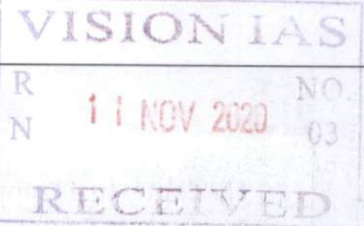




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GENERAL STUDIES (TEST CODE : 1415)

Name of Candidate	Vaibhav Prinja	Registration Number	971641
Medium Hindi/Eng.	Eng	Date	9-11-2020
Center	Delhi		

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
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6	10	
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9	10	
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11	15	
12	15	
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15	15	
16	15	
17	15	
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

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi- 110009

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।

Direct benefit cash transfer has emerged as a teen-sawy alternative to the cumbersome public distribution system.

Acc. to ES 2015-16, DBS saved Govt 6000 Cr in cash transfers by eliminating leakages.

Critics have argued both for and against the use of DBT as an alternative to PDS —

FOR

1. eliminates duplication, plugs leakages
2. prevents the need for physical movement of food grains
3. prevents the storage cost, storage losses, etc.
4. prevents the requirement of huge administrative setup required to monitor it.

AGAINST

1. can lead to inflation in food prices.
2. high errors due to mismatches between Aadhaar number & biometrics
e.g. Shakhband labourer died as he couldn't get PDS ration.
3. Financial services like BCs, postbank

5. Will lead to financial inclusion, savings banks penetration, savings deposits, etc. still not availed by all.
6. Will provide for diet diversification
4. Poor digital and financial literacy.
5. Can be diverted to non-food items.

Thus, DBS to become a reality must be supplemented with—

- i) increase financial literacy and awareness
- ii) increase capacity building of banking correspondents, rural banks, SHGs that can make it success.

Way forward

DBT has a huge significance in saving government's time, costs and resources and can empower the people in their food security.

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 the budgeting in association with different stakeholders in the society - NAO, civil society organisations, etc. to make the budget more inclusive and realistic.

Rationale behind Participative budgeting :

- i) accommodates interests of wider groups of society.
- ii) better addressal of demands and greater accountability.
- iii) Efficient utilisation of resources and prevents under utilisation of budget because of lack of project appraisal, planning or poor identification.
- iv) Has already been a success in states like Meghalaya where its supplemented by mandatory social audits in PDS, water supply and sanitation, etc.

But there are also challenges associated with it such as —

- i) lack of consensus among groups
- ii) delay in decision making and longer time periods of projects.
- iii) poor awareness among citizens.
- iv) lack of institutional support - apathy of State Govt, bureaucracy to involve NGOs, civil society in budgeting.
- v) poor transparency and accountability framework

Way forward

Participatory budgeting can usher a new revolution by making the development more inclusive and balanced.

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।

Universal Basic Income was 1st proposed by ES 2015-16 as an universal, transparent and a minimum income support by the state to the citizens to meet their sustenance activities.

Rationale behind UBI —

- i) falling labour productivity leading to lower wages
- ii) large population (93% acc. to NSSO 2009) in informal sector which keeps them out of social, health security nets of Government.
- iii) rising costs of living due to erratic monsoons driving food inflation; fuel inflation etc.

Inclusive Growth as an alternative to UBI —

- i) Will lead to increase in farm productivity and rise in farm wages which employs 49% of Indian population (ES 2017-18)

ii) will lead to decrease in income disparities in different regions due to poor industrialisation, poor infrastructure, etc. e.g. UP, Bihar suffers due to lack of physical infrastructure like roads, hospitals, etc.

iii) Will also provide environmental protection i.e. cleaner rivers, groundwater and prevent water borne diseases like cholera, diarrhoea; air pollution & diseases like Asthma which leads to huge Out of pocket expenditure (80%) and push people into poverty.

Thus, inclusive growth can eliminate the need of UBI by making the development inclusive.

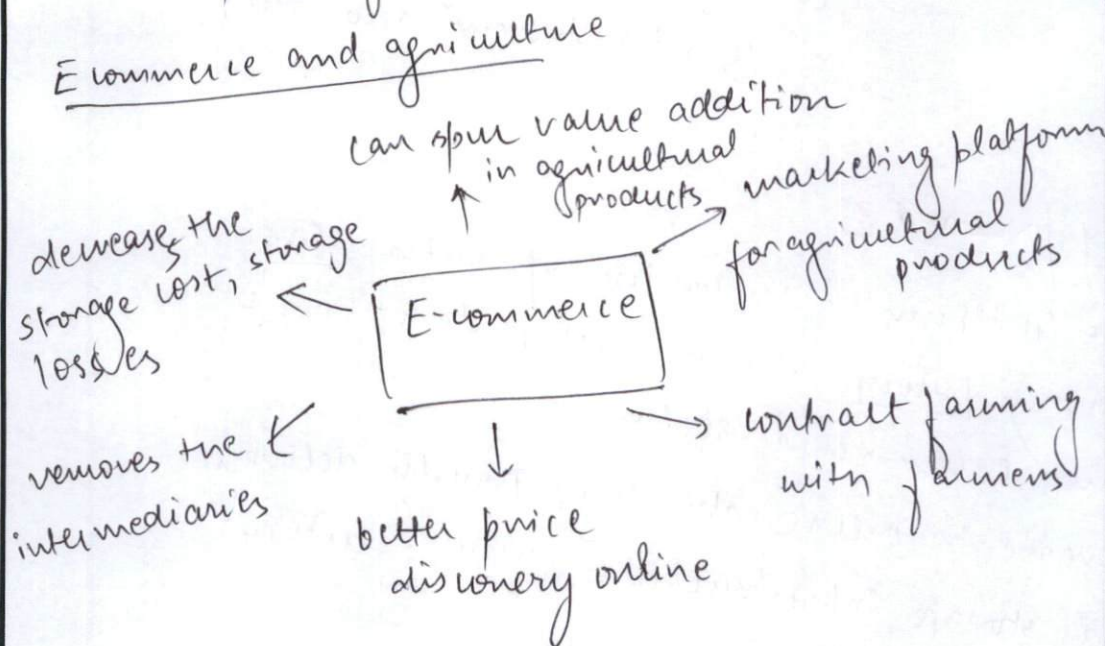
Way forward

1. Increase in skill building capacity of labour force.
2. Increase in farm productivity - wages, water productivity.
3. Increase in public expenditure in health (2.5% acc. to NHP-2017) & education 6% (NEP 2020) is the need of hour.

