



VISIONIAS

INSPIRING INNOVATION

ABHYAAS MAINS

सामान्य अध्ययन (प्रश्न पत्र-III)/GENERAL STUDIES (Paper-III) (2033)

निर्धारित समय: तीन घंटे
Time Allowed: **Three Hours**

अधिकतम अंक: 250
Maximum Marks: 250

सामान्य अनुदेश

इस प्रश्न-सह-उत्तर (क्यू.सी.ए.) पुस्तिका में 55+1 पृष्ठ हैं। प्रश्न-पत्र, क्यू.सी.ए. पुस्तिका के अंत में संलग्न है, जो अलग (वियोज्य) किया जा सकता है और उम्मीदवार परीक्षा के उपरांत अपने साथ ले जा सकते हैं।

रफ कार्य के लिए, इस पुस्तिका के अंत में खाली पृष्ठ दिया गया है।

पुस्तिका प्राप्त होने पर, कृपया यह जांच कर लें कि इस क्यू.सी.ए. पुस्तिका में कोई कमी न हो, फटा हुआ पृष्ठ न हो अथवा कोई पृष्ठ गायब न हो इत्यादि। यदि ऐसा हो, तो इसके बदले नई क्यू.सी.ए. पुस्तिका प्राप्त कर लें।

General Instructions

This Question-Cum-Answer (QCA) Booklet contains 55+1 pages. Question Paper in detachable form is available at the end of the QCA Booklet which can be taken away by the candidate after examination.

For rough work, blank page has been provided at the end of this Booklet.

On receipt of the Booklet, please check that this QCA Booklet does not have any shortcomings, torn or missing pages etc. If, so, get it replaced with a fresh QCA Booklet.

(उम्मीदवार द्वारा भरा जाएगा/To be filled by the Candidate)

पंजीकरण सं./Registration No. : 632903

अभ्यर्थी का नाम/Name of Student : SIDDHARTH SHUKLA

माध्यम: हिंदी/अंग्रेजी
Medium: Hindi/English

ENGLISH

तारीख
Date

19/12/2021

सामान्य अध्ययन (प्रश्न पत्र-III) GENERAL STUDIES (Paper III)

केंद्र
Centre

MUKHERJEE NAGAR

निरीक्षक के हस्ताक्षर
Invigilator's Signature

	महत्वपूर्ण अनुदेश उम्मीदवारों को नीचे उल्लिखित निर्देश सावधानी से पढ़ लेने चाहिए। किसी भी निर्देश का उल्लंघन करने पर उम्मीदवारों को मिलने वाले अंकों में कटौती, उम्मीदवारी रद्द या आयोग के परवर्ती परीक्षाओं के लिए वर्जित करने इत्यादि के रूप में दण्डित किया जा सकता है।	Important Instructions Candidates should read the undermentioned instructions carefully. Violation of any of the following instructions may entail penalty in the form of deduction of marks, cancellation of candidature, debarment from further Examination of the Commission etc.
1	(क) अपना पंजीकरण सं. एवं अन्य विवरण केवल प्रश्न-सह-उत्तर पुस्तिका में उम्मीदवार के लिए निर्धारित स्थान पर ही लिखें। (ख) इस पुस्तिका में अन्यत्र कहीं भी अपना नाम, पंजीकरण सं., मोबाइल नं., पता अथवा प्रश्न-सह-उत्तर पुस्तिका संख्या न लिखें जिससे आपकी पहचान का खुलासा हो।	(a) Write your Registration Number and other details only in the space provided in the Question-Cum-Answer (QCA) Booklet for candidates. (b) Do not disclose your identity in any manner such as, by writing your Name, Registration number, Mobile number, Address, Question-Cum-Answer (QCA) Booklet No. etc. elsewhere in the Booklet
2	अपनी प्रश्न-सह-उत्तर पुस्तिका में कहीं भी प्रश्नों के वास्तविक उत्तर के अतिरिक्त कुछ न लिखें जैसे कि कोई कविता/दोहा, अभद्र या अपमानजनक अभिव्यक्ति इत्यादि और न ही कोई ऐसा चिन्ह/निशान बनाएं जिसका उत्तर से सम्बन्ध न हो।	Do not write in the QCA Booklet anything other than the actual answer such as couplet, obscene, abusive expression etc., nor put any sign/mark having no relevance to the answer.
3	परीक्षक को प्रत्यक्ष/अप्रत्यक्ष रूप से कोई भी प्रार्थना/धमकी भरी बातें न लिखें।	Do not make any direct/indirect appeal/threat to the examiner.
4	उत्तर अस्पष्ट अथवा गंदी लिखावट में न लिखें। इस प्रकार के उत्तर का मूल्यांकन नहीं भी किया जा सकता है।	Do not write answers in bad/illegible handwriting. Such answers may not be evaluated.
5	उत्तर स्याही में ही लिखें। उत्तर लिखने के लिए पेंसिल का उपयोग न करें, हालांकि आरेख, चित्र इत्यादि बनाने के लिए पेंसिल का उपयोग किया जा सकता है।	Write answers in ink only. Do not use pencil for writing the answers. However, pencil may be used for drawing diagrams, sketches, etc.
6	प्रवेश पत्र में उल्लेख किए गए माध्यम के अलावा अन्य किसी माध्यम में उत्तर न लिखें। अधिकृत और अनधिकृत की मिली जुली भाषा का भी उपयोग न करें।	Do not write answers in medium other than the authorized medium in the Admission Certificate. Do not use mixed language either i.e. authorize and unauthorized media together for writing answers.
7	प्रश्नों के उत्तर ठीक उसके नीचे दिए गए निर्धारित स्थान पर ही लिखें। निर्धारित स्थान के अलावा किसी अन्य स्थान पर लिखे गए उत्तर का मूल्यांकन नहीं किया जाएगा।	Write answer at the specific space (right below the question) only. Answers written elsewhere at unspecified places in the booklet shall not be evaluated.
8	यदि आप अपने किसी उत्तर को रद्द करना चाहते हैं तो उसे पेन से काट दें तथा उस पर "रद्द" लिख दें, अन्यथा उसका मूल्यांकन किया जा सकता है।	If you wish to cancel any work, draw your pen through it and write "Cancelled" across it, otherwise it may be valued.

