



NEXT IAS

MAINS TEST SERIES 2.0 - 2025 (FLT)

(To be filled by candidate)

TEST CODE : FLT2503

Test No. : 03

Name of Candidate: PAKSHAL SECRETARY Mobile No.

Roll No. : MIS-FLTRA046 Start Time 9:00 End Time 12:00

Date of Examination: 05/07/25 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

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

MARKING SCHEME *			
Marks Per Ques	Below Average	Average	Above Average
10 Marks	Below 3.00	3.00 - 3.75	4.00 and above
15 Marks	Below 4.50	4.50 - 5.75	6.00 and above

* Subject to change without prior notice.

IMPORTANT QR CODES

 <p style="margin-top: 10px;">Topper's Copy</p>	 <p style="margin-top: 10px;">Common mistake and Correct Filled QCAB</p>
 <p style="margin-top: 10px;">Copy Scanner App</p>	 <p style="margin-top: 10px;">Next IAS Test Centre Location</p>

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.

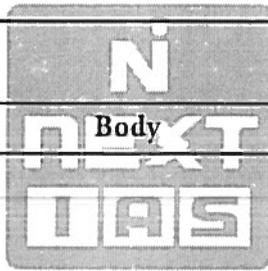
Introduction	Body	Conclusion

Q2.

Introduction	Body	Conclusion

Q3.

Introduction	Body	Conclusion



Q4.

Introduction	Body	Conclusion

Q5.

Introduction	Body	Conclusion

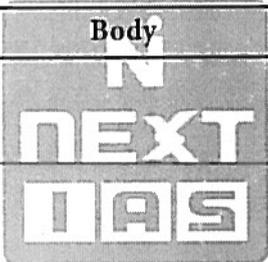
Q6.

Introduction	Body	Conclusion

Q7.

Introduction	Body	Conclusion

Q8.

Introduction	Body	Conclusion
		

Q9.

Introduction	Body	Conclusion

Q10.

Introduction	Body	Conclusion

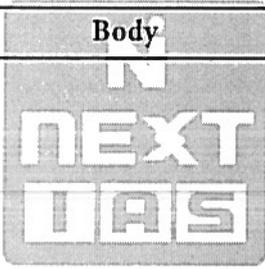
Q11.

Introduction	Body	Conclusion

Q12.

Introduction	Body	Conclusion

Q13.

Introduction	Body	Conclusion
		

Q14.

Introduction	Body	Conclusion

Q15.

Introduction	Body	Conclusion

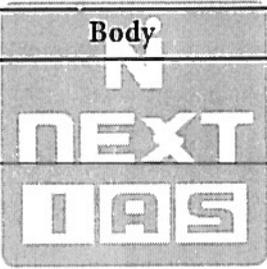
Q16.

Introduction	Body	Conclusion

Q17.

Introduction	Body	Conclusion

Q18.

Introduction	Body	Conclusion
		

Q19.

Introduction	Body	Conclusion

Q20.

Introduction	Body	Conclusion





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

Recently in Budget 2025-26,
government increased gender budget
to around Rs 3.1 lakh crore

Recent initiatives for gender budgeting

- ① Increase in Budget - to 6%
of total government spending
- ② Clear division of money
allotment in Part A and Part B
of Budget.
- ③ launch of new gender focused
schemes eg Mission Shakti
for women
- ④ Providing clear definition of
gender budgeting - process of
taking gender vulnerability into
concern while budgeting

Importance

① Improved access to resources to
the women

→ Bank credit share rose to 22%
for women

② More freedom and mobility among
genders

③ Allowed and empowered women to
take decision by self-autonomy

④ Reduced dependancy of ~~the~~ one
gender on other gender

⑤ Solving of specific problems
faced by women

Issues → Mere Accounting exercise
→ No impact measurement

To ensure gender justice by 2047,
we need to shift from mere reporting
of gender budgets to purposeful planning
for upliftment of women



2.

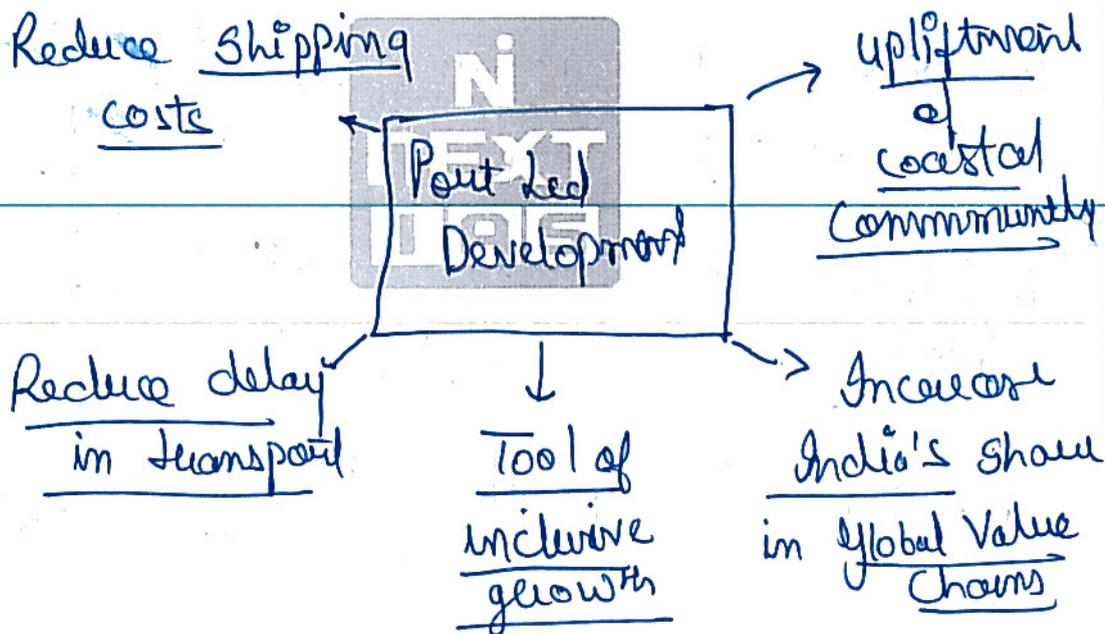
बंदरगाह आधारित विकास को भारत में आर्थिक विकास और क्षेत्रीय एकीकरण के प्रमुख चालक के रूप में देखा जाता है। चर्चा कीजिए कि सागरमाला पहल किस प्रकार बंदरगाह आधारित विकास और तटीय अर्थव्यवस्था को बढ़ावा दे सकती है।

