

VISION IAS

www.visionias.in

GENERAL STUDIES (TEST CODE : 1864)

Name of Candidate	Utsav Anand		
Medium Eng./Hindi	English	Registration Number	875993
Center	Online	Date	21-12-21

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	1. 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)। 2. There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं। 3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं। 4. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं। 5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one. प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे। 6. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए। 7. 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।
1	10		
2	10		
3	10		
4	10		
5	10		
6	10		
7	10		
8	10		
9	10		
10	10		
11	15		
12	15		
13	15		
14	15		
15	15		
16	15		
17	15		
18	15		
19	15		
20	15		
Total Marks Obtained:			
Remarks:			

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

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

EVALUATION INDICATORS

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

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

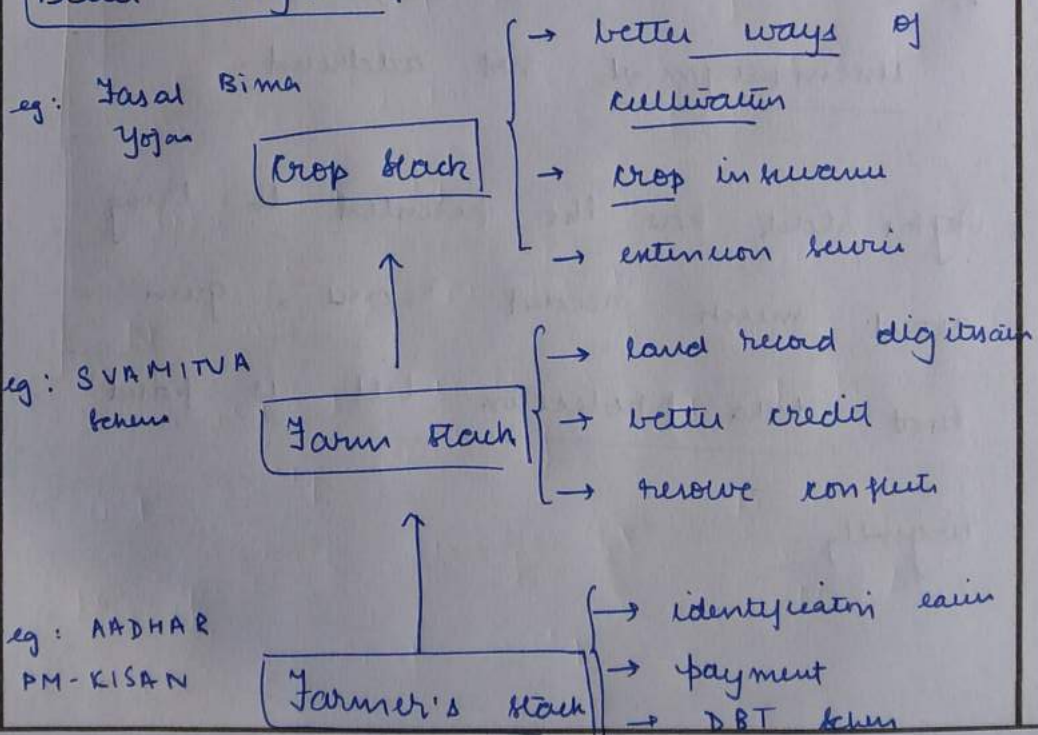
1. Agristack can serve as a foundation to build innovative agri-focused solutions, thus enabling creation of a better ecosystem for agriculture in India. Comment. Also, discuss the concerns associated with it.

(150 words) 10

एग्रीस्टैक अभिनव कृषि-केंद्रित समाधान प्रदान करने के लिए एक आधार के रूप में कार्य कर सकता है, इस प्रकार यह भारत में कृषि के लिए एक बेहतर पारिस्थितिकी तंत्र के निर्माण को सक्षम बनाता है। टिप्पणी कीजिए। साथ ही, इससे संबंधित चिंताओं की भी विवेचना कीजिए।

Agristack refers to the set of
innovations and APIs in the agri-
sector which can be exploited to
connect the farmers to the financial
system in a more robust way

Better ecosystem :



Concerns regarding Agri Stack

- Data privacy & security : can be exploited by corporates & insurers to give higher rates at time of distress
- Digital divide : only 18% rural have access to internet
- Landless labourers may not be benefitted
- Core problems of disguised unemployment not addressed.

Agri Stack has the potential to bring about much needed reform, given that data protection bill is passed urgently.

2. Despite the advantages of geothermal energy, it has not been adopted on a wide scale in India. Discuss. (150 words) 10

भूतापीय ऊर्जा के लाभों के बावजूद, इसे भारत में व्यापक पैमाने पर नहीं अपनाया गया है। चर्चा कीजिए।

Geothermal energy refers to the energy stored within the surface of earth, during the formation of earth itself. It is extracted in form of hot steam, or hot water

can be used by aquaculture

non-polluting

can be used by mining industries

India has multiple locations

of energy

eg: Ten, Camberg Valley, Sonata Valley

Renewable in nature

thus help in INDC commitment of 40% non-fossil energy

Advantages

always available for usage

unlike solar/wind

Roadblocks in wide scale usage

- available at geographically tough locations eg: Teh, Manikaran
- need heavy investment in sustainable exploitation
- may cause anthropogenic earthquakes as the energy usually present at plate boundaries eg: Himalayas
- other alternatives like solar/wind are cheaper

Recently Teh became the first geothermal plant in India. R&D needs to continue in light of higher non-fossil targets of 500 GW made at COP-26

3. While the WTO seeks elimination of subsidies that contribute to IUU (illegal, unreported and unregulated) fishing, there are multiple concerns around it. Discuss while highlighting India's stand on the issue.

(150 words) 10

जहाँ IUU (अवैध, अनरिपोर्टेड या असूचित और अनियमित) मत्स्यन सब्सिडी को समाप्त करना संधारणीय मत्स्यन को सुनिश्चित करने हेतु परिकल्पित है, वहीं इसके इर्द-गिर्द अनेक चिंताएं विद्यमान हैं। इस मुद्दे पर भारत के रुख को रेखांकित करते हुए इसकी विवेचना कीजिए।

WTO has been trying to regulate the subsidies to fishing industry given by developing countries ~~to~~ to maintain the trade liberalisation stand.

