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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. : 104719

अभ्यर्थी का नाम/Name of Student : SHRADHA SHUKLA

माध्यम: हिंदी/अंग्रेजी
Medium: Hindi/English

ENGLISH

तारीख
Date

19-12-21

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

केंद्र
Centre

RAIPUR

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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परीक्षक के हस्ताक्षर Signature of Examiner(s)	

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 ग्रंथ में नहीं लिखना चाहिए
Candidates must not write on this margin

Indian Agriculture is characterised by substantial nature, low productivity and limited extension.

Issues associated with agricultural extension :-

- ↳ Poor funding, low investment in R&D.
- ↳ Non lucrative career in agriculture
- ↳ ~~Low~~ Poor infrastructural capacity.
- ↳ Lack of skilled manpower.
- ↳ Presence of diversity in agriculture - No 'one size fits all approach' would work.
- ↳ Lack of awareness among Indian farmers.
- ↳ Poor status of farmers - 85% belong to small & marginal section.

Krishi Vigyan Kendras (KVK) are established with an aim to improve R&D in agriculture.

Role of KVK in strengthening national agricultural research extension system:-

- ↳ Improving technological solutions for efficient agriculture
- ↳ Providing a robust infrastructural setup for agricultural scientist to carry agricultural research.
- ↳ Encourage universities, colleges to take-up agricultural research.
- ↳ Lucrative career opportunity for students → promote agricultural entrepreneurship.

Other methods like - Kisan TV, applications, awareness drives have also been great contribution in direction of agriculture extension.

2.

भारत में, खाद्य प्रसंस्करण क्षेत्रक मूल्य संबर्द्धन 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 हार्गिण में नहीं लिखना चाहिए
Candidates must not write on this margin

Food processing sector
contributes 13% in export and 14%
in manufacturing GDP of India.

Food processing sector in India has
high potential for value addition :-

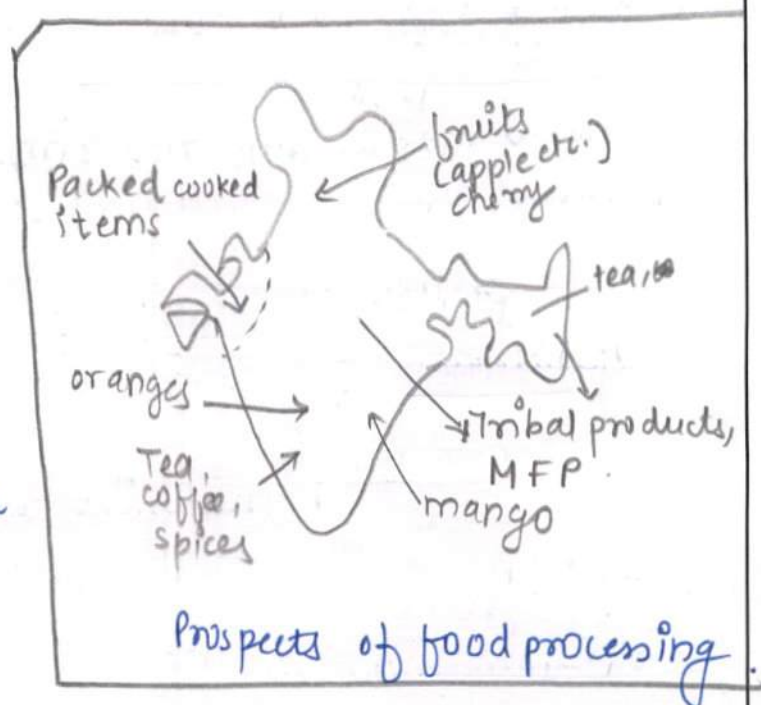
↳ Presence of diversity of raw materials.

↳ Presence of
traditional
knowledge of
processing.
eg - pickling,
papad etc.

↳ Availability
of skilled labour
in form of
women SHG

eg - Kijjat Papad.

↳ Huge tribal belt → use of tribal



minor forest produces to produce new items.

eg- CG (Bastar) ← mahua Jam
cashew processing
mahua cookies.

↳ Presence of huge domestic and international market

- large diaspora, fame of Indian cuisine.

↳ Presence of dense forests - variable variety of opportunity to add value.

To harness these opportunities following steps are being taken

- KISAN-SAMPADA
- ~~PR~~ TRIFED → ~~pro~~ marketing of tribal goodies.
- promotion of SHG, cooperatives
- Govt procurement of goods
- Awareness generation.

Food processing sector has huge potential to increase employment, empower women & increase export potential of country.

