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GENERAL STUDIES (TEST CODE : 1415)

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Medium Hindi/Eng.	English	Registration Number	504766
Center	online	Date	14/12/2020

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
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18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

Signature of Examiner

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- 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. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. There have been arguments that direct benefit cash transfers should replace the supply of food through the public distribution system. Do you agree with such arguments? Give reasons in support of your answer.

(150 words) 10

यह तर्क दिया जाता रहा है कि प्रत्यक्ष लाभ नकद हस्तांतरण को सार्वजनिक वितरण प्रणाली के माध्यम से खाद्यान्न आपूर्ति का स्थान ले लेना चाहिए। क्या आप ऐसे तर्कों से सहमत हैं? अपने उत्तर के समर्थन में कारण बताइए।

Public Distribution System is a rights based (PDS) approach under National Food Security Act 2013 where rations are given at subsidised rate to 67% of India's population.

Benefit of Direct Cash Transfer over PDS

- 1) Shift from welfare approach to capability approach (advocated by Amartya Sen).
- 2) Gives sense of self confidence to beneficiary with money in hand.
- 3) Malnutrition can be tackled as person can now buy other grains than rice & wheat given under PDS.

- 4) Reduce inclusion and exclusion errors.
- 5) No siphoning of ration problem.

Challenges with Direct Cash Transfer

- 1) Low Digital and financial inclusion in villages.
- 2) Cash given might be used for other purposes → alcoholism etc. → further affecting women & children (patriarchal society).
- 3) Delay in cash transfers as is the case in MGNREGA
↳ 38% of MGNREGA transfers in Jharkhand went into different accounts.

Direct Cash Transfer can help also reduce poverty directly (Economic Survey 2016-17).

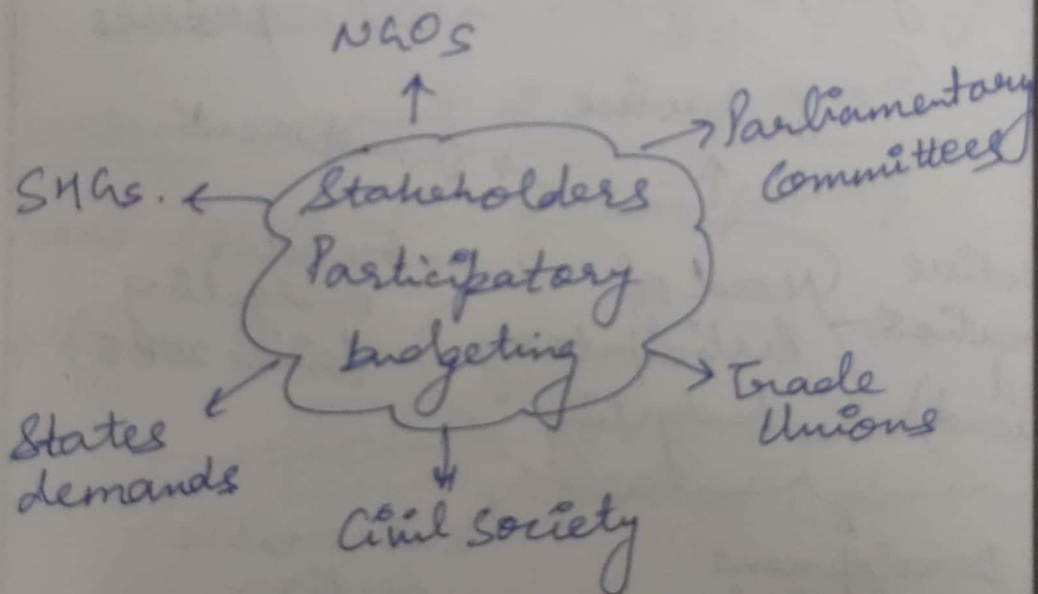
Above experiment can be done using Randomised Control Trials to know efficacy.

2. What do you understand by the term 'participatory budgeting'? Identify the challenges associated with participatory budgeting in India.

(150 words) 10

आप 'सहभागितापूर्ण बजटन' शब्दावली से क्या समझते हैं? भारत में सहभागितापूर्ण बजटन से जुड़ी चुनौतियों की पहचान कीजिए।

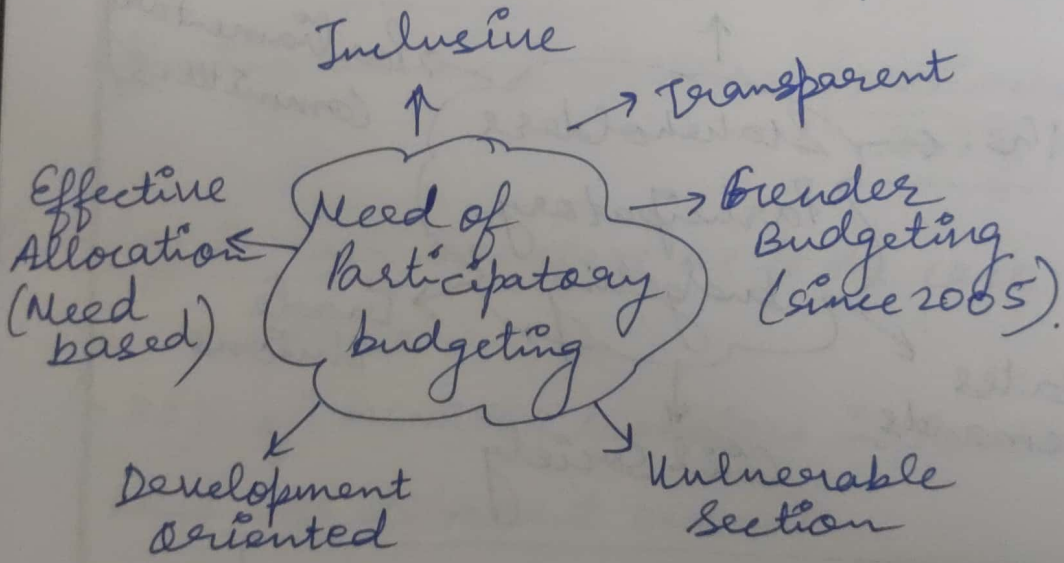
Participatory budgeting refers to a budgeting practice where inputs are taken from various stakeholders before formulation of final budget. Ex-Sweden



Challenges in such budgeting

- 1) Delays the process of making budgets.
- 2) Contradictory demands can stall the process.

- 3) All groups may not be able to give prudent suggestions.
- 4) Pressure groups can hold the governments at ransom.
- 5) Lack of awareness regarding such practice.
- 6) Enlarged polity & diversity → complicate process.



A Parliamentary Budget Office, already functional in New Zealand, can be an effective machinery to give honest suggestions while making budget.

