Pre-Qual
0845199

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14 JUL 2025

NEXT IAS

MAINS TEST SERIES 2.0 - 2025 (FLT)

(To be filled by candidate)

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

Name of Candidate: AYUSH RAJ Mobile No. [redacted]

Roll No. : QSPM24A13015 Start Time 2:15 End Time 5:15

Date of Examination: 14/07/2025 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, 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: .....

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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. 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

With rising concousness about Gender sensitivity there has been increased focus on gender budgetting.

Recent initiatives of government towards gender-budgetting and their importance :-

(i) PM Matritva Vandana Yojana :- for pregnant women health.

↳ importance :- healthy mother and providing supplements through ASHA workers.

(ii) Stand-Up-India scheme :- for women entrepreneur

↳ importance : provide seed fund and allocation for women entrepreneur.

(iii) Startup India Scheme : For promoting women head in starting setting and raising income level.

- As per DPIIT, 73000 startup have women member.

Candidates must not write on this margin

(iv) Deendayal Upadhyay NRLM : for promoting importance → women participation in rural development.

(v) Bank linkage program for women SHG, promoting their intrest and increase in income.

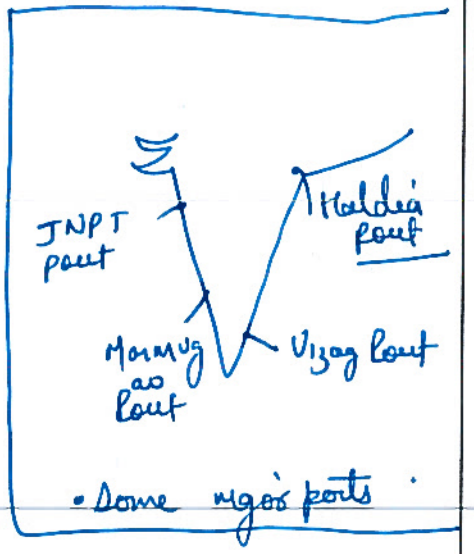
These have led to increased women labour force participation rate to around 41.1. (2022-23) (PLFS) and better realization of women potential.

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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

Port-led development is emerging as key driver of economic growth and regional integration in India; with 12 major ports and 100+ minor port:



Sagarmala leading to port led growth and ~~coastal economy~~ coastal economy:

① Technological upgradation for reducing entry and exit barries of consignment

② Multi-modal ~~tourist hubs~~ are being developed for better integration of rail, road and water transport
⇨ Varanasi has MMT hub.

Candidates must not write on this margin

(iii) Increasing port capacity and reducing turn around time by promoting infrastructure development.

Eg: Turn around time in 2023 — 33 hrs only

(iv) Promoting development of national waterways and its utilization.

Eg: NW Ganga Vilas in N-W-1 as tourism cruise.

(v) Creating employment and promoting supporting infrastructure like offices along in near coastal area.

But still some challenges like, old regulating acts, Red tapism hamper its full realisation.

with focus on digitisation and platform based service disposal sagarmala is set to redefine developmental model.

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 in India contributes around ₹11 lac crore in economy and gives employment to around 4 crore people.

Importance of livestock farming in a non-farm economy :-

(i) Allows 'subsitence' of lower strata people who lack lands.

Eg > More than 75% are small and marginal farmers.

(ii) Allows export chances of poultry, meat, beef etc earning foreign exchange for India.

(iii) Promote fisheries and shrimp culture increasing farmers income.

Candidates must not write on this margin

Eg: In last 5yr, contribution of fisheries sector is around 7-8% for year.

Need for recently proposed livestock censuses are as follows

① Grasp of data for development of new-hybrid variety development.

② Allows targetted intervention in fow live-stock health.

③ Allow government to make policy entry to specific places and areas.

Eg: fisheries in coastal area
Cattle rearing in UP.

④ Launches Centre of Excellence for better research and development.

This way, the livestock census may shape the intervention and promotion pathway for development of livestock related activities.