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 हार्गिण में नहीं लिखना चाहिए
Candidates must not write on this margin

Livestock based Integrated farming system (IFS) ~~aims to~~ is a method in which agricultural production is done along with livestock rearing in same agricultural land. Thus the livestock ~~output~~ output (dung etc) is used as agricultural input and agrowaste goes as livestock feed

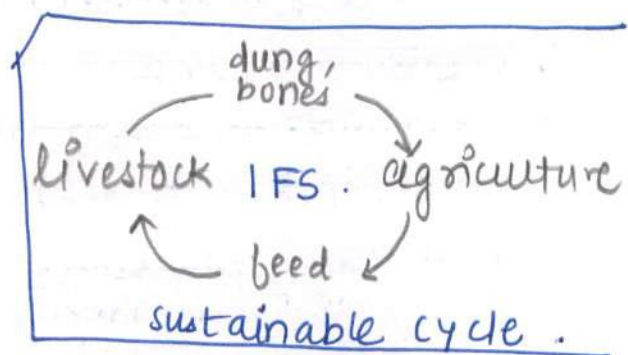
Benefits of IFS :-

↳ Reduction in farm input

↳ Improvement in land capability / soil fertility

↳ Improvement in productivity in long run

↳ Promotes sustainability - no wastage



- a solution to agricultural waste
- ~~now~~ increasing farmer's income
- promote ZBNF, organic farming
- ensure food & nutritional security -
both crops & meat/milk/egg.
- Diversification of agriculture income -
insurance in case of disasters.
- IFS also has capacity to tap the
growing market for organic goods
in India & abroad.

(Although some issues exists like)

- ↳ low initial output
- ↳ lack of awareness
- ↳ Needs skill to improve output
- ↳ land degradation.

to improve potential of IFS,

⊙ awareness generation along with
incentivisation is needed.

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

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

PIO (Person of Indian origin) entrepreneurs in world are leaders of many big companies like Google, Microsoft, Twitter. ~~But the~~

But the entrepreneurship rate in India is still low.

Factors causing low entrepreneurship rate :-

- ↳ lack of business friendly environment - Poor EoDB.
- ↳ lack of awareness among students
- ↳ Absence of career counselling specially in tier-2 cities & colleges.
- ↳ stereotypes & taboos associated with failure discouraging to take entrepreneurship as career.
- ↳ lack of easy credit mechanism.

- ↳ low risk taking capability
- ↳ Rote learning traditions in school & colleges
- ↳ No incentivisation to innovation.
- ↳ low accessibility to digital means ;
digital divide (30% internet penetration)

Govt has taken various measures to
increase the pace of entrepreneurship :-

- ↳ start up India scheme , stand up India
scheme .
- ↳ measures to improve EoDB .
- ↳ Easing of registration - onestopcentres
- ↳ promote skill development .
- ↳ Easing loan for entrepreneurship -
conclaves , seminars by Mo Skill .
- ↳ Advertisement, awareness generation .
- ↳ Encouraging anchor investors , angel investors -

These measures have increased entrepreneurship in India . Presently India is home to about 30 unicorns , and one of fastest growing start-ups .

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 कक्ष में नहीं लिखना चाहिए
Candidates must not write on this margin

'Land bank' is a concept in which an electronic database of available land for acquisition is made available for business-men/ industrialists.

* Land-bank can boost economy and promote EODB as :-

- ↳ Issue of land procurement will be solved, which is biggest hinderance eg- vedanta in odisha.
- ↳ It will prevent unnecessary clashes between locals & industry owners.
- ↳ It will also encourage industries to set-up in underdeveloped areas due to land availability
- ↳ It will boost economy by - improvement in upstream & downstream needs.

- ↳ Land bank will shorten the process of establishing industry - thus promote EoDB.
- ↳ It is also a solution to high land dispute cases, resettlement issues.
- ↳ It will ease the process of digitalisation & ∴ speeden the process.

Presently Odisha is using the concept to encourage investment in the state.

Following measures can help :-

- ↳ Computerisation of land records
- ↳ Encourage locals to participate in process by incentivisation
- ↳ competitive pricing.

Land bank concept can boost investment & ~~imp~~ reduce regional imbalance in India ∴ it must be utilised.

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

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

Forest ~~conservation~~ Act
aims to improve forest cover of India
from 23% presently to 33%

Recent amendment to FCA is
likely to create problems like :-

↳ Hampar tribal right to forest ownership
under FRA

↳ cause deforestation by allowing
certain exemptions in forest
clearing.