Concerns with WTO stand

- Unfair advantage to developed countries as they have well established, modern fishing equipments
- It is among the various similar issues where developed countries are trying to capture market of developing countries eg: Agric subsidies

- Unorganised fishing is the lifeline of many coastal countries, especially in Asia.

India's stand on fishing issue

- Developing countries should be given relaxation with respect to fishing subsidies, similar to agri-subsidies
- Unregulated & unorganised fishing should be brought under regulation at just terms with developed countries also reducing subsidies on fishing exports

WHO has been trying to bring concern among developed & developing world on a number of issues. Fast-tracking there is in best interests of every stakeholder.

4. There is a view that the current agricultural policies in India are biased against rainfed agriculture. Comment. Also, identify government initiatives in this regard. (150 words) 10

यह विचार दिया जाता है कि भारत में वर्तमान कृषि नीतियां सिंचित कृषि के पक्ष में हैं। टिप्पणी कीजिए। साथ ही, इस संबंध में सरकारी पहलों की पहचान कीजिए।

Rainfed agriculture refers to the farming practices dependent mainly on rain for irrigation. Indian agricultural policies are said to favour irrigated rather than rainfed.

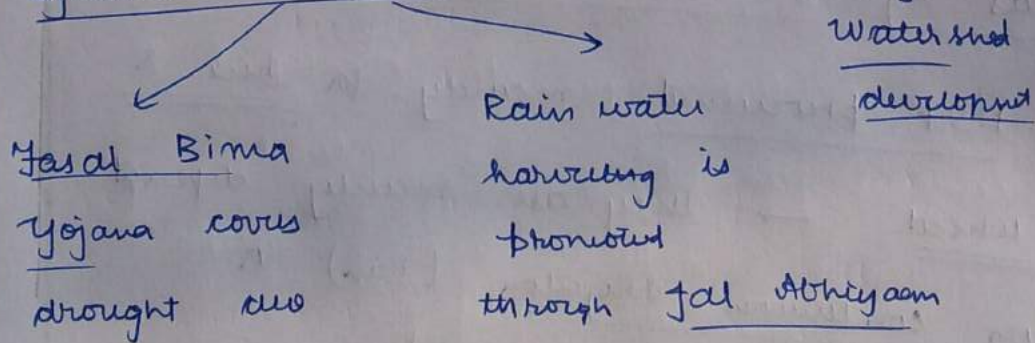
Bias against rainfed agriculture

- MSP procurement mainly for rice & wheat → they are mainly dependent on continuous irrigation (rain) or minimum irrigation (wheat).

- Crops like millet / jowar of South India aren't promoted due to less procurement.
→ they are mainly rainfed.

- Power subsidies given for tubewell irrigation, thus favouring tubewell irrigation
- Canals are built and river water linking projects like Ken-Betwa linking also favour non-irrigated irrigation.

However, rainfed irrigation is not ignored completely



Rain water harvesting is generally considered as a unsustainable irrigation practice. But it still covers more

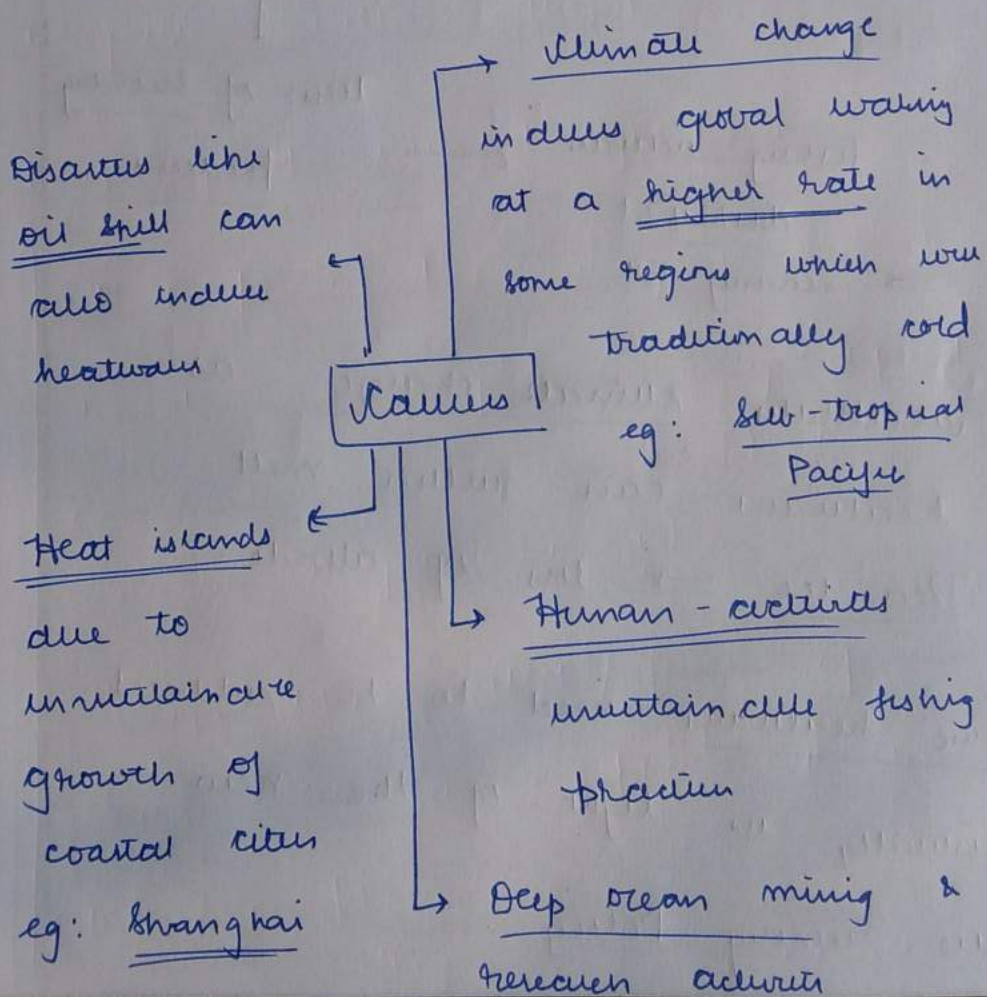
than 50% of agriculture in India.

