

202183 613301 1910101981 (2023-07-19 15:23:45)

Time Allowed : Three Hours



Maximum Marks : 250

समय : तीन घंटे

अधिकतम अंक : 250

GENERAL STUDIES / सामान्य अध्ययन

Name Of Candidate परीक्षार्थी का नाम	Madhav Agarwal		
Roll No./अनुक्रमांक	1910101981	Medium/माध्यम	English <input type="checkbox"/> हिंदी <input type="checkbox"/>
Center Code/परीक्षा केंद्र	Online	Date/दिनांक	19 July 2023

*Center Code : For Online - 1900 / Delhi : Karol bagh - 1901, ORN - 1902, Mukharji Nagar - 1903 / Patna : Boring Rd. - 2001 / Hyderabad : Jawahar Nagar - 2101

INDEX TABLE / अनुक्रमणिका			INSTRUCTION / अनुदेश		
Q. No. प्र.सं.	Max. Marks अधिकतम अंक	Marks Obtained प्राप्तांक	1. Please do furnish Name, Email, Roll No and Mobile in the answer sheet. कृपया उत्तर-पुस्तिका में नाम, ईमेल, रोल नंबर और मोबाइल नंबर भरें।		
1			2. There are TWENTY questions printed in ENGLISH & HINDI, all questions are compulsory. उत्तर पुस्तिका में अंग्रेजी/हिंदी में बीस प्रश्न दिए गए हैं, सभी प्रश्न अनिवार्य हैं।		
2			3. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के लिए निर्धारित अंक उसके सामने अंकित किए गए हैं।		
3			4. Answers must be written in the medium authorized in the admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. उत्तर प्रवेश पत्र में अधिकृत माध्यम में लिखे जाने चाहिए, जो कि दिए गए स्थान में इस प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के कवर पर स्पष्ट रूप से लिखा जाना चाहिए।		
4			5. Word limit in questions, if specified, should be adhered to. Any page or portion of the page left blank in the Question-Cum Answer Booklet must be clearly Struck off. प्रश्नों में शब्द सीमा, यदि निर्दिष्ट हो, का पालन किया जाए। प्रश्न-सह-उत्तर पुस्तिका में खाली छोड़े गये किसी भी पृष्ठ या पृष्ठ के भाग को स्पष्ट रूप से काट दें।		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
Total/कुल अंक	250		For Student Only / केवल परीक्षार्थी प्रयोग हेतु		
Examiner's Discretion/मूल्यांकन कर्ता का विवेक :			Start Time/प्रारंभ करने का समय :	End Time/समाप्त करने का समय :	
			9 AM	12: 40 PM (extra time taken)	
Total Marks/कुल अंक :			Mode Of Examination/ परीक्षा की विधि :	Online/ऑनलाइन <input type="checkbox"/>	
				Offline/ऑफलाइन <input type="checkbox"/>	
*Examiner's Discretion is the marks awarded at the discretion of the examiner based on your overall impression, on the basis of (but not limited to) your handwriting, presentation, use of diagrams, flowcharts, facts and figures or absolutely anything that he/she liked in your copy. मूल्यांकन कर्ता का विवेक अंक, आपकी लिखावट, प्रस्तुति, आरेखों के उपयोग, फ्लोचार्ट, तथ्यों और आंकड़ों या समग्र रूप किसी अन्य विषय वस्तु, जो मूल्यांकन कर्ता को आपकी कॉपी में पसंद आयी के आधार पर (लेकिन इन्हीं तक सीमित नहीं) पर दिए गए अंक हैं।			For Office Use Only / केवल कार्यालय प्रयोग हेतु		
			ECN CODE/ ईसीएन कोड :	EG/ईजी :	Evaluation Date/ मूल्यांकन तिथि :
				① ② ③ ④ ⑤	

Note: You can discuss your evaluated copy with the Mentor. Raise a ticket from your portal to schedule a mentor call or visit the offline centre to meet mentor (all 7 days, Timings – 11 AM to 6 PM). Further if you are unsatisfied with the evaluation, you can seek re-evaluation of the copy.

EXAMINER'S REMARKS

Respected checker, I've exceeded the time by 40 minutes (attempting Q6-10 post the time limit). Will surely improve in coming papers. Kindly mark me suitably.

CRITERIA FOR THE FEEDBACK SECTION AT THE END OF EACH QUESTION

1. **AWIS = Answered What is Asked.** This means whether you have addressed the core demand of the question or not. Addressing the core demand of the question gets you an objectively fair score. It is examiner's perception if you have understood the question and if you know the answer in the first place. Creative answer writing, sometimes missing the core demand, may fetch very high or very low scores, and exposes your answer to the subjectivity of the examiner.
2. **CD & VA = Content Density & Value Addition.** Examiner will evaluate the quality and quantity of your content in the answer. In the same word limit and space limit have you (a) written what is asked (b) gone beyond what is asked (c) enriched answers through combination of (but not all!) suggestions, ideas, quotes, flowcharts, diagrams, facts and figures, data etc. This affects objective components of assessment.
3. **S & F = Structure & Flow** = Whether you have structured your answer properly or not. Whether the answer has been broken into parts and sub-parts and each part has been addressed appropriately or not. Whether the flow of the answer is maintained. Affects both subjective and objective components of assessment.
4. **P & R** = How your answer performs on the criteria of **presentation, ease of read, clarity and apparent effort** in writing the answer. This affects the subjective components of assessment.

Q1: 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Budgets over the recent years have focused on increase in capex rapidly due to realise the multiplier effect of infrastructure, including on socio-economic progress.

Precursor to social transformation

- (i) Provision of basic needs through construction of houses for the weaker section under PM Awas
(Targets 3 crore house by 2024)
- (ii) Reduce poverty and promote shared inclusive growth. (eg: Asset construction as per need by MGNREGA.)

Precursor to economic transformation

- (i) Boost economic activity and trade.
(eg: Dedicated Freight Corridors)
- (ii) High speed digital connectivity.
(eg: via National optical fibre network.)

202183_613301_1910101981(2023-07-19 15:23:45)

(M) energy infrastructure to boost 24×7 power.(eg:) Hybrid Solar Wind Policy.Needs to address safety

However, in above animal spirits must not come at cost of safety. Safety of people and property is paramount to avoid loss of life, damage to assets as well as ensuring trust.

(eg:) Morbi Bridge Collapse = due to wrong clearance of contracts.(OR) Land subsidence in Jeshimath = due to alleged NTPC power plant.

We need capex to boost vicious cycle of growth but it must be scientific as well as sustainable to environment.

Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Q21Candidates
must not
write on this
margin

Growth which runs in consonance of environment, flora and fauna will be called Green Growth.

Due to emphasis on increasing the size of cake (economy), we cannot leave back the environment. This could otherwise lead to unsustainable growth.

Green Growth = Pro People + Pro-Planet + Profits.

The Budget 23-24 has a GREEN GROWTH as one of the 'Sapt'ishhi' to fuel India's journey to AMRIT KAAL.

Various Government Measures:

- (i) National Hydrogen Mission: to focus on boosting R&D, develop electrolyser and

202183_613301_1910101981_(2023-07-19 15:23:45)

generate green Hydrogen via renewables .

Candidates
must not
write on this
margin

(ii) Sustainable Agriculture via use of alternative
fertilizers and Natural farming under the
PM-PRANAM.

(iii) Boost to investment in renewable energy
generation to meet Paris targets.

(iv) Endorsement to millet to boost
regenerative agriculture.

(v) Focus on decentralised changes via Mission
Life.

A strong foundation has been laid by

Budget '24, now we need cooperative

federalism and local level bodies to

achieve them fully.

Q3. 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Project Cheetah is a Indian government's initiative to boost and reintroduce extinct cheetah to grassland habitats.

Around 20 cheetah have been brought to Kuno National Park from Namibia & South Africa.

Marks a departure:

- (1) India has been generally averse to inter-continental movement of species.
- (2) Focus has been to conserve the critically endangered species such as GIBI bird, Ghanals in an 'IN-SITU' format.
- (3) Focus has been on inter-state translocation instead (eg.) Gir lions translocation to MP.

202183_613301_1910101981_(2023-07-19 15:23:45):

Reintroduction of Major FaunaCandidates
must not
write on this
marginFavour:

- (i) New meta population is generated in new areas.
- (ii) Act as an umbrella open species. - conserving others along. eg: grassland ecosystems
- (iii) Global success: Namibia itself relocated cheetahs and now it is under strong position to translocate to other countries.

Against:

- (i) May lead to man-animal or other species conflicts.
- (ii) Large scale displacement of tribals and other people in nearby areas.
- (iii) Chances of success remain low - due to interplay of multiple factors (y) death of cheetah due to collagen infection.

The process needs to be scientific and well planned to get best results. Recently even, Ghanials planned to be sent to USA shows change of mindset.

94. 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Precision Agriculture is a method of agriculture that is driven by scientific and data driven principles to develop crops and allied activities.

Multi pronged challenges → Panacea ^{Precision Agriculture's}

(i) Overuse of Nitrogen → Soil analysis based
Abuse in NPK use of nutrients

(ii) Over irrigation of fields leading to poor soil → Irrigation post analysis of soil moisture level.

(iii) Crop failures due to climate → Climate Modelling to be used to generate right crop choice.

(iv) Poor value addition → Boost the quality by right sowing time and harvest.

202183_613301_1910101981 (2023-07-19 15:23:45)
Impediments to widespread adoption.

Candidates
 must not
 write on this
 margin

- (i) Diversity of geographic terrain call for diverse solutions.
- (ii) Technologically the farmers may not possess adequate skills.
- (iii) Need infrastructure at decentralised level
 (eg) Soil Analysis labs.
- (iv) 86% farmers have land size less than 2 hectares. → making adoption costly.
- (v) Inefficient pro-farmer policies driven by electoral gains (eg) rise in MSP may deviate focus.

Precision farming must be promoted through Krishi Vikas Kendras & R&D in Agriculture universities as suggested by ASHOK GULATI.

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

gs: Horticulture sector is one of allied sector of agriculture which has become mainstream due to 30% contribution to Agri GDP.

Reasons for increasing emphasis:-

- (i) Focus on doubling farmer's income (Dalwai committee) by focusing on high value items.
- (ii) Boosting demand of fruits & vegetables.
 - ↳ due to urbanisation
 - ↳ due to rise in purchasing power and per capita income
- (iii) High potential sector for exports and value addition by food processing industries. (eg) jams, fruit juices, etc.
- (iv) Potential to shift focus from rice-wheat and achieve Crop Diversification.

202183 613301 1910101981 (2023-07-19 15:23:45)

Government measures and its evaluationCandidates
must not
write on this
marginMeasures
taken

- National Horticulture Mission;
- Cold Chain Availability Platform
Via PM-SAMPADA Yojana.
- TOPS Scheme = Operation Greens

EvaluationAchievements:

- Total horticulture production crossed the overall food grain production by 5 times.
- High contribution to Agricultural GDP

Scope for improvement

- Cold chain infrastructure overall weak.
- Huge post harvest loss.
- Seasonality leading to inflation
- (eg:) rise in tomato prices recently.

The government has further taken up role of Farmer Producer Organisation & Agriculture Investment Fund (2 lakh crore) to give impetus to sector as a whole.

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Q6:
The unfortunate incident of fires at coaching ~~and~~ in Delhi, Hospital in Maharashtra have thrown light on vulnerability of cities due to fire hazard.

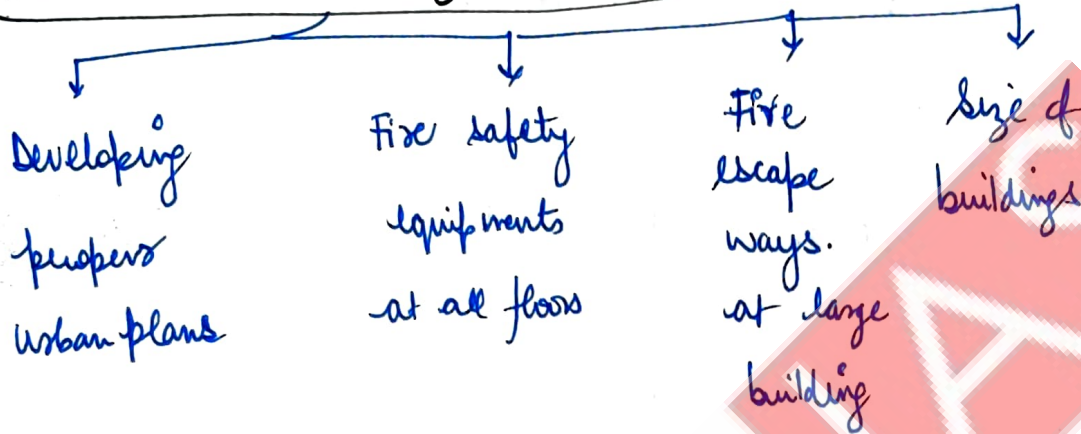
Unplanned Urbanisation → fire hazards.