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प्राप्तांक के विवरण (परीक्षक द्वारा भरा जाए)/ Marks Details (To be filled by the Examiner(s))

प्रश्न सं. Q. No.	अंक Marks		प्रश्न सं. Q. No.	अंक Marks	
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10			20		
उप-योग (A) Subtotal (A)			उप-योग (B) Subtotal (B)		
सकल योग (A+B) / GRAND TOTAL (A+B)					



सामान्य अध्ययन (प्रश्न पत्र-III)/GENERAL STUDIES (Paper-III) (2033)

निर्धारित समय: तीन घंटे
Time Allowed: Three Hours

अधिकतम अंक: 250
Maximum Marks: 250

प्रश्न-पत्र संबंधी विशेष अनुदेश

कृपया प्रश्नों के उत्तर देने से पूर्व निम्नलिखित प्रत्येक अनुदेश को ध्यानपूर्वक पढ़ें:

कुल बीस प्रश्न दिए गए हैं जो हिंदी और अंग्रेजी दोनों में छपे हैं।

सभी प्रश्न अनिवार्य हैं।

प्रत्येक प्रश्न/भाग के लिए नियत अंक उसके सामने दिए गए हैं।

प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए, जिसका उल्लेख आपके प्रवेश-पत्र में किया गया है, और इस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यू.सी.ए.) पुस्तिका के मुख-पृष्ठ पर निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिखे गए उत्तर पर कोई अंक नहीं मिलेंगे।

प्रश्न संख्या 1 से 10 तक का उत्तर 150 शब्दों में तथा प्रश्न संख्या 11 से 20 तक का उत्तर 250 शब्दों में दीजिए।

प्रश्नों में इंगित शब्द सीमा को ध्यान में रखिए।

प्रश्न-सह-उत्तर पुस्तिका में खाली छोड़े गए कोई पृष्ठ अथवा पृष्ठ भाग को पूर्णतः काट दीजिए।

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions.

There are **TWENTY** questions printed both in **HINDI** and in **ENGLISH**.

All questions are compulsory.

The number of marks carried by a question/part is indicated against it.

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 a medium other than the authorized one.

Answers to Questions No. 1 to 10 should be in 150 words, whereas answers to Questions No. 11 to 20 should be in 250 words.

Keep the word limit indicated in the questions in mind.

Any page or portion of the page left blank in the Questions-cum-Answer Booklet must be clearly struck off.

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.

भारत में कृषि प्रसार से सम्बद्ध मुद्दों का उल्लेख करते हुए, राष्ट्रीय कृषि अनुसंधान प्रसार प्रणाली को सुदृढ़ बनाने में कृषि विज्ञान केंद्रों (KVKs) की भूमिका पर चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

Stating the issues associated with agricultural extension in India, discuss the role of Krishi Vigyan Kendras (KVKs) in strengthening the national agricultural research extension system. (Answer in 150 words)

10

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

NITI Aayog's New India at

75 highlights need of agricultural extension i.e. providing knowledge services to atleast 50% of farmers.

Issues with agricultural extension

- (1) Lack of private sector participation
→ Only KVKs work significantly in this sector.
- (2) Lack of funding → less than 1% of agri GDP is spent on research. (ICRIER)
- (3) large number of small and marginal farmer → 85% of all make farmer contact tough.
- (4) low use of e-technology by farmers
- (5) low educational standards and number of State Agricultural

Role of KVK in extension

- (1) Linking ICRIER / ICAR / IAU research → farmers.
- (2) Weather forecasting, distribution of soil health card, advisory on crops is given by KVK.
- (3) Government schemes like KISAN-SMS, PM Krishi Sanchayee Yojana could be explained to farmers.
- (4) KVK in p.p.p. models could garner private sector support for agriculture extension.
- (5) KVK under local bodies like panchayat could become model for local extension system.
Atleast 10% of agri-credit worth 16 lakh crore should be allocated to Research and Extension.

2.

भारत में, खाद्य प्रसंस्करण क्षेत्रक मूल्य संवर्द्धन की अपार संभावनाओं के कारण एक उच्च संवृद्धि और उच्च लाभ के क्षेत्रक के रूप में उभर रहा है। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

In India, the food processing sector is emerging as a high-growth and high-profit sector due to its immense potential for value addition. Discuss. (Answer in 150 words)

10

उम्मीदवारों को इस दृष्टि में नहीं लिखना चाहिए
Candidates must not write on this margin

food processing

industries contribute 30% to Agri
GDP (Economic survey)

High growth sector

(1) constant double digit growth for previous five years

(2) 5th largest contributor to manufacturing sector.

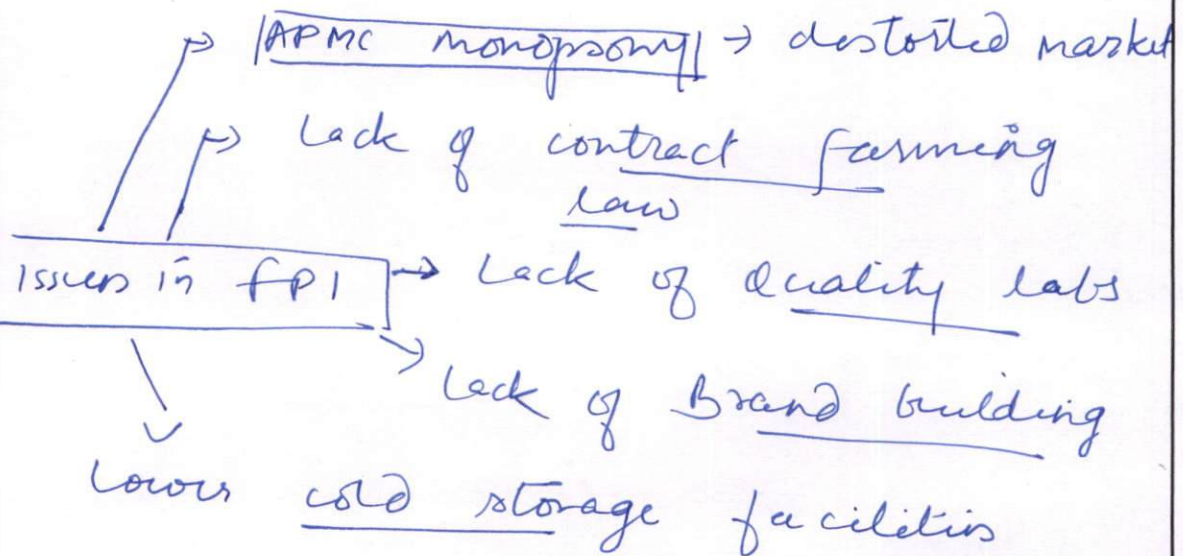


Thus f. p. is highly profitable and

growth oriented

potential for value addition

- (1) India is #1st manufacturer of milk,
2nd largest of fruits, vegetables.
- (2) 30-40% perishable crops is wasted.
- (3) Only 2% of total crops are processed
(Thus high potential for value addition)



Way forward

- (1) more funds to scheme for micro food processing (STMP)
- (2) Reramping National Mission on food processing
- (3) States should adopt Model Contract farming law.

3.