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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

Minimum support price (MSP) is a support-based price mechanism where in farmer is promised a minimum pay for his produce based on rate released by CCEA.

Its help in promoting farmer's income include

(i) Make the 'floor' beyond which farmer should not be paid & so that income of farmer be assured.

(ii) Allow farmer security, as government will buy at price fixed whatever the farmer's being

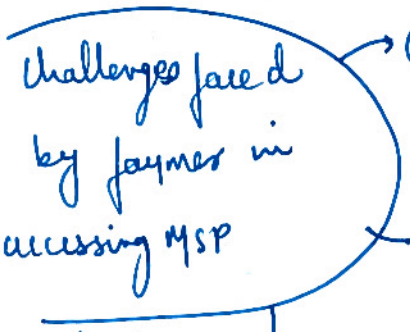
Eg Open procurement for Rice and wheat.

(iii) Allow farmer to practice different crop-

Candidates must not write on this margin

diversification as MSP on around 22 crops are assured.

Eg: Favoured focus on millet production and oilseed production.



(i) Lack of APMC market for realisation of benefit.

(ii) Cartelisation of traders which buy grain at price less than MSP.

(iii) No legal backing and at many times farmers get prices below it.

(iv) Lack of grading and marketing facility affect price farmers receive.

(v) less awareness among farmers about MSP other than wheat and rice which leads to ~~over~~ and under production

Government has been promoting farmers interest by schemes like MISS, price deficiency support scheme, PM AASHA scheme for better upliftment of farmers.

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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

Artificial neural network (ANN), is a set of 30-40 input output layer which mimics the functioning of neural network of human.

Importance in machine learning and Artificial intelligence (AI), include;

(i) Improves trainability of the device by calculating, recalculating and storing it for future use.

(ii) Assort data set for better characterisation and usage in context specific scenario.

(iii) Form baseline for Machine learning allowing machine to learn of advance data setting.

Candidates must not write on this margin

(iv) Induce semantic, syntatic and vocabulary analysis for better understanding of commands.

(v) Allow, deletion and upgradation of data for better development of AI.

Eg> Deep seek AI based on deep neural network.

(vi) Can be improvised by addition of 'more ANN' to make it deep neural network which allows development of AI models.

Government of India is promoting to development through
- India AI Mission
- National Science Policy
- Introduction of NEP for better skilling of new generation.

with these policies in live, ANN can help in democratization of AI and new development models for machine learning.

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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

Unmanned Aerial Vehicle has been in news since last April when Op. Sindoor and attack on Russia by Ukraine got the light.

UAVs in defence sector

Importance :- (i) Border management - 24x7 as India's border is porous.

~~Eg Tapas drone can be used for this.~~

(ii) For surveillance, in areas of great national interest.

(iii) For supplying materials for development of defence armory from one place to other.

Candidates must not write on this margin

(iv) for, 'counter attack and deterrence' in case of foreign aggression.

importance in modern warfare

(i) Coveted attacks as seen during Ukraine attack of Russia.

(ii) Very less cost in manufacturing and hence can be deployed highly.

(iii) Allows for targetted attack without any chance of damage on human (as unmanned)

(iv) Can 'bypass radars' as fly through very less height.

(v) Can be attacked in 'sequence one after other', inflicting heavy damage.

eg SWARM drone attack.

In this way drone technology has been increasing its presence in defence sector and modern warfare.

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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

Oil spills refer to phenomena in which due to accident or leakage, large amount of oil get spilled over ocean water.

Environmental impacts of oil spill on marine and coastal ecosystem are as follows.

(i) Cuts off oxygen for fishes causing hypoxic condition leading to fish death.

(ii) Leads to mass death of phytoplanktons and zooplankton due to anoxic condition.

(iii) May lead to 'migration of fishes' from areas causing instability in coastal ecosystem.

Candidates must not write on this margin

(iv) May cause coral reef loss due to death of zooxanthlae because of oil spill.