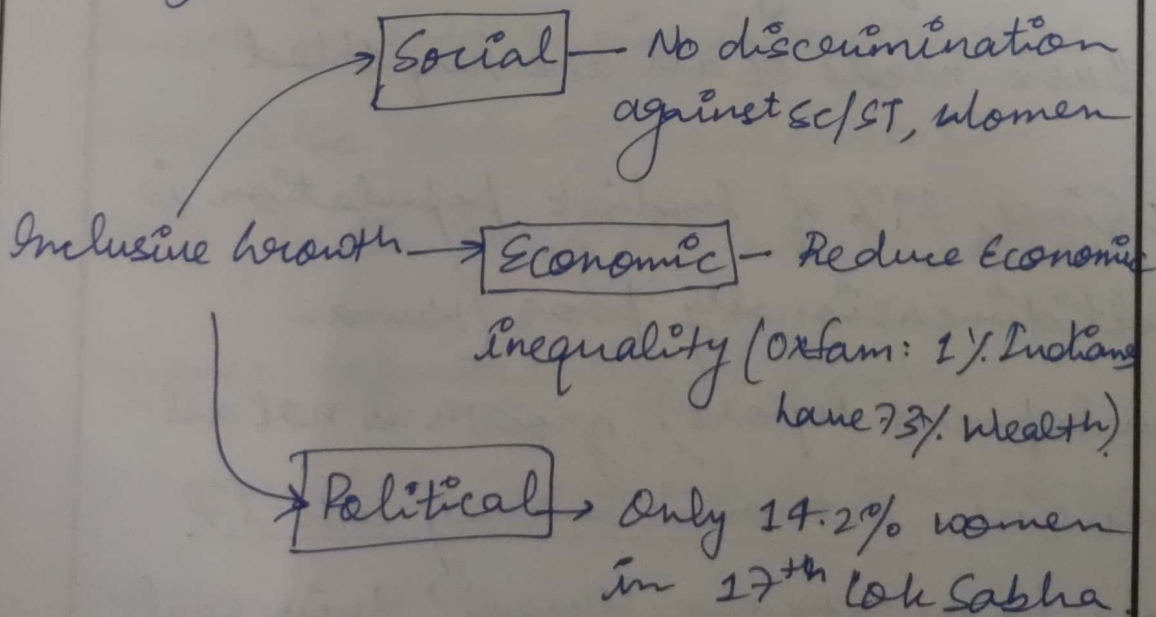
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3. Inclusive growth in an economy itself negates the need for a Universal Basic Income. Discuss in the context of India. **(150 words) 10**
 किसी अर्थव्यवस्था में समावेशी विकास स्वयं ही सार्वभौमिक मूलभूत आय की आवश्यकता को नकारता है। भारत के संदर्भ में विवेचना कीजिए।

Inclusive growth is egalitarian growth for the betterment and development of all sections. World Bank calls it 'pro-poor' and 'broad based' growth.

Universal Basic Income ^(UBI) is giving a certain amount of money to all citizens irrespective of their state of employment.



anything the margin can save it eyes on bank

How Inclusive Growth negates UBI

- 1) Fulfill needs of all sections of society
- 2) Takes everyone into confidence in decision making.
- 3) Gives employment to all section - so no need of 'free money'.
- 4) Gives Right to life with dignity of labour. (Article 21).
- 5) Removes social distinction and improves social fabric & feeling of brotherhood.
- 6) Promotes feeling of oneness.
- 7) Basic needs of all are fulfilled.

Since, 29% of India's population is multidimensionally poor (Human Development Report), growth is not all-inclusive. Economic Survey 2016-17 hence postulated a 'Quasi' Universal Basic Income to reduce poverty to 9%.

4. E-commerce holds the potential to revamp agriculture marketing in India in multiple ways. Discuss with suitable examples. (150 words) 10

ई-कॉमर्स भारत में अनेक तरीकों से कृषि विपणन में सुधार लाने की क्षमता रखता है। उपयुक्त उदाहरणों के साथ विवेचना कीजिए।

E-commerce sector has the highest CAGR of 51% in the world. Ex- Flipkart, Walmart, Future Retail, D-Mart.

Potential to revamp Agriculture

- 1) Increase food processing capacity of farmers → India: 9% processed
↳ USA: 65% processed.
- 2) Improve remuneration to farmers.
- 3) Invest in cold chain infrastructure thus also reducing transportation costs (India: 14% of GDP, USA: 9.5% of GDP).
- 4) Enhance exportability of produce.
- 5) Investment in farm inputs technology like HYV seeds, farm harvesters etc.
- 6) Eliminates middlemen & cartels in APMC.

Challenges

- 1) Farmer Price Assurance & Services Act 2020 postulated Contract Farming has been met with resistance by farmers.
- 2) Fear of land grabbing by big corporates.
- 3) APMC Mandis and MSP procurement might get a dead blow.
- 4) 'Terminator Seed' technology → will bind farmer to repurchase every year.

USA has Walmart & Ralphs which has improved farm productivity.

India has Reliance Retail trying to enter in this market.

The need is to reform agriculture & allay down the fears of farmers so that e-commerce can help in doubling farmers income goal (Ashok Dalwai Comm)

5. While digital financial services can expand financial inclusion in India, there are various challenges that need to be addressed in this regard. Discuss.

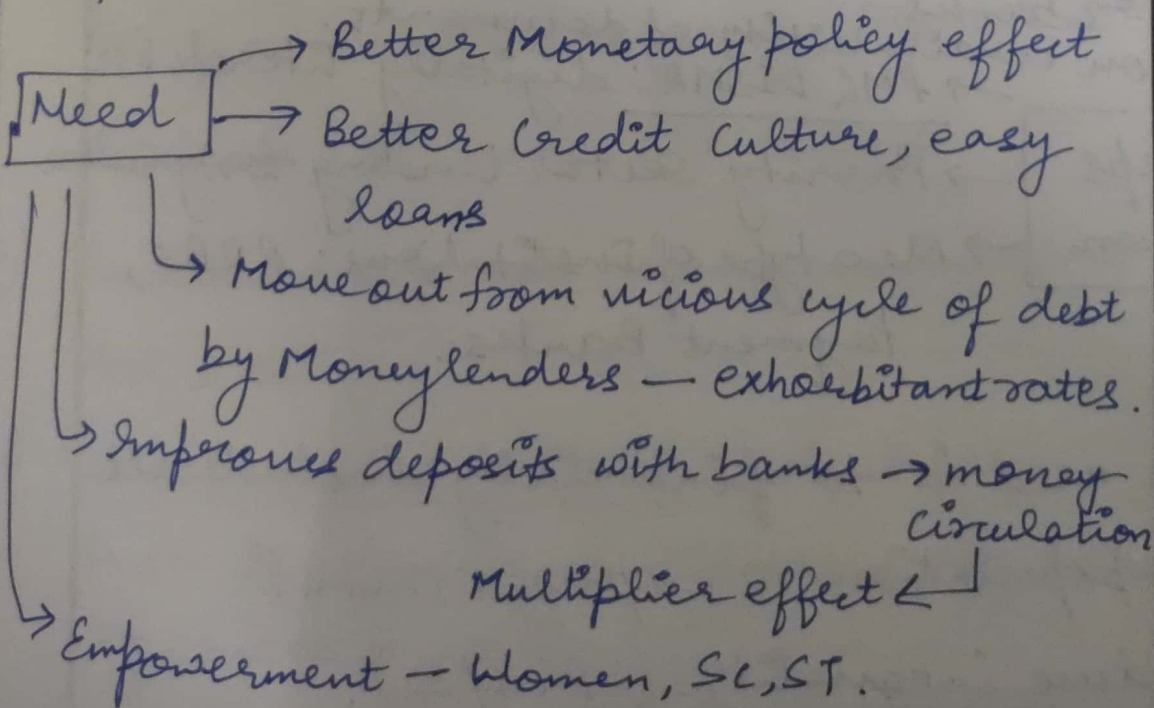
(150 words) 10

जहां डिजिटल वित्तीय सेवाएं भारत में वित्तीय समावेशन का विस्तार कर सकती हैं, वहीं इस संबंध में विभिन्न चुनौतियों का समाधान किए जाने की आवश्यकता है। विवेचना कीजिए।

PM Jan Dhan Yojna has opened 29 crore bank accounts since 2014, thus starting a revolution in financial inclusion.