↳ encroachment in forest by big
companies.

↳ It will slow the afforestation drive and

the measures by governments to
improve forest in country .

↳ climate change may ~~be~~ accelerate —
by high cutting of trees, displacement
of indigenous communities .

To lower the negatives,
following steps can be taken :—

- ↳ Involving tribals & locals in
deliberation process .
- ↳ clear cut ~~listing~~ listing of exemptions .
- ↳ No loophole to be used against
tribals .

Forest conservation is both
a DPSP & fundamental duty , to
ensure ~~as a~~ sustainable future,
strong FCA is need of hour .

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)

10

Floods in urban area are due to twin cause of high rainfall and faulty urbanisation.

Floods are result of uninformed coping with urbanisation as :-

- ↳ Encroachment of river beds
- ↳ Construction in river pathway - causing disruption in its flow
eg - 2005 flood, mumbai
- ↳ Encroachment of peri-urban wetlands.
- ↳ faulty drainage systems
- ↳ poor solid waste management system in city.
- ↳ discharge of solid waste in river without processing causing reduction in its capacity of carrying water.
- ↳ clearing of forest for settlement.

↳ downing of water absorption capacity
of land due to concretisation.

National disaster management
Authority or (NDMA) has laid guidelines
on urban floods :—

- ↳ It ~~declares~~ ^{defines} yellow, orange & red alert
for cities prone to flood.
- ↳ NDMA has laid guideline to maintain
urban drainage system before rainy
season
- ↳ It also ~~also~~ guides governments to
encourage construction in safe areas.
- ↳ guideline lays plans to ~~to~~ reduce the
destruction caused by flood — mitigation
& management.

with increasing
urbanisation at
rate of 4% (decade),
there is a need to
manage urban
centres efficiently.



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 हस्ति में नहीं लिखना चाहिए
Candidates must not write on this margin

~~ISRO~~

ISRO is chief scientific & Research organisation of country. It aims to excel India in scientific achievement & invent innovative solutions to developmental problems.

~~ISRO~~ ISRO's role in direct scientific advancement is visible by launch of numerous satellites, But presently its role is enlarging in development activities too :-

↳ Role in agricultural development by providing scientific data ~~about~~

↳ collaboration with institutions to create geo-tagged maps

eg. - NRSC - Bhuvan app

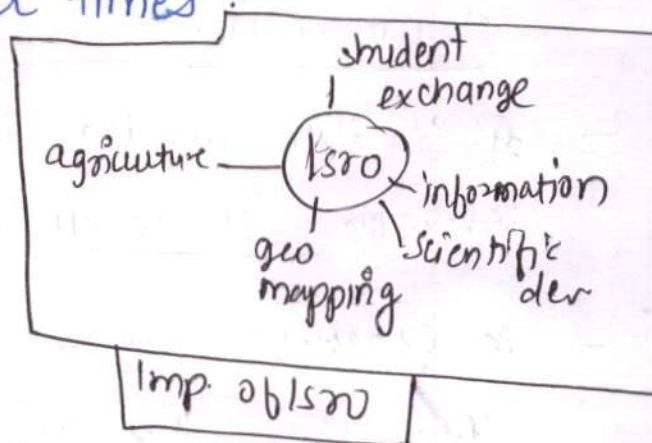
↳ It has also aided government departments & organisations with its scientific excellence

eg: Aspirational district program of NITI → ~~the~~ ISRO's work in formulating localised data based maps.

↳ ISRO has also taken various student awareness drive to ~~can~~ generate interest in STEM eg - ~~most~~ scientist meeting with students.

↳ Apart from this ISRO has also contributed directly in development by its 'scientific social Responsibility'

Thus the scope of ISRO is increasing in present times.



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

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

critical information
Infrastructure (CII) are information
system which store some important
information of country.

Reason for targeting CII

- ↳ to ~~hamp~~ hamper states security
eg - terrorist attacks
- ↳ To ask for ransome (ransome attacks)
- ↳ To gather critical information
about nation.
- ↳ It is also targetted to gain a strategic
leverage in intelligence gathering.
- ↳ cyber-warfare - some times targeting
aims at cyberwarfare.
- ↳ critical information about health,

finance, consumption pattern → for
profit motive of some ~~and~~ IT
based industries.

steps taken by government to
secure CII

- ↳ security enhancement
- ↳ cyber security cell
- ↳ CERT-In
- ↳ IT Act 2000 - to punish any breach
- ↳ India has also invested in its
cyber security infrastructure.
- ↳ Investment in R&D.

critical information security
are necessary to maintain security of
nation as a whole.