Various method used for cleaning up oil spills areas follows.

- (i) Mechanical removal of oil through skimming it out.
- (ii) Use of water ballons and baskets for removal of oil.
- use of containers to suck oil up and remove it.
- (iii) Biological method like Oil-Zapper bacteria for phyto-remediation.

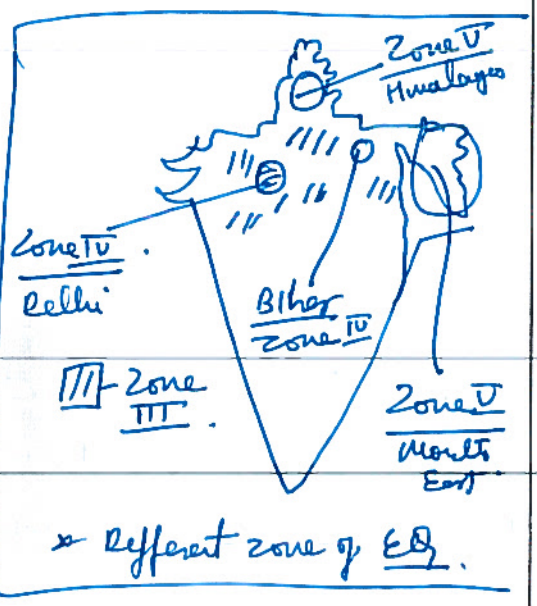
This way, oil spills are removed stopping it from becoming hazard and maintaining balance in coastal life and marine environment.

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 India is marked by Himalayas in north, Gangetic plain in centre and north-East hill in east making it vulnerable to Earthquake.



Vulnerability of Earthquake related disasters are as follows:

(i) Himalayan area is prone to landslide, avalanche and rockfall due to sesimicity causing instability.

(ii) Plain area may be affected with disaster like Glacier lake outburst flood caused by Earthquake
Eg Sikkim GLOF.

Candidates must not write on this margin

(iv) North eastern area suffers from disasters like landslides and 'free fall' of rock triggered by earthquakes.

India's preparedness in ~~meeting~~ mitigating their impact includes;

(i) National landslide zonation and mapping has been done.

(ii) Frequent Early Warning system is provided if high intensity Earthquake hit any area

(iii) National disaster Response force for response measure if any disaster happen.

(iv) National disaster Management fund for capacity building against disasters.

In this way, India is ready for tackling any Earthquake - related disasters in North India.

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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

Crypto currency and other emerging technologies are distributed ledger based technology which is online based and promotes 'anonimity' leading to menace of money laundering and terror financing.

Their contribution in money laundrig and terror financing includes:-

(i) Easy to access as mostly online available and require minimum information.

(ii) Maintains anonimity as based on block chain technology which is not easy to break.

(iii) Allows, 'easy transfer' of money to any

Candidates must not write on this margin

part of ~~country~~ would without physical payment.

(iii) Proceeds of it are used for financing Terror activities and organised crimes.

Steps taken by government of India to tackle this issue includes ;

(i) Increased presence of 'cyber warriors' to check on illicit work online.

(ii) Crypto currency attracts 30% tax and 1% TDS.

(iii) Financial Intelligence Unit (FIU) look upon suspicious financial activities.

(iv) ED prosecutes cases related to Money laundering.

↳ Till 2013, around 3100 Money laundering case registered by ED (2020-23)

Thus, with growing concept of digitalisation and emerging techologies, it is necessary to have futuristic monitoring mechanism for better identification.

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 refers to combined warfare techologies i.e traditional and non-traditional along side increasing use of techology in warfare.

It is different from conventional warfare in following ways;

(i) High 'use of techology' in warfare for example use of UAVs and drones for attack.

