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GENERAL STUDIES (TEST CODE : 1415)

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Medium Hindi/Eng.	English	Registration Number	446297
Center	Online / Jamia	Date	9/12/20

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Q. No.	Maximum Marks	Marks Obtained
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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-सम-उत्तर (क्यूआर) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में दिए 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।

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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।

Economic Survey (2016-17) had proposed to replace food supplies, etc. through system of DBT in the form of a quasi-UBI.

Arguments in favor of DBT

- (i) PDS is marred by huge leakages and corruptions (NITI report)
- (ii) scope of black marketing of food grains and discretion to FPS shop owner
- (iii) DBT as seen in pilot projects in Delhi and MP villages revealed success in also empowering women and improving social indices.
- (iv) greater choices with beneficiaries to utilise money as they want

Arguments in favor of PDS

- (i) Recent report on Jan dhan yojna highlights still only 80% bank coverage
- (ii) In case of tribals where lack of market, DBT money can't be used to buy foodgrains.
- (iii) DBT in PDS in Chandigarh & Chattisgarh did not give positive result
- (iv) patriarchal nature of society - DBT money can be misused by men.

Way forward

- (i) first need to ensure strengthen JAM and digital literacy.
- (ii) Need for RCT trials to test efficacy of DBT
- (iii) for starters, mixed models of both DBT & food grain should followed
Food security need not be compromised for digitisation.

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 can be defined as budgeting process where all sections of society participate to make budget - government, opposition parties, NGO, civil society, etc.

It has only been a recent phenomenon in budgetary practices common in Scandinavian countries.

However, not yet adopted completely in India due to various challenges

- ① lack of awareness among people related to budgetary process
- ② Issues with implementation
- ③ govt apathy & bureaucratic hurdle

- ④ Need for comprehensive legis-
lation.
- ⑤ Issues with fiscal prudence
of govt
- ⑥ lack of clear action plan, guidelines
of operation
- ⑦ social inclusion issues as powerful
groups may dominate → dominant
caste, etc.
- ⑧ lengthy process
- ⑨ thinking local, acting local - ignore
national issues

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।

Economic Survey (2016-17) called for debate on Universal Basic Income (UBI) in the context of welfare governance & poverty alleviation.

It is defined by WEF as basic minimum monetary amount required to lead decent life, paid by government to employed/unemployed.

However, in Indian context, lack of inclusive growth have led to calls for UBI.

Why need UBI?

① India remain behind in various socio-economic indicators like ranked 97/104 in global hunger index, in bottom quintile in MPI. index with largest absolute poor.

② Rise in unemployment (5.6 %) in

2019 as per latest NSO report on PLFS.

③ Threat to jobs due to AI, IR 4.0, etc.

④ poor standard of living as illustrated by Ease of living Index.

⑤ huge gender inequalities, India perform poor in Gender Gap Index of WEF.

To overcome above, UBI can work as panacea :-

- (i) as evidenced by PM-KISAN which is type of quasi-UBI
- (ii) Various pilot projects in Delhi & MP proved success of UBI to overcome poverty trap.

Inclusive growth means economic growth & development of all section of society & all sectors.

However, till that is not achieved, UBI should be thought about.

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 defined as sale and purchase of goods & services online by use of internet.

eg - flipkart, amazon, etc.

With agriculture suffering from market issues, e-commerce can act as great [panacea] by -

- ① Choice to farmers to sell produce anywhere across country.
- ② Greater options for consumer to choose from variety of products.
- ③ Eliminate middlemen → reduce prices for consumers → good cost to farmers → double farmer income
- ④ E-commerce can boost agri processing and agri-exports, thus reaching \$ 5 Tr economy by 2024.

⑤ Will help develop domestic farm market & increase GDP contribution.

However many challenges remain

- ① buyers can't be assured of what they are buying & what they'll be getting.
- ② Internet connectivity issues & lack of accessibility.
- ③ lack of digital literacy pointed by NITI Aayog report
- ④ even govt. schemes like e-NAM has not been successful much.

Hence, need of the hour is to develop comprehensive policy for e-commerce in agriculture to ensure safeguard of both farmers & consumers.

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

जहाँ 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।

Recent report by IBM services have revealed four fold increase potential in digital financial services in wake of pandemic in next 5 years.