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

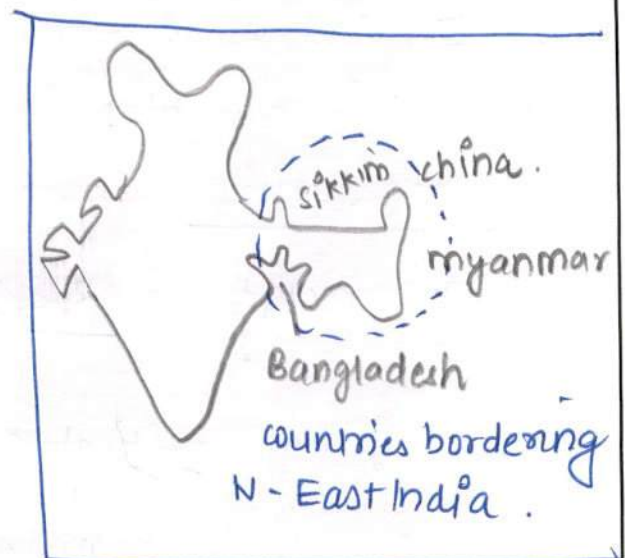
उम्मीदवारों को इस हिसाब में नहीं लिखना चाहिए
Candidates must not write on this margin

North East India is significant in terms of Resource availability, strategic location, cultural importance.

security threats faced by North East India

↳ N.E. India is surrounded by international borders
∴ external threat from nations

↳ migrant influx from Bangladesh
eg-chakma



↳ Issue of organised crime — drug ~~trafficking~~ trafficking from Myanmar (near to golden triangle)

↳ Internal security issues —
extreme groups, militant tendency

and secessionist claims

- ↳ Lack of connectivity with rest of India
- ↳ ~~issue of~~ Border disputes with China — claim of Arunachal Pradesh
- ↳ Insurgency Issues
- ↳ Local violence against govt policies (eg - AFSPA)

Government Initiatives

- ↳ Border security — BSF, ITBP .
- ↳ laws like AFSPA
- ↳ socio-economic development
- ↳ cooperation with other countries
eg - Border haat - Bangladesh .
- ↳ improve connectivity
eg - Kaladan project .

NEA is an imp component
of Act East policy of India .

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 Railway is one of biggest employers in world and important service provider in India.

Indian Railways suffer from chronic under investment. This causes challenge in infrastructure generation.

Challenges in speedy infra generation :-

- ↳ Absence of large scale investment projects
- ↳ lack or low scale private presence.
- ↳ ~~poor~~ poor efficiency in resource utilisation
- ↳ lack of expertise in planning
- ↳ govt interference leading to slow decision making.
- ↳ due to large contribution in transport

the railway operation cannot be stalled for purpose of retrial or renewal.

↳ low technology & advancement

↳ caters to lowest strata along with higher
∴ services need to be average valued.

To improve investment & infraction in railways, following steps are being taken by government :-

↳ Private Participation
eg- Tejas.

↳ Efficiency in management

eg- Pantry car replaced by Private service providers.

This will lead to efficient resource utilisation and infrastructure generation.

↳ merging of railway budget → low obligation of railway towards profit sharing.

↳ comprehensive grievance Redressal - leading

to greater ~~to~~ customer input and ∴
scope of improvement .

↳ Improvement in employee efficiency ,
→ focus on quality service delivery .

Railways are ~~reviving~~ reviving
due to these initiatives. Constant ~~no~~
~~endeavour~~ to beautification, shift to
green energy (eg- Hyderabad) , efficient
service delivery has made railway as a
~~ext~~ profitable venture to invest
Thus, attracting investment .

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)

Indian farmers ~~are~~
comprise of 80% of small and marginal
farmers. This has led to shortage of
resources, investment and quality management
causing lower farmer income.

Doubling farmers Income needs a
disruptive approach to R&D :-

↳ To tackle the problem of diminishing
return — lower cost of production.

↳ To address the issue of global
warming & climate change → New
technological interventions to bear the
brunt of high temperature.

- ↳ method to track and assess rainfall
- better planning for agriculture
- ↳ Disaster tracking mechanisms - to
reduce loss of crops by extreme disasters
- ↳ R&D on new equipments → women friendly,
cheaper.
models like Uberisation can help in
this regard.
- ↳ New technology in research irrigation -
promote efficient water utilisation
- ↳ soil Health assessment technologies -
to suggest proper N:P:K ratios in
fertiliser according to need.
- ↳ New seed varieties, gm crops
- ↳ Drought resistant crops
- ↳ R&D on storage, processing technology
that are mobile & cheap.
- ↳ New techno for spraying of pesticide,

Insecticides — to prevent farmer health loss.

eg- Vidarbha (MH) → loss of lives of
farmers due to poisonous pesticide
spray.