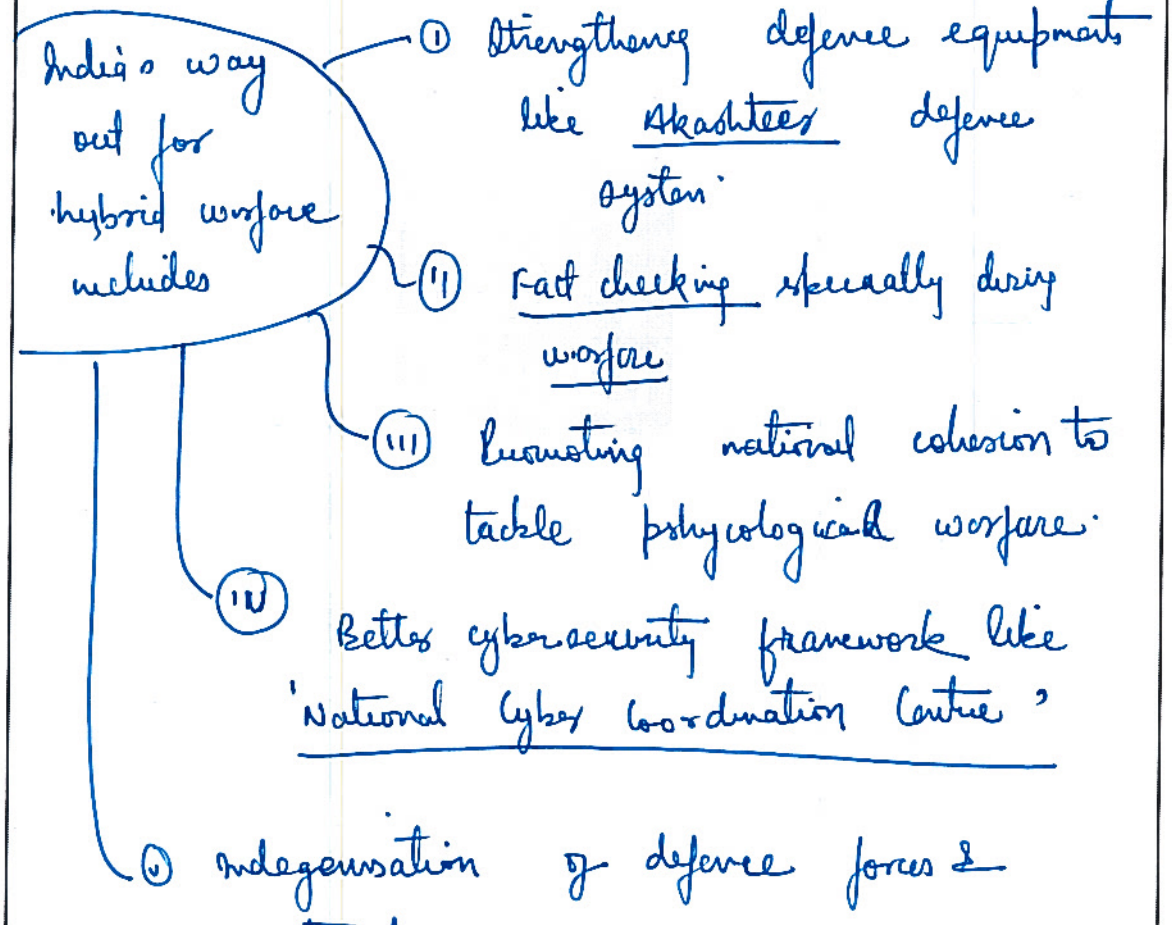
(ii) No physical need to cross borders, techologies like swarm eased by drones

(iii) Info nation warfare by promoting misinformation and disinformation

Candidates must not write on this margin

of warfare. Eg: Pakistan did it during operation Sindoor.

(iv) Psychological warfare which leads to people losing trust in their country's government promoting more input on natural warfare.



With these changes India can navigate its way out from hybrid warfare and promote peace and harmony.