Potential for expand financial inclusion

- ① huge and blooming IT sector to offer stable digital solutions.
 - ② dirt cheap data packs and smart-phones penetration increased
 - ③ Govt push for digitisation through JAM, digital India, etc;
 - ④ Will play role of equaliser and enable good governance
 - ⑤ Reduce leakages & corruption as shown by NITI report
- However still many challenges

still exist :-

- (i) lack of financial and digital literacy esp in rural areas
- (ii) Internet connectivity issues as highlighted by Symantec report
- (iii) cyber frauds - recent cases of harassment by digital lending app led to suicide of Hyderabad techie
- (iv) absence of a data protection law as recommended by Srikrishna Committee

Way forward

- (i) govt recent scheme of PM-WANI yojna for wifi in rural areas esp
- (ii) Data protection law being deliberated in Lok Sabha
- (iii) govt announced to update cyber security policy in 2020
what needs to be made sure is financial empowerment before digital empowerment

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।

More than a lakh people have lost their lives in recent covid pandemic not only due to health but other reasons too

Gaps in domestic laws

- (i) DMA Act 2005 does not include pandemic as biological disasters.
- (ii) Lack of govt policy to comprehensively deal with pandemics — UK parliament passed covid law in 2020, no such development in India
- (iii) Epidemic disease Act 1898 is four page law that does not deal with such pandemic — vaguely worded provisions
- (iv) In economic sphere, lack of holistic policy on how to deal

With economic effects of pandemic
(v) such pandemics largely originate
due to environmental destruction &
man-animal conflict, yet no govt
lawⁱⁿ regard to this matter.

However govt has adopted some
piecemeal measures like focus on
increasing budgetary support on
health, improve PNC, etc.

What can be done?

- (i) Adopt one health concept of WHO
- (ii) Repeat and replace outdated
epidemic act of 1898
- (iii) amend DMA (2005) to include
biological disasters in pandemics.

Covid like pandemic has
potential to re-emerge in future
(WHO), hence need for reforms in
govt approach.

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।

With increasing significance of space in all sectors of life up in recent space warfare, focus on space activities have increased under ISRO.

However, there has been growing demand for including private sector on lines of spaceX in USA due to following reasons :-

- (i) ISRO was set up for R & D in space & not satellite launch entity - private sector can do that
- (ii) crowding out effect :-
ISRO currently occupy most market share in space that leaves not much scope for private.
- (iii) private sector can bring much needed capital in the segment & completion.

- (iv) private sector can leverage ISRO R&D via PPP model to develop space assets.

Govt efforts

- (i) setting up of ANTRIX — commercial arm of ISRO
- (ii) New Space India Ltd. for greater private participation in budget 2019
- (iii) promotion to private enterprises to use ISRO facilities
- (iv) Research sharing mechanism

Still, Indian private space industry is in nascent stage.

More specific measures like private space policy can go a long way.

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 इम्युनिटी 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।

In the context of infectious diseases, herd immunity can be defined as the immunity obtained among more than at least 60% of population towards a viral disease.

Eg- herd immunity for covid

Types $\left\{ \begin{array}{l} \text{through vaccination} \\ \text{through infection of large population that leads to develop antibodies naturally} \end{array} \right.$

Herd immunity said to be achieved when $R_0 < 1$ and disease transmission slows down.

usually, herd immunity is referred to developing natural immunity.

Problems on relying on this

- (i) long time period to achieve herd immunity
- (ii) large no. of deaths occur before herd immunity achieved
- (iii) against ethical governance & human rights
- (iv) makes government lax & not pursue vaccine development
- (v) Economic growth slows down as health care comes under stress
- (vi) loss of productive citizens occur

Way forward

Instead of solely relying on herd immunity, better can be prevention through PHC strengthen and quick vaccine development.

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?

UNSC has identified India as one of top 10 most vulnerable to terrorism. - a global concern.

India thus proposed to UN the comprehensive convention on international terrorism (CCIT) in 2014 that is yet to be adopted.

Reasons

- + lack of consensus over definition of terrorism
- + resistance from countries that are source of terrorism
- + issues of developed v/s developing countries in context of terrorism
- + not much efforts from India to get the convention passed

Implications

- (i) increasing instances of terror acts — both organised (ISIS) and lone wolf attacks (Samuel Paty case)
- (ii) loss of economic resources and global GDP
- (iii) continuous loss of lives due to terror attacks
- (iv) culprits not brought to account
- (v) lack of effective collaboration to solve global terror issues

Way forward

- (i) India needs to build consensus with like minded countries to get the act passed
- (ii) leverage relation with USA, Russia and France in UNSC

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

India has been bestowed with a long international border of more than 15000 Km that has become an issue to handle with hostile neighbourhood.