पशुधन आधारित एकीकृत कृषि प्रणाली (IFS) की अवधारणा की व्याख्या करते हुए, इसके लाभों पर चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

Explaining the concept of livestock-based Integrated Farming System (IFS), discuss its benefits. (Answer in 150 words)

10

उम्मीदवारों को इस हिसाब में नहीं लिखना चाहिए
Candidates must not write on this margin

Integrated farming system is the process of cultivation of crops with usage of locally produced inputs, manure, pesticides etc.

In livestock based IFS like Zero budget National farming livestock like cattle, goat, bees play important role in farming.

Concept of livestock based IFS

- (1) Cattle / goat → excreting or dropping acts as manure
- (2) One part of field is reserved for livestock feed.
- (3) Cattle grazing, bees etc are used for pest control.
- (4) Tillage operations are done with use of livestock

- (5) Seeds are mixed with cattle/
livestock product like cowdung.
e.g. Seiramurt, Byamurt in
2 BNF.

Advantages of Livestock based IFS

- (1) lowers input cost
↳ local seeds, organic fertilisers,
no cost pest control. (integrated
pest management)
- (2) Livestock sector expands - it
provides employment to 17 crore people.
- (3) ICRIER → growth of livestock sector →
women empowerment as women tend
to cattle
- (4) Environment friendly - No soil pollution
harmonious water
usage.

But it is also associated
with high labour input, lower
productivity. Therefore Indirect
Benefit transfer on per hectare basis
should be given to livestock based
IFS farmers.

4.

जहाँ भारतीय मूल के व्यक्ति (PIO) विश्व भर में उद्यमिता का नेतृत्व कर रहे हैं, वहीं भारत में अभी भी उद्यमिता दर सबसे कम है। चर्चा कीजिए। साथ ही, भारत में उद्यमिता की गति को बढ़ाने के लिए उठाए गए नीतिगत उपायों का भी उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

While Persons of Indian Origin (PIO) are spearheading entrepreneurship across the world, India still has one of the lowest entrepreneurship rates. Discuss. Also, state the policy measures that have been taken to increase the pace of entrepreneurship in India. (Answer in 150 words) 10

Economic survey 2019-20
highlights how 10% growth in
entrepreneurship adds 1% to GDP
of every district.

Person of Indian Origin
are people who trace their ancestry
to India. founder of Hotmail was
a PIO

Reason for low entrepreneurship Rate

- (1) Lack of skill Development
→ McKinsey → skill based labour
productivity among lowest in India
- (2) Economic survey (2019) → Lack of
physical and social infrastructure →
low entrepreneurship.
- (3) Regulatory Overburden
↳ India scores 163/190 in EOPB's
contract enforcement, low score on
clearance etc.

- (4) Lack of Startup ecosystem → Though it is 3rd largest in world, in per capita terms it is low.
- (5) Lack of access to capital
- (6) Lack of entrepreneurship ethics and culture
- (7) Lower educational standards (checkbox - only 49% graduate employable)

Policy measures for entrepreneurship

- (1) National policy on Skill Development and Entrepreneurship.
 - (2) PM MUDRA YOJANA → Access to capital
 - (3) STARTUP INDIA scheme and Standup India scheme.
 - (4) 200B Reform - India now ranks 63 on 200B.
 - (5) Minimum government Maximum Governance (Budget 2021)
- Curricular Reform in
- School education is must for creating a culture of entrepreneurship.

5.

‘भूमि बैंक’ अर्थव्यवस्था को प्रोत्साहन देने और भारत में व्यापार सुगमता (ईज ऑफ डूइंग बिज़नेस) को बढ़ावा देने में महत्वपूर्ण भूमिका निभा सकते हैं। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

‘Land banks’ can play a critical role in boosting the economy and promoting ease of doing business in India. Discuss. (Answer in 150 words)

10

उम्मीदवारों को इस इच्छा में नहीं लिखना चाहिए
Candidates must not write on this margin

Land Banks are collective pool of lands created for a common purpose.

There are also Land Development Banks that help in optimum usage of land.

Role in Boosting Economy

- (1) Optimum use of land as factor of production.
- (2) Faster pace of Infrastructure Development
e.g. Land Bank and pooling was used for planning Amravati city.
- (3) enhanced competitiveness of economy.
- (4) LARR Act of 2013 → Stringent provision for land acquisition.
Land Bank help overcome regulatory

Reform in SOB

- (1) India scores poorly on accessing land vertical.
- (2) Faster clearance
 - ↳ Land Bank is based on consent
 - ↳ faster social impact assessment under LARR Act, 2013
- (3) Special Economic Zones, National Industry and Manufacturing Zones, Coastal Employment Zones could be easily developed.
- (4) Boost to p.f.p projects in Infrastructure Development.

India should create a National Land Bank Development policy and amend LARR Act, 2013 for easier creation and utilisation of Land Banks.

6. वन संरक्षण अधिनियम (FCA) में प्रस्तावित संशोधन, न केवल वन अधिकार अधिनियम (FRA) के विपरीत हैं, बल्कि इनके कारण भारत को जलवायु परिवर्तन पर अपनी प्रतिबद्धताओं को प्राप्त करने में देरी होने की भी संभावना है। चर्चा कीजिए। (उत्तर 150 शब्दों में दें)
- The proposed amendments to the Forest Conservation Act (FCA) are not only antithetical to the Forest Rights Act (FRA), but are also likely to delay India achieving its commitments on climate change. Discuss. (Answer in 150 words)

10

Forest Conservation Act

of 1980 lays down that any diversion of forest land for non-forest purpose would require approval of Central Government.

Forest Advisory Committee (FAC) was created in pursuance of FCA.

Proposed amendment to FCA

- (1) Greater exemption to projects from getting FAC approval.
- (2) Lower requirement of social approval for projects.
- (3) Authorising forest officials to

evict 'intruders' or 'settlers' illegal
settlers from forestland.

~~Issues~~ Issues with Amendment

- (1) Earlier clearance $\rightarrow$ more felling
of trees.
- (2) Empowers forest officials $\rightarrow$
eviction of local communities from
forest.
- (3) Against Aarhus Convention
on involving local communities in
forest management.
- (4) Together with Draft EIA norms,
Green forestry policy this could
↓
Reduce Tree and forest cover below
24.56%
↓
Lower Greenhouse gas sink
↓
failure to achieve Paris target
Recent amendments
should be rethought in light
of Glasgow 17 summit.

7.

शहरी क्षेत्रों में बाढ़ की समस्या न केवल नदियों के उफान के कारण है, बल्कि उन अनियोजित तरीकों के कारण भी है जो हमारे नगर, शहरीकरण की प्रक्रिया में अपना रहे हैं। चर्चा कीजिए। इस संदर्भ में, शहरी बाढ़ पर राष्ट्रीय आपदा प्रबंधन प्राधिकरण के दिशा-निर्देशों का उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

The problem of flooding in urban areas is not only due to overflowing rivers, but also the uninformed ways in which our cities are coping with urbanisation. Discuss. In this context, mention the National Disaster Management Authority guidelines on urban floods. (Answer in 150 words)

उम्मीदवारों को इस इलाक़े में नहीं लिखना चाहिए
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10

Urban flooding is a disaster that is both natural and anthropogenic. Recently Hyderabad (2020) and Mumbai witnessed devastating urban floods.