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

India has been pushing greatly for digitisation of economy to promote efficiency, effectivity and reduce corruption for Transcending to 'Viksit Bharat by 2047'

But it faces some challenges which includes

① lack of digital infrastructure with many
Eg As per NSO, 42% of household in urban areas and 15% of households area have internet connectivity

② lack of digital literacy
Eg As per NSO, only 20% above age of 5 have basic digital literacy

Candidates must not write on this margin

(iii) Compounded with gender digital divide.

Eg: As per NFHS 5, only 33% of female have ever used mobile phone.

(iv) lack of interoperability features in many services causing departmental issues.

(v) lack of language compatibility as majority local language component is missing.

But India has pushed a larger drive for digitalisation:

(i) Umang is providing 1677 services from 207 department at one place.

(ii) e-Hastakshar has provided 82 crore + hastakshars / digital signatures.

(iii) UPI, has crossed over 21700 crore transactions in volume.

(iv) Aadhar has formed base for DBT (direct Benefit transfers).

Candidates must not write on this margin

Measures to ensure equitable access to digital resources include;

(i) Promoting digital literacy through programs like 'digital India Mission'.

(ii) Promoting digital infrastructure in rural areas.
   Eg ⇒ Bharat Net for wifi.

(iii) Promoting language component through 'Digital India Bhasini'.

(iv) Promoting Cyber security measures to stop data leakages and build public trust.

Thus, with these policies in live, India can aim for equitable digital resources for all promoting the mission of 'Sabka Saath Sabka Vikas'.

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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

AI is the new innovation in the cycle of Industrial Revolution 4.0 which has multitude of effect on different aspect of societies and economy.

Impact of AI on employment

Positive impact :-

(i) It will 'create demand' for new jobs like coder, bug reader and developer

(ii) It will promote 'humanism' as many small scale job can be done through machine freeing people from such jobs

Eg. Cleaning rooms, administrative billings etc.

It will create employment in 'component market' as well as 'repair and service market'

Eg. Rise of AI service centres.

Candidates must not write on this margin

Negative impact includes

- It will take away menial jobs like, catering services, cooks etc.
- (II) It may lead to unemployment of larger untrained professionals.
  - Eg: In India only 4.5% have received formal training.
- (III) It may stop people with lesser skill to be replaced by machines.
  - Eg: Automated car leads to erasure of jobs of drivers.
- (IV) It may lead to unemployment of even 'high skilled workers' as many AIs like GPT can do coding, check for bugs and can develop applications

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Measures to navigate this challenge and promote growth include

(i) Upskilling and reskilling of workforce for better absorption.

(ii) Balancing technology with manual labour.

(iii) Rise of care economy and focus on more employment generation.

(iv) Regulation of technology as in areas where it should be restricted.

Eg: In defence forces, AI may cause hamstring.

(v) Reducing education - skill training gap by promoting skill training infrastructure in schools and colleges.

Eg: Centre of Excellence and focus on IITIs

With this policy, as PM Modi say, "with change in technology, job don't disappear but only changes nature", we can navigate to changing nature of job.

NEXT IAS

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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

In India according to many resources, post harvest loss crosses ₹ 1 lac crore annually causing heavy toll on fiscal and economic reality of India.

Constraint of marketing and Transport as reason of post harvest loss;

(i) It disallows farmer to reach to 'market' and hence leads to losses.

(ii) It fail to generate consumer trust due to marketing facilities.

(iii) 'limited scale of promotion' in nearby areas leads to less farm realisation for farmers.

(iv) Farmers income decreases substantially due to weight-loosing crops especially

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'horticulture crop' get rotten easily.

(v) leaves the farmer at bottom line of competition and hence losses multiply.

Eg 'Nasik Onion case', where farmer threw onion on road because of just ₹1/kg.

But not only they are constraint, many other constraint like;

(i) Lack of post management post harvest leads to loss of product.

(ii) Lack of food processing industries disallows farmer for value addition and preservation.

Eg As per NITI Ayog – ₹91000 cr losses due to this.

(iii) Lack of cold storage near farm leads to open air storage leading to crop losses.