(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

Sagarmala is initiative of Ministry of Shipping to make "string of pearls" around the ports of India.



Role of Sagarmala

Ⓐ Port-led growth

Ⓘ Improve the infrastructure across ports in India

Ⓙ Provide livelihood & wellbeing

of coastal community

(ii) Reduce logistic cost of
India (currently - 13% of GDP)

(N) Would ensure port become
central to coastal area development

(B) Coastal Economy

(i) creation of jobs → for coastal
infrastructure upgradation

(ii) Sustainable coastal fishing as
one of the pillars of sagarmala

(iii) Preservation of our local heritage
and culture (eg) Maritime Complex
at Duttal

Issues → Delays in Projects
→ low Budgetary Allocation
→ Lack of coordination

① Coastal shipping is key to
success of "assembly in India, for
the world"



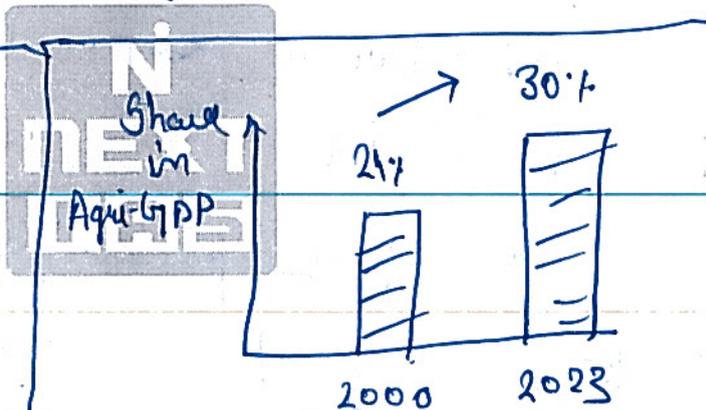
3. गैर-कृषि अर्थव्यवस्था में पशुपालन के महत्व पर चर्चा कीजिए। पशुपालन को बढ़ावा देने के लिए हाल ही में प्रस्तावित पशुधन जनगणना की क्या आवश्यकता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

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 involves activities like dairy, animal rearing, fishing etc and is one of major component of India's non farm rural economy

Importance of livestock farming



① Rising share in total Agri output (30% of Total Agri-GDP)

② Employment potential - employs 2/3rd of rural household.

③ Export potential → Milk exports are rising

- ④ Women empowerment - 85% of rural women engaged in livestock as source of income
- ⑤ Creating non-farm jobs → key to structural transformation (Lewis Model)

Need of livestock census

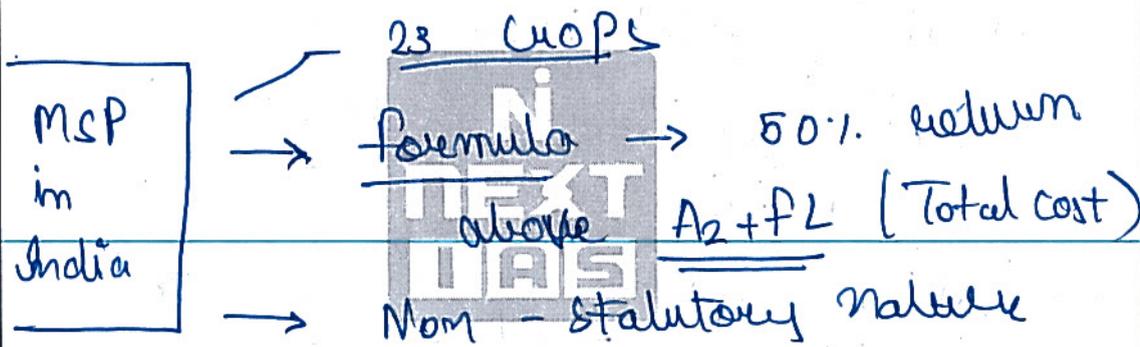
- ① Estimating total livestock → key to plan specific intervention in policies
- ② Estimating people's dependency on livestock → gives clear idea of extent of sector
- ③ Helps in solving the food - animal husbandary paradox
- req ▷ Animal husbandary only receives 2% of credit despite contribution
- ④ Tool for empowerment and framing required schemes.

Thus, livestock census would be path towards "evidence based policy making" in India



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 refers to minimum price that government promises to the farmers on 23 specified crops based on recommendation of CACP



Role of MSP in promoting income

- ① Ensures assured income to farmers
→ Solves cobweb problem of agriculture pricing.
- ② positively correlated to farmer's income \Rightarrow Recently govt increased wheat MSP by 150 Rs.
- ③ Allows farmer to take risk and

thus improves overall results of farming
 → positively correlated with farmer investment -

- ④ Hedge against inflation and ensure real return to farmer

Challenges faced by farmers

- ① lack of awareness → As per NITI only 40% of farmer know MSP before sowing seeds.

- ② Limited Reach Benefits only 8% of total farmers (MoA)

- ③ Regional concentration of MSP operations
 eg Punjab, UP, Bihar

- ④ farmer's exploited by middle man → don't receive proper MSP.