However, this has not been achieved due to challenges

- (i) long, porous and difficult geographical terrain

- (ii) lack of settled & fenced border
due to border dispute at LAC &
LOC, etc.
- (iii) funding crunch to ensure effective
border infrastructure
- (iv) hostile neighbourhood - China,
Pakistan
- (v) issues with border security forces

Need to reform BSF

- (i) Need for BSF modernisation
- (ii) Issue of IPS and BSF cadre
leadership needs resolved
- (iii) for effective manning of Pak
border, more funds to be allotted

Secure borders can only
translate to peaceful & strong
nation, thus need to focus on
border management.

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 सुधारोपरान्त अवधि में भी भारत इस विषय पर दुविधा की स्थिति में रहा है। विवेचना कीजिए।

Privatisation as an economic policy was adopted by India post 1991 LPG reforms based on ideology "business of govt is to stay out of business".

"privatisation" refers to the diverting of govt. stock in govt. owned companies/PSU and allow private ownership partially.

However unlike strategic disinvestment, it does not include complete transfer of ownership.

Prominent component of reforms

- (i) privatisation leads to better competition in market as govt firms usually marked by inefficient work culture. Eg - BSNL

- (ii) access to better credit facilities and private capital
- (iii) Infusion of latest tech. to improve productivity
- (iv) Allow govt to focus on strategic key sectors eg - Atomic power
- (v) Govt becomes facilitator of eco. growth rather than regulator
- (vi) leads to wealth creation

Challenges from India

- (i) against socialistic credentials of our economy
- (ii) opposition from employees and trade unions
eg - case of PPP in Railway
- (iii) populistic policy measures - not wanting alienate vote bank

(iv) unable to attract real buyers
as govt seen offloading liabilities
and not assets.

However, the disturbance of
current govt is real as seen in
₹ 2.1 lakh crore disinvest target for
FY 20-21.

- (i) privatization of IOCL, etc.
- (ii) Relaunching IPO of LIC, IRCTC
etc in 2020
- (iii) Budget declared to privatise all
PSU except core sector PSU

Hence, govt has been
taking concrete steps to usher in
more PPP model to achieve ₹ 5 Trn
economy by 2025.

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 क्षेत्र 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।

MSME sector in India is respon-
sible for providing employment to
90% workforce & contribute to 45%
of GDP.

Potential of MSME in food processing

- (i) scope for huge employment due to labour intensive
- (ii) utilize potential of green
Revolution — production of wheat
and rice
- (iii) Improve agricultural exports to
achieve doubling farmers income
- (iv) Rich potential in fisheries &
horticulture department

(V) utilise FPO and cooperative model



In this context, govt launched scheme of FME in budget 2020.

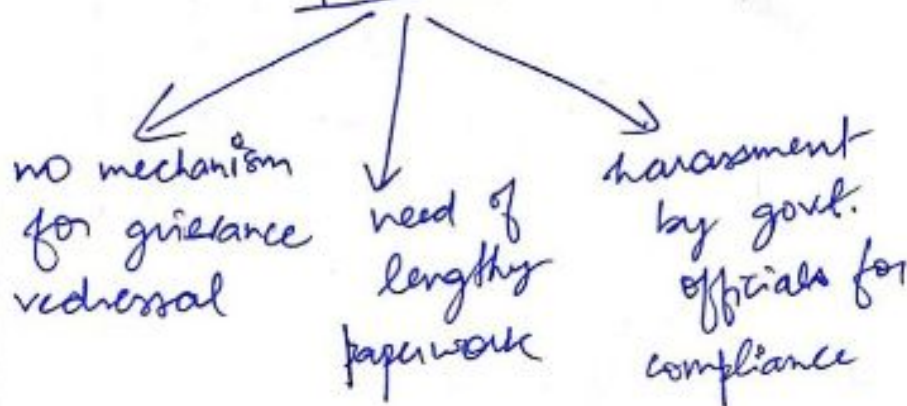
Potential

(i) will lead to better access to credit from micro finance institutions

(ii) promote & incentivise food
processing in rural and small
tier-3 cities

(iii) Utilise huge surplus of wheat,
rice & such crops

however, issues remains :-



Way forward

- (i) Spread awareness about scheme
- (ii) Incentivise food processing

This can help country
from green revolution to green
processing..