Hence, efforts are needed in this direction

5. Enumerate the major causes behind marine heatwaves. Also, discuss their impact on the ocean ecosystem. (150 words) 10

एकल-उपयोग वाले प्लास्टिक क्या हैं और ये पर्यावरण के लिए खतरा क्यों हैं? भारत में एकल-उपयोग वाले प्लास्टिक को चरणबद्ध रीति से समाप्त करने से संबंधित चुनौतियों पर चर्चा कीजिए।

Marine heatwaves refer to the sudden increase in temperature of marine ecosystem, mainly in large water bodies



Impact on ocean - ecosystem

- marine organisms considered to be stenothermal : can't survive a range of temperatures
→ loss of marine biodiversity
- coral reef bleaching → loss of primary producer
↓
loss of secondary producer
← fishing activities disrupted
⇒ economy hit
- accelerates climate change as heatwaves can further melt sea-ice ⇒ loss of albedo.

Marine heatwaves need to be addressed holistically in light of the new

Blue Economy Policy.

6. Aseismic structures are touted as a viable solution to combat earthquake destruction. In this context, highlight the need of a National Program on Seismic Retrofitting of Buildings and Structures in India. (150 words) 10

भूकंप के विनाश से निपटने के लिए भूकंपीय संरचनाओं को एक व्यवहार्य समाधान के रूप में माना जाता है। इस संदर्भ में, भारत में भवनों और संरचनाओं के भूकंपीय पुनर्निर्माण पर राष्ट्रीय कार्यक्रम की आवश्यकता को रेखांकित कीजिए।

India is highly prone to
Earth quakes across geography.
Vulnerability of population especially
in hilly areas need to be reduced
to frequent earth quakes.

National Program on seismic retrofitting
of Buildings & Structures :

- will help to induce strength in
important structures like government
offices
- Helpful to secure critical infrastructure
like telecom stations
- Cultural preservation to strengthen the

ancient structures without destroying
their ~~are~~ originality.

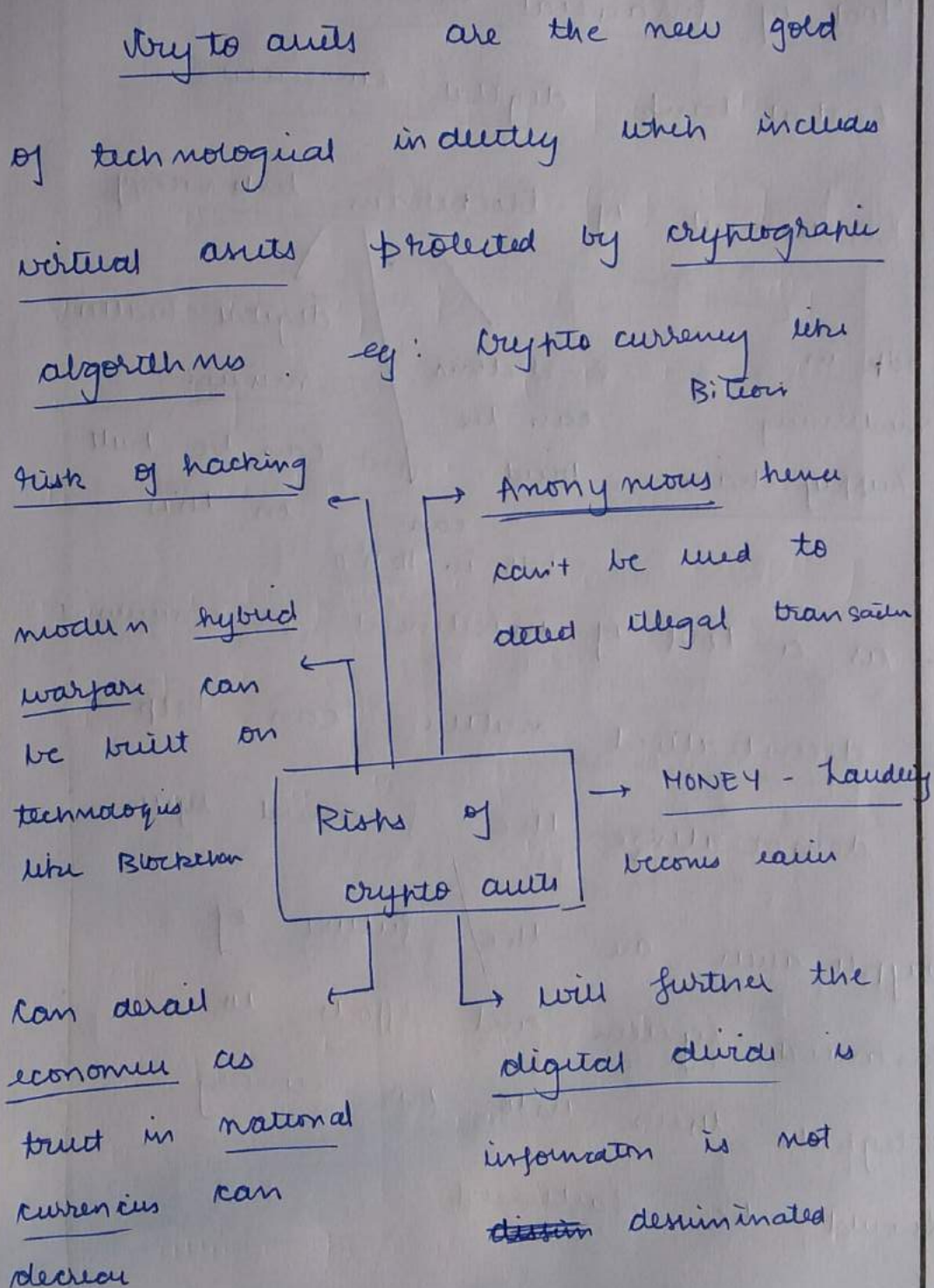
- Hilly areas along the Himalayas
are in Zone - I of seismic
vulnerability. Extra attention to
these areas

- Adoption of best practices from
countries like Japan through
a dedicated fund for research

NMSRBS can be the ~~best~~ way
to reduce vulnerability - of both
physical & technological in the
increased earthquake environment.