Way forward } → NITI : ~~Allow~~ Announce well in advance
 } → Innovative solution eg Bhavantar Bhagat of MP.

Need to shift from MSP to public investment in Agri (Higher Multiplier effect)

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



2024 nobel in physics went to Hopfield et al for their work on Artificial Neural Network (ANN)

ANN (Artificial Neural Network)

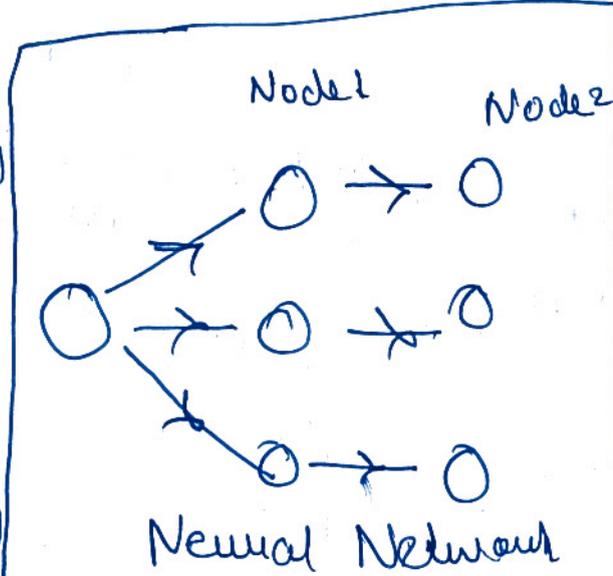
① Process of simulating neural based method of learning among the machines.

② Use of nodes to transfer data and learn correlation.

③ Idea based on → Human Neural Network

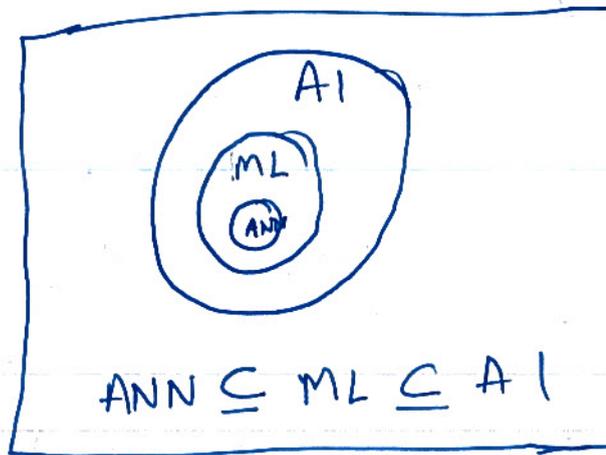
Mechanism

- ① Data is transferred from one node to other
- ② If the connection is strengthened
- ③ Other wise weakened



Importance in ML and AI

- ① Key mechanism to train machines in data → ensure supervised & unsupervised learning
- ② Helps in reinforcement of ideas and learning in machines
- ③ Simulating human intelligence → Basic bloc of AI
- ④ Stores ~~an~~ information and data flow to give fast results
- ⑤ One of the Method → To ensure that machine is intelligent



Recent success of FDA approval to NeuroLink for ANN based devices
 has potential to usher "neural revolution" in the world



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

Recently, we saw UAV warfare
in two important Battlefields
① operation Gandoor by India
② operation spider web by Ukraine

Importance of UAVs

① Defense Sector

- ① low cost defense equipment in
form of UAVs.
- ② Can be used to send and
receive weapons for defense
related works.
- ③ Major wing arena of defense
research and spending.

② Modern Warfare

- ① Recent uses  By Ukraine
in Russia

- (ii) key element of 5th generation warfare.
- (iii) Can overwhelm air defenses
 req Use of Swarm drones
- (iv) Cheap → can destroy millions
worth of asset req destroying
of fighter crafts in Russia
- (v) Anonymous, untraceability and
effective surveillance by UAVs.

Rising Threats →

- ① grey zone warfare
 req use of drones to send
drugs in Punjab.
- ② Becoming Tool of
cheap warfare

Way forward.

A National Drone policy for
 Defense sector is need to
holistically address challenges.

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 spill refers to a phenomenon where due to hydraulic faulting or marine ship spilling, oil gets spread over vast regions in ocean

Impact

(A) Marine Ecosystem

(i) Creation of Dead-zones → due to no oxygen supply.

(ii) Oil → does not degrade → make marine ecosystem non-functional

(iii) Creation of hypoxic effect in the ocean → permanent losses

(iv) Disturb food chain of Marine ecosystem

(B) Coastal Ecosystem

(i) Bioaccumulation among coastal people

- (ii) Reduces fishing catch and negative impact on economy.
- (iii) Spreading of pollution in coastal areas due to sea waves

Methods used

① In-situ Methods

(i) Bioremediation \Rightarrow use of oil-zappers

(ii) phytoremediation

(iii) Degradation of spreaded oil

② Ex-situ Methods

(i) Collecting of spreaded oil from ocean surface

(ii) Ship based treatment of oil water

As "London Convention" says, the oil spills must be dealt based on polluter pay principle.