Reasons for urban flooding

Natural → concentration of monsoon rainfall within short span of time
→ climate change

→ Wetland encroachment

↳ Encroachment of lakes like Hussainsagar
Hyderabad flood

→ Siltation of drainage

Failure of Urban planning → High sewerage content in drain

↳ lower ecological flow of rivers like Mithi, Yamuna.

↳ encroachment of floodplains

NDMA Guidelines on Urban flooding

उम्मीदवारों को
इस हार्जिए में
नहीं लिखना
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- (1) Creation of Nation urban flood management information system (NUFmis)
- (2) Pre-monsoon de-siltation of drains.
- (3) Mandatory preparation of Drainage Master plan by cities.
- (4) Creation of inventory of wetlands and waterbodies in urban areas and their conservation.
- (5) Development of early warning system like C-FLOWS Chennai, M-FLOWS (Mumbai)
- (6) Inclusion of urban flooding in school curriculum.

The ideas of sponge cities and urban forests are essential for urban flood control. They should be included in urban planning.

8.

इसरो अब केवल उपग्रहों के प्रक्षेपण तक ही सीमित नहीं है, बल्कि यह वर्षों से विकास गतिविधियों में अपनी भूमिका को लगातार बढ़ा रहा है। विवेचना कीजिए। (उत्तर 150 शब्दों में दें)

ISRO is no longer confined only to the launching of satellites, but it has been constantly enlarging its role in development activities over the years. Discuss. (Answer in 150 words)

10

उम्मीदवारों को इस दृष्टिकोण में नहीं लिखना चाहिए
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ISRO is India's apex body in space research, beginning with launch of ROHINI, ISRO has journeyed to become one of the biggest space agency of world.

→ PSLV, GSLV, SSLV system launched various satellite into space
(launching of satellites) → ISRO earns forex reserve through sending satellites like Amazonia into space

Diversification of ISRO: Development Role

(1) Role in Natural Resource Development

↳ RESOURCE-SAT-II is used for creating India State of forest Report.

↳ LANDSAT → used for land development

(2) Development of Military Capability

↳ IRNSS and CARTOSAT

(3) Management of TRAFFIC

↳ EOS satellite

(4) Development of Navigation

→ IRNSS satellite → also helps

in fisheries development as fishermen use it as GPS.

(5) Development of Aero-Industry / Aviation sector

↳ GAGAN system of ISRO.

(6) Development of maritime sector

↳ OCEANSAT of ISRO helps in shipping along with GEMINI.

(7) Rural Development

↳ The SVAMITVA scheme would use ISRO's geospatial data.

↳ Geotagging of assets under PMAY could use ISRO's satellite data.

The recent liberalisation of Geospatial Data by Ministry of Science and Technology would further development role of ISRO.

9.

राज्य और गैर-राज्य अभिकर्ताओं द्वारा महत्वपूर्ण सूचना अवसंरचना (CII) को लक्षित करने के पीछे उत्तरदायी कारणों को बताइए। साथ ही, भारत सरकार द्वारा अपने CII को सुरक्षित करने के लिए उठाए गए कदमों पर भी चर्चा कीजिए। (उत्तर 150 शब्दों में दें)

State the reasons behind targeting of Critical Information Infrastructure (CII) by state and non-state actors. Also, discuss the steps taken by the Indian government to secure its CII. (Answer in 150 words)

10

Critical Information Infra-
structure and those infrastructure
the decapacitation or misuse of
which could threaten national
security and security of state -
E.g National Health system data
of U.K.

Recent targeting of CII

- (1) OTrack attack on kudankulam
- (2) Shadow PAD attack on Mumbai's power grid

Reason behind attack

- (1) Rise in cybersecurity capability of hostile states like China.
- (2) Growing digitisation of India
↳ Creation of National Digital Health
Mission, Central Identity Repository

has enhanced vulnerability

(3) Tensions at Northern Border

Steps taken to secure CII

(1) Creation of NTRC (2004) and
National council for protection of CII
(NCPCCII) (under IT Act) under
NTRC.

(2) CERT-IN → Computer emergency
Response Team - India.

(3) Creation of Cyber Swachhata Kendras

(4) National Security Directive on
Telecom to stop backdoor bugs in
telecom infrastructure.

(5) Enhancement of cybersecurity capability

↳ creation of I4YC etc.

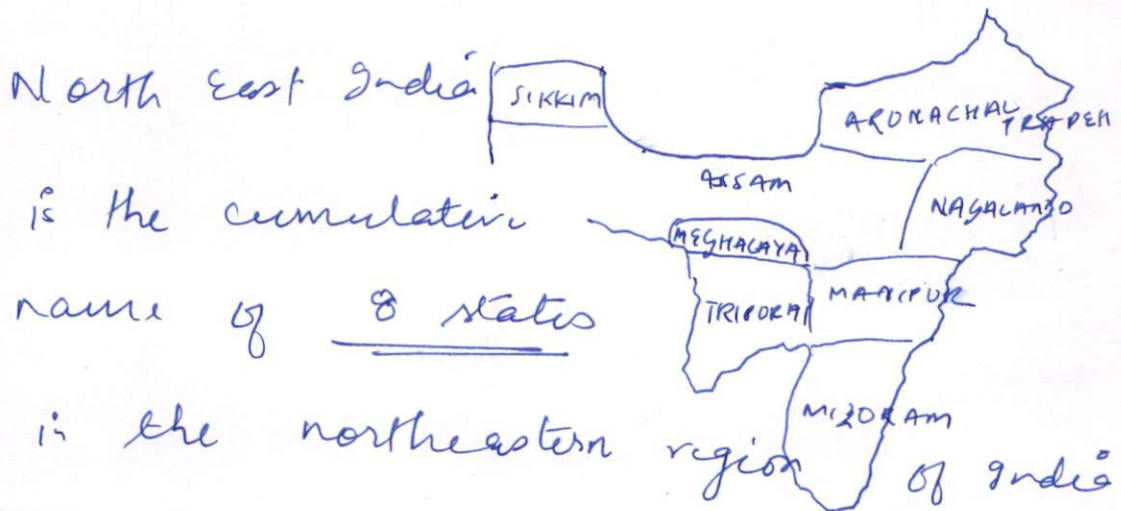
India needs to amend
IT Act holistically and create New
Cybersecurity Policy to counter
rising China challenge in cyber
security

10.