Many new technologies have proved that
R&D can improve farmers income

like :

- Nano-urea by IFFCO —
 - 500 ml bottle = 1 bag of urea.
- ~~water~~ drip & sprinkler irrigation
- HYV seeds
- processing units in tribal regions.

for this, some measures need to be
taken :-

- ↳ Investment in R&D, promote agriculture
colleges
- ↳ Agricultural entrepreneurship
- ↳ subsidised technological solutions
- ↳ PPP.

Thus, Robust Agricultural R&D is
sine-quanon for doubling farmers income.

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

India's energy utilisation

is heavily skewed in favour of fossil based fuels, of which coal comprises of 60%.

The electricity generation in India is also heavily dependent on fossil fuel (thermal based), ~~of which~~ ~~a~~ reform is needed in power distribution companies (DISCOMs) and grids :-

- ↳ Utilise renewable alternative for electricity generation
eg:- hydropower
- ↳ To reduce carbon footprint arising from power sector.
- ↳ Reduce externalities causing to environment and public health.

↳ Reform to renewables will also make the electronic solutions actually contribute in reducing GHG emission.

ex : A FAME → for electronic vehicle promotion
but electricity itself is coming
from fossil fuel based plant

∴ no major environment profit.

↳ shifting to renewables is also needed to reduce cost in long term —
as fossil reserves are soon going to go scarce.

↳ It will also help fulfill India's
commitment to go carbon neutral
by 2070. (COP-26).

To realise this, following
steps can be taken :—

↳ ~~more invest in~~ investment in R&D
to find cheap renewable solutions.

- ↳ Infrastructural generation to modify DISCOMs and grid according to renewable needs.
- ↳ Enhance storage capacity.
- ↳ collaborative approach - public-private partnership.
- ↳ collaboration with other countries for technological innovation.
- ↳ Incentivisation of DISCOMs.
- ↳ fix compulsory minimum renewable usage for DISCOMs.
- ↳ Incentives & tax relief to big companies & industries who source electricity from renewable using DISCOMs.

Power sector is ~~not~~ big consumer of fossil $\therefore$ reform is needed.

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 हार्जिन में
नहीं लिखना
चाहिए
Candidates
must not
write on
this margin

15

~~भारत~~
Indian agriculture is
input intensive and low efficient.

Input intensive agriculture is
unsustainable & has negative consequences
like :-

- ↳ Problem of diminishing return over time.
- ↳ losing soil capability - to regenerate itself naturally.
- ↳ loss of productivity
- ↳ Reduction in farmers income - due to low output per unit input.
- ↳ Higher input in irrigation leads to issue of waterlogging, water wastage, ~~soil~~ soil erosion.

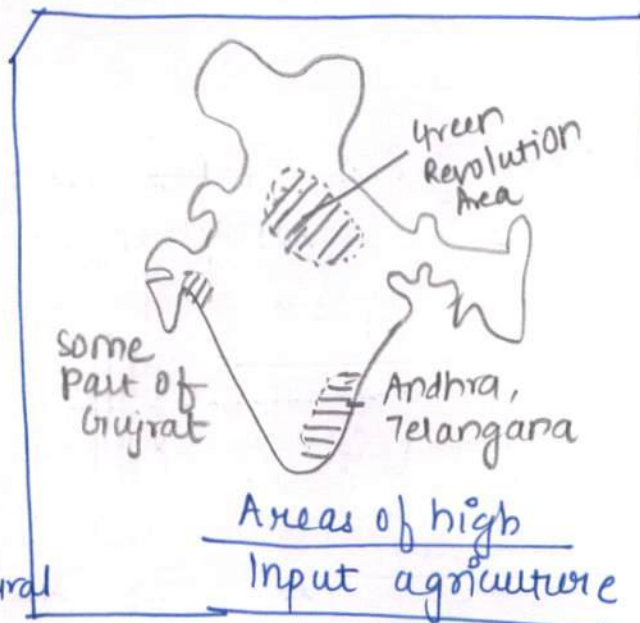
eg - Punjab, Haryana, west UP

↳ overuse of
chemical fertiliser &
pesticide has also led
to contamination
of ground water ;

~~pesticide~~

↳ Pesticide remnants
makes India's agricultural
export- in competitive

eg- EU banning Basmati rice.