(iv) Lack of 'drying', 'sorting' and 'grading' facilities disallows farmer and leads to post-harvest losses.

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But government has been reducing it through schemes like,

(i) PM Formalisation of micro enterprises

(ii) PM KISAN SAMPADA scheme

(iii) e-NAM for better market to farmers produce.

(iv) Agriculture Development funds for infrastructure creation of storage and supply chain.

Thus a multi-pronged approach along with focus on pre-harvest losses is necessary for farmers development and reduced wastage.

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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

Direct subsidies refer to subsidies given directly to farmer in form of direct benefit transfer etc but indirect subsidies are subsidies which impact agriculture sector 'indirectly' which includes canal subsidy, fertilizer subsidy etc

Impact of these subsidies on cropping diversity includes :;

(i) Major focus on 'wheat and rice' growing due to great MSP and 'open-procurement' by FCI

(ii) Majorly for irrigation, tubewell is preferred because around 78% ground subsidy is directed for it.

(iii) Growing interest in natural farming and

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horticulture development is because of growing subsidy on seeds, natural manure etc.

(iv) Heavy usage of urea and promotion of crops like oilseed is because of subsidy on fertilizer and subsidy under National Mission on oilseed respectively

(v) Millets and coarse food grain is lesser grown because of lesser subsidy given for these crops.

Impact on farm economy

(i) Increased 'farmer's income' to around ₹12000 approx

(ii) Better realisation of farm because of fertilizer and seed subsidy.

(iii) Promotion of candl subsidy has also led to employment generation and

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greater farm income.

(iv) Subsidies in form of support under PM KISAN has also empowered ~~farmers~~ farmers.

(v) But has also led to dominance of only certain crop like rice & wheat.

(vi) Leads to dependency syndrome of farmer which hampers empowerment.

Thus subsidies are double edged sword and hence should be channelized wisely for empowerment of people dependent on farm economy.

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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

Reusable Launch Vehicles (RLV) are new generation vehicles which return back to earth after transferring the satellites in desired orbit.

Potential of reusable launch vehicles

(i) It will reduce cost of launching satellite by around 50% as compared to other launch vehicle.

(ii) It will allow safe coming and going to space promoting 'space tourism'.

(iii) It will help in reducing 'space debris' promoting safety of satellites and future missions

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(iv) It will allow redefination of space sector and promote more democratic exploration of space.

(v) It will lead to sustainable space mission reducing footprint.

India's initiative towards development of Reusable launch vehicles include ;

(i) HEX : For testing landing experiment from space forming parabolic path.

(ii) Landing Experiment (LEX) : ISRO made land a launch vehicle at narrow strip at Chitradurga, Karnataka.

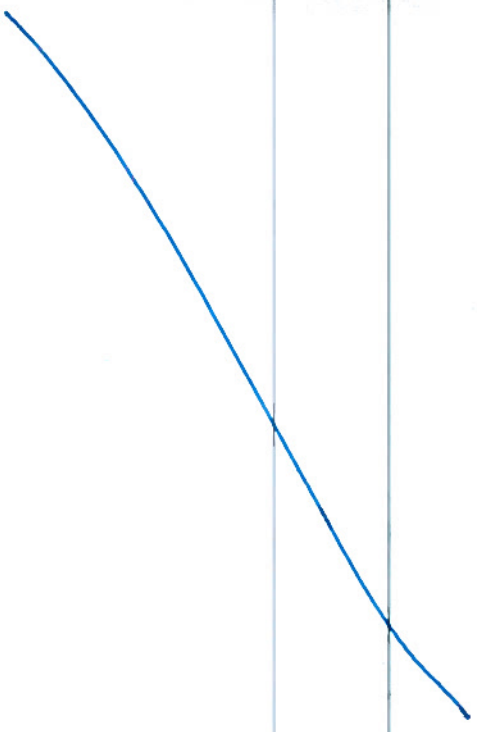
(iii) HSEX : For promoting landing using parachute and reentry into atmosphere in much guided way.