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।

Indian agriculture consume 90% of total water usage in India as per NITI report - CWMI.

This has led to issues of water stress, water pollution, etc.

In this context, micro-irrigation assume significance & is defined as - precision irrigation system through controlled delivery of water at micromanagement level.

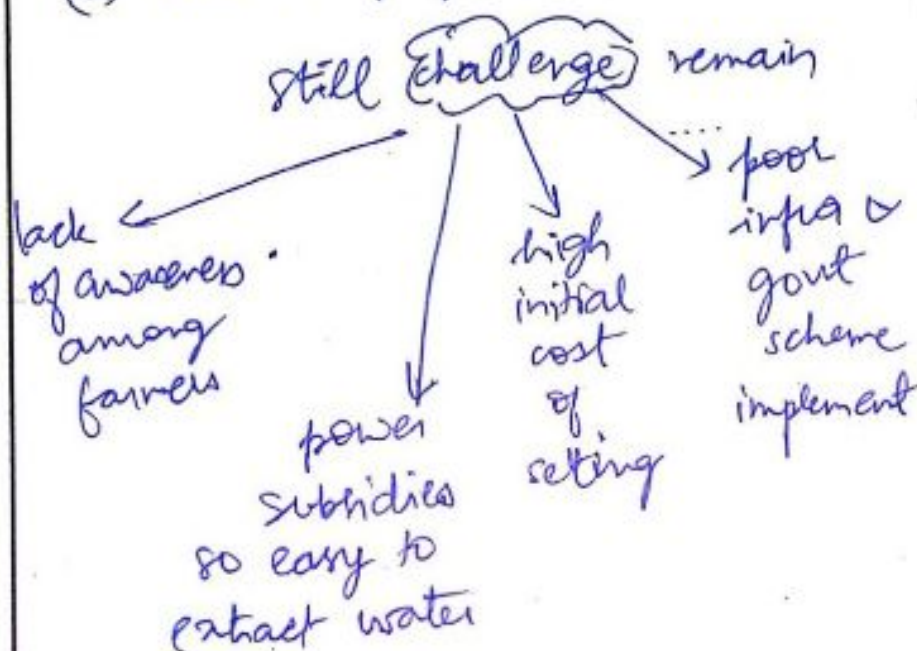
Significance

- ① address problem of water stress in regions of green Revolution
- ② Improved water table due to less groundwater extraction

- (iii) prevent water pollution due to fertilizer runoff & leaching
- (iv) solve problem of soil salinity due to excess irrigation
- (v) water use per crop requirement make farming eco-friendly

Govt efforts

- (i) PM Krishi Sichai Yojna
- (ii) Har Khet Ko Pani
- (iii) more crop per drop



Way forward

- ① Ensure affective implementation of govt schemes for irrigation
- ② awareness & incentive & subsidy - scope in Krishi Kendra
- ③ implement recommendation of Mihir Shah committee
- ④ comprehensive water policy like Meghalaya
- ⑤ More water & agriculture to concurrent list

.....
Micro-irrigation can prove to be panacea for water scarcity.
Need of hour is to ensure efficient implementation

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।

As the world pushes for greater focus on renewable energy to counter climate change, there is need for greater energy tech. innovation.

However, Indian policy approach has been fund lacking in this regard.