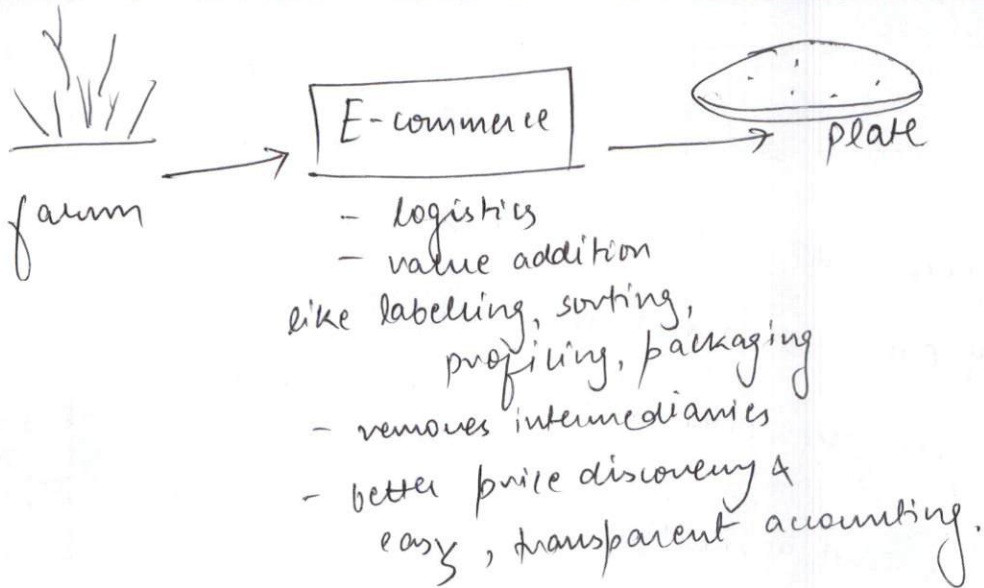
4. E-commerce holds the potential to revamp agriculture marketing in India in multiple ways. Discuss with suitable examples. (150 words) 10

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

E-commerce in India is a sunrise industry and growing at an annual rate of over 10% and employing over a million workforce.



Covid 19 saw how E-commerce was vital in marketing space of India particularly agriculture. With the new sites coming up such as Big basket, grofers it holds immense potential for agricultural marketing in India.



way forward

- The Government is coming up with Gig economy policy which will further boost this e-commerce sector.
- Increase in online spending, quality delivery and storage infrastructure will further boost the e-commerce sector.
- Farmers (Contract farming) Act 2020 can be the next big thing in Agriculture and can meet India's target of doubling farmers income by 2022.

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।

J A M Trinity as said by ES 2015-16
revolutionised the financial inclusion
system in India by increasing financial
access to 87.1% of Indian population.

Digital financial services as financial inclusion—

- i) DBT in fertilisers, LPG
- ii) Aadhaar based payment
- iii) Bhim UPI which prevents the need of physical debit card
- iv) Payment Banking in India to act as differentiated banking. Very efficient in small transfers, remittance payment etc.
- v) Leads to increase in services e.g. Core banking solutions.

But challenges still persist such as -

- i) poor penetration of banking correspondents
- ii) poor availability of core banking solutions in rural areas.
- iii) poor financial & digital literacy.
- iv) Rejection of Aadhaar authentication in
- v) poor digital infrastructure in rural areas.
- vi) Rising cases of cyber fraud, card skimming, etc.

Way forward

Data privacy Bill and cyber security policy to prevent bank frauds and compensation is must to incentivise users to transact digitally.

Also, businesses must come up with insurance redressal mechanism in case of payment failure/rejection.

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 exposed the lack of subject on Disaster management in any list of Schedule 7. Govt. had to depend upon Disaster management Act 2005 (Centre) and Epidemics Prevention Act- 1897 (States) respectively.

Lack of domestic laws poses challenges such as —

- i) lack of guidelines and clear policy rules hinders quick action.
- ii) leads to action paralysis.
- iii) reduces accountability & responsiveness.
- iv) leads to clash between State & Centre.
e.g. in imposing lockdowns — Centre forced its decision upon states.

Clear demarcation of subject in schedule 7 will allow for clear legislation on subject.

- This will also increase the capacity building of State & District disaster management authority.
- Including epidemics as a disaster under NDMA 2005 is must as zoonotic diseases have become more frequent.
e.g. Nipah - Kerala
Zika - Rajasthan
- Will need multi-department coordination —
Health, Education, Home, etc.
Ministry

Way forward

1. Also there's a need for community level participation mechanism as they are the 1st to respond.
2. Local practices as a response also have to be encouraged.
3. Need dear cut item in schedule 7 delineating the disasters including epidemics.

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

भरत में अंतरिक्ष क्षेत्रक 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।

Indian space sector is a 20000 Cr industry potential acc. to Digital Sky Report 2019. With the path breaking missions of Mars Orbiter, Chandrayaan it has carved out a niche in global space sector.

But the Indian space industry needs private sector participation because —

i) Capital investment and capacity building of industries to supply raw materials like engines, sheets, etc.

ii) R&D in space sector technologies like fuel engines, impulse, etc.

iii) Freeing the resources from PSLV which India has mastered and using them for new technologies like GSLV Mk-III, space shuttles, space stations, etc.

Indian Govt. has recently decided for the creation

of In-space to act as facilitator of private sector participation in space sector.

In-space

- will provide equal opportunities to participating private entities in using national space assets and facilities.
- will also disseminate the technology of PSLV, SSLV to allow for local production.
- will encourage private sector to go for commercial launches for imaging, space & atmosphere research and then moving into satellite launches.

Way forward

1. It will also help build the space startup ecosystem in India.
2. Will also create employment in space sector and accommodate skilled workforce.
3. Will increase competition and reduce cost of future launches with better technologies.

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 refers to the immunity gained by a majority of population on the whole which prevents the microbe/pathogen from finding any host to sustain in the outside environment.

Advantages

1. Act as an alternative in place of vaccine but its not available.
2. Is quicker and cheaper means to build immunity
3. Is suitable for low population areas.

But it was not been able to entirely address the spread of disease as evident from US, UK which lead to an enormous fatality rise.