7. Despite the risks associated with cryptoassets, their underlying advantages should not be overlooked. Discuss. (150 words) 10

क्रिप्टो-एसेट्स से जुड़े जोखिमों के बावजूद, उनके अंतर्निहित लाभों की उपेक्षा नहीं की जानी चाहिए। चर्चा कीजिए।



Underlying advantages

- Tool of financial inclusion through central bank digital currencies
- Development of blockchain technology
 - help in modernising supply chain
 - e-elections can be tried
 - can help in IR 4.0
 - digital health mission can be built on this
- as a tool of investment for consumers
- decentralised nature can help democratise the financial system.

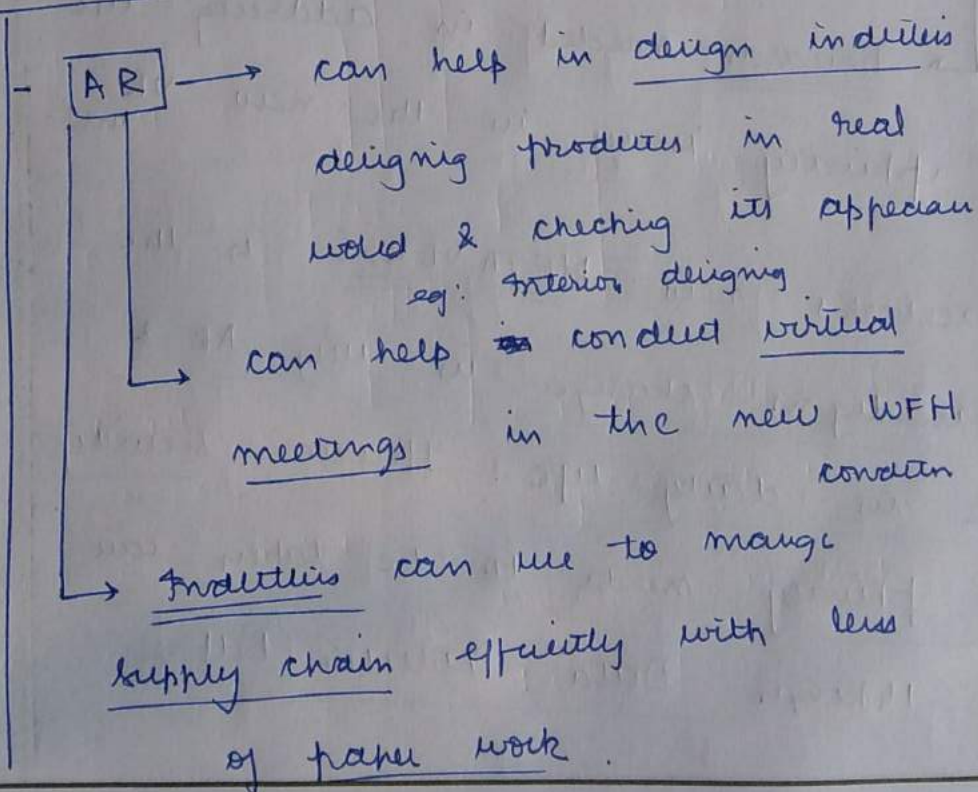
Cryptocurrencies are the future of financial system and efforts to integrate them into our economy should be furthered

8. Virtual Reality and Augmented Reality (VR and AR) have massive innovation potential across a wide range of industries and research fields in India. Discuss. (150 words) 10

हालांकि, कृषि जैव प्रौद्योगिकी में हमारे कुछ सबसे महत्वपूर्ण मुद्दों के समाधान की अपार क्षमताएं हैं, लेकिन भारत में इसके विकास के समक्ष अनेक बाधाएं विद्यमान हैं। चर्चा कीजिए।

Virtual Reality refers to a completely virtual world without connection to reality, whereas Augmented Reality refers to ~~add~~ adding virtual elements to the real world.

Innovation potential in India



- research in medical science & teaching to medical students
- virtual classrooms can feel real

VR → can define the new gaming industry

eg: virtual car races

- entertainment industry through VR movies for real life experience

- research needed in addressing the privacy issues in the new VR world.

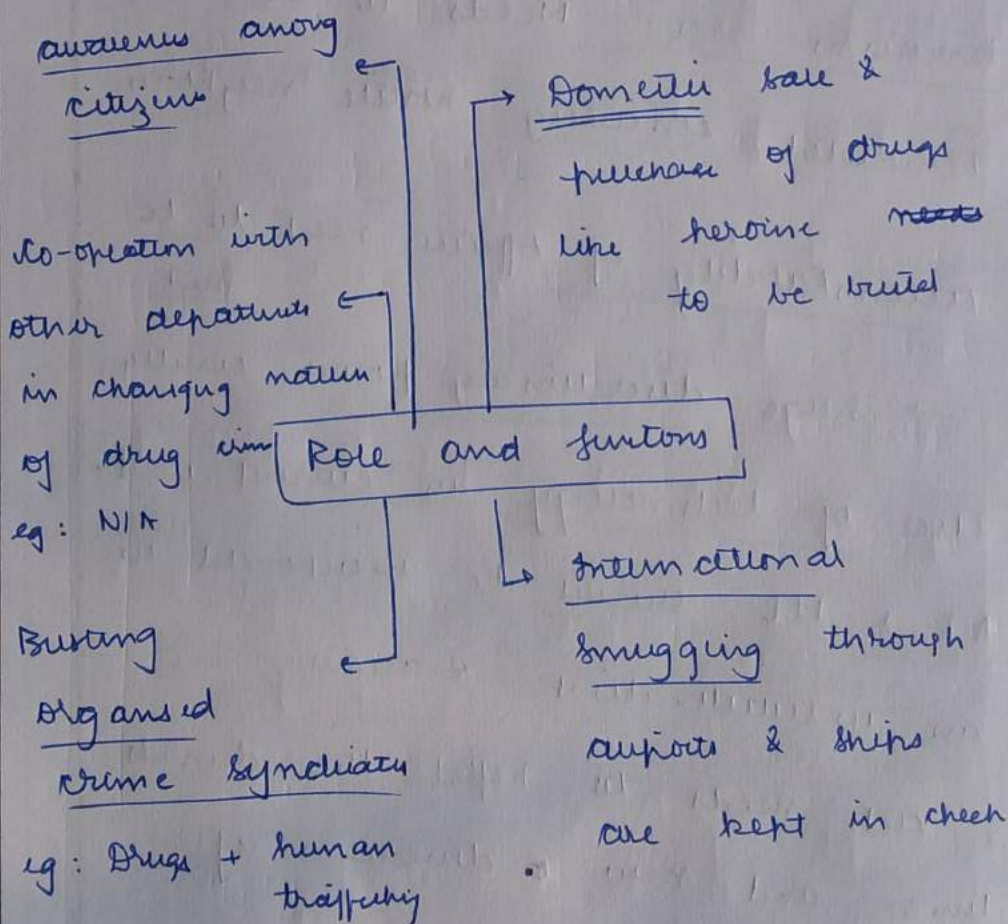
Facebook's new METaverse is the paradigm change in using AR & VR in daily life. However security & privacy needs to be taken care of through Data Protection bill.