- (i) Model city level plans are ~~not~~ made or violated.
- (ii) Poor distribution of utility services such as fire safety stations.
- (iii) ~~Close~~ close proximity of construction between building to maximise usage.
- (iv) Violation of building code due to its weak enforcement.
- (v) Powers of local bodies limited to funels and functionaries.

202183_613301_1910101981_(2023-07-19 15:23:45)

Measures to mitigate urban fires:

National ~~Urban~~ Building Code 2016.



Other measures: -

- (i) Proper Enforcement of the code through prosecution of violations. | surprise check
- (ii) Conduct 'FIRE AUDITS' of all public hotspots.
- (iii) Mock fire drills to instill preparedness.
- (iv) Boosting power of local bodies through fund devolution.

In Amrit Kaal, our growth of cities cannot be just rapid but has to disaster proof.

Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

With rise of Internet and Industry 4.0;

Digital Public Infrastructure (DPI) has become
a critical infrastructure.

(eg:) Aadhar, DBT, UPI.

DPI enabling citizens:

- (i) faster access to services (eg:) e-governance
via My Gov. in
- (ii) Wider reach : (eg:) MOOC courses to promote
skilling
- (iii) Reduce intermediaries & corruption (eg:) 2.33 crore
duplicate Aadhar ghost beneficiaries removed

DPI enabling businesses :-

- (i) backbone to India's service industry
(eg:) Business process outsourcing
- (ii) Enabled growth of international trade &

202183 613301 1910101981 (2023-07-19 15:23:45)

Connectivity (G) Teleconferencing, Global financial transactions

Candidates must not write on this margin

(iii) Promote data driven decisions

(eg:) Using public data to plan next factory / industry.

Challenges on the way:

(i) Exclusion : → Poor digital access (only 30% women have internet - NFHS 5)
→ Create Rich poor divide.

(ii) Exploitation : → Misuse of data & invasion of privacy. even when anonymised.

(iii) Monopolisation : → Tech Giants evading tax laws.
→ Security issues due to concentration of information / data.

DPI is the future and has to be dealt in inclusive manner. Initiatives like

PM-WANI, PM GDISHA & BharatNet are steps

in right direction.

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidate
must not
write on the
margin

NISAR is a collaboration between NASA from USA and ISRO from India.

It is a 'Synthetic Aperture Radar'.

Key features :-

- Dual band surveying
- Most expensive radar of NASA deployed.

Observing and managing climate change.

- (i) Will study images of earth through observation in different bands.
- (ii) Identify and track movement of glacial melting.
- (iii) Observe the movement of oceans & analyse its effects on global climate change.

202183 613301 1910101981 (2023-07-19 15:23:45)

On Natural hazards:Candidates
must not
write on this
margin

(i) Early warning to different disasters
around the globe.

(ii) Track movement and build up of
disasters.

(iii) Planning the rescue sites based on
analysis of vulnerability - aiding
reconstruction.

Both nations are cooperating immensely
in all sectors - agreement to join
Artemis Accords by India is a case in
point. for space sector.

Q9. 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

As per SIPRI Report, India has been largest importer of defence equipments which harms India's security preparedness.

Reasons for Indigenisation as an Achilles heel.

Major partners: -
Russia, USA,
Israel.

(i) Poor rate of R&D in the country @ 0.7% of GDP v/s 2.1% China

↳ Defence R&D less than 1% of Budget

(ii) Poor state of defence production - due to lot of delays.

(iii) Lack of access to technology to develop new age security apparatus.

(iv) Lack of transparency / corruption due to "secrecy" of defence deals.

202183 613301_1910101981_(2023-07-19 15:23:45)

Importance of startups to make India self

reliant:

(1) Diversification of responsibility from only ordinance boards to startups.

(2) Creative use of R&D to develop local solutions.

(3) Become a key player as a global exporter of weapons eventually.

(4) More professionalism and focused approach of R&D startups compared to public sector's bureaucratic red tapism.

Government is serious about Defence Indigenisation

post Russia-Ukraine war, the promotions of defence startups is being done through SKIAN

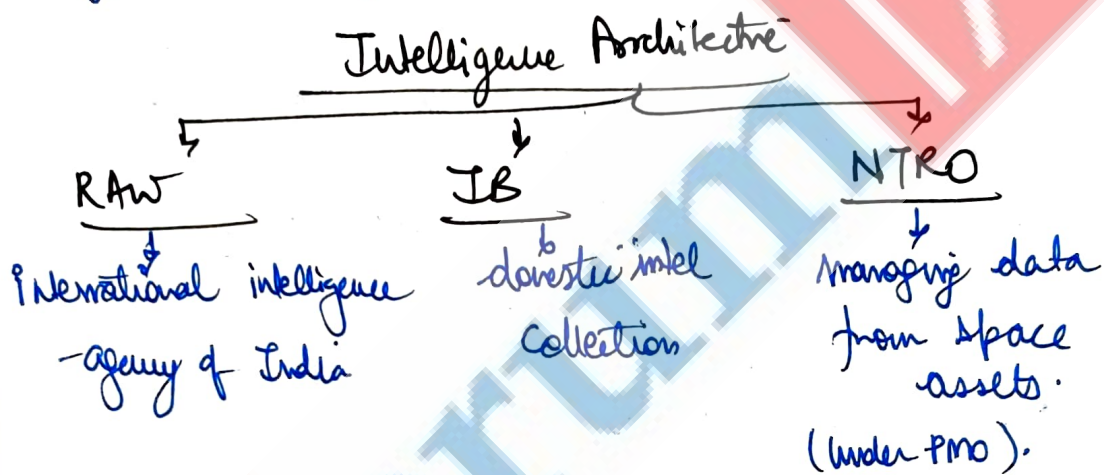
Portal, Negative list as well as Defence Expos.

Candidates
must not
write on this
margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Modern warfare has become complex and involve multiple variables. Where traditional determinants like size of territory are no longer meaningful. Instead we need efficient Intelligence.



Role of Intelligence in national security.

- (i) Avert a threat at the beginning itself
 eg: reduce terror attack by decoding plans from ~~do~~ leaked communication.
- (ii) Maintaining spy agents to monitor the enemy movements and strategies.

202183_613301_1910101981_(2023-07-19 15:23:45).

(iii) Analysis of enemy activities to predict

future areas of security threat.

(iv) Tackle breach of borders through use of intel via drones / LIDAR walls.Challenges associated:(i) Turf wars among agencies.(ii) More focus on offensive via hard power rather than intel gathering.(iii) Reactive setup:

↳ eg: RAW made after 1962 war.