It refers to inclusion of beneficiaries in formal banking sector of the country.

Digital services like UPI enabled by NPCI, PayTM, BHIM has further improved access.



Challenges → Data protection & cyber threats.

- 1) Digital illiteracy - Only 29% of ^{internet users are} women.
- 2) ~~are~~ Banks & correspondents not going into rural areas.
- 3) Lack of internet penetration in rural areas.
- 4) Poor credit culture due to farm loan waivers.
- 5) Attitude: People not ready to joint open bank accounts.
- 6) Easy availability of credit by non institutional sources, lack of collateral for banks.
- 7) Non availability of documents.
→ PMG DISHA: Digitally literate ber

Steps taken → Priority Sector Lending to Agriculture
→ New type of Institutions: RRBS, Payment Banks.

The need is to financially include all the population to empower them & reduce inequality (SDG #10).

6. COVID-19 has exposed gaps in India's domestic laws to deal effectively with outbreaks of infectious diseases, especially pandemics. Discuss.

(150 words) 10

कोविड-19 ने संक्रामक रोगों, विशेष रूप से महामारियों के प्रकोप से प्रभावी ढंग से निपटने में भारत के घरेलू कानूनों में व्याप्त अंतरालों को उजागर किया है। विवेचना कीजिए।

COVID-19 pandemic perpetuated chaos among National & State governments due to non inclusion of pandemics in any ~~state~~ list.

Exposed gaps

- 1) Outdated 7th Schedule: 'Disaster' is not mentioned in any list, so Parliament can make laws. But ~~the~~ pandemic being a Health emergency, 'Health' is in State list, hence the tussle.
- 2) Pandemics are not mentioned in NDMA Act 2005.
- 3) No coherent structure to deal with such pandemics → different regulations by centre & states
↳ Inefficiently managed migrant issue.

- 4) Not making policies taking states in confidence, proliferation of ordinances.
- 5) Different responsibilities under Epidemic Act 1897.
- 6) Management of health becoming law & order issue.

Solutions

- 1) National Crisis Committee must be strengthened under Home Secretary.
- 2) Inclusion of Disaster under Union list & updation of 7th Schedule.
- 3) Effectively amending NDMA Act.

COVID-19 should be treated as an opportunity to reform our structural federal deficiencies to invoke a more coordinate response in future disasters.

7. Highlight the need for increasing private sector participation in space sector in India. Enumerate the steps taken by the government recently in this regard.

(150 words) 10

भारत में अंतरिक्ष क्षेत्र में निजी क्षेत्र की भागीदारी को बढ़ाने की आवश्यकता पर प्रकाश डालिए। इस संबंध में हाल ही में सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए।

The space industry in the world is valued at \$350 bn out of which India's space industry is only \$7bn. It is (2%) poised to increase to \$550bn by 2025.

Need for increasing private sector participation

- 1) Transfer satellite launching to private sector so that ISRO can focus on deep space mission & research.
- 2) Become independent & reduce dependency on taxes & funds by government.
- 3) Being in efficiency and technological expertise in launch pads, satellite development.
- 4) Being investment → NASA & space-X

collaborating to send astronauts to International Space Stations.

Challenges

- Critical infrastructure should be safeguarded
- Profit motive should not triumph national security.

Steps taken

- 1) IN-SPACE - Indian National Space Promotion & Authorisation Centre - to promote private investment
 - 2) NSIL - New Space India Limited - private arm of ISRO.
 - 3) launching private satellites - SRM SAT, ASAT etc.
- The need is to have effective collaboration between ISRO & private sector, to make India as a rising space power by 2030.

8. What do you mean by herd immunity? Also discuss the problems with primarily relying on this approach to stop the spread of infectious diseases.

(150 words) 10

हर्ड इम्यूनिटी से आप क्या समझते हैं? साथ ही, संक्रामक रोगों के प्रसार को रोकने के लिए मुख्य रूप से इस दृष्टिकोण पर निर्भर होने से संबंधित समस्याओं की भी विवेचना कीजिए।

Herd Immunity happens when a certain percentage of population has become immune to the virus by developing antibodies (via vaccination or recovery) that the disease spread is controlled.

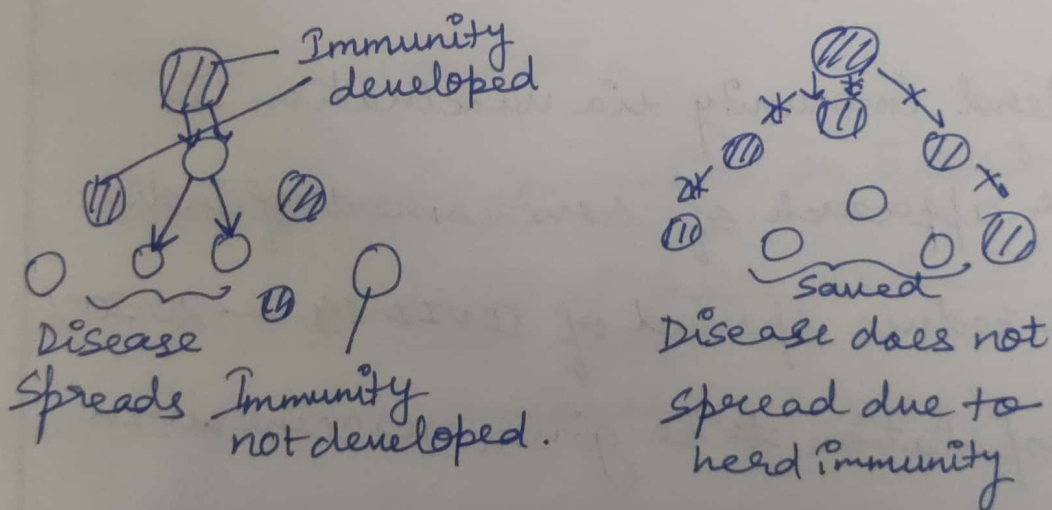


fig. 1. How herd immunity stops spread of disease.

Problems on relying on this approach -

- 1) It may require significant population to get infected for acquiring the

immunity, if the ~~virus~~ virus has high transmission. Ex- 95% population in Malaria.