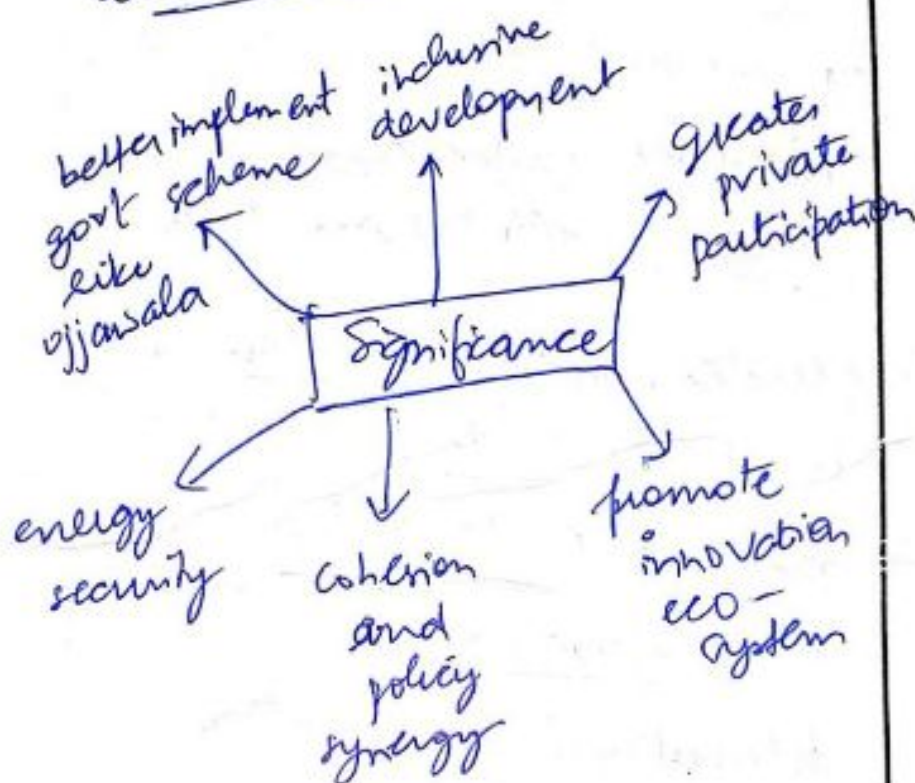
Need to integrate energy tech. innovation into energy policy

(i) to harness the renewable sources of energy

(ii) fulfill commitment of 40% energy by renewables by 2030

(iii) ensure energy security &

reduce dependence on oil & coal
(iv) ensure electricity reaches to
all houses, esp rural areas



Govt steps

(i) establishment of GITA,
AgNI, etc.

(ii) Impetus to PPP model on
innovation — NITI Aayog

(iii) Increased funding to R&D

- from current less than 1%.
- (iv) est of International solar alliance (ISA) for global co-op.

Way forward

- (i) Need for comprehensive energy policy for all energy types
- (ii) greater PPP collaboration with likes of TERI, etc
- (iii) Increase R & D funding to energy innovation
- (iv) International collaboration need strengthening

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।

The recent pandemic induced disruption of global supply chains exposed excess dependence of nations over China.

As a result, India too decided to embargo of mission of self-sufficiency through "Aatmanirbhar Bharat".

However, experts claim it is about Nehruvian protectionism.

- (i) Ideas about vocal for local
- (ii) govt banning import of
various Chinese items
- (iii) thrust on domestic manufac-
turing, withdrawal from REEP
- (iv) Improve exports & domestic
consumption

However, gout claims it is
not traditional self-reliance:-

- ① Diversification of import sources
to prevent weaponisation of supply
chains
- ② India looking to sign free
trade agreement like BTIA
- ③ Mission will focus on strategic
self-reliance -
 - + API for pharma
 - + electronics & IT
 - + weapons & ammunitions, etc
- ④ Reduce too much dependence on
any one country
- ⑤ promotion of FDI, Made in
India, Assemble in India, etc.

Way forward

In a world that is looking to de-globalisation in post pandemic era, India needs to focus on more globalisation as means for faster economic growth.

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-प्रत्यासूचना निर्माण की दिशा में उठाए जा सकने वाले कुछ कदमों का भी सुझाव दीजिए।

UNDRR report on disaster have highlighted an increase in frequency of cyclones and intensity in the non-traditional Arabian Sea. Eg - recent cyclone Nisarga

Statistics

- (i) Increased phenomenon of ENSO in past decade have adversely impacted monsoon leading to more and longer drought spells - Marathwada region
- (ii) Recent Idukki land slide of Kerala shows increasingly fragile nature of Western ghats due to rainfall excess
- (iii) urban floods have also been increasing - recent urban flood in

Mumbai & Hyderabad in 2020

Implications

- (i) UN Climate Risk Index puts India in top 10 vulnerable countries due to climate linked disasters
- (ii) climate refugees created esp due to increased ocean level and cyclones
- (iii) low preparedness could cause huge threat to life & property as seen in case of cyclone Amphan
- (iv) WEF report says India stands to lose GDP growth due to extreme water stress till 2030
- (v) Vulnerable section like tribal & women are most affected as revealed by recent cyclones.