(iv) Allegations of misuse of bodies for political & personal vendetta.India has been cooperating with regional partners like Sco, or Israel's MOSSAD tostrengthen and integrate intelligence strength.

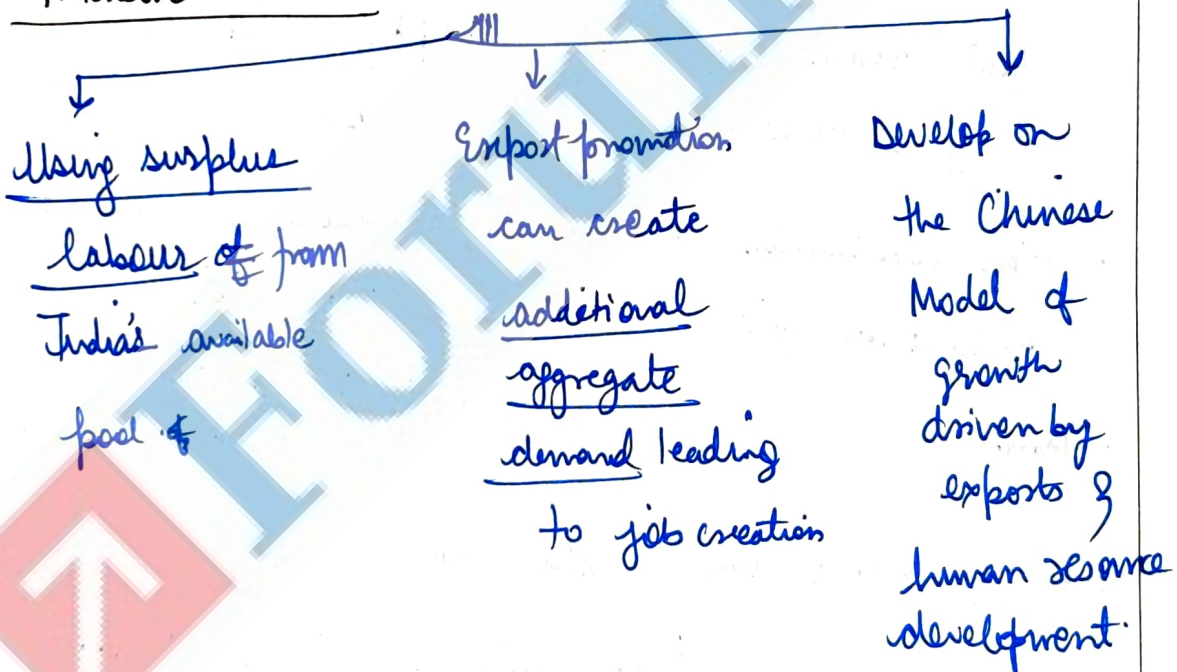
Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Jobless Growth is the inability of Indian growth story to create adequate jobs despite being the 5th largest economy of world. Here role of labour and export intensive industries became pivotal.

Tackling jobless growth via labour & export intensive industries.



eg: Focus on sectors like textile, leather, tourism, etc.

202183_613301_1910101981 (2023-07-19 15:23:45)

Opportunities from textile sector:

Candidates must not write on this margin

(i) Capitalize on large scale cotton cultivation, highest wool cultivation, etc

(ii) Deploy labour force in the long chain: + Boost to female labour force participation

① Cotton farming → ② Ginning → ③ Weaving → ④ Apparel

at each different skill will be used.

(iii) Inclusive and decentralised growth as cotton industries can be spread across the country

(iv) Incentivize local GI Tagged products

(eg: Maheshwari, Black points of MP.)

(v) Low amount of capital is needed & currently deploy highest number of labours post agriculture, construction.

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Associated challenges :

- (i) Huge competition of countries such as Vietnam and Bangladesh
- (ii) Falling per unit yield of cotton crop due to climate change and pests.
- (iii) Quality delivered does not conform to international standards.
- (iv) Pre-mature industrialisation led to direct jump to service sector.
- (v) Processing challenges: lack of capital, inability to market products globally, etc

Recently the government has launched various

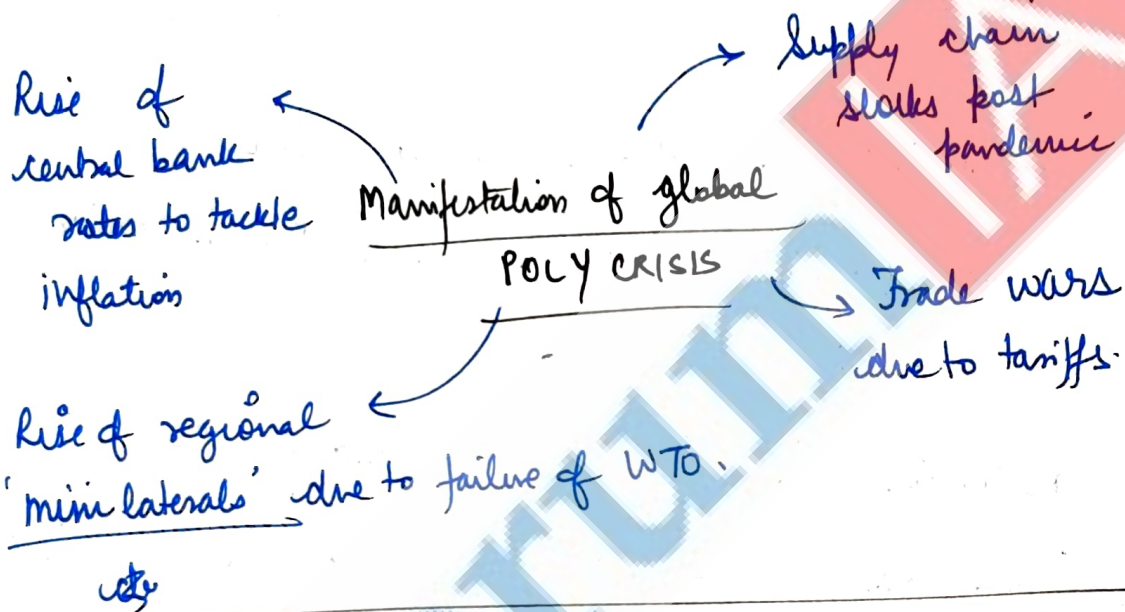
PM - MITRA Parks which can go long

way to revive potential of textile sector and create jobs.