Problems can generate if its relied upon

singly such as -

- i) whole population gets vulnerable and loses immunity.
- ii) is a time taking process.
- iii) is not suitable in a mobile population
e.g. migrants may carry disease or may get infected due to lack of herd immunity.
- iv) Not as effective as vaccines and temporary immunity.

Way forward

Herd immunity must be seen as a temporary measure with ultimate aim of vaccines coverage for lifelong immunity.

Also, 'vaccine hesitancy' needs to be tackled.

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?

Comprehensive convention on International Terrorism was launched by UN in 1996 along with India as a vocal supporter. But it has yet to be adopted due to differing views on 'terrorism concept'.

Reasons for the impasse

1. No consensus on definition of Terrorism.
2. States like Pakistan, China against religious groups fighting for autonomy to be labelled as 'Terrorism'.
3. Middle East countries like Saudi, UAE, etc. against usage of foreign forces on other countries soil. Want it under 'Terrorism' label.
4. States like New Zealand, US against targeting of any particular section be it religious minority or refugees, etc.

Implications

1. Pakistan keeps attacking and sponsoring LeT, JeM in name of freedom of Jammu Kashmir.
2. China violates India's sovereignty by supporting insurgency in North-East India.
3. No international consensus leads to avoidance of sanctions which could act as a strong deterrent on terror sponsoring states.

Way forward

India must take lead to reach global consensus as Terrorism anywhere is a threat to humanity everywhere.

Recent Christchurch shootings in New Zealand, France Republic Day attacks, etc. have reignited the debate.

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 of India is a part of Central Armed Police forces responsible for protecting North-west and Indo-Bangladesh borders.

Deployment of BSF

Rajasthan —

Challenges

human trafficking; fences get broken and covered in sand dunes; hostile enviro. location +

Gujarat —

drug trafficking, gun trade, gold smuggling, illegal fishing; creeks + nalas

Punjab —

Drug trafficking, militant infiltration

Bangladesh —

Rohingya refugees, cattle smuggling, porous borders - streams, nalas. Very densely populated.

To meet these challenges, India needs to reform its Border Security force—

- i) Capacity building and training to deal with human and drug trafficking; cattle smuggling, etc.
- ii) Need of technology adaptation such as UV/smart drones, smart fences, etc. to reduce laxity in porous areas along the border.
- iii) Need integrated checkpoint Management and training to deal with such a variety of offences.
- iv) Need fencing & capacity building of check posts along border.

Way forward

India must enhance its border preparedness in wake of rising challenges along borders through better management of border forces.

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।

Privatization refers to the disinvestment process where the Govt. reduces its stake below 51% and hence passes on both management and operational control to private business in its Government enterprises.

Privatization was seen as a crucial reform post 1991 because of —

- i) increasing competition among Govt. enterprises through entry of private sectors.
e.g. Telecom - finest successful story.
- ii) to save Govt. tax payers money and use it in public expenditure on other critical sectors like health, education, etc.
- iii) to break down the monopoly in non-critical sectors of the economy and benefit consumers.
- iv) to attract new R&D through private sector participation, most notably in manufacturing industries.

But India could not see a desired result and had a mix of outcomes —

- i) Privatisation could not follow in all sectors.
e.g. Telecom, manufacturing attracted private investors but only in top PSUs.
- ii) It could not get away with its ailing PSU, like Sootu Corporation of India which still burns tax payer money.
- iii) Privatisation was resented by trade Unions, etc. and caused rise in unemployment.
- iv) Most privatisation did not provide for adequate VRS, rehabilitation measures for workers.
- v) Also, the addition of new technology measures further increased unemployment as companies became skill intensive moving away from manual labour.

Success of Hindustan Zinc — now the 2nd largest Zn manufacturer in the world could not be replicated in other sectors.

Acc. to Rangarajan Commission 2012 —

i) privatisation is NOT the only way to increase competition. It can also be increased by simplifying the processes, decreasing Red Taps, etc.

ii) skill building, apprenticeship of workers is most to cope up with unemployment that is followed in privatisation as they become outdated.

e.g. Japan - workers enter into life time contracts and are provided with periodic internships, apprenticeships to be relevant.

Today, the Govt. has come out with policy that it will exit non-critical sectors completely and will have max 4 in critical sectors.

But this must be followed by —

i) smooth exit as well as entry of private firms

— IBC

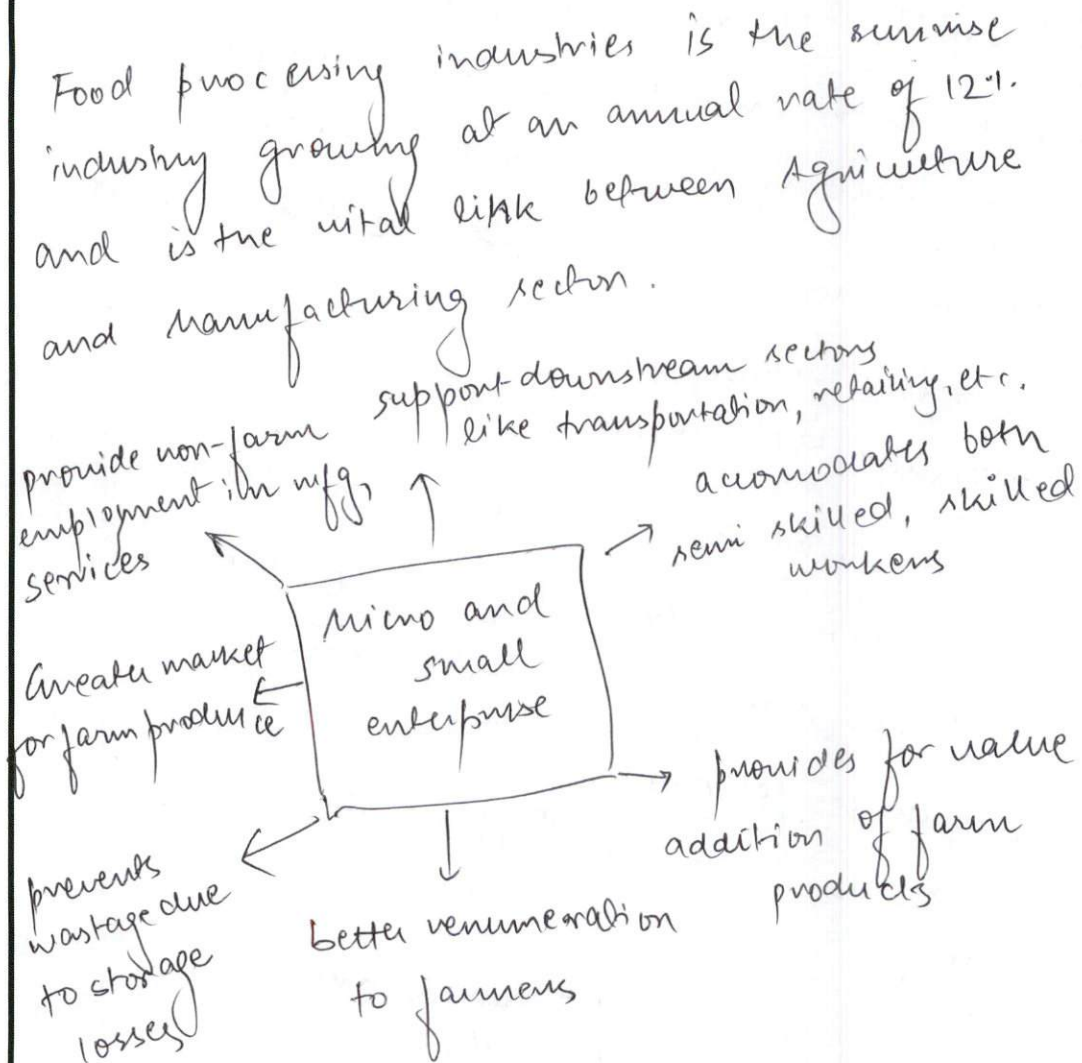
ii) Ease of Doing Business - parameters have to be improved.