Thus, due to this the importance of
low external input sustainable Agriculture
has increased

Significance of LEISA

- ↳ To improve agricultural efficiency.
- ↳ increase (double) farmer's income.
- ↳ move towards Zero budget natural farming (ZBNF)

- ↳ Exploit the opportunities of -
organic farming
- ↳ Improve India's agricultural export -
cater increasing demand of organic products
- ↳ New technology like Aquaponics,
Aeroponics, Hydroponics be utilised
- ↳ Ensure food security & nutritional security for India in changing climate.
- ↳ To tackle issues of health deterioration
eg- cancer menace in Punjab due
to pesticide contamination of
groundwater.
- ↳ Improve soil health, utilise natural resource (eg- cow dung) & also enhance
livestock farming.

DEISA is therefore future of a
sustainable, inclusive agriculture in India.

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

IPCC Sixth Assessment

Report or AR-6 has highlighted various concerns regarding environment.

Some concerns are :-

- ↳ increasing global temperature at higher rate, that the target to maintain rise ~~rise~~ below 1.5°C from preindustrial level will not be achieved.
- ↳ climate change will cause more extreme events (flood, drought, cyclones) specially in tropic countries like India.
- ↳ The brunt of climate change will be more harsh upon global south due to

presence of more population, climate

↳ Report also highlighted that present efforts to control climate change is insufficient.

↳ It highlighted India's contribution in emission & future extrapolations showing increasing emissions.

To tackle these issues & address the concerns, following remedial measures are given :-

↳ commitment to Net zero

↳ lowering of emission by all country - developed & developing.

↳ shift to renewable energy

↳ more commitment from developing countries like India.

↳ Reinsurance of funding by developing developed countries (\$100 bn commitment).

↳ collaborative approach for sustainable future.

India has made certain commitment according to the recommendations :-

- ↳ Achieving net zero by 2070
- ↳ Increasing share of renewable energy.
- ↳ higher target of production of solar energy.
- ↳ change in economic pattern, but no immediate & haste change, for energy use.

Thus to ensure a liveable & sustainable world, the commitment to reduce emission & ensure green economy is needed.

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)

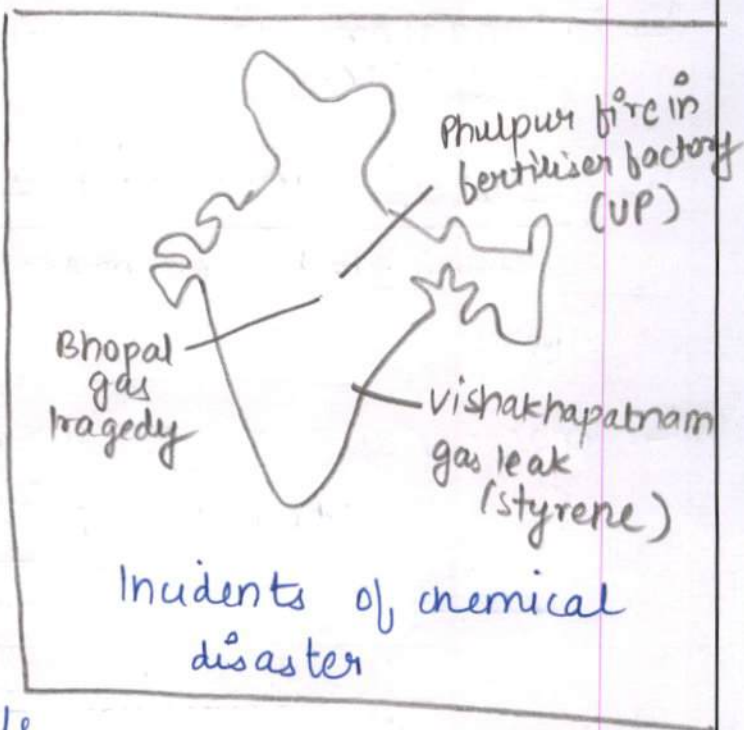
उम्मीदवारों को इस हाशिए में नहीं लिखना चाहिए
Candidates must not write on this margin

15

Disaster management is process of managing a hazard to minimise its ill impacts on life, property & society.

Hazardous chemical (hazchem) industries pose various threats like :-

- fire accidents
- ignorance and
- lack of safety equipments
- lack of disaster management skills to workers.