Candidates
must not
write on this
margin

Q12: 202183_613301_1910101981_(2023-07-19 15:23:45)

The global arena is going through multiple and inter-connected crises together (rather than one at a time) which is called "POLY CRISIS"



Implications for macro economic stability of India

- (i) Affect on forex reserves: Need to have surplus reserves to tackle the "flight of capital due to Fed Hike"
- (ii) Overall growth gets restricted: While projections of global slowdown are

202183_613301_1910101981 (2023-07-19 15:23:45)

(iii) Internationalisation of rupee:

↳ (eg.) rupee rubble trade, or UPI usage
in UAE, Local Currency Settlement
System.

(iv) Explore new exports opportunities

(eg.) wheat export to Egypt.

(v) Global capability centres. to boost innovation
and R&D.(vi) Rational use of resources. by reducing
inefficient subsidies and expenses.

The recently ongoing G20 Conference Working
group meeting of Finance Ministers provides

a "Window of Opportunity" to India to
lead the global nations towards prosperity

Candidates
must not
write on this
margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Q13:

Candidates
must not
write on this
margin

India's low female labour participation (FLFP) rate of approx 23% is seen from different lenses with regard to its correctness.

Recently the Economic Survey 2023, took up the issue and showed how current FLFP Rate shows incomplete picture.

Reasons cited: -

(i) Single question based approach: leads to 'yes' & 'No' situation to a complex problem of employment ignoring indirect nature of work.

(ii) Poor categorisation of what constitutes work: (eg:) even work done in field of food plucking, animal rearing is not counted as employment by the

202183_613301_1910101981_(2023-07-19 15:23:45)

Q13:

Candidates
must not
write on this
margin

India's low female labour participation (FLFP) rate of approx 23% is seen from different lenses with regard to its correctness.

Recently the Economic Survey 2023, took up the issue and showed how current FLFP Rate shows incomplete picture.

Reasons cited: -

(i) Single question based approach: leads to 'yes' & 'No' situation to a complex problem of employment ignoring indirect nature of work.

(ii) Poor categorisation of what constitutes work: (eg) even work done in field of food plucking, animal rearing is not counted as employment by the

202183_613301_1910101981 (2023-07-19 15:23:45)

Candidates
must not
write on this
margin

(iii) Invisibilisation of female work behind the
garb of domestic duties.

(iv) Irregularity and collected sample size
in the surveys is also questioned.

However, this does not mean there are no
only statistical challenges, there are real issues too:

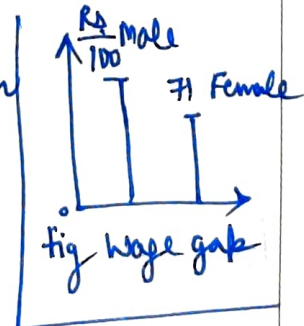
(i) Patriarchy that restricts movement of female
members.

(ii) Even if jobs they are made to suffer
due to : → pink collarisation of jobs.

→ harassment at workplace

→ wage gap (as per
ILO)

→ glass ceiling.



(iii) Unintended effect of laws such as

Maternity Benefit Act. - reducing female employees
appeal.

202183_613301_1910101981 (2023-07-19 15:23:45)

(iv) Poor access to resources:

- ↳ Only 14% women own land (Agri census).
- ↳ Leading to poor collateral for loans.

(v) Poor health & education:

- ↳ Literacy gap of 17% compared to males (Census 2011)
- ↳ High rate of MMR at 113 per lakh & high anaemia as per NFHS-5.

Steps for
gendered
growth

- ↳ Correct the future survey of data.
- ↳ Incentivize women employees through tax rebates.
- ↳ Promote SHGs at local level (Kudumbacherry Model)

As per estimates, full potential use of female labour force can boost Indian economy by 27% (as per IMF).

Candidates
must not
write on this
margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

9/14
Climate change has become a "climate emergency" for all. However its effects are not evenly spread across regions & sectors.

Marginalised sections most affected.

(A) Across sectors:

↳ Agriculture sector: Facing the brunt of vagaries of monsoon, extreme weather events, pest attacks (locust attack), → leading to uneven yield of fields.

↳ Manufacturing sector: Reduced labour productivity as discussed by ILO Report

(eg:) due to heatwaves, increasing in length & frequency.

↳ Domestic: rise of gender violence, due to inability to manage house in available water.

202183_613301_1910101981_(2023-07-19 15:23:45)

(B) Across Regions :

(i) Rural v/s Urban: Rural generally is more unprepared due to poor early warning infrastructure and low adaptation.

(ii) Developing v/s Developed: The developing and small island nations will be first to bear rise of sea level, lack of technology and finance for adaptation & mitigation.

Case for climate resilient model of development to integrate mitigation & Adaptation.

There is need to uphold the ideals of "CLIMATE JUSTICE" which seeks to recognise how climate change will have different effects to different sections and regions.

Candidates must not write on this margin

202183_613301_1910101981 (2023-07-19 15:23:45)

Candidates
must not
write on this
margin

- (i) Climate resilience and adaptation has been made 6th theme by Serdai framework.
- (ii) Focus has to be on sharing of technology with developing countries to boost both mitigation & adaptation.
- (iii) Climate finance: has to respect the common but differentiated responsibilities and pledge of \$100 bn per annum (Copenhagen Summit)
- (iv) Promote Green Growth: through use of renewables, Hydrogen economy.
- (v) Preference to grants instead of loans.
- (vi) Develop a fund to sponsor mitigation & adaptation and efforts of global south.

Climate change is a global problem that calls for partnership to achieve the goals of SDG 13.

202183_613301_1910101981_(2023-07-19 15:23:45)

Q15:

Candidates
must not
write on this
margin

Overall the area under millets have reduced from 50% during 1950s to less than 25% today, which shows adoption of millets has been abysmally low.

To tackle above and promote consumption government declared International Year of Millets 2023 through UN GA. along with

'MAHARISHI' initiative in G20 meetings

~~Despite it faces challenges~~

Checking Nutritional deficiency

↳ by providing micro-nutrients not available in other cereals.

↳ lower rate of glucose, reducing excessive sugar consumption

↳ High rate of fibres making them a super food..

202183_613301_1910101981_2023_07_19_15:23:45

Checking environmental degradation

- ↳ Reduced or negligible need for fertilizers.
- ↳ Low rate of irrigation unlike water guzzling crop of rice.
- ↳ soil conservation via regenerative agriculture potential

Checking seeking farmer income.

fallen to ₹ 10,000 approx per month (NABARD).

- ↳ Short duration crops → less time and more yield.
- ↳ Processing potential is high.
- ↳ Climate resilient crops - reducing risk of crop failure.

Challenges faced by millets adoption process :-

- (i) lack of awareness, seen as "coarse" cereals / inferior goods.

Candidates
must not
write on this
margin

202183_613301_1910101981_(2023-07-19 15:23:45)

(ii) MSP regime promoted excessive usage of rice & wheat disproportionately.