पूर्वोत्तर भारत के रणनीतिक महत्व के बावजूद, इस क्षेत्र को कई सुरक्षा खतरों का सामना करना पड़ता है। चर्चा कीजिए। साथ ही, क्षेत्र में शांति और स्थिरता सुनिश्चित करने के लिए सरकार द्वारा उठाए गए कदमों का भी उल्लेख कीजिए। (उत्तर 150 शब्दों में दें)

Despite the strategic significance of North-East India, the region faces several security threats. Discuss. Also, state the measures taken by the government to ensure peace and stability in the region. (Answer in 150 words)

10



Strategic Significance

- (1) More than 79% boundary is International Boundary → key to national security
- (2) Central to ACT EAST POLICY of India
- (3) Strategic Reserve of Uranium, coal, limestone, hydroelectricity etc.

Security threats

- (1) Hostile State Actors → China claims Arunachal Pradesh.
- (2) Refugee crisis → earlier Chakma, Bangladeshi refugees came, now

Chin refugees

(3) Insurgency and Militancy

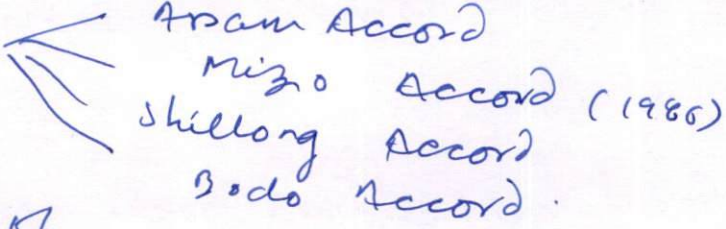
- ↳ Naga insurgency under Khaplang
- ↳ militant groups like ULFA, NISCN operate here.

(4) Organised crime networks

- ↳ Drug trafficking as it is closer to Golden triangle of drugs.
- ↳ Human trafficking, arms trafficking etc.

Steps taken by government of India

(1) Constitutional steps → A. 244 and VIth schedule, 371A for Assam etc.

(2) Accords 

(3) Creation of North Eastern Council and NER.

(4) Various centrally sponsored schemes in 90:10 cost sharing ratio.

An Inter state council should be created ²⁵ for North eastern Region.

11.

भारतीय रेलवे को लंबे समय से अल्प निवेश की समस्या का सामना करना पड़ा है, जिसने इसके परिचालन के प्रमुख क्षेत्रों पर प्रतिकूल प्रभाव डाला है। इस संदर्भ में, बुनियादी ढांचे के तीव्र निर्माण में रेलवे के समक्ष आने वाली चुनौतियों पर चर्चा कीजिए। साथ ही, इस संबंध में सरकार द्वारा उठाए गए कदमों का भी उल्लेख कीजिए। (उत्तर 250 शब्दों में दें)

Indian Railways has suffered from chronic under-investment, which has adversely impacted key areas of its operations. In this context, discuss the challenges faced by the railways in speedy creation of infrastructure. Also, mention the steps taken by the government in this regard. (Answer in 250 words)

15

Indian Railways requires fund of 50 lakh crore over next 10 years as per economic survey (2019-20).

Challenges faced by Railways

- (1) High Operating Ratio of 97.45
↳ requires business process Reengineering.
- (2) Staff cost → 561 of revenues of Railway
↳ downsizing of staff.
- (3) Need of 100% electrification and movement to Broad Gauge.
- (4) Private sector participation in Railways.
- (5) Cross-subsidising fare → lower freight volume on rail → Railway requires tariffs rationalisation

Steps Taken by Government

उम्मीदवारों को
इस कक्ष में
नहीं लिखना
चाहिए
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(1) Declaration of National Railway Plan
(2020-2030)

→ By 2023 all railways would be broad gauge.

(2) Creation of IRCTC and private participation in Tycoo Express. further opening 150 trains.

(3) Bibek Debroy Committee led to

→ Creation of IRMS to create inter departmental synergy.

→ Plans for independent regulator.

(4) Infrastructure Development

→ Budget 2021 → North South DFC,
East West DFC, East Coast DFC

(Dedicated freight corridor) would be created.

(5) Railways further need

to shun non core activities
according to Bibek Debroy Committee

(6) Greater Electrification of Railways
→ approaching 100% electrification

(7) Subsuming Railway Budget
within general Budget (2017)

(8) compulsory accident insurance
in railway travel.

(9) Rationalisation of freight rates.

Way forward

(1) Supplement other suggestion of
Bibek Debroy Committee

→ private sector control over
running trains.

→ Enhanced passenger fare.

→ Railways staff downsizing policy.

A profitable Railway sector is
essential for reducing India's logistic
to GDP Ratio to 10% from
existing 14%.

12.

किसानों की आय को दोगुना करने के भारत के उद्देश्य को साकार करने हेतु कृषि प्रणाली के अंतिम बिंदु तक के दायित्वों पर ध्यान देने के साथ अनुसंधान और विकास (R&D) के लिए एक परिवर्तनकारी दृष्टिकोण आवश्यक है। विवेचना कीजिए। (उत्तर 250 शब्दों में दें)

A disruptive approach to research & development (R&D), with a focus on last mile obligations of the agricultural system is necessary to realize India's objective of doubling farmer's income. Discuss. (Answer in 250 words)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

15

According to ~~Asok~~ Ashok
Gulati (ICRIER) India spends
less than 1% of agri-GDP on agri-
Research

Disruptive approach to agri R&D

- (1) Enhanced funding → at least 5% of agri GDP on Research. 5% of Budgetary allocation to agriculture should go to research.
- (2) Debate on lifting embargo on [Gm Crops]
- (3) Private sector participation in Research.
- (4) Establishing a chain of ICAR, ICRIER, Agricultural Universities, KVKs throughout India.

Focus on last mile obligation

- (1) NITI (New India at 75) → linking KVK, SAV, ICAR to farmers
- (2) Rural Research centres should be more than urban research centres.
- (3) Focus of Research
 - ↳ Creating equipments suitable to women farmers
 - ↳ Creating fortification of food-grains
 - ↳ Environmentally suitable to GM crops

Research & Doubling farmers Income

- (1) Example : GM cotton
 - made India largest producer of cotton
 - Income of cotton farmers increased.
- (2) Cultivation of Bt. Brinjal in Bangladesh enhanced farmer income

by more than 30-40%.

(3) Advantages of well developed research system

- ↳ Low input cost
E.g. Soil Health care reduced fertiliser cost.
- ↳ Higher productivity
- ↳ Connection to market
- ↳ Improvement of market → eNAM and e-technology improved market.
- ↳ Development of food processing industries due to Research labs, testing labs
- ↳ No need to pay royalty to foreign seed developers like Monsanto, PepsiCo.

India should further allocate 10% of agri credit worth 16 lakh crore (Budget 2021) to Research and Development

13.