9. Discuss the role and functions of Narcotics Control Bureau (NCB) and examine whether the NDPS Act, 1985 needs to be remodelled.

(150 words) 10

नारकोटिक्स कंट्रोल ब्यूरो (NCB) की भूमिका और कार्यों पर चर्चा कीजिए तथा परीक्षण कीजिए कि क्या NDPS अधिनियम, 1985 को पुनर्निर्मित करने की आवश्यकता है।

Narcotics Control Bureau is the nodal agency in the country to curb the usage and trading of illegal narcotics substances.



Remodelling of NDPS act, 1985

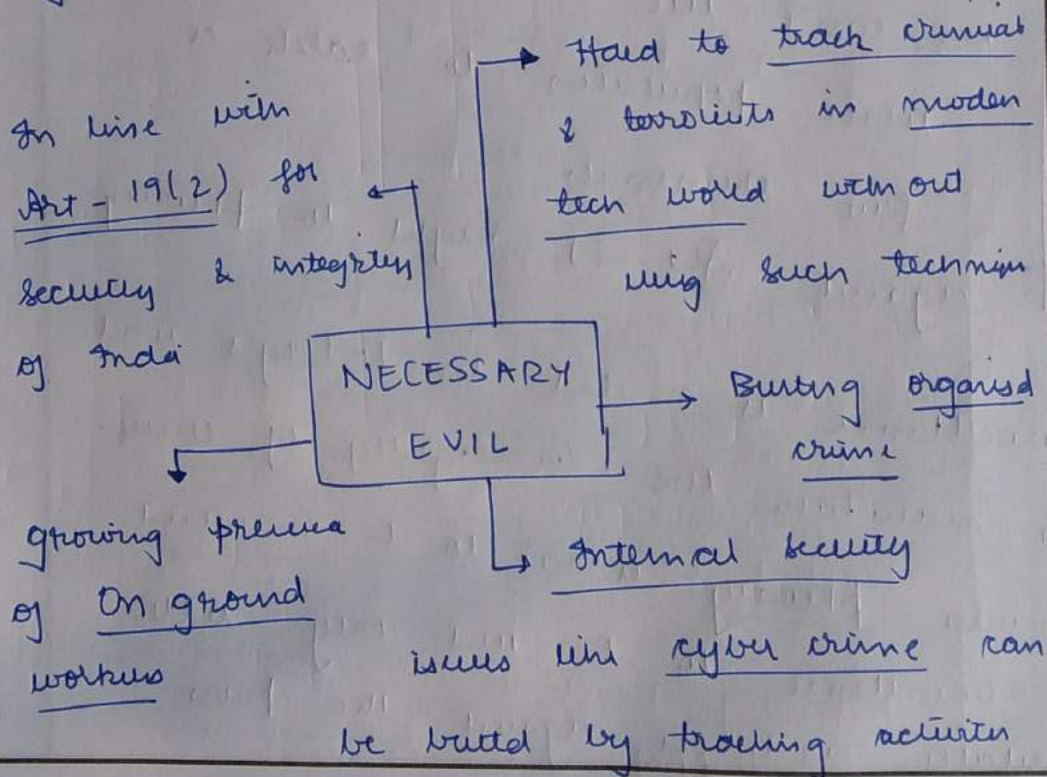
- Provisions of co-operation with other departments need to be explicitly provided in changing crime world
eg: ATC, NIA etc.
- Modelled in a pre-cross border terrorism era. Needs to be remodelled considering hostile neighbours
- accountability of officers need to be fixed
→ huge discretionary power currently
- Use of technology in current world -
AI & ML should be incorporated in an institutionalised manner.

NDPS act needs to reflect the demands of time and new dimensions of internal security

10. Recent events have raised concerns around the issue of surveillance in India. Do you think surveillance is a necessary evil to tackle crime and terror? Discuss the various arguments on the issue. (150 words) 10

हाल की घटनाओं ने भारत में निगरानी के मुद्दे को लेकर चिंता बढ़ा दी है। क्या आपको लगता है कि अपराध और आतंक से निपटने के लिए निगरानी एक आवश्यक बुराई है? इस मुद्दे पर विभिन्न तर्कों की विवेचना कीजिए।

Surveillance refers to usage of technologies to track activities of people to gain confidential information regarding his/her intents. Recent Pegasus scandal around the world ~~has~~ has gained attention towards surveillance.



However concerns are

- Can be used to curb free speech and expression under Art-19
- Can be used to premise civil society
eg: journalists can be used as tools for political purpose
- chilling effect on use of fundamental rights
- Doctrine of proportionality violated
- we can't use surveillance on whole population to catch a few criminals
- against Art-21 right to privacy

Surveillance is needed in today's world to maintain the sovereignty of country.

However privacy has to be maintained & surveillance to be used only with suitable evidences against the person

11. The decision to grow a particular crop by a farmer is affected by various factors other than the yield of a crop. Discuss this statement and assess the need for bringing a change in the cropping pattern in India.