(iii) Urbanisation led to fast paced life and increased consumption of other processed foods.

(iv) Poor demand of millets domestically and globally.

(v) Low rate of income derived from per acre yield of millets vis-a-vis others.

(vi) Unavailability on PDS ration shops and lot of markets.

The millets can be promoted by promotional events (eg: all millets lunch at parliament), government support & use for food processing of millets extensively.

Candidates must not write on this margin

Q/6: 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Food Processing Industries contribute to 14% of India's GDP and acts as foundation for 'farm to fork' model of value addition in agri-sector.

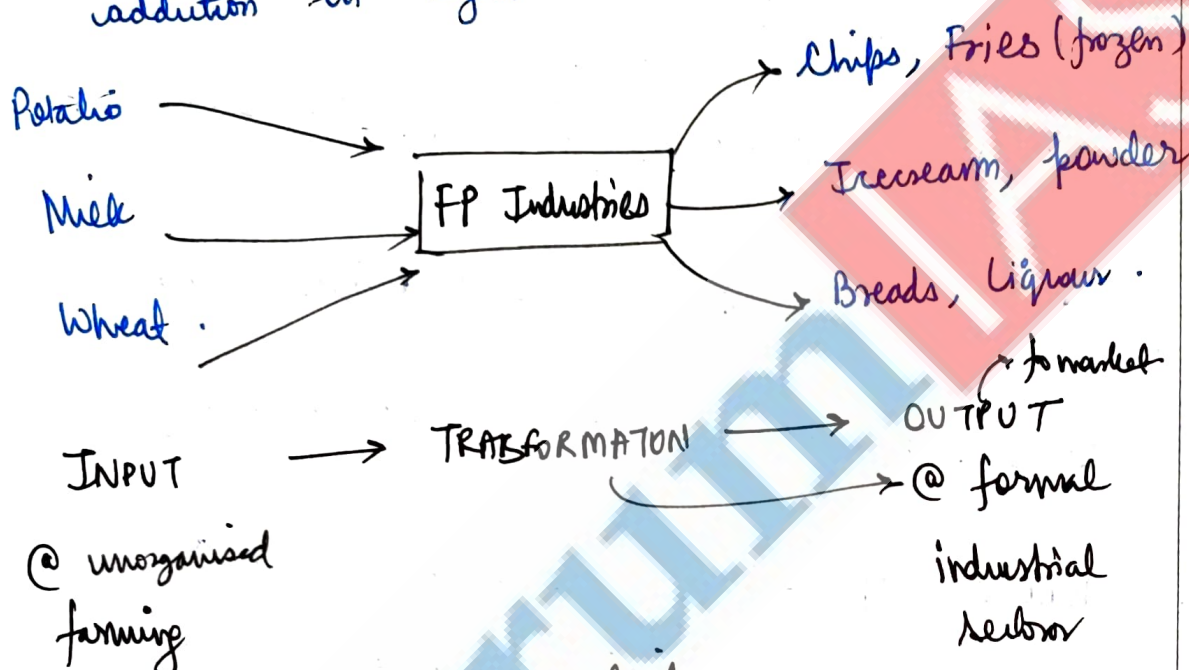


Fig: FPI as a link.

The above link play a significant role to boost Rural Economy:-

- (1) Boost Income: of farmers due to higher demand and value addition via processing.

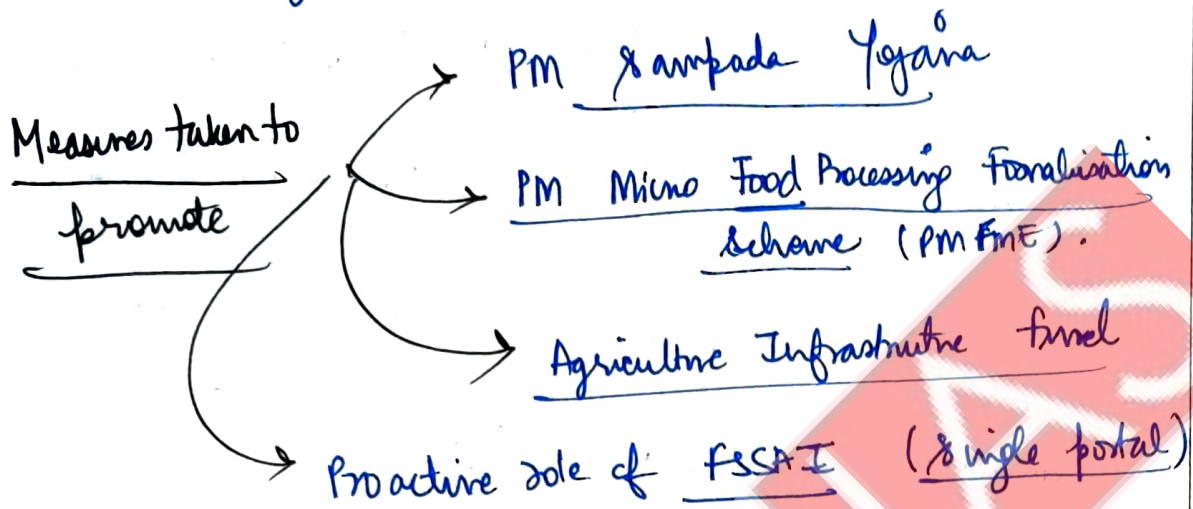
202183_613301_1910101981 (2023-07-19 15:28:45)

Candidates
must not
write on this
margin

- (2) Reduce disguised labour : by deploying surplus labour in lower skilled jobs created by food processing Industries.
- (3) More marketability and resilience due to longer shelf life.
- (eg:) Reducing tomato inflation via Processed tomatoes.
- (4) Formal Industries can provide know-how support to farmers under Contract farming.
- (5) Boost exports of processed goods
(eg:) processed marine exports
- (6) Create a whole supply chain management systems with forward & backward linkages.
- (7) Capitalise the 10+ different agro-economic zones creating food variety.

202188_613301_1910401981_202307191623:45) Gap in demand of increasing population

and higher per capita income.



As per CGI estimates food processing sector can create \$ 33 Billion investments and 9 million person days of work, forming a force to reckon for rural economy.

Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Q17:

Candidates
must not
write on this
margin

Disaster Risk Reduction (DRR) is one of 6 pioneer theme of Sendai framework and adopted under Policy and Plan in India.