भारत की विद्युत वितरण कंपनियों और विद्युत ग्रिड को जीवाश्म ईंधन से अक्षय ऊर्जा के अधिक संधारणीय रूपों में संक्रमण हेतु सुधारों से गुजरना होगा। चर्चा कीजिए। (उत्तर 250 शब्दों में दें)
India's power distribution companies and electrical grids must undergo reforms to transition from fossil fuels to more sustainable forms of renewable energy. Discuss. (Answer in 250 words) 15

उम्मीदवारों को इस हाथिए में नहीं लिखना चाहिए
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The Glasgow summit declared goal of phasing down coal, further to achieve target of net zero emission by 2070, India needs to transition to Renewable energy. Presently 70% of electricity is generated from coal.

Issues and Reforms in power Discoms

- (1) High NPA's worth lakh of crore.
- (2) State monopoly → majority of them are run by State government
- (3) High AT&C loss - more than 30%
- (4) Absolute infrastructure → low use of smart meters

- lack of feeder separation
 - Absence of National power grid infrastructure
 - lower transition capability from fossil fuel to Renewable
- Issues in electricity grids

Proposed Reforms in DISCOM and grids

- (1) Resolution of NPA's
→ through UDAY, loans from PFC, state guarantees etc.
- (2) Tariffs Rationalisation as per new electricity bill.
- (3) Usage of SMART METERS and adoption of technology like NET-ME-TERING.
- (4) Mandatory feeder separation as per Budget 2021.
- (5) Creation of grid storage system

↳ for storing renewable energy from solar system, hydrogen energy generation plans.

(6) Integrated grid system with seamless transition from Renewable to fossil fuel

↳ would solve problem of intermittency in ~~fossil~~ Renewables.

(7) Private sector participation and privatisation of state discoms as suggested by Budget 2021.

(8) Power subsidy should be withd-
rawn in gradual phases.

(9) Creation of Green Term Ahead Markets and their expansion.

To achieve the target of 750 GW by 2030 a national mission for revival and rejuvenation of power discoms should be created.

14.

भारत में आगत-सघन (इनपुट इंटेंसिव) कृषि की प्रथा में, इसकी अस्थिरता और नकारात्मक परिणामों के कारण, बृहद पैमाने पर बदलाव की आवश्यकता है। इस संदर्भ में, निम्न बाह्य आगत संधारणीय कृषि (LEISA) के महत्व पर चर्चा कीजिए। (उत्तर 250 शब्दों में दें)

The practice of input-intensive agriculture in India needs a massive overhaul due to its unsustainability and negative consequences. In this context, discuss the significance of Low External Input Sustainable Agriculture (LEISA). (Answer in 250 words)

उम्मीदवारों को इस हिसाब में नहीं लिखना चाहिए
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Indian agriculture is

defined as extremely input
intensive.

→ Excessive use of Groundwater for rice cultivation in Punjab

Illustrations

Input-Intensivity

→ overuse of pesticides

Overuse of Urea the N:P:K ratio is skewed

→ Large amount of seed-wastage.

Low External Input Sustainable Agriculture reduces (a) quantum of external input (b) enhances usage of local inputs like cowdung, household organic waste (c) enhances productivity

of agriculture.

Zero Budget Natural farming.

Organic farming in Sikkim are
example of LEISA.

Significance of LEISA

(1) Optimum usage of Resource

↳ microirrigation as per LEISA
help in reducing water scarcity.

(2) Growth of Local industry

↳ monetisation of local seed farms,
cow-dung, manures, livestocks.

(3) Suitable to small and marginal
farmers.

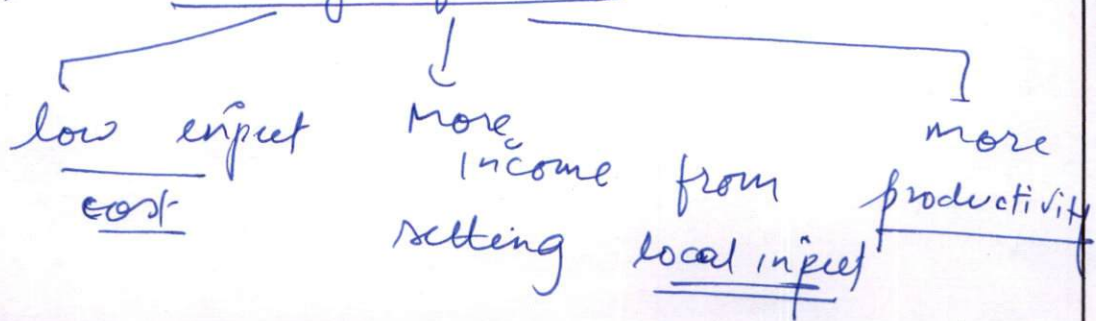
(4) Reduced import Bill

↳ lower import of urea, DAP etc.

(5) Reversing Land Degradation
→ 150 million hectare land

in India is degraded.

(6) Doubling farmer income



(7) Catering to eco-markets and developing organic product portfolio

(8) Achieving Goal of National Agri export Policy

(9) Building Brand India around LEISA products.

(10) Creation of more GI tagged agiproducs and GI AHS in India.

(11) Creation of non-farm rural employment.

Governments of India should create special market infrastructure and branding scheme for LEISA crops.

15.

हाल ही में जारी IPCC की छठी आकलन रिपोर्ट (AR6) – 2021 को मानवता के लिए 'कोड रेड' माना गया है। इस संदर्भ में, भारत पर विशेष ध्यान देते हुए इस रिपोर्ट में उजागर की गई विभिन्न चिंताओं की विवेचना कीजिए। साथ ही, इस रिपोर्ट द्वारा प्रदत्त उपचारात्मक उपायों को भी सूचीबद्ध कीजिए। (उत्तर 250 शब्दों में दें)

The recently released IPCC Sixth Assessment Report (AR6) – 2021 has been deemed as 'code red' for humanity. In this context, discuss the various concerns raised in the report with special focus on India. Also, enlist the remedial measures given by the report. (Answer in 250 words) 15

उम्मीदवारों को इस हॉग्रीफ में नहीं लिखना चाहिए
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IPCC's AR6 was released during Glasgow Summit of COP26. Reorientation of Paris goals was highlighted as a dire necessity to achieve target of 1.5°C envisaged in Paris Pact.

Concerns Raised in Report

- (1) Global carbon budget is reducing at alarming rate.
- (2) Global temperatures have increased more than 1.1°C since 19th century.
- (3) Global emission should peak before 2040 to achieve target of 1.5°C
- (4) Cumulative emission matter more

than present emission hence
Common But Differentiated Responsi-
bilities should be adhered to.

उम्मीदवारों को
इस हार्डिप में
नहीं लिखना
चाहिए
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Concerns Relating to India

- (1) India is third largest emitter
with significant coal dependency.
- (2) Extreme weather events like
→ erratic monsoon, heatwaves,
Cyclones, droughts, floods would
increase in India.
- (3) Melting of Himalayan glaciers
could lead to a water crisis in
India.
- (4) Sea level Rise would threaten
coastal communities.
↳ Sunderbans island like
Ghorumara are below sea now.
- (5) India should prepare for
→ declining productivity of food-
crops and lower nutritional standard
of crops.