(250 words) 15

एक किसान द्वारा किसी विशेष फसल को उगाने का निर्णय उक्त फसल की उपज के अतिरिक्त विभिन्न कारकों से प्रभावित होता है। इस कथन की विवेचना कीजिए तथा भारत में फसल पद्धति (क्रॉपिंग पैटर्न) में परिवर्तन लाने की आवश्यकता का आकलन कीजिए।

Cropping pattern used by a farmer is an interplay of many factors other than just a yield of a crop. India grows crops varying from staple like rice, wheat to commercial crops like tea, coffee.

Factors affecting decision to grow crop

Government policies

- Procurement at MSP or not
eg: rice, wheat are favoured
- Subsidy on the fertilizers & pesticides and on the crop ~~or not~~
- Crop covered under insurance
Schemes like Fasal Bima are favoured

- A more energy intensive crop,
whether government provides power
subsidy

Infrastructure availability

- Storage of perishables like horticulture
- Cold storage facilities
- Farm gate infrastructure for
processing
eg: sugarcane is processed in UP, Madhya Pradesh
- Upstream linkages to the
wholesale market.
eg: road connectivity

Miscellaneous factors

- Cooperative structure
eg: sugarcane in Maharashtra
- Labour intensive v/s capital intensive
- Skilled labour v/s unskilled labour
- Technological availability
eg: Happy seeders harvester

Need to bring change in cropping pattern

- Over dependence on Rice & Wheat culture due to MSP regime has led to

- Over usage of fertilizers → depletes soil

- Water wastage & water-logged fields → increased salinity

- Crop diversification not promoted
→ overdependence on a particular market of rice & wheat

- Climate change will induce harsher climate

→ drought resistant crops should be promoted eg: Millets

→ efficient water usage & better irrigation facilities.

Agri-reforms are a much needed step to change the cropping pattern & shift towards a more healthy & resilient multi based agri-economy

12. Identifying the importance of livestock in the Indian agricultural economy, enumerate the steps taken by the government in this regard. Also, discuss the potential impact of climate change on the livestock sector.

(250 words) 15

भारतीय कृषि अर्थव्यवस्था में पशुधन के महत्व को चिन्हित करते हुए, इस संबंध में सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए। साथ ही, पशुधन क्षेत्र पर जलवायु परिवर्तन के संभावित प्रभावों पर चर्चा कीजिए।

Livestock sector contributes to $\frac{1}{3}$ rd of the agriculture GDP. It ~~is~~ ^{covers} dairy, poultry etc. industries ancillary to agricultural practices.

Importance of livestock

- Fallback option in case of any disaster like drought.
- a cheaper alternative and a means of survival for small landholders.
- Both consumption + market value
eg: milk from cows
- Strong resilience to climate and needs less attention as compared

to crops

- Complementary benefits to agriculture.

eg: used both in fields to pull
carts and at home.

Steps taken by government

- ~~Agriculture~~ Animal Husbandary

Infrastructure fund of 15,000 crore
announced to improve the infra.

- National Bovine diseases programme
to address issue of bad health

- Modernising abattoirs for new
generation poultry industry

- Shelters for cows in states like
UP to address issue of old
age livestock.

Rashmiya

- Yokul mission for sustainable development
of dairy industry.

water scarcity

both for
humans & animals

→ decrease in pasture
land for the
livestock due to
agri - pressure

Impact of
climate change

Temperature
change

may
impact

productivity

eg: milking at
higher temperature is
low

→ new diseases
will erupt
due to unhealthy

biological organisms

→ more human-
wildlife conflict
will endanger
the livestocks

The livestock sector is backbone of
agriculture & needs to be made
resilient for new generation issues
of climate change

13. It has been argued by some economists that supply creates its own demand. In this context, discuss the merits and demerits of reliance on investment in infrastructure to boost the Indian economy.

(250 words) 15

कुछ अर्थशास्त्रियों द्वारा यह तर्क दिया जाता है कि आपूर्ति अपनी मांग को स्वयं सृजित करती है। इस संदर्भ में, भारतीय अर्थव्यवस्था को बढ़ावा देने के लिए बुनियादी ढांचे में निवेश पर निर्भरता के गुण एवं दोषों की विवेचना कीजिए।

Demand for any product or service is a result of many factors like consumer needs, trusts, affordability, overall economic health. But a good and stable supply can also induce demand & hence revive economy.

Investment in infrastructure & economic boost

- 1) Transport infrastructure improvement will ensure easy and cheap travel options → boost to ancient industries
eg: Baununga airport under UDAN has boosted the tourism in north-Bihar

2) Power infrastructure → consistent & reliable power supply will encourage MSMEs to set up new units

3) Communications infrastructure → will help to boost the digital economy in the current set-up.
eg: better internet connectivity at distant places → encourage tourism

4) Infrastructure development → employment growth
↓
more money with people
← spend on goods & services
↑
(Boost to economy)

5) Can solve the issues of demand crunch by reducing cost of services & goods through an efficient supply chain. eg: cut cost in transport, cut cost in AT & C losses. etc.

Demerits of infra-led boot

- Won't address the issues of
consumer trust in economy
- Poverty, hunger and inequality in
short term are not ended.
- Infra development through PPP models
may actually lead to increase in
prices further eg: private railways
- Infra development keeps boosting
economy in an already stagnant position.
Current slump in growth may
not be affected by infra.
- Infrastructure in contrast through National
Bank for Financing Infrastructure is
a welcome step. But other schemes
to cause immediate demand boost
are also needed. eg: extension of
free food grain

14. Innovations emerge not just as an opportunity but also as a pre-condition to assure the sustainability of food production. Analyse the statement in context of the food processing sector in India. (250 words) 15

नवाचार, खाद्य उत्पादन की संधारणीयता को सुनिश्चित करने के लिए न केवल एक अवसर के रूप में बल्कि एक पूर्व शर्त के रूप में भी उभरें हैं। भारत में खाद्य प्रसंस्करण क्षेत्र के संदर्भ में, इस कथन का विश्लेषण कीजिए।

Innovations in food processing
sector can help to increase the
current 9% of manufacturing GVA to
15% target.

