑥ Green Building code

Making building energy efficient & designing in such way to improve cooling system

Eg: Amravati city (Andhra) using ~~black~~ flyash bricks in building govt. buildings.

"Whole of Govt" & "Whole of society" approach must be followed in developing & implementing Heat Action Plans.

Candidates must not write on this margin

19. बाह्य सरकारी एवं गैर-सरकारी तत्वों द्वारा भारत की आंतरिक सुरक्षा के लिए उत्पन्न खतरे क्या हैं? इन खतरों से निपटने के लिए आवश्यक रणनीतियों पर चर्चा कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

What are the threats posed to India's internal security by external State and non-state actors? Discuss the strategies necessary to tackle these threats. (Answer in 250 words) 15 Marks

India have ~~to face~~ hostile neighbourhood on both ~~the~~ side of boundaries which creates threats to internal security.

Threats posed to internal security

① Cross-border terrorism

By Pakistan majorly in J&K region

Eg: Recent Pahalgam ~~tourists~~ attack

② Organised crimes like

- Smuggling of arms
- Trafficking of humans & cattles majorly on Bangladesh border.
- Drug trafficking at Punjab border

③ Insurgency & Militancy

by Non-state actors like terrorist groups Eg: LeT, Azaad Kashmir fauz, etc

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④ Money laundering of fake currency is influxed in mainstream through borders by state actors

⑤ Naxalism supported by foreign actors

Eg: Space x device found with Naxals

⑥ Cyber threat

often Chinese hackers are alleged to attack on critical infra info.

Eg: Cyberattack on AIIMS, Delhi

Strategies necessary to tackle these threats

① Installing advanced technology to prevent cross border & movement.

Eg: BOLD-QIT initiative on Bangladesh border.

② Capacity building over cyberspace

Eg: CERT-In, CERT-Fin, NPCIL

Candidates must not write on this margin

established to ~~build~~ protect critical info.

③ Established Border Haats

to prevent smuggling of ~~non~~ non-agri products at Bangladesh & Nepal border.

④ SAMADHAN initiative to control Naxalism

Eg: Home Minister's target to eliminate naxalism by March 2026.

⑤ Using space technology - Remote sensing satellite for real time data on cross-border ~~in~~ movements

⑥ Using UAVs & AI for surveillance & Intelligence for Anti-terrorist operations.

India has improved its defence expenditure from ~~below~~ below ₹3 lakh crore, to ₹11 lakh crore + in past decade - this must be focussed in capacity building, modernising infra and indigenisation for security & integrity of India.

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20. वामपंथी उग्रवाद (एलडब्ल्यूई) भारत की आंतरिक सुरक्षा के लिए चुनौती बना हुआ है। देश में वामपंथी उग्रवाद के मुद्दे को हल करने के लिए भारत सरकार के दृष्टिकोण पर चर्चा कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक

Left-wing extremism (LWE) continues to remain a challenge to India's internal security. Discuss the Government of India's approach towards solving the issue of LWE in the country. (Answer in 250 words) 15 Marks

LWE which originated from a Naxalbadi village of west Bengal has now expanded to 126 districts of 9 states.

Challenge to India's security

1. Threat to sovereignity & integrity of nation
2. Threat to Military personnels & Infrastructure
3. Running parallel governments
4. Expanding networks
   Eg: ~~Kerala is~~ Wayanad district of Kerala is the latest addition to LWE.
5. Emergence of Urban - Naxalism
   — a new threats providing logistics & financial supports

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Government's Approach to Solve LWE

① Adopting SAMADHAN approach which encourage aggressive counter LWE approach

② Modernisation of Police Infra

Eg: Fortification of Police stations

③ Special Central Assistance

To military of armed forces for special rehabilitation package of surrendered LWE ~~victims~~ people.

④ Setting up Mobile towers

To improve connectivity in forest areas

⑤ State Govts have enacted acts to control Urban Naxalism

Eg: Maharashtra's bill on Public security., 2025

Candidates must not write on this margin

⑥ Establishing Eklavya Model school in tribal regions affected by LWE

⑦ Road connectivity through special provisions under PM - Gram Sadak Yojana

⑧ Dharti Abba Gram Unnat Yojana

To provide basic ammenities to 15000 tribal villages.

⑨ Strengthening local self governance through PRI for Public & community participation - bridging trust deficit.

India transition to Samadhan under National Policy and Action Plan has reduced Red corridor to Red Pockets. Reducing 300+ affected districts to 126 only.

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।