(iv) Reusing rocket using Pohini for landing experiment of RLV.

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~~Dono~~ ISRO is also planning testing RLVs for gaganyan - crew escape module test for if uncertainity happens mid - air with these experiments in line, ISRO along with global agency is on line for promoting usage and development of Reusable Launch Vehicles :



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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

BioE3 Policy is a policy for development of bio-technology for promoting research and development, promoting economy and making holistic development for employability.

Aim: To achieve $300 bn biotechnology market by 2030.

Objectives:
- Development of bio enablers
- Development of biofoundries.
- Development of smart proteins and functional foods
- Development of bioenzymes and chemicals
- Development of climate capture and marine research ideas.

- Development of 'Bio - AI hubs' for integration of Biotechnology and AI.

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Policy help in ensuring 'green growth' of the economy are as follows,

(i) Development of new generation of Carbon capture and utilisation mechanisms, reducing pollution.

(ii) In view of climate change, development of climate resilient crop varieties help in green growth.

Eg Ashika chick pea variety.

(iii) Allows for more genetically engineered crop and hybrid crop development.

(iv) Growing focus on smart proteins may lead to development of lab grown meat which is also climate sustainable.

Candidates must not write on this margin

(v) Create employment and allow avenues for innovation of new pharma, crop or protein variety.

Thus BIOE3 policy along with National Policy on Bio-pharmacy and other policies coherence, may lead to boost in green growth along with greater sustainance.

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 has provided for many market mechanism to deal with climate smart strategy and reduce pollution.

Various market mechanism includes;

(I) Carbon units which can be traded between surplus and deficit country.

(II) Clean development mechanism :- for investment in developing countries and can generate Certified Emission Reduction (CER) unit

(III) Joint implementation :- for projects in other developed country and (Emission Reduction Units) for trading.

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Article 6 of Paris agreement, talks about 'market mechanism' for trading carbon reduction unit, to allow countries to participate in such state along side 'non-market mechanism' too

This was made workable during recent COP 29 which is also called as being (climate finance COP)

Significance of global carbon market in achieving net zero targets are as follows :-

(i) Allows many countries to go for climate positive work earning them money.

(ii) Corporations may invest themselves in climate smart technologies as incentives are being provided.

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(ii) 'Credit deficit country' have to pay for getting units from 'surplus countries' and hence they also shift to less polluting industries.

(iv) Formalizes global level market mechanism reducing discriminatory practices like Carbon Adjustment Mechanism of EU; and promote net zero-target.

(v) Allows, people to earn money by adopting climate sensitive works like afforestation, green hydrogen etc for getting carbon credits and earning more.

Thus in this way, more sustainable carbon mechanism alongside net zero-target is achieved.

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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

Heat waves refers to temperature above 40°c in plain, 37° in coastal areas and 30° c in hilly areas, according to IMD, which is lethal for both human and environmental implications.

Reason behind heat waves rise

(i) Concretisation at peak in urban areas.

(ii) Degradation of wetlands due to encroachment.

(iii) Deforestation at large scale.

(iv) Global warming due to pollution etc.

(v) climate change due to overexploitation and over consumption.

Candidates must not write on this margin

Impact of heatwaves are as follows

(i) Heavy sweating due to humidity and high temperature leading to reduced efficiency

(ii) Heat stroke chances increases, which is fatal in nature.

(iii) Ill functioning of machinaries due to heat may reduce output.

(iv) Promotes wildfires in and around urban areas.

Heat Action Plans (HAPs) improve heatwave Management in following ways;

(i) Promotes sustainable way of living and avoid over-exposure in sun.

(ii) Development of buildings owning to GRIHA

Candidates must not write on this margin

code which ~~leads~~ leads to proper ventillation and cooling.

(ii) Planting trees - miyawaki or vertical afforestation for urban cooling.