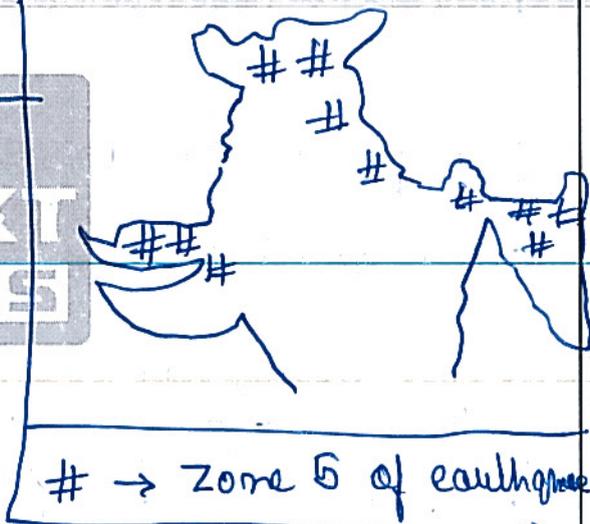
8. भूकंप संबंधी आपदाओं के प्रति उत्तरी भारत की संवेदनशीलता पर चर्चा कीजिए। उनके प्रभावों को कम करने में भारत की तैयारियों पर प्रकाश डालें। (उत्तर 150 शब्दों में दीजिए) 10 अंक

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

59% of India's area falls in sensitive seismic zone making it vulnerable to earthquake

Vulnerability of Northern India

- ① Collision of Indian and Eurasian plate → in north India



- ② Most of Region → falls in zone 5 (most vulnerable) - see fig.
- ③ Tectonically active and young mountain - Himalaya
- ④ large Number of Reservoirs
 ↳ Koyna Dam kind of earthquake
- ⑤ Possibility of landfall induced earthquake

India's preparedness

- ① Hazard zonation → Already done
- ② Preparation of SOPs and steps for earthquake → done
- ③ Seismic retrofitting → partially done
- ④ Focus on earthquake risk reduction in northern region.
- ⑤ Formulation of rescue & rehabilitation plan → complete
- ⑥ Hazard Risk ~~Policy~~ policy → In place

Way forward

- ① Ravi Chopra Committee → Stalling 23/24 HEPs in Himalayan Region
→ Himalaya specific Earthquake plan
- ② ① focusing on infrastructure upgrade → retrofitting fully.

As Gandhinagar Declaration of G20 says, Disaster Risk Reduction & Building Back Better is only way forward



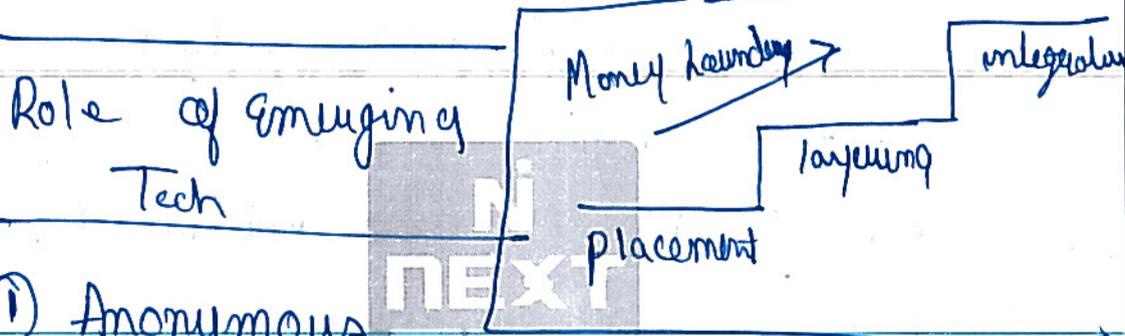
9. चर्चा करें कि क्रिप्टोकॉइन्स और अन्य उभरती प्रौद्योगिकियां मनी लॉन्ड्रिंग और आतंकवाद के वित्तपोषण के खतरे में कैसे योगदान करती हैं। इस समस्या से निपटने के लिए भारत सरकार द्वारा क्या कदम उठाए गए हैं?

(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 refers to blockchain based, decentralised, peer verified

~~crypt~~ Currency eg Bitcoin, Ethereum



① Anonymous Nature

→ easy to launder funds

② Creation of explicit crypto to fund money laundering eg Black Coins

③ Easy process of layering → allows creation of multiple account without ID proof.

④ Decentralised Nature → Difficult to trace the funds.

⑤ Easy convertibility from crypto exchange → smooth integration of funds

⑥ Terrace linked coins

eg Monies used to fund ISIC

Steps undertaken

- ① Mandatory KYC by crypto exchanges
- ② 30% Tax → on all crypto transaction (profit)
- ③ Banks need to monitor transfer of funds to and from crypto
- ④ International collaboration eg FATF, NMF T Conference
- ⑤ Intelligence gathering eg special cell in ED for crypto

Way forward

- ① Law to regulate crypto and its uses in India
- ② Mandatory linking PAN with crypto account
- ③ RBI suggestion → Banning crypto in India.

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



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

As per Google & Bain report,
India's digital economy is projected
to reach \$ 1 Trillion by 2030

India's push for Digital Economy

① DPI led model (Digital Public Infrastructure)

req UPI — \$ 17.6bn worth of transaction in May

② Specific government schemes

req Digital India Mission

③ JAM Trinity push

→ Jam Dhan : 53 crore account

→ Aadhar : 99.9% coverage

→ Mobile : 117 crore phone users

④ Cheap cost of internet

req only \$ 0.17/gb (vs \$2/gb-world)