Remedial measures IPCC AR5

- (1) Emission peaking before 2030 - more nations should declare net zero target.
- (2) Developed countries are large cumulative emitters hence adhere to CBDR.
- (3) Enhanced climate finance - adhere to target of \$100 Billion/years to Green Climate fund.
- (4) Emphasis on adaptation should increase.
- (5) Levying carbon taxes and later phasing out coal.
- (6) Global Stocktake and enhancement of Paris target and Paris goals.
India declared target of 450 GW by 2030 and net zero emission by 2070 in response of IPCC AR-5.

16.

भोपाल गैस त्रासदी से लेकर विशाखापत्तनम में गैस रिसाव तक कई रासायनिक आपदाओं ने भारत में खतरनाक रसायनों (HAZCHEM) द्वारा उत्पन्न जोखिमों को ध्यान में लाया है। इसके दृष्टिगत, भारत में रासायनिक आपदा प्रबंधन (CDM) की तैयारियों के साथ-साथ इसमें व्याप्त कमियों की भी विवेचना कीजिए। (उत्तर 250 शब्दों में दें)

Multiple chemical disasters from the Bhopal gas tragedy to gas leak in Visakhapatnam have brought into focus the risks posed by hazardous chemicals (HAZCHEM) in India. In view of this, discuss the preparedness as well as gaps in Chemical Disaster Management (CDM) in India. (Answer in 250 words)

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

chemical disasters

occur due to large scale release of poisonous gases like Styrene (Visakhapatnam) in residential areas.

E.g Release of methyl isocyanate during Bhopal gas tragedy.

Preparedness for CDM

(1) Structural measures

→ Industrial location away from residential areas

→ Norms of storage of hazardous chemicals

(2) Non structural measures

→ Hazardous substance management rules under Environment

Protection Act.

→ Public insurance under Public Liability Insurance Act.

→ Inclusion of chemical disaster in school curriculum.

→ Mandatory environmental clearance before operating chemical industry.

Gaps in CDM

(1) Implementation Deficit

E.g. LG Polymers was operating without clearance.

(2) No proper inspection mechanism

(3) Skewed industrial location

E.g. LG polymer situated near residential area.

(4) Lack of staff training in handling hazardous substance.

- (5) Lack of proper relief and compensation policy.
→ NGT used absolute liability principle in adjudicating LG polymer case which is problematic.
- (6) Lack of Rehabilitation policy
- (7) Absence of early warning system
- (8) No training to local community
e.g. locals did not know SOP of dealing with chemical disasters.
- (9) Lack of regular mock drills.

Way forward

- (1) Operationalise Environment Relief fund under PLI Act, 1993 for proper relief and compensation.
- (a) CDM management through local bodies and communities as per SENDRI framework.

17.

महामारी के समय सार्वजनिक स्वास्थ्य से संबंधित वस्तुओं और सेवाओं के उदारीकरण की बढ़ती मांग ने वर्तमान बौद्धिक संपदा व्यवस्था के संबंध में महत्वपूर्ण मुद्दों को उठाया है। विवेचना कीजिए। (उत्तर 250 शब्दों में दें)

The growing demand for liberalisation of public health-related goods and services amidst the pandemic has raised critical issues with regard to the current intellectual property regime. Discuss. (Answer in 250 words)

15

उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए।
Candidates must not write on this margin

India and South Africa
petitioned World Trade Organisation
for patent waiver ^{on} CORONA vaccines.
Further vaccine nationalism
and vaccine shortage highlighted
how public health goods and services
should be liberalised and IPR system
reformed.

Issues in Current IPR Regime

- (1) Doha Declaration of WTO allowed
for patent waiver in emergency
but it was not operationalised during
COVID-19.
- (2) Backlash against compulsory licensing.
- (3) No Transfer of Technology by multinational

Pfizer shows how developed
nation misuse IPR.

उम्मीदवारों को
इस हशिफ में
नहीं लिखना
चाहिए
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(4) Question of Equity

→ present IPR Regime excludes
Africa and South America for
accessing public goods.

(5) Putting profits over lives

(1) failure of WTO to implement
TRIPS in entirety and adhere to
Doha agreement.

Need for Reform

(1) Amend TRIPS to allow compulsory
licensing in national interest.

(2) Reform WTO for quick and
agile response to crisis like
COVID-19.

(3) Development of generic medicine.

(4) Mandatory transfer of technology
during global crisis.

(5) Prohibition on evergreening of
patents during crisis.

(6)

18.

भारत में रक्षा प्रौद्योगिकियों के स्वदेशीकरण में उप-इष्टतम परिणामों के लिए उत्तरदायी कारणों पर प्रकाश डालते हुए, उन उपायों का सुझाव दीजिए जो रक्षा क्षेत्र में स्वदेशीकरण की गति को तीव्र कर सकते हैं। (उत्तर 250 शब्दों में दें)

Highlighting the reasons behind suboptimal results in indigenization of defence technologies in India, suggest measures which can accelerate the pace of indigenization in the defence sector. (Answer in 250 words)

15

उम्मीदवारों को इस हशिप में नहीं लिखना चाहिए
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According to SIPRI
India is 3rd largest importer
of defence products .

Reason behind suboptimal Indigenization

- (1) Lack of capability in public sector units like HAL, OFB.
- (2) low private sector participation.
- (3) high cost and time in defence trials → Defence deals more than 3 lakh crore are struck in trials.
- (4) Lack of indigenous defence production ecosystem
→ limited Original equipment manufacturers in India.

(5) Limited export market

- Defence production policy 2020
- Defence procurement policy, 2020

→ Atmanirbhar Bharat Abhiyaan

→ corporatisation of O&B

→ Negative import list

→ 74% FDI in Defence

Steps taken by Government

- ↳ Creation of CDS
- ↳ IDEX, Defence export for developing entrepreneurship.
- ↳ Creation of Defence manufacturing zones in Thane, Meghal, Tamil Nadu.

Further measures for indigenisation

- (1) Time bound trial procedure
- (2) Developing export market
 - ↳ Recently Shrew helicopters and Brahmos missile was exported to Vietnam

(3) Creating National Regulator for
Defence production sector

(4) Tax holidays for new defence
manufacturing firms.

(5) Development of f.p.p. models
in defence.

(6) Emphasising Make in India in all
defence deals.

(7) Making transfer of technology
key to diplomatic engagement.

(8) Emphasising success stories like
building of INS-Vikramaditya.

India needs to overhaul
Defence procurement procedure to
make it time bound and suited
to indigenous manufacturers.