(v) Restoration of wetlands and waterbodies of areas

(vi) Avoiding kitchenworks in peak hours of heat as it may increases chances of heat stroke

With these plan in action, we must strive for countering climate change by following LiFE (Lifestyle for environment) and responsible consumption.

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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

Rising influence of external and non-state actors due to proliferation of internet and digital media has led to increased threats to India's internal security.

Threats posed by them

(i) Radicalization of youth because of social media acting as echo chambers

(ii) Increased 'organised crime' especially drug trafficking through drones near India's border

(iii) Proliferation of terrorism and fundamentalist idea through social media.

(iv) Extremism and use of military in near border areas due to large scale

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wealth at once.

(v) Increase of communal tensions and riots due to sensitive speeches by non-State actors.

(vi) Increase of cyber crime due to attacks from external actors.

As per I4C → 31 lac cases of cyber crime reported in India.

Strategies to tackle these threats include

(i) Comprehensive Integrated border management system, which include
- CCTV
- Night vision cameras
- Radars and AI based surveillance
- Drone usage etc.

(ii) Development of regulatory measures of social media.

(iii) Increased global collaboration against terrorism

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and extremesism.

Eg T:20 group by India after Operation Sindoor

(iv) Induction of more cyber warriors and more stringent regulation of cyber spaces.

Eg National cyber Coordination Centre.
→ Cyber Sakshasta Abhiyan.

(v) Check on 'porosity' of border by fencing and monitoring through BOLD QIT system

With these strategies the problems of India's internal security can be reduced along side capacity building of nation to fight against such threat.

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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

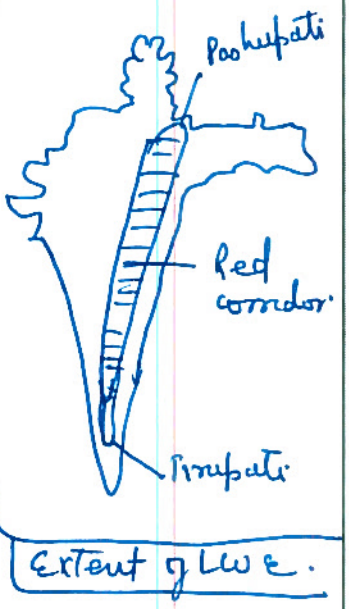
Left-wing extremism is a far-left ideology having its root in communism who advocates for classless society and equal society through armed rebellion.

Causes of LWE

- Failure of land reform due to irregularities
- skewed economic development model after independence based on 'trickle down theory'
- Imbalanced regional development
  - Eg: Vidharbha vs Mumbai
- Tribal displacement and lack of good rehabellation and resettlement mechanism.
  - Eg: 8.6% is population of tribals but they constitute 40% of displaced persons
- lack of grievance redressal mechanism exists.

Candidates must not write on this margin

Government of India's approach towards solving LWE issue;



(1) Security measures

(2) SAMADHAN Doctrine for ~~~~ actionable intelligence and checking on key performance indicators

(b) Modernisation of police forces; equipping them with best equipments.

(c) Special infrastructure scheme for fortification of police station etc.

(d) Special security measures for surrender and rehabilitation measures.

(e) Coordination of different police forces

⇨ COBRA (CRPF)

Greyhounds (Andhra Pradesh)

Bastariya Battalion (Chattisgarh)

Candidates must not write on this margin

② Development measures :-

→ focus on tribal aspirational district program.

- Construction of road under Road Requirement scheme — 5422 Kms +

→ Special assistance of ₹600 crore annually to LWE hit districts.

- Eklavya model school for education of tribal children

  ⇨ More than 130 + Eklavya Model school in LWE districts

→ PM Vandhan Yojana and PM Vankaushal Yojana for skill development.

Thus these strategies had led to decline in LWE districts from 90 in 2018 to 38 in 2024 which is to be ended by March 2026 as per home ministry.

NEXT IAS

Space for Rough Work

Space for Rough Work

NEXT IAS

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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.

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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.
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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 पृष्ट/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।