⑤ focus on Digital Governance

eg e-gov, e-NAM, GST portal

Challenges

Measures

① Digital Divide →
only 37% in rural area have internet

① Digital Literacy Campaigns

eg Stark & Surakshit Bharat

② Cyber security issue
eg AIIMS attack

② Inclusivity of Digital India

③ Data privacy & security concerns

③ Providing Right to be forgotten to people

④ low digital literacy among people

④ Expanding DPI model into rural India

⑤ Rising frauds
eg 6000 cases of digital arrest

⑤ focusing on sheltering of women

⑥ low funds for digital

Challenges	Measures
<p>⑦ <u>Digital Apartheid</u> against weaker <u>section</u>.</p>	<p>⑥ <u>Digital India</u> <u>awareness</u> <u>fund</u> for <u>literacy</u>.</p>
<p>⑧ <u>Misuse</u> of <u>personal</u> <u>data</u> by <u>people</u>.</p>	<p>⑦ <u>Incentive</u> <u>design</u> in <u>India</u> from <u>assembly</u> in <u>India</u>.</p>
<p>⑨ <u>Lack</u> of <u>local</u> <u>digital</u> <u>manufacturing</u></p> <p>Dependent on <u>imports</u> of <u>semiconductors</u> <u>chips</u>.</p>	<p>⑧ <u>Breaking</u> the <u>duopoly</u> in <u>digital</u> <u>economy</u> in <u>India</u>.</p>
<p>⑩ <u>Ineffective</u> <u>implementation</u> of <u>e-governance</u> <u>initiatives</u></p> <p>e-<u>NAM</u></p>	<p>⑨ <u>Training</u> among <u>children</u> on <u>literacy</u>.</p> <p>⑩ <u>Cyber</u> <u>Hygiene</u> to <u>reduce</u> <u>fraud</u>.</p>

Recent push of India's DP1 Model during G20 and impact of model to various countries highlight our "Comparative Advantage" in sectors.



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

As per Acimoglu & Robinson (2019), AI would be next creative destruction in the job sector across the world

Job losses a reality

↳ Mckinsey Report

78 million jobs loss in India due to AI

women would be most vulnerable to job loss (2/3rd of Total)

Impacts of AI on employment

(A) positive impact

(i) Improve productivity of the workers.

(ii) Complements efforts of the workers + creates new type of jobs

- ③ Lower workload and faster processing of work by employee
- ④ Reduction in employment cost of firms.
- ⑤ Promotes → Reskilling & upskilling among workers

② Negative Impacts

① Acemoglu & Restrepo → Earlier all industrial revolution have had led to prolonged period of unemployment.

② Jobless growth - 78 million jobless (McKinsey)

③ Would be disastrous for Semi-skilled and low-skilled workers.

④ Replacing of Humans with AI
 → Already seen in service sector like chatbots replacing humans

(v) Reduce wages of low-skilled workers → as AI takes their work

Measures to be taken

- ① Promoting "augmented intelligences"
→ which augments & not replace humans
- ② Reskilling & upskilling of workers
- ③ Formation of National Task force →
To study emerging threats
- ④ Creating new jobs in domain of
AI → AI engineers, data scientist
- ⑤ Rehabilitation and support to
people losing job due to AI.
- ⑥ Employment linked Incentive (ELI)
for new jobs in other sector

Economic Survey 2023-24, however
highlights that reaping ~~the~~ India's
unique AI advantage can lead
to job creation due to AI instead of
loss

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

Despite being one of largest food grain producer (327 MT), Rs 1,52,790 crore of post harvest losses have led to prevalence of hunger among plenty in Ind



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write on this margin



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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

As per Budget 2025-26, the subsidy Bill of India is 4.24 lakh crore Re (8% of Total Budget) this year.

Direct Subsidies

① Subsidies that directly reduce the prices of inputs in agricultural production.

② Are directly related to price of inputs in Agriculture Sector

③ Example → Fertiliser Subsidy, Irrigation Subsidy, Electricity Subsidy

Indirect Subsidy

① Subsidies that indirectly finance operation of agriculture sector

② Indirectly leads to reduction
in price of inputs / provide
stable income

③ Example → MSP, insurance
subsidy (PMFBY)

Impact on cropping diversity

Positive → promote diverse crops
↓
provide
diverse inputs
at
subsidized rates

Sometimes → oil seeds
subsidy under ~~PMFBY~~
NMOP

Negative

① leading to wheat - rice dominance
in India's food basket

→ MSP only on wheat - rice is
effective

② Negatively discriminates against
other crops

→ Pulses, Millers

② Promotes monoculture + mono-cropping due to stable income

Impact on farm economy

positives → welfare of small & marginal farmers
 → Affordability of farming

Negative impact

- ① Crowd out private investment in farm - economy
- ② Perverse incentives to farm sector
 eg. Virtual water export due to irrigation subsidy
- ③ Makes farmers vulnerable & dependent
- ④ Market Distortion → due to subsidy

Way forward → Shifting to public investment (3x more benefit - Ashok Gulati)
 → R&D investment instead of subsidy

" Subsidies are enemies with face of friend that create good politics but bad economies" - Abhyeet Bora



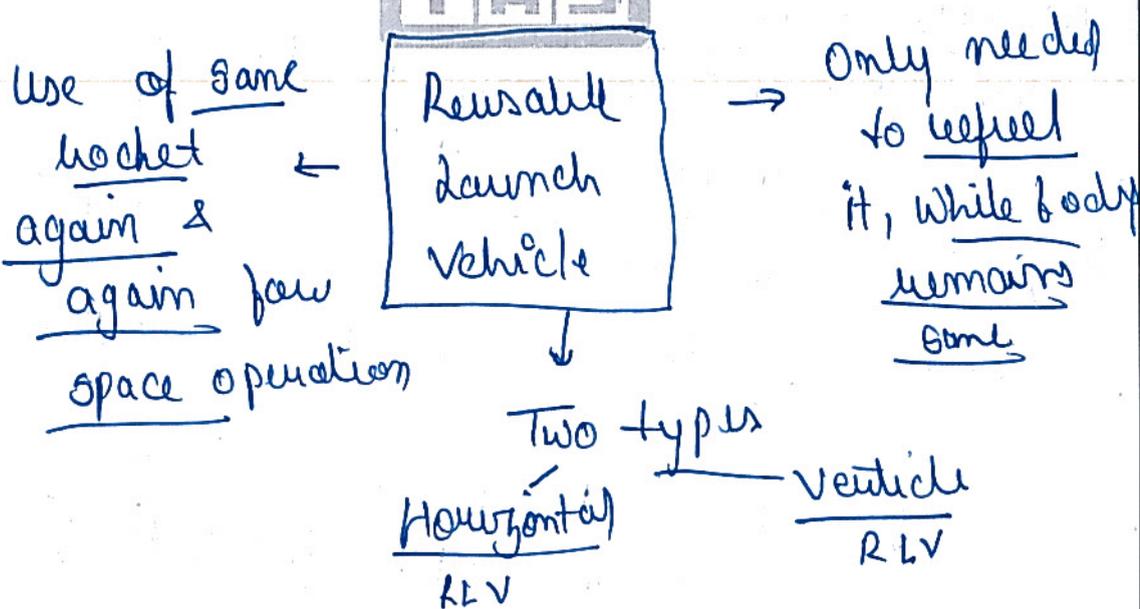
15. भविष्य के अंतरिक्ष संचालन और मिशनों में पुनः प्रयोज्य प्रक्षेपण वाहनों की क्षमता पर चर्चा कीजिए। पुनः प्रयोज्य प्रक्षेपण वाहनों के विकास की दिशा में भारत की क्या पहल है? (उत्तर 250 शब्दों में दीजिए) 15 अंक