Innovations as an opportunity

- Huge raw material base and diversified crop production.
- Heavy workforce already working in agri sector (~ 50%).
- untapped potential of agri-startups
- opportunity in capturing new markets like Africa

- Diversity of Indian food and GI tags give great opportunity to boost agri - exports

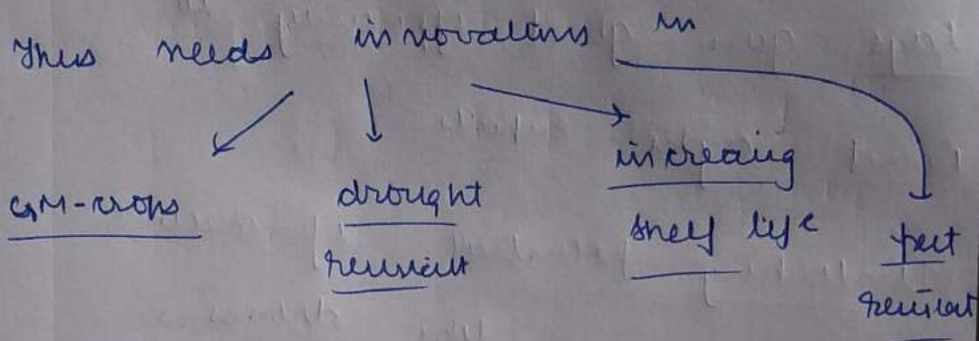
- Unlocking potential of new tech innovations like drones, GIS mappings etc. to improve scalability of operations

Innovation as a pre-condition to sustainability

- agri-sector is in crisis due to stagnant growth. To double farmers income, innovations in FDI is a must.

- Disguised unemployment needs to be channelized towards production food processing sector.

- Climate change produces new challenges



- To exploit the innovations in technology for sustainable agriculture

like → soil health card
modern harvesters
Happy seeders.

The food processing sector is an important link between agri & manufacturing sector. To give a boost to the overall economy, innovations in this is must.
Agri - stock, Agri - infra fund etc. can give that push.

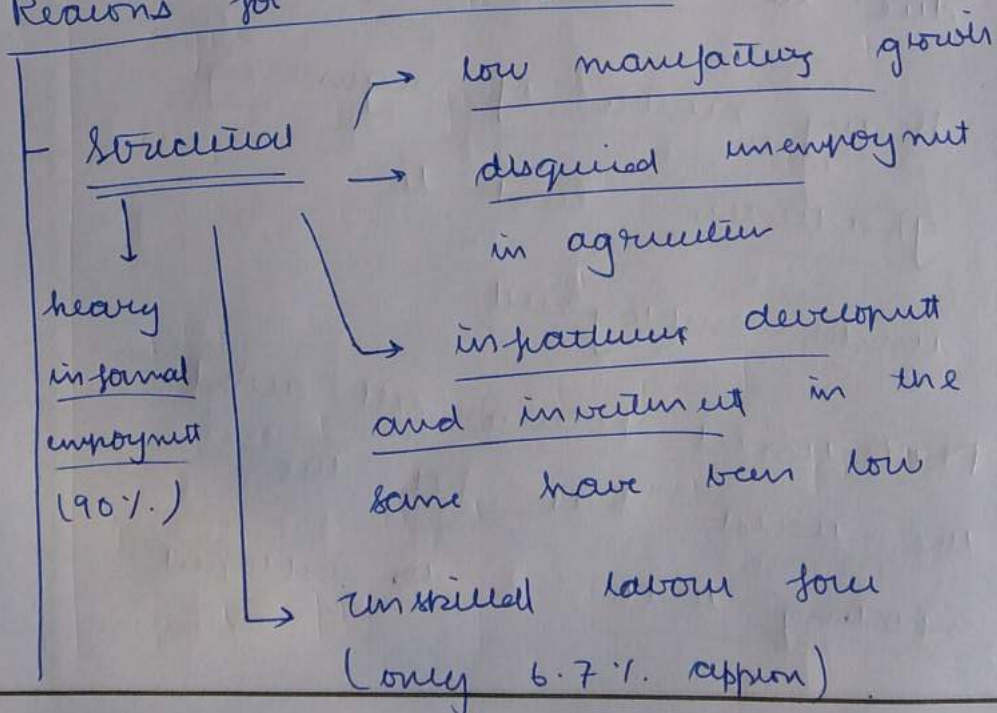
15. The factors contributing to unemployment in India are not merely a result of the structural issues related to the Indian economy. Discuss. Also, highlight the measures taken to address the problem of unemployment in recent times. (250 words) 15

भारत में बेरोजगारी को बढ़ावा देने वाले कारक केवल भारतीय अर्थव्यवस्था से संबंधित संरचनात्मक मुद्दों का परिणाम नहीं हैं। चर्चा कीजिए। साथ ही, हाल के दिनों में बेरोजगारी की समस्या के समाधान के लिए किए गए उपायों पर प्रकाश डालिए।

Unemployment rate in 2019-20
was about 4.8% in India. Some
estimates ~~that~~ predict it to go
beyond 10% during the pandemic.

The reasons for the pandemic are
both structural & non-structural.

Reasons for unemployment



- Non-structural reasons

- COVID-19 pandemic led to firing of many employees. Only those survived who were digitally connected

- Overall decreasing world economy growth even before pandemic

- Reluctance of people towards skill development programmes due to bad perception

- Heavy number of engineering graduates lead to under-employment

- Protectionist policies all around the world has hit the exporting units & employment

Government recent measures

→ Employment boost through encouraging
manufacturing sector

- Labour laws relaxation
- PLI scheme
- Infrastructure pipeline

→ through guarantee programs

- PM Yash Kalyan Rojgar Yojana
to give employment to migrants
who returned home

→ Skill development focus

→ apprenticeship + PM - Kaushal
Vikas Yojana

Unemployment is a major roadblock in
the growth story of India. The
demographic dividend needs to be
exploited through reforms across
sectors.