- ① agro-climate cropping - MS Swaminathan
 ② shelter for heat waves

1415

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Measures

traditional
Knowledge
↓
WB used
Kuttanad
method
after
Bampham

- (i) Since climate change is global phenomenon, hence international coordinated response has been required.

+ GITA to share technological solution
 + CDRI proposed by India, RIMES, etc can be leveraged

- (ii) focus on climate resilient infra both social & physical as per Sendai framework and NDMA 2008

- (iii) Need to control root cause - global warming - strict NDC and their implementation as per Paris protocol

climate extremes need to be effectively tackled to further inclusive development for all - SDG 13

Measures

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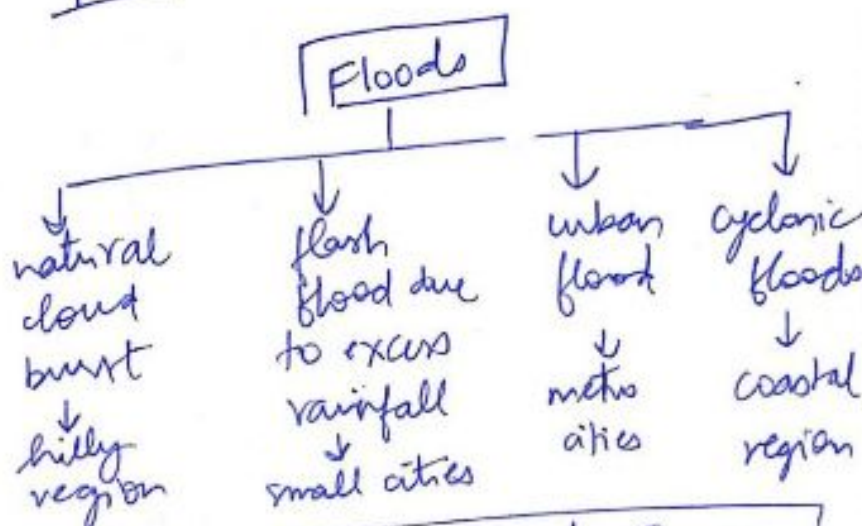
(iii) Need to control root cause - global warming - strict NDC and their implementation as per Paris protocol

Climate extremes need to be effectively tackled to further inclusive development for all

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।

The recent vulnerabilities in India's flood control system revealed by hyderabad floods has shown the need for integrated flood control plan.



Current approach and Issues

① current flood control approach in India relates to ad-hoc measures

② focus currently more on mitigation & not preparedness.

③ As revealed in case of Chennai
Hyderabad floods, prime reason was
hazardous urbanization and wetland
encroachment.

④ No proper flood control mechanism
dealing with different types of
floods in place

⑤ excess reliance on army &
NDRF for flood rescue & recovery
as seen in Uttarakhand cloud burst

What can be done

① Need of hour is integrated basin
management

+ River - inter linking to transfer
excess water away to low water
stressed areas

+ River basin - ecological
sustainable approach. Eg -

recent newspaper report revealed
the need for stopping construction
of dams in fragile eastern himalayas

② Reclamation of wetlands from
encroachment

③ Use of traditional indigenous
knowledge

④ cross border sharing of info.
related to water release from dam,
excess rainfall, etc.

Flood is a natural hazard
that become disaster due to man-
made vulnerabilities.

focus should be hence
to reduce vulnerabilities by
increasing preparedness.

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

(CRT) is a cumulative care medical technique that seeks to cure viral diseases based on principle of immune response.

Recently due to covid pandemic, it has been proposed as a potential cure in absence of vaccine.

USES

(i) first used in spanish flu (1920) & lately for ebola treat-ment

(ii) mostly used for treating viral diseases that can't be cured by drugs or anti-biotics.

(iii) Principle

- blood plasma from recovered patient containing disease antibodies taken
- Injected into blood of infected patient to trigger immune response via antibodies.

(iv) It can also be used for the treatment of incurable diseases.

However, concerns raised :-

① not much data about the efficacy & side-effects.

② lack of peer review

③ therapy not tested on all types of patients.

eg - people with co-morbidities

④ not approved by WHO.

Way forward

In India, it was being used as
effective cure for covid.