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

Recently, Space X demonstrated unthinkable feat of catching a falling booster of falcon 9 rocket with mechanical choopers, advancing potential of reusable LV.

Potential of Reusable Launch Vehicle



potential

① Reduction in cost of space travel → from \$ 2000/kg current

to expected $\$ 100/\text{kg}$

- ② fasten assembly of satellite launching system \rightarrow Reduce turnaround of time to hours from days
- ③ Sustainability of space operation
- ④ Reduce the environmental footprint of space sector \rightarrow Reduce resource use in spacecraft
- ⑤ ~~Key~~ potential to start \rightarrow space tourism and space mining due to lower cost

India's initiatives

- ① Plans to develop an horizontal reusable launch vehicle
- ② Attempts to make Next Gen Launch Vehicle (Next Gen launch vehicle) as ~~part~~ partially reusable
- ③ Experimentation for reusable

Vehicle

Req RLV-TD → Successfully demonstrated horizontal landing of spacecraft component.

④ Developing of frequently reusable material. Req New research on Kevlar polymer

⑤ Simulation → of landing back of Vehicle

⑥ Private Sector

① Bellatrix → Mission to develop RLV in future

Way forward

① Accelerating speed of testing and development.

② More funds to ensure NRLV is fully reusable.

③ Learning from Best practices
Req Space X Model



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

Recently cabinet approved Bio E3 policy that is being touted as next gamechanger for Bioeconomy in India.

Aims and objective of policy

- ① Creating a \$100 bn worth of bioeconomy in India
- ② Indigenous development of Biotech resources
- ③ focus on R&D and Innovation in the sector.
- ④ Role in private sector to universal in Bioeconomy.
- ⑤ Making biotechnology to benefit people at large through human centric focus

- ⑥ Job creation → In Bioeconomy
sector of country.
- ⑦ Making products competitive and
focussing on export potential of sector

Role in ensuring "green growth"

- ① Incentivises "green" research for
transition of economy
→ req Promotion of 4G of Biofuels.
- ② Use of Bio remediation for solving
~~the~~ pollution problem → focus of ~~economy~~
policy.
- ③ Will lead to creation of
sustainable jobs → future ready &
green
- ④ Helps in reducing the energy
dependence of our growth
- ⑤ R&D focus of → New alternative
policy to ensure green
growth

⑥ focus on indigenous development → Reduce our import dependency of our growth

⑦ Private sector focus → incentives investment in green alternatives

Issues → limited funding
 ↓
 Vaguely wounded nature
 No concrete targets in policy

Bio technology has potential to
 usher a new revolution of green
 growth in India.



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

In COP 29 recently Paris rulebook for implementation of market mechanism was finalised.

Various Market Mechanisms

① Carbon Trading

Two types

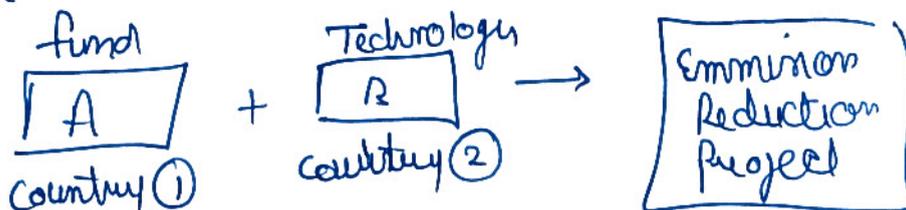
Emission Trading

↓
 Allow to trade current emission by Cap & trade model.

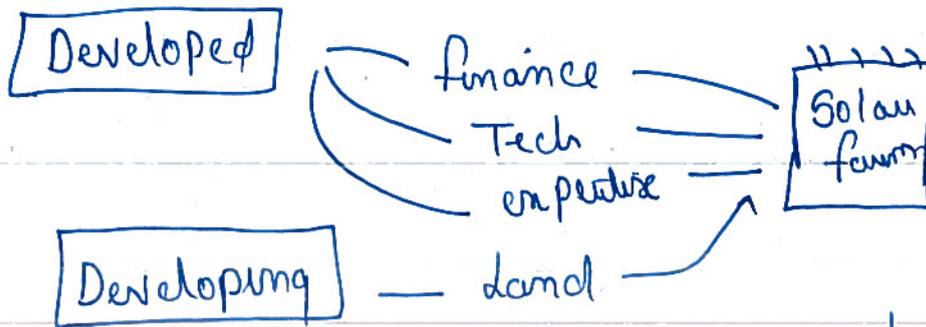
offset trading

↓
offsetting of higher emission by a country in other country

② Joint implementation of project - (Between two Annex - countries)



③ Clean Development Mechanism (CDM)



→ Implementation of "green & clean" project for transition in developing country.