Way forward

Thus, privatisation has to be followed in step by step manner with both structural and periodic reforms in background.

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।



Thus, MSME micro & small in particular can lead to increase in farm productivity and prosperity.

But, micro and small enterprises also face numerous challenges such as —

- i) poor institutional finance due to small size,
- ii) economies of scale cannot be utilized efficiently leading to exports inefficiency
e.g. Bangladesh, Vietnam produce lot less but have cluster names which gives them exports advantage over India.
- iii) poor R & D penetration due to poor private investment.
- iv) lack of phyto-sanitary measures which acts as non-tariff barriers in exports under WTO. Need institutional support from FSSAI to disseminate best methods.

In this background, Govt. has come up with Scheme for formalisation of Micro Food Enterprises which can address a variety of challenges such as —

- i) Micro & small enterprises will get registered and will lead to better institutional credit support from NABARD, banks, etc.

- ii) will lead to better regulatory standards.
- iii) will provide capital to invest in technology upgradation to increase productivity.
- iv) Cluster based development will lead to better economies of scale.

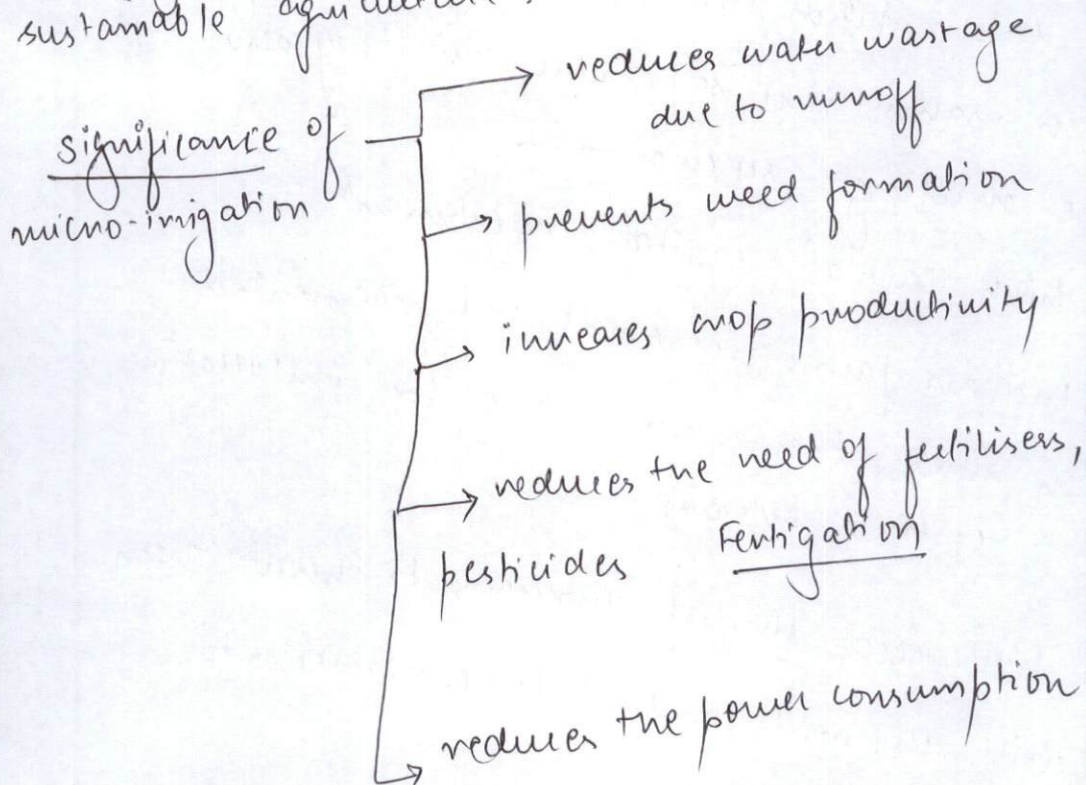
Way forward

MSMEs form the backbone of Rural non-farm as well as farm economy and must be addressed with better physical infrastructure capacity building, credit support to achieve India's aim of doubling farmers' income by 2022.

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।

Micro-Irrigation have been a revolutionary step in water management practices in agriculture leading to increased water productivity and sustainable agriculture.



India is suffering from water stress as water availability per capita has fallen to 1500 cc and acc. to Niti Aayog, 70% water supply is contaminated.

Israel has achieved tremendous success in water (micro) irrigation systems which has made it sufficient in food production. India has already signed MOU on water management best practices information exchange.