- 2) May take time to develop herd immunity → mortality costs are high.
- 3) Elders and children are at significant risk as antibodies itself may cause disease, fear of reinfection is high.
- 4) Herd immunity via vaccination is the approach of government of India to reduce spread of COVID-19 — 20-30% population to be given vaccine when it arrives.
- 5) Mutating virus makes herd immunity ineffective. Herd immunity is important in long run as it naturally develops so that similar infection (like SARS) don't cause epidemic on same scale afterwards.

9. Despite the acknowledgement of terrorism as a global concern, the Comprehensive Convention on International Terrorism is yet to be adopted. What are the reasons and implications of this impasse?

(150 words) 10

आतंकवाद को एक वैश्विक चिंता के रूप में स्वीकार करने के बावजूद, अंतर्राष्ट्रीय आतंकवाद पर व्यापक अभिसमय को अभी तक नहीं अपनाया गया है। इस गतिरोध के कारण और निहितार्थ क्या हैं?

Amidst COVID-19, the world has seen various terrorist attacks - Nice in France, Peshawar Pakistan, Christchurch in New Zealand (2019). Despite the acknowledgement of terrorism as concern, CCIT has not been adopted.

Comprehensive Convention on Terrorism (CCIT) is brainchild of India which is struggling with crossborder terrorism.

Reasons for non adoption

1) Definition of Terrorism: US objects as it's Afghanistan policy may come under 'radar'.

2) China vetoes: Uighur Muslims in West China.

3) UNSC - permanent (5) does not have consensus.

4) Stringent actions under the policy!

Nations like Pakistan are wary of global sanctions in case it is passed.

5) Authoritative Regimes: Murder of Jamal Khashoggi (Saudi Arabia), persecution of Rohingyas (Myanmar) - might come under it.

Implications

1) Human Right Violations in name of national security continue unabated
Ex - Yemen, Syria.

2) Targeted persecution of minorities.

3) Deplorable conditions of Refugees.

4) Safe Havens in Afghanistan, Pakistan -

5) State sponsored terrorism.

Reduces UN stature.

The need is to pass CCIT with consensus to stop international terrorism & bring a peaceful world for all in line with

10. In view of the need for effective border management necessitated by complexity of prevailing challenges, India needs to reform its Border Security Force (BSF).

(150 words) 10

विद्यमान चुनौतियों की जटिलता द्वारा अनिवार्य बनाए गए प्रभावी सीमा प्रबंधन की आवश्यकता को देखते हुए, भारत को अपने सीमा सुरक्षा बल (BSF) में सुधार लाने की आवश्यकता है।

Border Security Force (BSF) is one of the paramilitary force of India with personnel strength of around 1 lakh. It comes under Ministry of Home Affairs.

Challenges in Border Management

- 1) Porous Borders: Easy smuggling of ~~trade~~ drugs, trafficking, infiltration by terrorists.
- 2) Border fences easily broken by terrorists
- 3) Terrain: Difficult terrain for security forces → Himalayas along LOC, Riverine across Bangladesh.
- 4) Lack of infrastructure facility for soldiers - toilets.
- 5) Poor arms & ammunition, coats for snow etc.

- 6) Overground workers nexus with terrorists.
- 7) Black Hole Syndrome: Nexus between organised crime & terrorists.

Reforms in BSF

- 1) Better life jackets, snow coats & arms & ammunitions are needed for effective sight in mighty Himalayas.
- 2) Integrated structure & coordination with Army — coordinated patrols.
- 3) Ensure promoted officers also man higher ranks to lift morale — DG BSF has always been from IPS.
- 4) Give one rank one pension to paramilitary forces — boost morale.
- 5) Better infrastructure facility in border areas.

BSF is the premier paramilitary force manning Indo-Pak & Indo-Bangladesh border. Above reforms are needed to tackle any terrorist challenge.

"Terrorist need only 1 chance but security force needs to be alert all the time"

11. Though privatization is considered as a prominent component of economic reforms, India has been ambivalent on the subject even in the post reform period. Discuss. (250 words) 15

यद्यपि निजीकरण को आर्थिक सुधारों का एक प्रमुख घटक माना जाता है, तथापि सुधारोपरांत अवधि में भी भारत इस विषय पर दुविधा की स्थिति में रहा है। विवेचना कीजिए।

In 1991, India went for liberalisation, privatisation and globalisation (LPG) reforms.

Privatisation refers to strategic disinvestment by government such that the stake of government in the entity reduce to less than 50% with management also in the hand of private player.

Even after the reform period, India has been ambivalent on it -

Positives of Privatisation

1) Increases profitability of firms.

↳ Economic Survey 2019-20: Hindustan

Zinc privatised in 2000s. It's profits

has since increased by 900%.

2) Improves efficiency of the organisation as government employees are generally considered lethargic with no incentive.

3) Provides funds to government for other activities in the budget.

Ex- ₹ 2.1 lakh crore in Budget 2020
postulated by disinvestment.

4) Clears government away from running a loss making entity.

↳ Government looking to privatise Air India.

5) Allows private sector to enter into strategic areas hitherto reserved for government. Ex- Coal mining

6) Brings world class technology into the sector, ultimately percolating to the consumer in better service.

Ex- Telecommunication privatised in 1990s.

Challenges of Privatisation

- 1) Government may not get the needed value of the entity, leading to a loss in long term. Ex- BPCL divestment
- 2) Profit motive of private player may hurt welfare objective. Ex- In Railways.
- 3) Firing of government employees may lead to unemployment.
- 4) Erodes public trust and employee morale of other sectors.

Privatisation should be done of those sectors in which private sector has more efficiency like BPO, telecommunication, by strategic disinvestment (NITI Aayog). As Kelkar Committee has recommended,

certain strategic sectors like Atomic Energy should not be privatised.

12. Highlighting the potential of micro and small enterprises in the food processing sector, enumerate the challenges that they face. In this regard, discuss the importance of the Scheme for Formalisation of Micro Food Processing Enterprises (FME). (250 words) 15

खाद्य प्रसंस्करण क्षेत्रक में सूक्ष्म और लघु उद्यमों की क्षमता पर प्रकाश डालते हुए, उनके द्वारा सामना की जाने वाली चुनौतियों को सूचीबद्ध कीजिए। इस संबंध में सूक्ष्म खाद्य प्रसंस्करण उद्यम औपचारीकरण (FME) योजना के महत्व की विवेचना कीजिए।

Food processing sector contributes 13% to India's total food exports.

Potential of MSME in food processing

- 1) Most of the processing occurs in Western India which has abundant cooperatives. Ex- Lijjat Rapad.
- 2) It can take raw material direct from farm gate → abundant.
- 3) Large demand and market domestically.
- 4) Proliferation of credit
↳ MUDRA scheme.
- 5) Increase exports, double farmer's income.