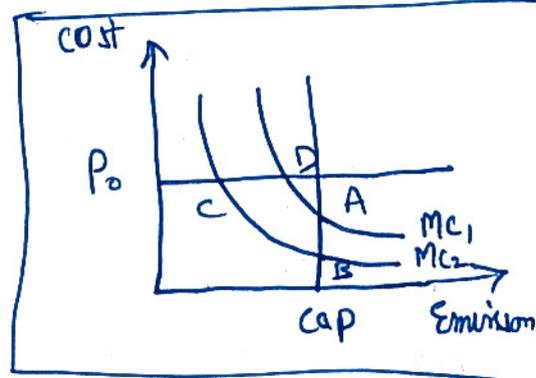
Article 6 of Paris Agreement

- ① Calls for development of various market and non-market interventions for greener growth.
- ② Allows nations to mutually develop carbon trading strategies.
- ③ Provision of retention of past accumulated credits in (2013-15) period.
- ④ Also calls for developing non-market strategies for emission reduction.

Significance of carbon Market

- ① Punishes the offender of higher emission → form of "carbon tax"
- ② Incentivises countries to lower their carbon emission → to earn carbon credits.
- ③ Promotes technology transfer from developed to developing countries
- ④ Tool of climate justice and CBDR (common but differentiated responsibility)
- ⑤ Net emission of world remain capped by market mechanism.

- ⑥ Equitable Nature
 - ⊗ compared to carbon tax (see fig)



Thus, carbon market across world can help us transition faster



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। हॉट 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

Recently, there were calls from experts and policy analysts to declare Heat waves as notifiable disaster under DM Act, 2005.

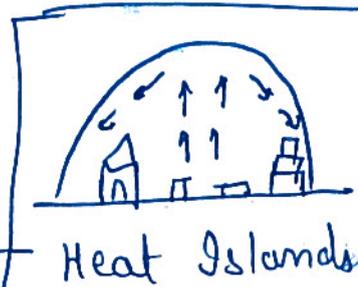
Heat waves

- ① Situation of intensely hot condition
- ② Dry winds → No rainfall
- ③ Results into extreme heat stress

Role of Climate change & urbanisation

- Ⓐ Frequency of Heat waves
 - ① Rising Temperature due to climate change → More frequent
 - ② Concentration of cities → no natural shield (forest) against heat waves

(iii) Urban Heat Dome
effect → More frequent
heat waves



(B) Impacts of Heat wave

- ① More Heat stress due to rising intensity.
- ② No relief for extended period due to climate change induced water deficit.
- ③ Proliferation of slums → further heat vulnerability in cities.
- ④ low water availability due to climate change → causing heat related deaths.

Heat Action Plan

Involves strategies to cope up with heat wave with focus on short term planning and long term Sustainable development.

Role in heatwave management

- ① Highlight steps to be taken to reduce vulnerability \Rightarrow passive cooling techniques
- ② Integrates long term planning \Rightarrow Biophilic urbanism, concept of sponge cities.
- ③ Articulates plan of action to reduce heat stress among people
- ④ Special focus on vulnerable sections \Rightarrow old age people
- ⑤ Tries to bridge the rich-poor divide of heat wave.
- ⑥ Provides clear direction to administrative officers for action.

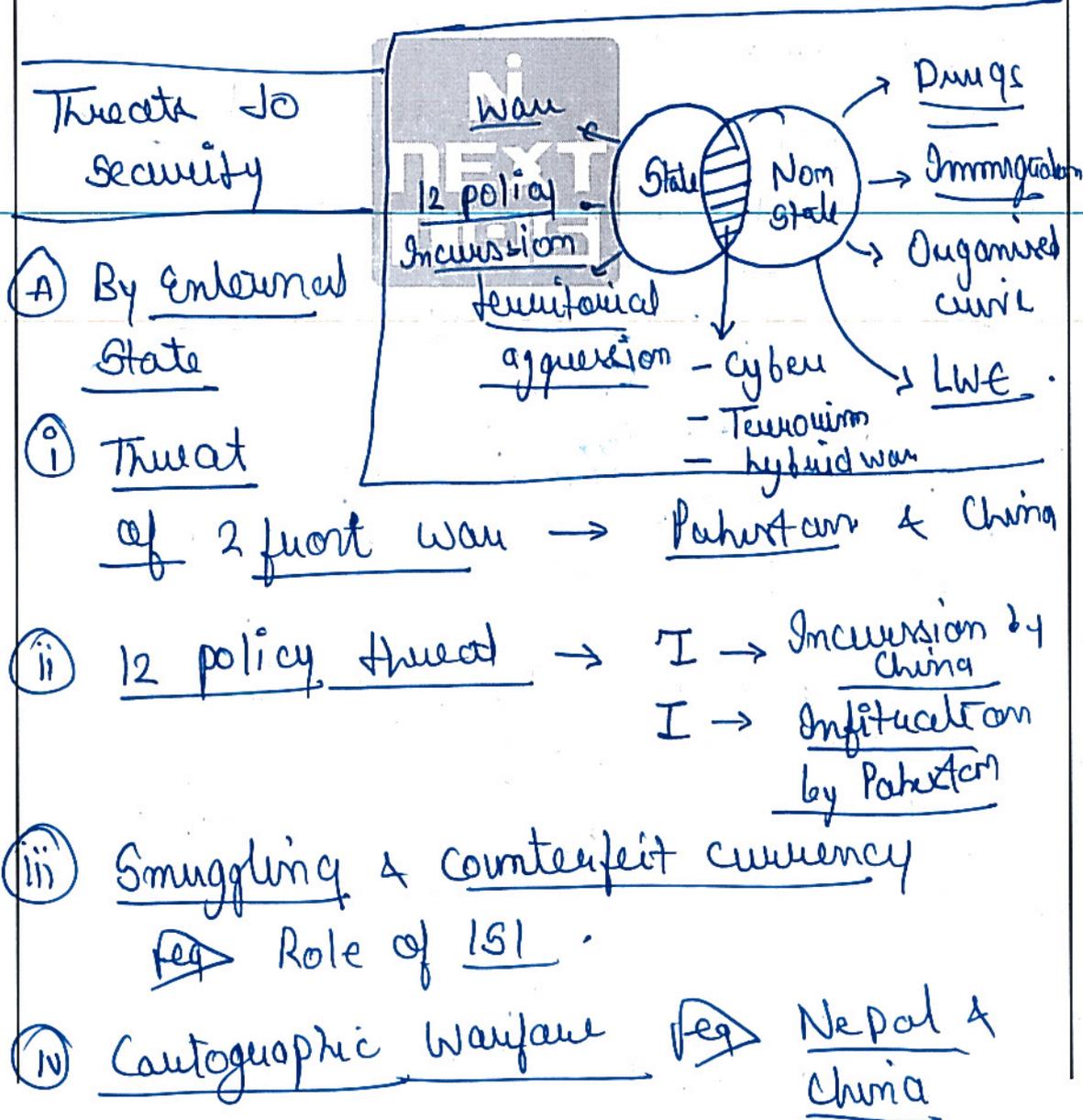
Way forward \rightarrow Preparing region specific Heat plans
 \rightarrow Clear SOPs to tackle crisis
 \rightarrow focus on risk reduction