The aim is to reduce the size

of disaster by focusing on:-

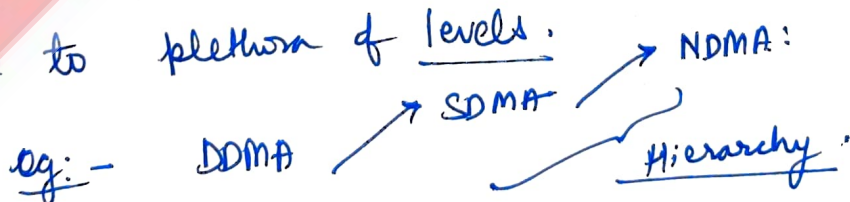


(eg) Building inundation channels for floods; disaster resilient buildings, walls to check land slide

(eg) Enforcement of techno-legal regime by National Building Code.

Constraints faced in DRR:

(i) Difficult to establish inter-agency cooperation due to plethora of levels.



(ii) Multiplicity of stakeholders = local

202183_613301_1910101981 (2023-07-19 15:23:45)

bodies, administration, NGOs, media houses.

Candidates
must not
write on this
margin(iii) Complexities of multi sectoral linkages

(eg.) Poor waste water management — By local bodies

Inefficient rain forecasts. — By IMD.

Poor dam management — State bodies

= all contribute to Urban floods(iv) CAG Report highlighted a lot of vacancies
in National Advisory Council consisting of
experts.(v) Poor coordination leads to unfurnished
projects started by NDMA.(vi) Verbose and vague policy guidelines
under Disaster Management Act.(vii) 15th Finance Commission highlighted overfocus
on 'response' rather than 'mitigation'
of disasters.

202183_613301_1910101981_(2023-07-10_15:22:45)

Measures for a Robust DRR Strategy :

Candidates
must not
write on this
margin

(i) Cooperation and coordination of stakeholders

(eg.) regular meetings of SDMA, NDMA.

(ii) Balance of structural measures (Retrofitting)

as well as non-structural means.

(iii) Capacity Building
via
Pillar Case Project of Red Cross:

Training of people
Education
Research in New Strategies.

(iv) Multi-agency model for convergence.

(v) 15th Finance Commission : form a 'single'

National Disaster Fund (~~for~~ Response: Mitigation)

We must spend adequately in DRR as .

according to Sendai Framework , \$ 1 spent

on DRR generates \$ 7 in return for

the economy..

Q18. 202183_613301_1910101981_(2023-07-19 15:23:45)

Candidates
must not
write on this
margin

Generative AI is the use of cognitive abilities of AI to generate concise responses based on a "prompt". With rise of ChatGPT, generative AI has become a buzzword.

eg: Prompt: Write a 1000 worded essay on rise of AI → Concise generation of answer within the word limit.

Advantages :-

- Processed and filtered content
- Alterable as per need.
- Quick and responsive.
- Reduce dependence on search engines.

However, there are several concerns & challenges:

(i) fear of job loss: and lead to instability

eg: Hollywood writers' protest organizing

202183 613301 1910101981 (2023-07-19 15:23:45)

Candidates
must not
write on this
margin

- (ii) Infringement of IPK: copyrights may be violated by scanning of protected content by Generative AI.
- (iii) Invasion of privacy: by generating wrong information about a person or fuel fake news.
- (iv) Garbage in Garbage out: Inefficient machine learning can perpetuate social evils like racism, gender inequality in software.
- (v) Data can be misused to fuel wrong demands: (eg.) using ChatGPT to promote pornography website by creative prompts.
- (vi) Fuel new tech giants: that can influence state policies and domestic issues of countries worldwide (eg.) Elections influence.

202183 613301 1910101981 (2023)07-19 15:28:45
 Role of Policy makers & regulatory bodies :

Candidates
 must not
 write on this
 margin

- (i) Need Data Protection Bill to protect harm to privacy of individual. (Article 21).
 - (ii) Need global cooperation to regulate such boundaryless organisations.
 - (iii) Managing security risks by blocking illegitimate keywords in prompt.
 - (iv) Responsible use of AI : as being promoted by NITI Aayog under #AIforall.
 - (v) Algorithmic accountability : to reduce the social biases in data.
 - (vi) Protection of IPR through updated laws ~~and~~ and regulations.
- Generative AI must be regulated effectively to reap benefits while avoiding the ill-effects.

202183 613301_1910101981_(2023-07-19 15:23:45)

Q19:

Candidates must not write on this margin

The recent ongoing ethnic conflicts among Meiteis - Kuki - Naga in Manipur has thrown light on ethnic fault lines of the North Eastern Region.

Ethnic fault lines as a major threat

North East is an "ETHNIC HOTSPOT" due to diversity of cultural practices among different tribes.

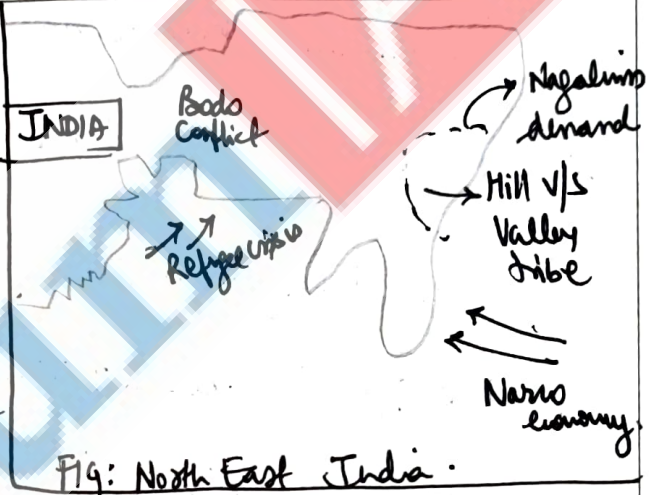


Fig: North East India.

(egs) Bodo conflict → wants autonomy to preserve Identity.

∴ Manipur conflict → Conflict among Valley tribes Meiteis and Hill tribes of Kuki & Naga.

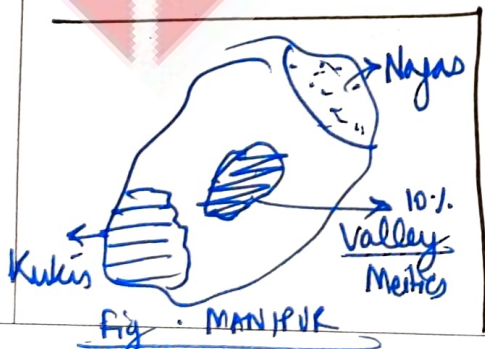


Fig: MANIPUR

202183_613301_1910101981 (2023-07-19 15:23:45)

This has led to rise of several insurgent groups (eg: NSCN (K), NSCN (IM), Kuki National Front, etc.

These sectoral identities however denote only ~~to~~ one side of the story.