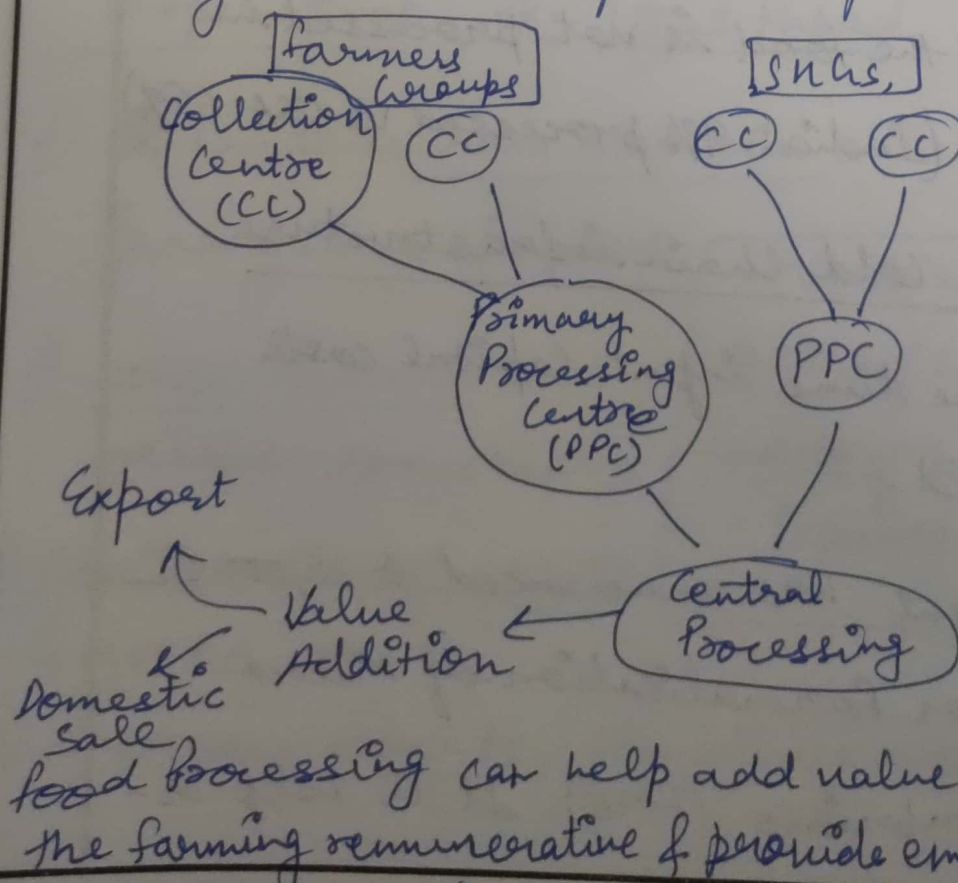
<p>MSME Sector</p> <ul style="list-style-type: none"> ↳ 28% of GDP ↳ 45% of India's Exports

Challenges

- 1) No advantage of economies of scale.
- 2) Lack of institutionalised credit.
- 3) Do not pass stringent technical & non technical barriers of EU and western nations (Phytosanitary measures).
- 4) Lack of awareness regarding schemes.
- 5) Huge transportation costs (14% of GDP Vs 9.5% in USA)
- 6) Most of the food is not processed in India (India: 9% processed vs USA: 65%)
- 7) Lack of Cold Chain infrastructure.
- 8) Huge one time input capital costs required.

Government has announced ₹ 20,000 Cr Scheme for formalisation of Micro Food Enterprises (MFE). It'll help in-

- 1) Getting institutionalised credit from banks.
- 2) Improve marketability of product.
- 3) Ensure access to government finance and Mega Food Parks set up by government under PM SAMPADA yojna.
- 4) Improve Bargaining power.
- 5) Streamline Cold Chain infrastructure integration to improve exportability.



13. Discuss the significance of micro-irrigation in a situation of water crisis in India. Also, mention the challenges with regard to adoption of micro-irrigation systems in India. (250 words) 15
- भारत में जल संकट की स्थिति को देखते हुए सूक्ष्म सिंचाई के महत्व की विवेचना कीजिए। साथ ही, भारत में सूक्ष्म सिंचाई प्रणालियों को अपनाने से संबंधित चुनौतियों का भी उल्लेख कीजिए।

According to NITI Aayog, 21 major cities are going to experience water scarcity in 2020.

Microirrigation refers to practice of irrigation where it is managed minutely at local level in order to have efficient utilisation of water.

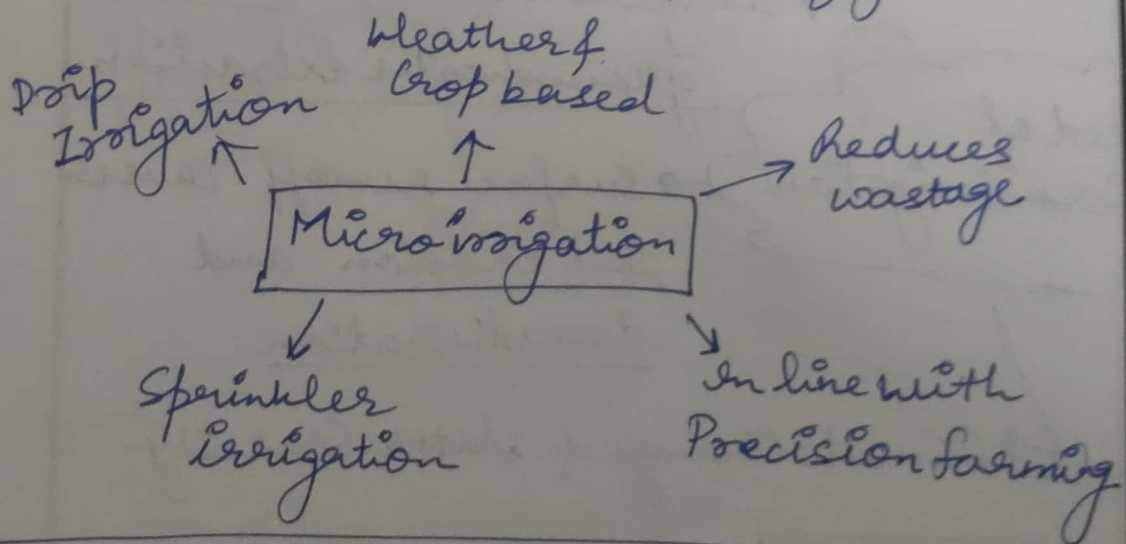
Need of Micro irrigation

- Irrigation constitute 80% of groundwater extraction
- surface runoff causes soil erosion and desertification.
- Climate change & water scarcity

Significance

- 1) Reduce surface runoff → ensure soil productivity & crop productivity.

- 2) Rationalisation of water use ensures crop production even in arid & semi arid areas.
- 3) Agro climatic planning of crops ensured.
- 4) Increases farm incomes → Reduces crop failure
↳ High crop production
- 5) Reduces need of electricity — low bills,
↳ low need of subsidy by government
↳ Reduces deficit of government



Challenges of Microirrigation

- 1) Need capital investment for implementation.

- 2) Lack of awareness regarding scientific need of crops. — over watering of crops.
- 3) Lack of funds & credit due to low collaterals
- 4) low Research & development to implement it.
- 5) No coherent policy formulation at national and state level — Agriculture is in State list.

With climate change and exploding population, water scarcity is only going to accentuate.