The preparedness in HAZCHEM chemical disaster management in India is

guided by following :-

Preparedness :-

- ↳ mandatory fire equipments, safety equipments
- ↳ Principle of Absolute liability in place of strict liability (supreme court rule in oleum gas leak case)
- ↳ mandatory fire resistant building norms.
- ↳ disaster management Act 2005
- dedicated NDMA to form policy for chemical disaster
- ↳ emergency helpline for early remedy in fire accidents & chemical accidents.

But there exists huge gap in preparedness front :-

- ↳ violation of safety norms by hazchem companies.

- ↳ Absence of compliance to minimum safety requirements
- ↳ Lack of disaster training to the workers.
- ↳ Absence of comprehensive system at place to tackle chemical disaster with immediate effect

eg : In case of ~~sty~~ styrene leak - measures taken were hasty & not systematic.

- ↳ Lack of funds, equipment with district administration.
- ↳ Overburdened administration machinery
→ ∴ no particular focus on disaster management.

To tackle this, measures like :

- clear cut guidelines, strict implementation
- mandatory labour training
- ~~strict~~ chemical disaster Response force & fund.

chemical disasters are expected to increase owing to increasing industrialisation.
∴ focus needs to be increased on CDM.

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

Pandemic and shortage of public health goods has raised question of preference of welfare over Intellectual property Regime.

Current Intellectual Property Regime has following critical issues :-

↳ clause of ~~some~~ patent for lifesaving drug -

• Issue of evergreening

↳ lack of clearcut exceptions in case of emergency / disaster.

↳ Absence of common mechanism - lack of cooperation among countries.

↳ lack of any global ~~consensus~~ consensus

in IPR field.

Due to this issues, ~~there are~~ problems like :

- High cost of drugs
- Patent by various companies
- vaccine nationalism

India and many other country demanded relax from IP norms in health sector & pharmaceuticals to help countries tackle the pandemic.

In this regard, following ~~the~~ changes are needed :—

↳ Review of evergreening in medicine / pharmaceutical products.

↳ ~~the~~ improving no. of clauses & adding some such as 'compulsory licensing' which provide alternate regime.

↳ Improving ethical practices in
IP in healthcare sector

↳ Cooperation among countries

↳ Addition of exception clauses.

Apart from this, to improve
public health goods & services, following
steps can be taken :—

- Higher investment in R&D
- Greater emphasis of improved capability
- Cooperation among nations
- Strengthen supply chain (global & domestic)
- Check monopoly (eg-chinese firms).

Pandemic has highlighted
the importance of accommodative IPR
regime ∴ reforms are needed.

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 हार्शिए में नहीं लिखना चाहिए
Candidates must not write on this margin

Defence sector in India is heavily dependents on import from countries like - US, Russia, Israel, France.

Reason behind sub-optimal indigenisation of defence technology :-

- ↳ Lack of access to disruptive technology
- ↳ Low investment on R&D (0.6% of GDP)
- ↳ Poor participation of private sector.
- ↳ Lack of funds
- ↳ Poor industrial base
- ↳ Lack of skilled manpower.
- ↳ Policies which prevent higher collaboration with private partners.

measures to accelerate the pace of
defence indigenisation :-

- ↳ Limit increase private sector participation - ease norms.
- ↳ Greater investment in R&D
- ↳ Higher technology innovation, encourage entrepreneurship to find new solutions.
- ↳ encourage technology transfer
- ↳ cooperation with countries like France, Russia to skill manpower.
- ↳ Restriction of import of certain equipments → encourage domestic production.

Govt of India has taken various measures to improve indigenous capability in defense manufacturing.

steps taken :

- ↳ Two restriction list, restricting import of certain equipment to boost domestic production.
- ↳ ^{increase}~~greater~~ automatic route in FDI (74%).
- ↳ encourage private participation.
- ↳ skilling initiatives - encouraging to ~~take~~ take up defense career.
career research as career.
- ↳ encourage entrepreneurship.
- ↳ strengthen manufacturing capability (make in India)

Thus with collaboration of academia - industry - government, indigenisation of defense sector is possible.

19.