However -

- (i) Need for effective, long term &
peer-reviewed studies
- (ii) govt policy on use of CRT
- (iii) address concerns of side-effects

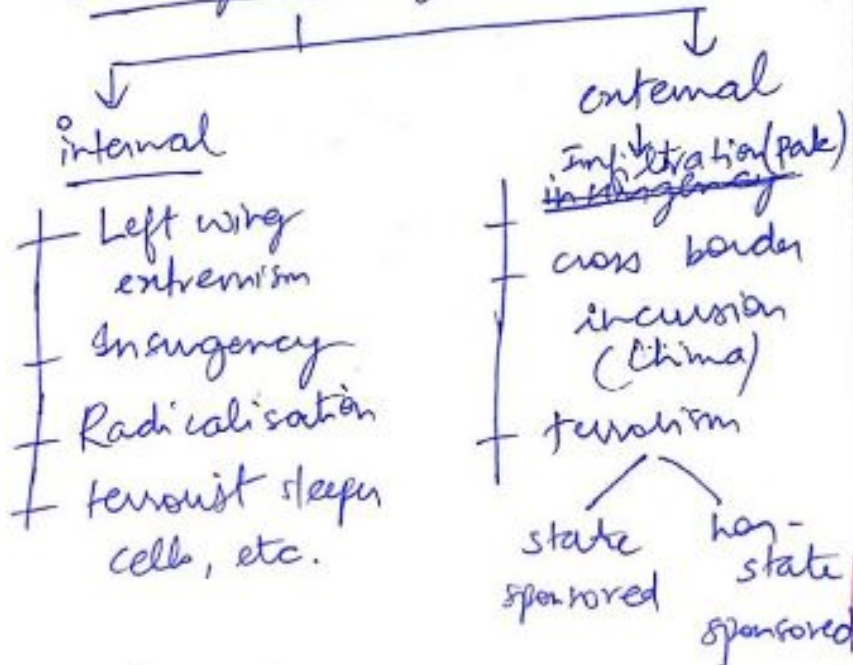
CRT can be potential tool
for treating incurable diseases in
absence of vaccine, however more
studies needed.

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।

With changing tactics of state and non-state actors related to security threat to India, there is need for tackling the issue via comprehensive approach.

Security Challenges



Some security challenges have both internal and external

linkages like cyber security
issues (Kundakulum nuclear attack),
cyber hacking, money laundering, etc

Security challenges implication

- (1) Pakistan policy of "Bleed India
by thousand cuts" lead to the
problem of wastage of life &
economic resources on security
- (2) India spend less than 2% GDP
on defence budget
- (3) LWE in tribal areas lead to the
issue of alienation and stalled
economic development
- (4) lack of national security
strategy & defence white
paper — lack of cohesion

Measures

- ① govt steps like setting up of JMA and COS office, increased budget are correct steps.
- ② Threat of LWE has been much reduced by use of line as well as force
- ③ diplomacy use to isolate Pak & China at international level
- ④ membership of key security organisation like SCO.
- ⑤ Mult-vector foreign policy to get support & weapons from both USA, China
- ⑥ Need for comprehensive defence strategy for tackle all security threats.

Insecure nation can't become superpower hence need to focus on security issues.

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

(CII) refers to the infrastructure that has potential to be targeted by enemy in wake of war like situation to extract information about economy.

Recent attack by north Korean hackers on Kudankulam nuclear plant falls into this category.

Significance

- ① It stores critical data about a country's economy and strategic resources.
- ② can be targeted to cripple efficient response.

eg - power grid if targeted can lead to power failure and the subsequent shut down of all services

③ CIC help protect the user & citizen info.
↳ large servers, data parks, etc. can have sensitive user info

④ data can be used for black-mailing, theft, extortion, etc.
eg - recent incident of sale of credit card info. of Indian users on dark web

Hence, there is need to protect CIC from potential threats

Govt measures

① est of Cert-In and National cyber crime coordⁿ centre

- ② govt to bring updated cyber security policy in 2021
- ③ push for data localisation
- ④ ethical hacking being focussed
- ⑤ National Mission on super-computing to tackle easy handling of CIC

Way forward

- (i) awareness to common people
- (ii) strengthen cyber security capabilities
- (iii) Signing Budapest convention

With push for digital India, equal emphasis also needed on cyber security measures.