To ensure food security and remunerative farming, microirrigation

needs to be promoted in line with

SDG #13 via schemes like PM Kishu

Sinchai Yojna (Nar ~~Khet~~ Ko Pani, Per Drop More Crop)

14. India needs to integrate energy technology innovation in its broader energy policy. Highlighting its significance, mention the steps taken by government in this regard. (250 words) 15

भारत को अपनी व्यापक ऊर्जा नीति में ऊर्जा प्रौद्योगिकी नवाचार को एकीकृत करने की आवश्यकता है। इसके महत्व पर प्रकाश डालते हुए, इस संबंध में सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

India has the 5th largest renewable energy installation, 4th largest wind power and 5th largest in solar power installation (International Energy Agency Report).

Need of Energy Technology innovation

It refers to innovations in improving access to electricity, diversification of energy needs & sources & research in new technologies.

- 1) Climate change disrupting & depleting the conventional energy sources - coal, petroleum.
- 2) Global warming due to CO₂ emissions & GHG emissions from power plants.

- 3) Reduce cost of energy production & supply — fulfill increasing demand.
- 4) Harnessing the renewable products.

Significance

- 1) Inexhaustible: It can fuel earth's needs for thousands of years without getting exhausted.

Ex- Experiment on Fusion Reactor
(ITER, France) — can give a million times more energy on coal.

- 2) Clean and Renewable energy — No emission of GHG gases — can achieve Paris Climate goal of year 2100.
- 3) Cheap: With research, efficiency is increasing, rendering it cheaper, as in the case of Solar Energy.

- 4) Abundant material
- Solar — Sun
 - Hydro — Water
 - Tidal — Oceans
 - Wind :

Steps taken by government

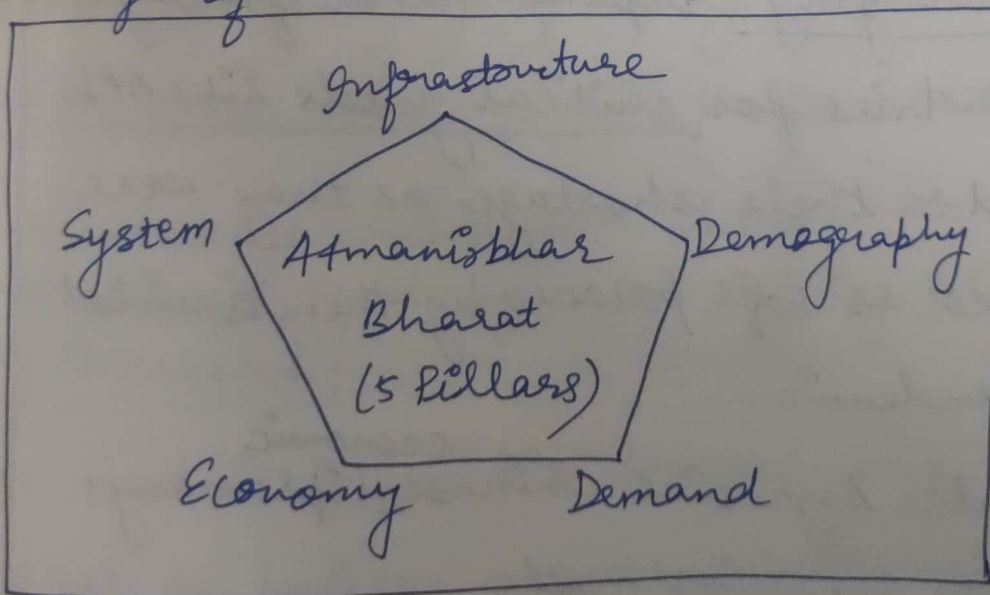
- 1) International Initiatives — International Solar Alliance
- 2) PM KUSUM — Rooftop Solar Installation
- 3) Participation in International Thermal Experimental Reactor Experiment.
- 4) Paris Agreement - INDC — 175 GW Renewable Energy by 2022.
- 5) National Energy Policy 2017 formulated.
- 6) National Biofuels Policy 2018 — mixing of bioethanol & biodiesel in petrol & diesel.
- 7) Formation of smart grids.
- 8) Indian Cooling Action Plan (2019-2024).

Above steps have been taken to fulfill SDG # 7 (Clean & Affordable Energy for All).

15. Discuss how the idea of Aatmanirbhar Bharat goes beyond the traditional view of self-reliance. (250 words) 15
चर्चा कीजिए कि आत्मनिर्भर भारत का विचार किस प्रकार आत्मनिर्भरता के पारंपरिक दृष्टिकोण से परे है।

Amidst the COVID-19 pandemic and deglobalising tendencies weaponising Global Value Chains, India has launched Aatmanirbhar Bharat Abhiyan.

It is launched to ensure self sufficiency and self reliance by a package of ₹ 20 lakh crore.



It aims to build upon → 1. Land
→ 2. Labour
→ 3. Laws
→ 4. Liquidity

Need of Atmanishtha Bharat: Beyond Self Reliance

- 1) To get included into the global value chains. According to Economic Survey 2019-20, India is well positioned to do so as China's & Japan's economy have saturated with no more domestic demand.
- 2) Sovereignty: Dependence on foreign countries for critical goods like APIs led to their shortage as they were used as soft power by them amidst pandemic.
- 3) Counter Aggressive ^{economic} Chinese diplomacy: Wolf Warrior mode
- 4) Increase employment for MSME sectors by being 'Vocal for local' → PM SVANIDHI Yojna

5) Improve exportability of traditional goods.

6) Reduce Current Account Deficit.

Challenges

1) It is in line with global 'anti-globalisation' tendencies emerging with weakening of WTO.

2) May lead to import substitution.

3) Discourage foreign investors & FII.

4) Dents India's image of being & supporting open, free and inclusive trade at WTO.

5) Accentuates crisis with China.