Micro-water systems like sprinklers and drip irrigation systems have 90-95% efficiency which makes them so popular but they also face challenges such as —

- i) high initial capital investment
- ii) Indian farms are small and fragmented which makes them poor choice for installation of these systems.
- iii) Will need skilled workers to operate them.
- iv) will also need constant power sources to operate them.
- v) will also lead to rise in unemployment as Irrigation system supports over 80% farm labour particularly rice.

EC 2017-18 has already pitched for micro-water irrigation system as it makes India climate resilient particularly in water sensitive crops like Rice.

The GOI has already included it in under On Farm Water management under Pradhan Mantri Kisan Sinchayi Yojani.

Way forward

- i) The Govt must provide initial capital support for installation
- ii) can converge with schemes like Murega to compensate for mul wage labour loss.
- iii) skill building is also essential.

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 setup itself ambitious targets of 40-1. non-fossil energy production by 2030 and 35-40.1. GHG emissions decrease per capita by 2030.

All this requires investments in new, alternative sources of energy —

- i) Renewables like Wind, solar
- ii) Others like Gas, shale, Methane (CBM), wave tidal energy, etc.

This has to be backed by R&D in energy technology innovation because it leads to greater benefits downstream such as —

- i) reduced costs of operation
- ii) efficient capacity building & proper utilisation of resources

e.g. India suffers from obsolete technology in coal extraction because of which it imports 20% coal although it has 4th largest reserves.

- iii) decreases the consumer expenditure
- iv) increases the Government revenue in the long run due to better utilisation of resources

Technology innovation needs in different sectors

1. Solar - Need of solar photo-voltaic cell building capacity.
 - India imports 90% of solar pvc cells.
 - Also, need of technology innovation in solar batteries

2. Wind - Wind turbines need R&D to increase productivity and decrease cost of manufacturing.

3. New technologies like waste to energy plant e.g. Ghazipur which supplies electricity to Delhi Metro is a case in point.

Recently Indian Railways came up with Polyuack technology which can convert all types of wastes into refuse derived fuel and is a Net Zero emitter. Such public R&D has to be promoted.

Also, India is working to promote tidal energy in Mangroves of Sundarban; shale exploitation

in Indo-Gangetic plains; Offshore Wind power plants which needs technology innovation to increase efficiency and decrease costs.

Also, Green corridors, smart grids, etc. need a sound technology backbone to maintain load stability and efficiency in the long run.

Govt. steps in this regard —

1. International Solar Alliance to share best practices and innovation.
2. HELP - composite license under hydrocarbon exploration licensing policy.

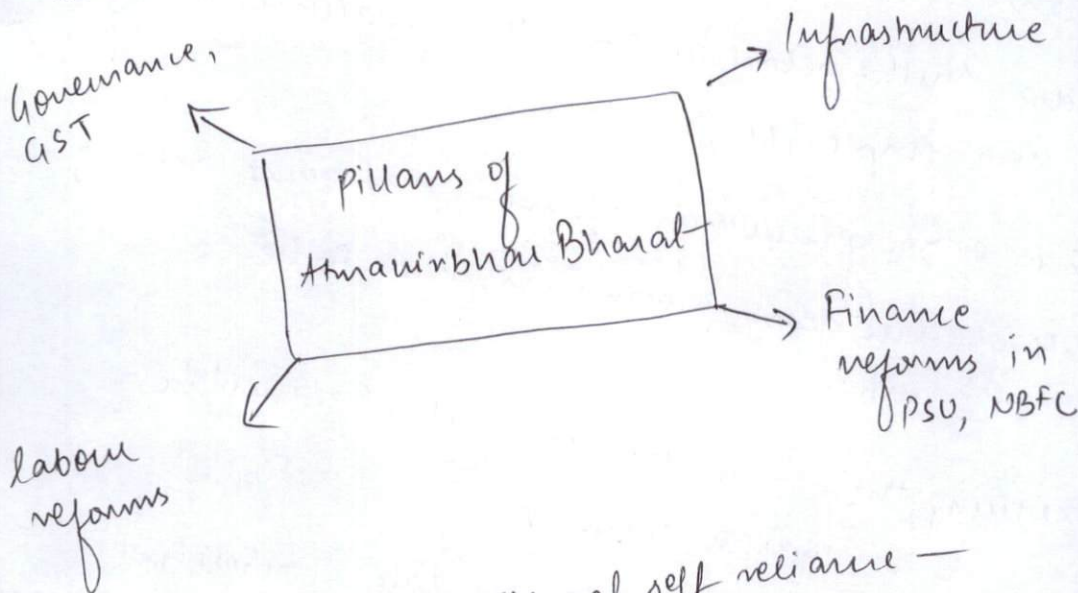
Way forward

The Government needs to increase R&D which is about 0.8% to 2.5% with greater participation of private sector which currently invests just 0.3% of total to drive India's innovation ecosystem.

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।

Aatmanirbhar Bharat policy of 2020 has come out in wake of covid 19 due to global disruption in supply chains, finance flow, labour movement, etc..



- It's different from traditional self reliance —
- i) It does not mean self dependent to become a close economy nation to drive world growth.
 - ii) It means building institutional capacity of Indian enterprises to make them more competitive in world markets.

iii) As the countries like China lose manufacturing competitiveness due to rising wages, India can attract those enterprises and spur domestic growth.

But all these needs to be backed by —

i) Skill building of workers.

India Skills report 2018 - 44% graduates are non-employable.

ii) Ease of Doing business reforms - enforcing contract, starting a business parameters have to be improved.

iii) Solving the twin balance sheet problem in Indian economy.

iv) Simplifying labour reforms like contractual workers, retrenchment - Labour Code 2020 a positive step in this regard.

v) Also need labour protection laws like Occupational Safety Bill, Minimum wages Act, etc.

India has already partnered with Japan in its supply chain reform measures post covid19 outbreak and can attract those Japanese firms.