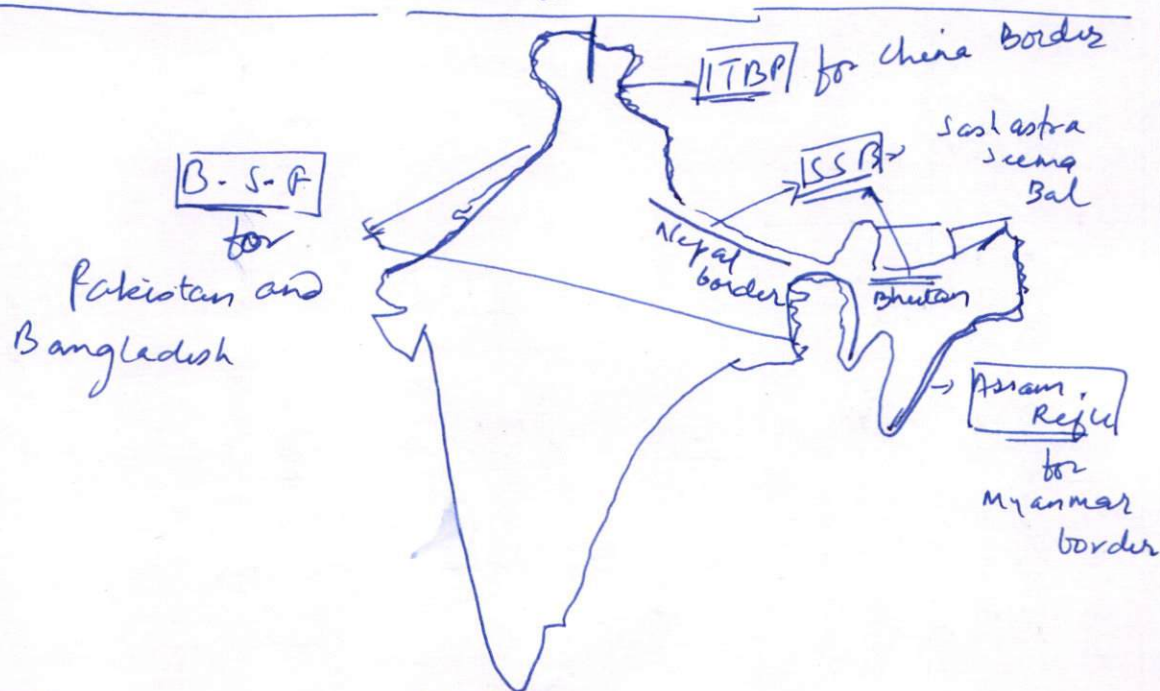
19.

अंतर्राष्ट्रीय सीमाओं की रक्षा के लिए विभिन्न केंद्रीय सशस्त्र पुलिस बलों की अवधारणा के पीछे के कारकों पर चर्चा कीजिए। साथ ही, भारत की सुरक्षा सुनिश्चित करने में इन बलों के योगदान पर भी प्रकाश डालिए। (उत्तर 250 शब्दों में दें)

Discuss the factors behind conceptualization of different Central Armed Police Forces for guarding the international borders. Also, highlight the contribution of these forces in ensuring security of India. (Answer in 250 words)

15

Central Armed Police forces
are created under statutes like
B.S.F Act for serving essential
national interest.



factors behind different forces

- (1) B.S.F was created during Indo-Pakistan war of 1947.
- (2) ITBP was created after Indo-Chinese war of 1962.

(3) Assam Rifles is a pre independence
body raised as Cachar Levy during
1820's.

- principle of One Border- One force
reiterated by Kargil War
Review Committee
- factors → Specialised challenges of
different Borders
- Bangladesh - human trafficking
 - Pakistan border - terror
- Wars of 1964, 1915 shaped their
formation
- Different terrains of different border
- SSB operates in plain and mountain
 - ITBP is almost completely mountainous.
- Better collaboration with army.
- ↳ Development of institutional memory
regarding border management.

Contribution of Border Guarding forces

(1) ITBP

↳ played landmark role in 1987 crisis and during recent Golwan crisis

↳ Also secured embassies like Afghanistan embassy and VIP

(2) BSF

↳ Played leading role during Indo-Pakistan War, 1971

↳ Anti-terror activities like shooting down drones, stopping arms trafficking etc.

(3) Assam Rifles

↳ friends of the North east were instrumental in quelling emergencies, emergency and militancy.

(4) SSB

↳ Helped in anti terror operations near Bhutan Border

↳ stops human trafficking from Nepal border

experts recommend bifurcation of BSF to adhere completely to ONE BORDER ⁵² ONE FORCE principle.

धन शोधन (मनी लॉन्ड्रिंग) गतिविधियों के लिए आभासी परिसंपत्तियों के दुरुपयोग के संदर्भ में, उनकी सुभेद्यता पर चर्चा कीजिए। साथ ही, उन सुधारात्मक उपायों का भी उल्लेख कीजिए, जो आभासी परिसंपत्तियों के उपयोग से उत्पन्न जोखिमों को कम करने के लिए अपनाए जा सकते हैं। (उत्तर 250 शब्दों में दें)

Discuss the vulnerability of virtual assets in terms of their misuse for money laundering activities. Also, state corrective measures that can be taken to mitigate the risks posed by the use of virtual assets. (Answer in 250 words)

Virtual assets are income-earning economic assets held in digital form, they tend to act as a store of value

eg Cryptocurrency like BITCOIN, Non fungible tokens (NFT)

Vulnerability of virtual assets

(1) Source of Money laundering

eg As a bitcoin transaction is secured and non-transparent it could be used to launder money.

(2) No Central Bank Regulation

→ RBI does not track virtual assets

(3) Real time payment to criminals

→ WWF has shown how hackers

are paid in cryptocurrency for wildlife trafficking.

(4) According to FATF cryptocurrency is a new method of terror-funding and money laundering.

→ Vulnerability to hacking
→ The 51% control problems in cryptocurrency
→ Highly volatile
Other threats e.g. ^{Elon}Musk's tweet raised price of Dogecoin

Mitigating Risk of Virtual Assets

(1) Creation of public or government virtual assets like e-RUPI, CBC, e-Renminbi as alternative.

(2) Regulation of virtual assets by law such as Cryptocurrency Regulation Bill.

(3) Tracking of high value virtual asset transfer like sale of NFT worth million dollars.

उम्मीदवारों को इस कक्ष में नहीं लिखना चाहिए।
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(4) Directorate General of Revenue Intelligence (DRI), IB, ED to be trained with AI/ML in tracking virtual assets.

(5) International collaboration using INTERPOL, FATF to stop illegal transfer of virtual asset.

(6) Creation of virtual asset Repository under RBI.

India needs a National policy on Virtual Asset Management. Further UNSC membership should be leveraged for creating global standards for virtual asset.

SPACE FOR ROUGH WORK