6) Isolationist tendency - not joining RCEP

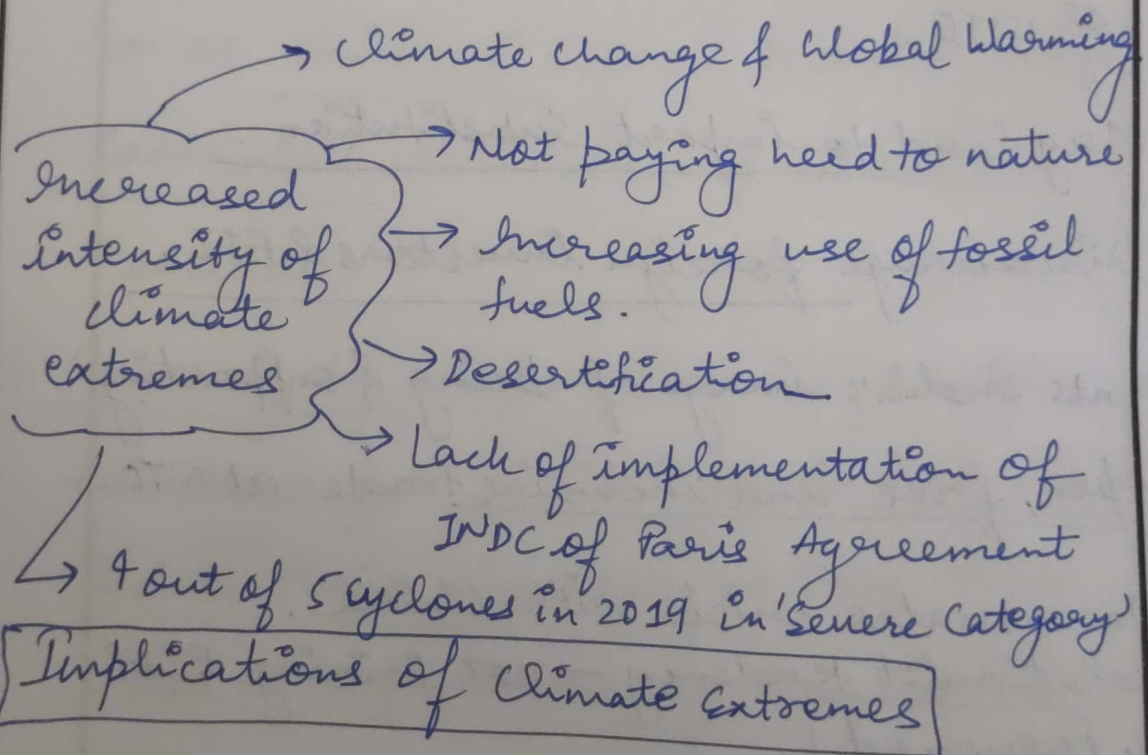
Way forward

The need is to utilise Amanishbas Bharat to bolster our manufacturing sector and increase competitiveness to increase our share in world trade from 1.7% to 5% by 2030.

16. The increased frequency and intensity of climate extremes in the Indian subcontinent can have grave implications. Comment. Also, suggest some measures that can be taken towards building climate-resilience in India. (250 words) 15

भारतीय उपमहाद्वीप में जलवायु की चरम स्थितियों की बढ़ती आवृत्ति और तीव्रता के गंभीर निहितार्थ हो सकते हैं। टिप्पणी कीजिए। साथ ही, भारत में जलवायु-प्रत्यास्थता निर्माण की दिशा में उठाए जा सकने वाले कुछ कदमों का भी सुझाव दीजिए।

India has been ranked 5th in Global Climate Risk Index.



- 1) Agriculture: Vagaries of monsoon & heat waves impacting crop productivity.
↳ Recurrent floods damaging crops.
- 2) Migration: Climate induced refugees have become 2nd largest after war-torn ones.

- 3) Infrastructure: Kerala floods destroyed more than ₹ 1 lakh cr infrastructure.
↳ Recurrent cyclones in Odisha (Amphan, Fani, Bureni) destroying homes, roads etc.
- 4) Unemployment: large scale job losses in disaster struck areas.
- 5) Dwindling incomes as firms take a hit.
- 6) Destruction of communication facilities.
- 7) Accentuating inequality and poverty, hunger.
- 8) High density coastal areas are at higher risk.
- 9) Water scarcity: India 1545 cum/person.

Measures taken towards Climate Resilience

- 1) Mandatory ECBC (Building Codes) and energy conservation practices.
- 2) India spearheaded Climate Disaster Resilient Infrastructure (CDRI).

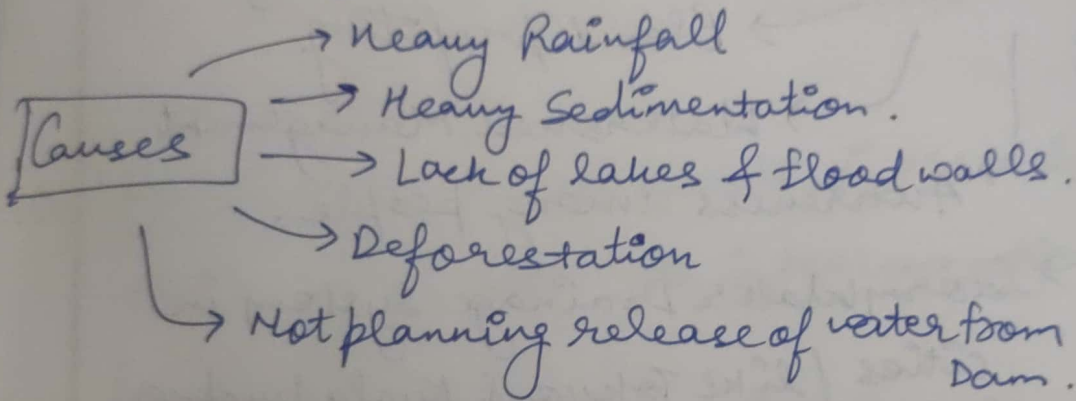
- 3) Promote afforestation & urban forestry → 'sponge cities' development
(Singapore)
- 4) Storm Water Drainage System like in Tokyo & Kuala Lumpur can tackle flash floods, cloud bursts.
- 5) Increase awareness among people.
- 6) GPS enabled weather forecasting in advance using AI tools by INCOIS.
- 7) Inter State River Linking Project to reduce flood damage.
- 8) Use traditional knowledge → Kuttanad Below Sea level farming in Kerala (ASANS) etc.

Mitigation & Adaptation to Climate induced disaster can reduce vulnerability & risk & help save millions of lives.

17. Approach to flood control in India should evolve from piecemeal measures to an integrated basin management. Comment. (250 words) 15

भारत में बाढ़ नियंत्रण के लिए खंडित रूप में उपाय करने वाला दृष्टिकोण क्रमिक रूप से एकीकृत बेसिन प्रबंधन के रूप में विकसित होना चाहिए। टिप्पणी कीजिए।

According to Rastriya Barh Ayog, 12% of India's land area (40 million hectares) is prone to flooding.



Piecemeal Measures which are generally adopted for mitigation include -

- 1) Flood Embankments across the river → easily broken
- 2) Evacuating people before floods → short term
- 3) Rescue via boats.
- 4) Afforestation drives → siphoning CAMPA funds
- 5) Building higher dams → sudden opening floods areas

But all such measures only aggravate the crisis in long run → ad hoc → temporary.

Integrated Basin Management refers to minutely planning & managing the activities along the entire basin of river.

It includes → Flood Plain Zoning

→ Flood profiling

→ Watershed Management

Awareness among people.

→ Stormwater Drainage System in

Cities (like Tokyo & Kuala Lumpur).

→ Effective dredging.

It will help in -

i) Reducing damage to infrastructure - roads, communication lines - as the water will get path to flow.

ii) Removing silt & dredging - increase depth of channel so that breadth decreases.

iii) Effective warning system along the entire basin.

- iv) Coordination between national & state government increases.
- v) Afforestation along the bank - reduce flow of water and soil cutting.
- vi) Villages to be relocated away from the channel & basin - reduces vulnerability.
- vii) Proliferate lakes & ponds in the basin - check water flow via interconnection.

Other steps → Early Warning System.

- ↳ NDMA guidelines. (NDMA Act 2005).
- ↳ Reducing concretization of banks.