Way forward

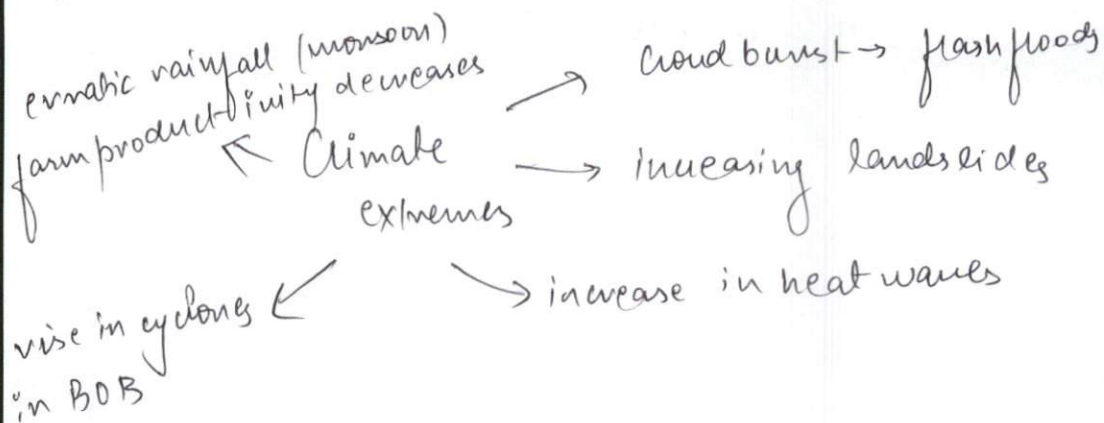
1. India must make judicious use of its demographic dividend by skilling them.
2. Smooth entry & exit of firms via IBC.
3. Strengthening of finance institutions like PSU banks, NBFC is also must.

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।

With the increasing climate change phenomena due to rise in global warming, ozone depletion, etc., the frequency of climate extremes like super cyclones, heat waves, ~~monsoons~~, cloud burst, etc. have also become common.



Acc to ES 2017-18, climate extremes can lead to greater stress in Indian sector because —

- i) 47% agricultural land is still rainfed
- ii) sensitive to extreme rainfall shock - Rice
extreme heat shock - wheat

both are staple diet of India.

iii) increasing frequencies of cyclones, also increasing erratic nature.

e.g. cyclone Fani, cyclone Titli

iv) increasing heat waves affect both farm as well as urban productivity.
labour

Also affects health of livestock

v) Erratic rainfall has increased due to El-Nino (monsoon) amplification.

- Chennai drought, - worst drought of century just after a year of urban floods.
- Maharashtra drought

vi) will also affect water security of India; drying up of rivers, reservoirs, due to deficient monsoons.

Measures that can be taken

i) Renovate water storage structures like ponds, kulhs.

ii) build rainwater harvesting structures, mandatory rooftop harvesting.

iii) Water efficient agricultural practices like sprinklers, drip; ~~also~~ changing crop pattern e.g. sugarcane

in Marathwada which further put stress on ecology of the region.

iv) Growing climate resistant hardy crops like Millets - maize, jowar, bajra and pulses.

v) Integrated watershed management practices taking river basin as unit of implementation.

Way forward

India must spur R&D under National Plan for climate change 2007 by making

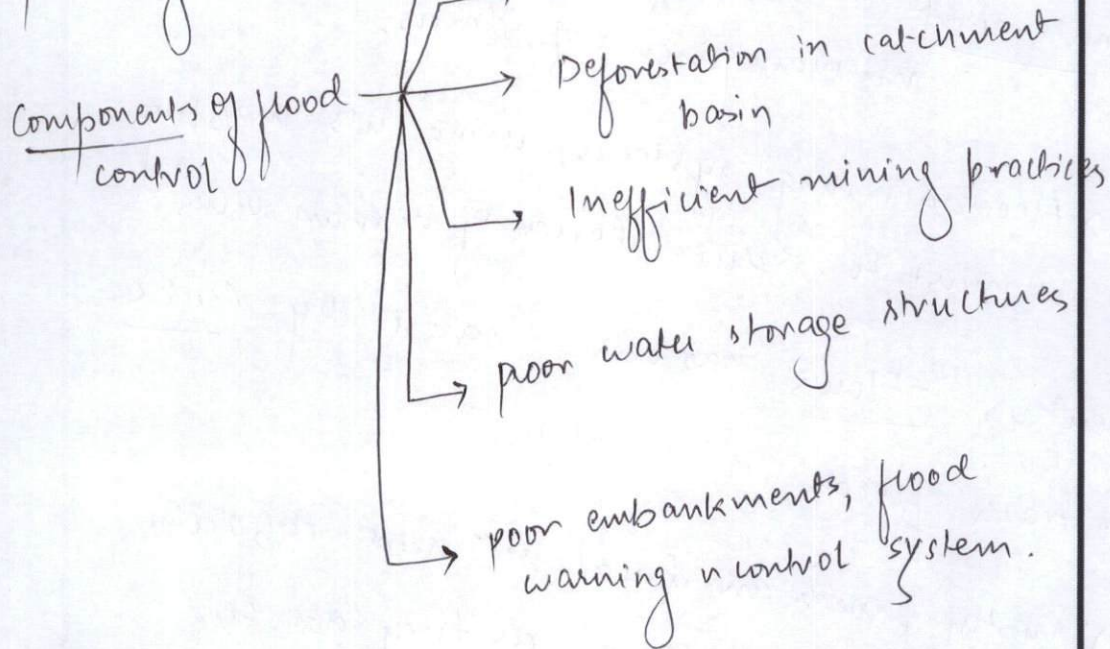
- sustainable agriculture
- increased water & energy efficiency
- Sustainable Himalayan ecosystem, etc.

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।

Flood control in India is more of a planning concept that requires an integrated basin management.

National water Policy 2012 emphasises on using river basin as unit for management & planning.



Thus, India needs to look at all these components in an integrated manner —

- i) Afforestation of upstream catchment areas

e.g. Kosi floods, Brahmaputra floods are annually held because of deforestation, loose sediments upstream.

ii) Siltation is one of the biggest problems. It reduces water storage capacity of reservoir as well as cause floods downstream.

iii) Dam & reservoir management is also the key in flood control.

Gout report : Kerala floods happened due to mismanagement of dams.

iv) Flood warning systems, using GIS mapping is must to reduce losses of human lives.

Recently, i-Flows has been released by MOES to track floods in Mumbai.

v) Mostly floods are rural so need capacity building of Panchayats as they are the 1st one to respond.

vi) Constant upgradation n repairing of embankments
storm water drains is also must.