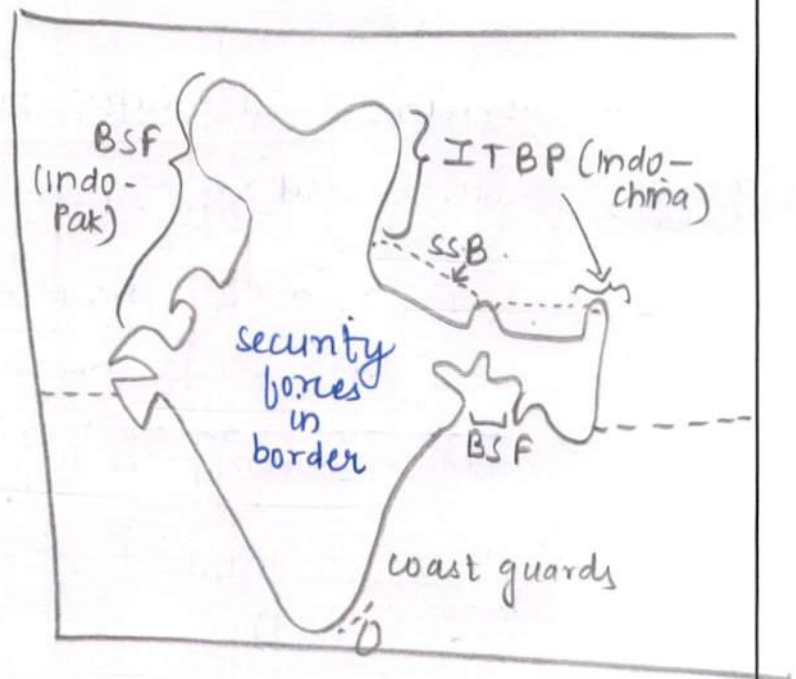
अंतर्राष्ट्रीय सीमाओं की रक्षा के लिए विभिन्न केंद्रीय सशस्त्र पुलिस बलों की अवधारणा के पीछे के कारकों पर चर्चा कीजिए। साथ ही, भारत की सुरक्षा सुनिश्चित करने में इन बलों के योगदान पर भी प्रकाश डालिए। (उत्तर 250 शब्दों में दें)

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 force is conceptualised with the aim to protect the vast international borders of India.

factors behind conceptualisation of different CAPF :-



↳ Presence of diversity of international borders.
(physical)

eg - marshes (sir creek), glaciers (siachin), land, mountain etc.

↳ Presence of diverse issue with different countries.

↳ speciality of different forces to handle

different situation

eg - To handle cold weather of siochin,
special training is given.

↳ To maintain a complex security system
which cannot be deciphered by enemy
nations.

↳ To maintain a vast territorial army
to ensure security of nation.

Due to these factors, the
CAPF in India is contemplated on-

"one force one border" principle, giving

rise to following:

- BSF (border security force) for
Pakistan border
- Indo Tibet Border P (ITBP) for Indochina
- SSB (Shashatra seema Bal)

Contribution of forces

↳ To maintain peaceful land border
with neighbouring countries.

- ↳ Improving border security by carrying out patrolling, exercises, operations.
- ↳ collaboration & cooperation with force of other country - to ensure peaceful border management.
- ↳ Ensure people to people contact in borders. (eg - open border, border haat)
- ↳ The forces also undergo trinity training & maintain capacity to tackle any surprise security threat.
- ↳ ICAPF also contribute in territorial security in case of any emergency - deployed in states to tackle extreme events, violence sometimes.

Thus, border security in India is a comprehensive and complex system.

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)

money laundering is
process of disguising & illegal money or
black money via different routes.

virtual assets (like cryptocurrencies)
are vulnerable to be used ~~as money~~ for
money laundering activity, due to
following reasons :-

- ↳ Absence of regulation
- ↳ Decentralised nature
- ↳ Non-trackable route.
- ↳ Anonymity of user.
- ↳ easy entry and exit.
- ↳ Acceptable in vast range of economic activities in various countries.
- ↳ Increasing acceptance among people
∴ can be used to launder money easily

- ↳ Absence of mechanisms to punish misuse.
- ↳ cross border movement → difficult to track and record movement.
- ↳ increasing technology → more ease of utilisation.
- ↳ increasing Internet penetration, digitalisation, computerisation ∴ increased usage.

To mitigate the risks posed,
following corrective measures can be
taken :-

- ↳ Regulation of virtual assets
- ↳ Exploring the opportunity of central bank led crypto
- ↳ strengthening cyber-security infrastructure
- ↳ clear cut listing of minimum/maximum assets limit for individual

& business ~~to~~ above which anonymity cannot be maintained.

↳ R&D Investment.

↳ ~~For~~ Tracing of cross border movement by cooperation among countries.

↳ ~~entry~~ & limit investment in limited ventures.

& virtual assets are growing at an exponential rate; their accelerated rise & steep falls indicate their volatile nature & the threats they can pose to economies ∴ its regulation is the key.

SPACE FOR ROUGH WORK

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