Other reasons for the threats in North East:

(i) Relative Deprivation: where most colleges and market jobs are alleged to be in Valley consisting of only 10% area.

(ii) Political disparity:
(in seats of Assembly in Manipur).

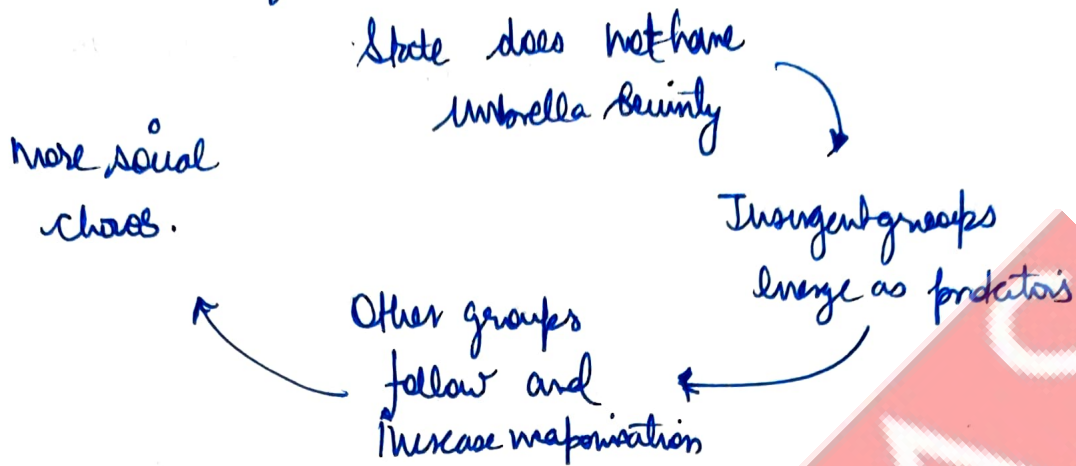
	Valley	Hills
Area	10%	90%
Seats	40	20

(iii) Inability of valley tribes to buy land in hills areas due to land laws.

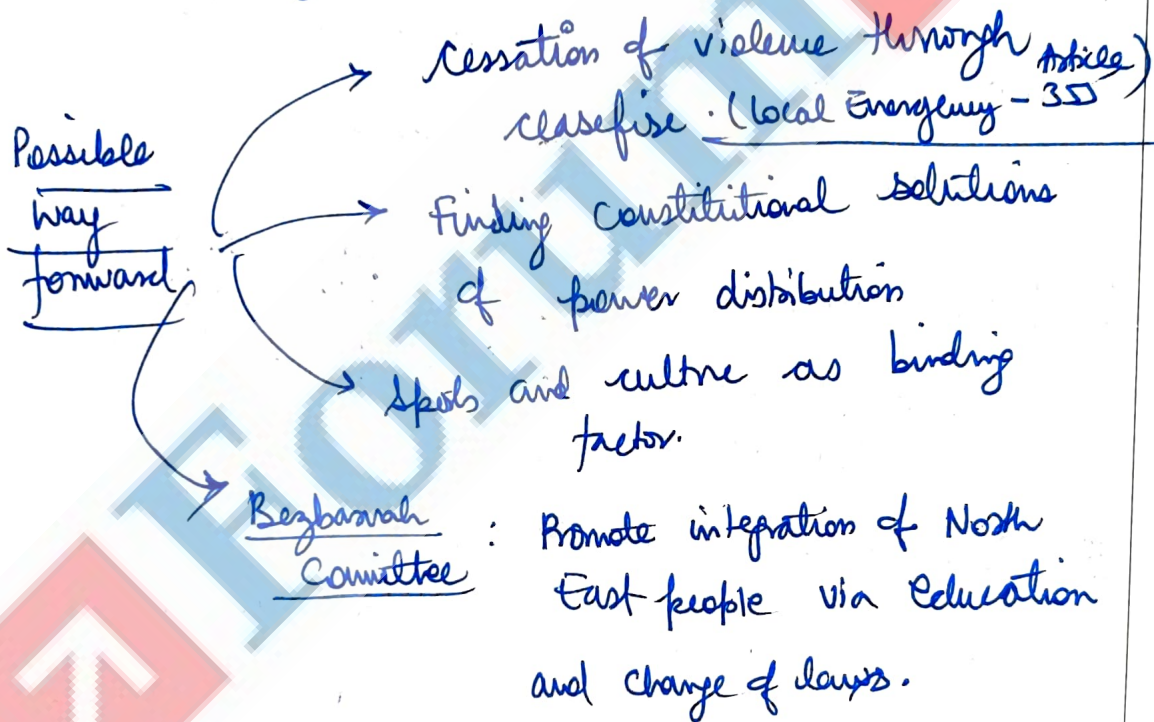
(iv) Narrow Economy - based on Dmy Triangle fuels a parallel economy, money laundering and organised crime.

Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

(V) Security Dilemma:

(vi) Unilateral suspension of agreements reduced trust among tribes.



India has shown in the past its ability to bring opposite sections on same table & forge amicable solutions, same must be shown here too.

Candidates must not write on this margin

gao 02183_613301_1910101981_(2023-07-19 15:23:45)

Candidates must not write on this margin

Terrorism and militancy having been a blocking hurdle in the full development of Jammu and Kashmir. To address the same a developmental approach has been adopted along with law and order approach.

Positive role of developmental activities:

(i) Promoted employment by delivery of skills to reduce radicalisation



(ii) Penetration of education through enforcement of Right to Education under Article 21A.

(iii) Abrogation of Article 370 to create uniformity and integrate J&K under single constitution.

(iv) Promoted stability → led to boost to tourism

(eg) highest footfall in J&K in 2023.

202183_613301_1910101981 (2023-07-19 15:23:45)

(v) Holding of G20 Tourism Meeting and other events led to boost of local economy.

(vi) Investments into the valley region - increased due to reformed land laws.

However, only developmental approach cannot be complete:

(i) Need law & order approach too, to boost feeling of security.

(ii) Tackle sophisticated crimes such as drone attack on IAF Base.

(iii) Contain infiltration by terrorists due to unfenced border due to terrain.

(iv) Also need restoration of status to a statehood to promote local politics.

Candidates must not write on this margin

202183_613301_1910101981_(2023-07-19 15:23:45)

Terrorism also calls for global and regional

partnerships (eg: RATS initiative under SCO)

Common definition of terrorism in UN.

Terrorism and military are a multi-
constant security challenge and as per

2nd ARC 7th Report have to be dealt
via dual approach of "Carrot and stick."

Candidates
must not
write on this
margin