Way forward

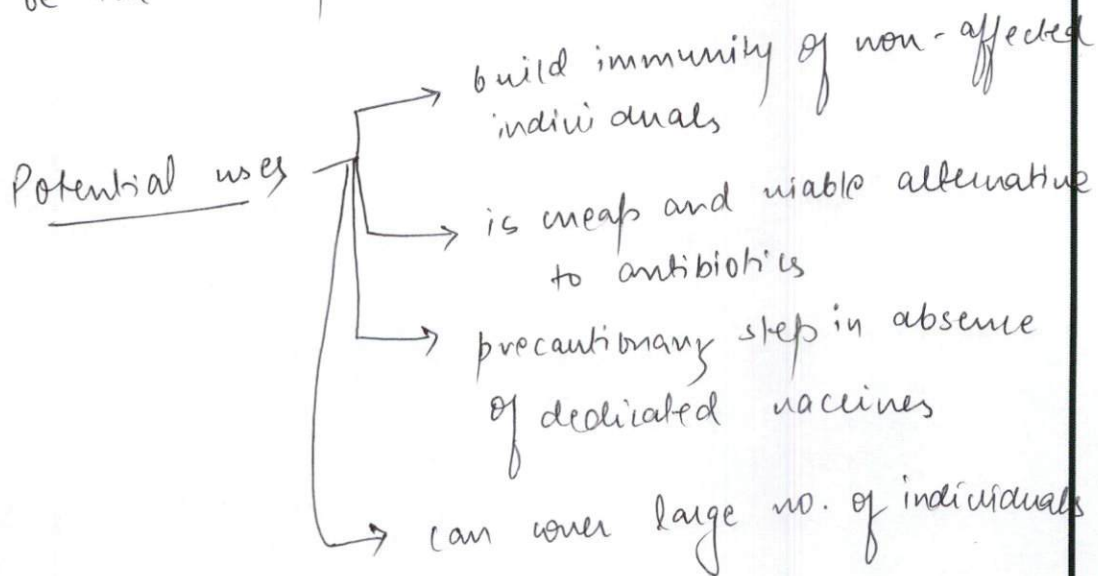
India needs a multi pronged approach to
solve its flood problems.

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 the use of biotechnology - polymerase chain reaction, etc. to build immunity among the non-affected individuals of the society against any potent disease.

This theory depends on the fact that antibodies produced in the affected patient's body also impart immunity when inserted into an unaffected patient. This can be the 1st step towards Herd Immunity.



But there are also challenges such as —

- i) hesitancy of affected patients to donate plasma
- ii) hesitancy of unaffected patients to receive plasma.
- iii) efficient handling and delivery of plasma in hospitals.
- iv) fear of unwanted antigens, harmful components that may pass into healthy individual during transfusion of blood.
- v) This is not 100% full proof as it just provides immunity for shorter duration and may vary from person to person.
- vi) This is still in development and needs further testing to ensure its efficacy in fighting diseases like covid.

The Govt. of India has already CPT with 1st plasma bank in Delhi which has been a great success.

Way forward

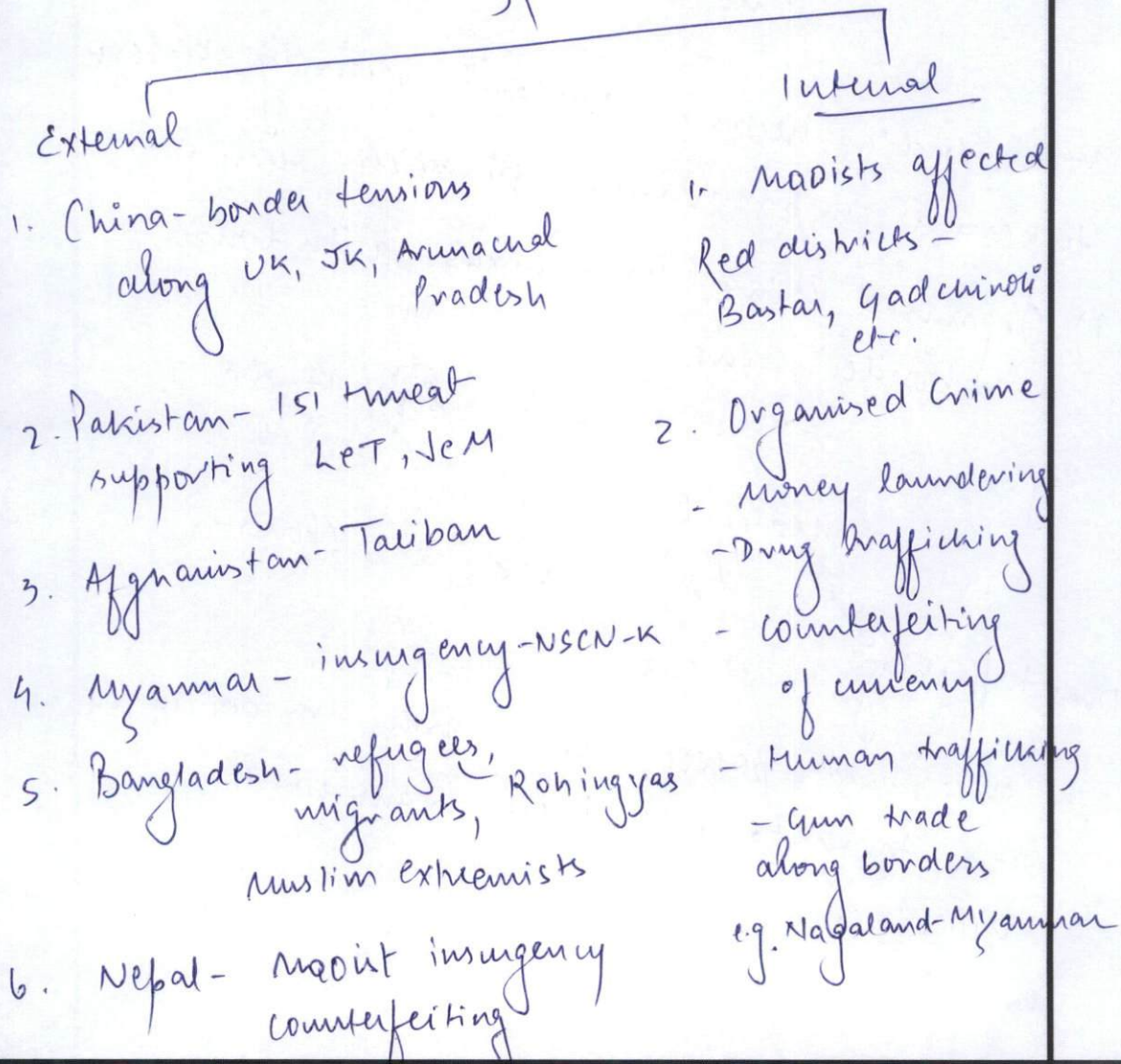
1. The Govt. in partnership with health institutes must come out with a detailed guidelines on its use.
2. Capacity building of primary healthcare so that its easily affordable and available to all.