Floods are an annual phenomenon.

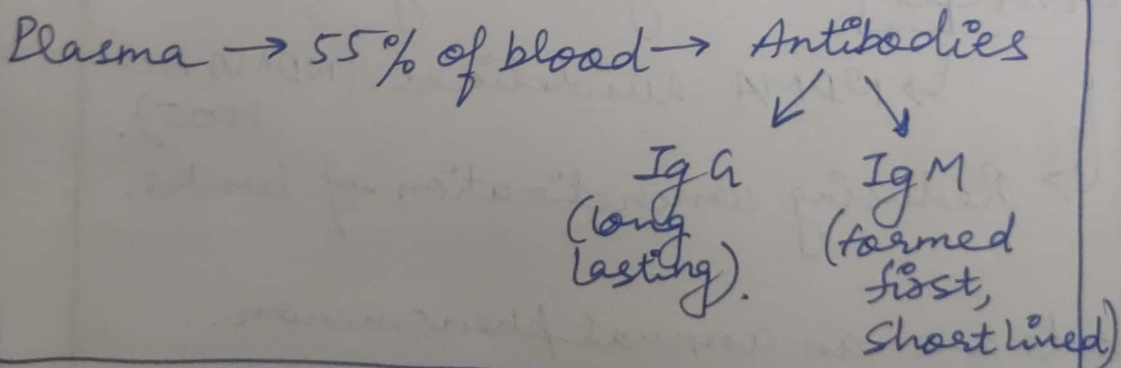
Ideas like Interstate River Water Interlinking project can be studied to further mitigate them.

18. What do you understand by Convalescent Plasma Therapy? Enumerate the potential uses and concerns in its application. (250 words) 15

कॉन्वलेसेंट प्लाज्मा थेरेपी से आप क्या समझते हैं? इसके संभावित उपयोगों और अनुप्रयोग में सम्मिलित चिंताओं का उल्लेख कीजिए।

Convalescent Plasma Therapy refers to using plasma of a recovered patient from a viral disease to induce antibodies in the ailing patient.

This is a method of giving 'passive immunity'.



Plasma Therapy was used to give immunity during COVID-19, although it was later discontinued on ICMR recommendation.

Uses

- 1) Gives instant immunity for 2-3 days
- 2) Can give relief in case no other medicine or vaccine developed.
- 3) It can be used to treat various life threatening diseases like cancers.
- 4) Earlier used in SARS, Ebola etc.

Concerns

- 1) Needs same blood group donor which is difficult to find.
- 2) Asphaeresis machine used for transferring plasma is expensive - so not available in small cities.
- 3) Lack of research regarding its efficacy in COVID-19.

- 4) Immunity given is not long lasting.
- 5) Unavailability of blood banks.
- ↳ Delhi opened 1st Plasma Bank at ILBS.

The need is to promote research in plasma therapy and find out about its potential in treating life threatening diseases.

19. Given the diverse security challenges as well as external and internal linkages, developing a National Security Strategy for India requires a comprehensive approach. Explain. (250 words) 15

विविध सुरक्षा चुनौतियों के साथ-साथ बाह्य और आंतरिक जुड़ाव को देखते हुए, भारत के लिए राष्ट्रीय सुरक्षा रणनीति विकसित करने हेतु एक व्यापक दृष्टिकोण अपनाए जाने की आवश्यकता है। स्पष्ट कीजिए।

National Security refers to protection of tangible and intangible assets from external or internal threats.

Security Challenges to India

1) Neighbourhood

1-1) China - Territorial Sovereignty as CPEC passes through Gilgit Baltistan, Border clashes (Chumbi Valley, Pangong Tso).

1-2) Pakistan - Cross Border Terrorism

1-3) Nepal - porous borders helps drug trade, trafficking, terrorists

1-4) Bangladesh - Smuggling, Migration.

1-5) Myanmar - Refugees (Rohingyas), Protection to groups like ULFA, NSCN (Khaplang).

2) Cybersecurity - Cyberwar via malware, viruses on critical installations.

3) Organised Crime - Being sandwiched between 'Golden Crescent' and 'Golden Triangle'.

4) Maritime Security - Piracy in Indian Ocean, String of Pearls of China, 26/11 attack.

External linkages → 1) Helps proliferate Terrorism

↳ 2) 'Black Hole' Syndrome: Nexus between organised crime & terrorists.

→ Drug trafficking, Arms, Human trafficking, Money laundering, Counterfeiting currency

Internal linkages → Instability in country via secessionist movements (Khalistan, Magalim)

↳ Support to Naxalism & Kashmir infiltration.

↳ Islamic fundamentalism: Communal violence

A National Security Strategy and Doctrine

hence is required -

- 1) Standard Operating Procedures to deal with crisis.
- 2) Interoperability between different armed forces and paramilitary force.
- 3) Accountability: Ensures it in case an attack occurs.
- 4) Ensures faster decision making.
- 5) Coordination in Civilian Bureaucracy & Armed force.
- 6) Investment in enhancing technology capability.

At the same time investment is required

in CERT-IN, BOLD-OIT, CIBMS so that

security of the nation is paramount and India is rendered impegnable by external & internal threats.

20. What do you understand by Critical Information Infrastructure? Highlight the significance of Critical Information Protection and state the measures taken to ensure the same. (250 words) 15

महत्वपूर्ण सूचना अवसंरचना से आप क्या समझते हैं? महत्वपूर्ण सूचना संरक्षण के महत्व पर प्रकाश डालिए और इसे सुनिश्चित करने के लिए उठाए गए कदमों का उल्लेख कीजिए।

Critical Information Infrastructure is the infrastructure having important information for national security and sovereignty of a nation. Ex- Atomic Energy, Trade secrets, Critical Personal Data, Nuclear Installations, Military communication etc.

Significance of Critical Information Protection

- 1) Safeguarding from national threat by adversary.
- 2) Sovereignty and territorial integrity
- 3) Trust: Trade secrets are based on trust between nations. It can hamper international relations.

- 4) Nuclear Installations: Harmful materials can be discharged if the system is hacked.
('D Trock' malware in Kudankulam Nuclear Power Plant Software).
- 5) Right to Privacy: Art. 21 & Justice Puttaswamy Judgement — can be used to generate 'deep fakes' and 'child pornography' maligning image.
- 6) Critical information about financial transaction needs to be secured.

Measures taken for Protection

- 1) Formation of CERT-IN under IT Act 2008
- 2) Justice B.N. Srikrishna Committee has formed a Data Protection Bill.
↳ Safeguard Critical Personal Data.
↳ Date Protection Regulatory Authority.

- 3) Formation of a state force - Cyberdome by Kerala.
- 4) India Cyber Crime Coordination Centre
- 5) Mandatorily storing copy of critical data within nation.
- 6) NATHRID - Connects all police stations to nab criminals.
- 7) Project NETRA (Network Traffic & Analysis)
- 8) National Critical Information Protection Centre.

Way forward

The need is to have a data regulation law in line with EU's GDPR Regulation as Data is going to be the new oil in 21st CE 'Knowledge economy'. Critical Information is even more important for Security purposes.