IPCC AR6 projects intensity of extreme heat wave to rise, thus need of up to date heatwave plans

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



As highlighted by NSA Ajit Doval, India faces a hybrid dilemma of 2.5 front war, waged by external state and non-state actors



(V) Policy of state-sponsored terrorism
 eg cutting India through 1000 blades

(B) By Non-State Actor

(i) cyber warfare eg Kundakulam
 spyware attack

(ii) organised crime eg Dawood Network

(iii) Drugs → eg Golden Triangle →
NE region of India

(iv) Hybrid threats eg use of
 drones to supply weapon (Punjab)

(v) Money laundering, cattle smuggling
fueling radicalism

Strategies to Tackle Threat

Already
 Taken
 Strategies

Institutional → Army, Rounded
police, NCRB, ED

— policies eg cyber surveillance
Bharat, Say No To drugs

— legislation eg IT Act, 2008
, UAPA Act

Higher Monitoring, use of Technology
 etc.

More Strategies Necessary

① Shivshankar Menon

① formulation a National Security Doctrine

② Integrated theatre of to tackle threats -

② Shethkar Committee

① Defence expenditure - 2.25 - 3% of GDP

② Establishing a cyber command

③ focusing on unstructured project

③ Delhi Declaration → No Money for Terror & No Money laundering

④ Targeted Elimination of Threat
eg LWE by 2026

⑤ focusing on deterrence capability
- defensive offense strategy of
NCA Doval

"Longer Delhi takes in Military modernisation and threat integrated strategy, more difficult it would to deal future Doklam, Pulwama or Yalwan" - C Raja Mohan



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

Recently, Home Minister gave a call for complete elimination of LWE from India by March of 2026.

LWE as unsolved challenge

① Area of spread

→ still spread around 30+ districts

→ complete control over few regions
eg forest of Burhan, Mouma etc

② killing → more than 100 people died due to LWE in past 5 years

③ Ideological challenge by LWE still present eg urban Naxalism

Reasons for remaining a challenge

① underdevelopment of region
eg Chattisgarh state

- ③ Funding to Maoists → parallel taxation system -
- ③ Exploitation of people's vulnerability
→ Tribal base of Maoist -
- ④ Limitation of "gun" based elimination policy → doesn't address root cause

Government's Approach

- ① SAMA DHAAN Doctrine → To smartly counter LWE threat :

② Improving policing capability

- ① Formation of special forces

→ grey hounds - Chattisgarh

- ② Infrastructural and operational
revamp of police → LWE infra policy

- ③ Deployment of CRPF in region

③ Developmental Strategy

- ① Aspirational District Programme

- ② Special scheme for development of ~~the~~ LWE region

(ii) Creating Infrastructure

- physical eg Road, Rail
- social eg POTA Cabins of Bunker
PHC in LWE areas

④ Building Trust

- ① FRA, 2006 → To give forest rights to tribals
- ② No alienation from land
- ③ PESA Act → To ensure Self governance & preserving culture

Way forward

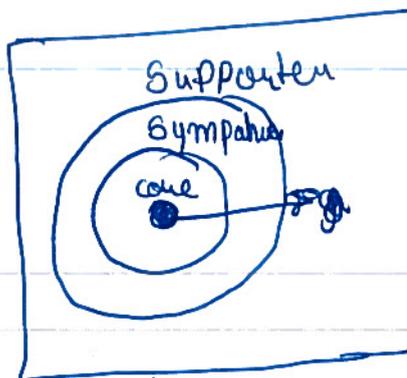
① Winning Hearts and Minds strategy

② Three tiered approach

(i) Core - eye for eye

(ii) Sympathiser - grievance redressal

(iii) Supporter (peripheral)
→ development as antidote



③ Countering suborn influence (suborn moral)

• No place of violence, while we allow for dissent in a democracy

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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- <ol style="list-style-type: none"> 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- <ol style="list-style-type: none"> 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
<ol style="list-style-type: none"> 1. QCA पुस्तिका को ठीक से स्कैन करें। हम चाहेंगे कि आप स्कैनिंग के लिए कैमस्कैनर ऐप (CAM SCANNER) 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।