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।

India faces hugely diverse security challenges as it sits in hostile neighbour hood and also has internal problems due to extremists like Maoists.

Security challenges



Challenges on India —

Internal - leads to overthrow of lawfully elected Govt.

- undermines Govt. institutions like schools, panchayats.

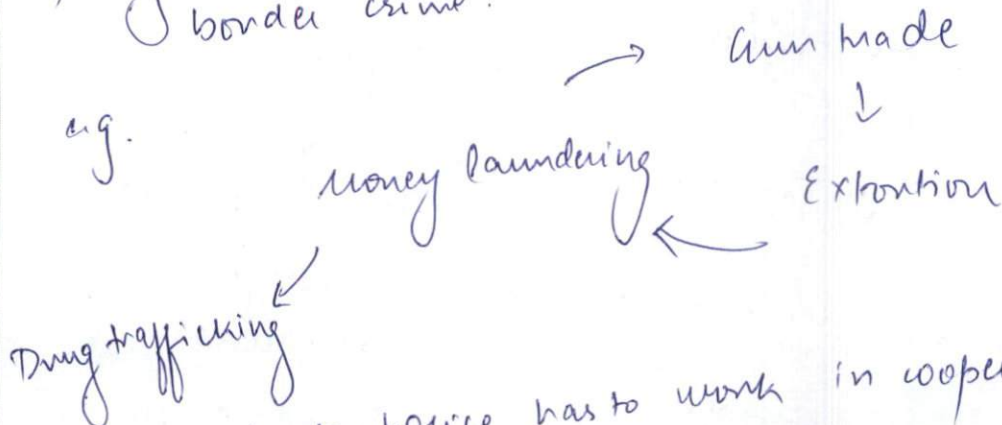
e.g. Maoists in Abujn Maris, Patnalgadi in Jharkhand

- prevents development

e.g. kidnapping contractors, blowing up rail tracks.

Thus, India needs a National security strategy to have a comprehensive approach such as —

i) Organised crime has a nexus with trans border crime.



ii) State border police has to work in cooperation with Army to curb these trans-border activities.

iii) Mumbai Attack was a state-communication failure after which NATGRID was formed.



This will lead to better profiling of security threats in future and act as preventive measure.

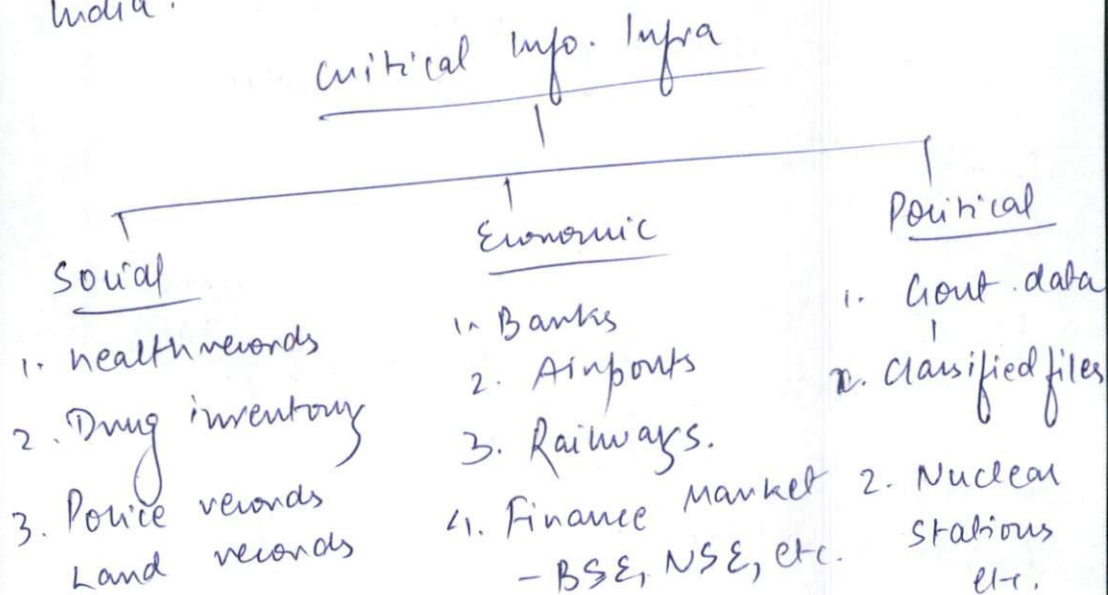
Way forward

Indian needs to proactively engage with states and different stakeholders to have a comprehensive strategy.

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 refers to those infrastructure which are vital for socio-economic-political sovereignty of India.



Significance of critical info. infra—

i) Controls the economic activities of country
e.g. BSE, NSE runs the whole finance
sector of India.

ii) Is vital to store information of high

- sensitivity of users given in confidence.
- iii) Any breach can destroy users privacy.
 - iv) Any attack of critical infra can hold the country standstill.
e.g. 2016 US bot attack on banking sector.
 - v) Rising threat of ransomware, denial of service attacks.
e.g. Kudankulam plant was recently attacked by cyber hackers.
 - vi) Is crucial for development of India
e.g. Aadhaar - has full biometric details and is a primary identification means for MNREGA, PM-KISAN, PAHAL, etc.
any attack on it can compromise millions of poor denying them their benefits.

Measures

- i. IT Act 2008 deals with all types of cyber threats.
CERT-in was found ^{ed} under the Act

- to coordinate all such threats.
2. Data Privacy Bill to safeguard users privacy.
 3. National Cyber security Policy 2013 to build capacity.

National Cyber security Coordinator 2017
established to coordinate with states.

4. NATGRID an important database sharing system of critical information.

Way forward

India needs a robust cyber & data privacy policy to maintain its digital sovereignty.