16. Highlighting the major announcements made by India in the recently concluded COP26, examine India's capabilities in achieving net zero emissions by 2070. (250 words) 15

हाल ही में संपन्न COP26 में भारत द्वारा की गई प्रमुख घोषणाओं पर प्रकाश डालते हुए, वर्ष 2070 तक शुद्ध शून्य उत्सर्जन की स्थिति प्राप्त करने में भारत की क्षमताओं का परीक्षण कीजिए।

COP-26 in Glasgow under UNFCCC was used by India to give voice to the demands of developing world along with new commitments for the climate action.

Major announcements :

- Net zero carbon emissions by 2070
- Renewable energy capacity to 50% of net energy by 2030
- Non-fossil energy to 500 GW by 2030
- Reduce carbon intensity by 45% by 2020
- Additional decrease of 1 billion tons of carbon emissions as

currently projected by 2030

- India also proposed amendment to the provision against coal usage. India demanded reduce and not eliminate coal usage.

India's capabilities in achieving

- 1) Already on track to achieve INDC commitments.

→ already 25% reduction of emission intensity

→ close to 40% non-fossil energy

- 2) India's leading international collaborations like ISA &

disaster-resilient infrastructure.

- 3) A number of initiatives to promote

non-fossil energy :

- National solar mission

- PM - KUSUM
- Rooftop solar energy program
- National Hydrogen mission
- FAME for electric vehicles
- PLI scheme for solar manufacturing

4) Huge investments in the new age technologies like advanced battery

5) India's reputation around the world for sustainable practices promotion. eg: Organic farming, ecosystem restoration initiatives (Forest cover increased to 24.56%.)

India is on the right track to achieve the 2070 target of net zero. However, the continued usage of coal power plants need a relook. and realigned to national targets.

17. While geography plays a definite role in the recurring disasters in Western Ghats, it is the human intervention that has exacerbated them. Discuss. Also, suggest measures to protect Western Ghats from these frequent disasters. (250 words) 15

यद्यपि, पश्चिमी घाट में बारंबार आपदाओं के घटित होने के पीछे भौगोलिक स्थिति एक निश्चित भूमिका निभाती है, तथापि मानवीय हस्तक्षेपों ने उन्हें और बढ़ा दिया है। विवेचना कीजिए। साथ ही, बार-बार आने वाली इन आपदाओं से पश्चिमी घाट को बचाने के उपायों का सुझाव दीजिए।

Western Ghats are among the biodiversity hotspots of the world and has recently become a disaster hotspot as well. Both natural and anthropogenic reasons are present for the same.

Role of Geography

- Escarpmnts present due to epirogenesis. It makes it vulnerable to landslides.
- Monsoon hits them full, causing urban floods.
- Biodiversity rich $\Rightarrow$ may cause biological disaster

Exacerbation by Human activities

- 1) Unplanned urbanisation : cities of western coast like Mumbai get flooded in every monsoon due to irregular & unorganised growth
- 2) Human induced earthquakes : due to mining activities.
eg: Koyna earthquake
- 3) Damaging the forests → leads to increasing change of landslides
- 4) Mangrove deforestation → no barrier against cyclones. eg: Taukhata cyclone damaged the ghats
- 5) Human-wildlife conflict has increased due to continuous disturbance of the fragile ~~ecosystem~~ ecosystem.

To protect Wetland Ghats from decline

- 1) Respect for the ecological hotspots and the creation of critical wildlife hotspots.
- 2) Environmental impact assessment need to be further strengthened in the regions with fragile geography.
- 3) Using technology to map vulnerability of the indigenous people separately.
- 4) Building capabilities against increased dangers of climate change through R & D, training

Wetland Ghats are an important geographical feature for the peninsula India. Needs to be part of sustainable disaster resilient growth.

18. The IPR regime in India is mired by inadequate protection and ineffective implementation. In this context, discuss how the IPR regime can be made more robust and effective. (250 words) 15

भारत में IPR प्रणाली अपर्याप्त संरक्षण और अप्रभावी कार्यान्वयन से ग्रस्त है। इस संदर्भ में, चर्चा कीजिए कि IPR प्रणाली को और अधिक मजबूत एवं प्रभावी कैसे बनाया जा सकता है।

IPR regime in India is guided by the Patents act and WTO TRIPS agreement. However, the protection provided is not enough.

Inadequate protection

- Provisions like compulsory licensing is considered against growth of innovation.
- Protection to plant varieties act is also tilted in favour of farmers.
- Protection against cyber-piracy is not adequate.
- ~~Protects~~ India has continuously demanded relaxation of IPR rules at WTO for domestic benefits.

In-effective implementation

- Lack of technology to detect originality of cyber-content
- Training of officials for IPR rules not adequate
- People's ignorance towards using original content & product causes authorities to be lenient.

To make it more robust & effective

- Training & sensitization
- Schemes to promote patent filing
- GI tags to be more frequently given
- Standard methods to detect piracy
- Safechecks against the IPR rules only at times of emergency like COVID-19

Indian IPR regime needs to
take into consideration the best
practices around the world. It
will also address the issue of
brain drain & retain skilled
human resource.

19. What are the similarities and differences between the activities of terrorists and organized criminal groups? Also, elaborate upon the fact that their linkages occur in both tactical and strategic ways. (250 words) 15

आतंकवादियों और संगठित अपराधिक समूह की गतिविधियों के बीच समानताएं और असमानताएं क्या हैं? साथ ही, इस तथ्य पर सविस्तार चर्चा कीजिए कि उनके संबंध सामरिक और रणनीतिक दोनों तरीकों से होते हैं।

Terrorists and organized criminal groups though ~~related~~ with ~~different~~ different objectives, have essentially converged ~~with~~ in many aspects.

Terrorists try to induce fear among people and force government to meet their demands ~~that~~ based on political or ideological basis.

Organised crimes on the other hand are indulged in illegal activities mainly for profit making.

Similarities b/w the two

- 1) Both use illegal activities against law
eg: weapon trade etc.

(2) Indulge in killing people if required. eg: ~~Quinn~~ Syndicates & Drug terrorist gangs.

(3) Often use illegal smuggling methods like infiltration / marine navigation to transport the requiem.

Differences b/w the two

Terrorists

- aim is political / ideological
- weapons are the primary instrument
- try to conflict with government
- usually don't involve govt. officials within ~~organisations~~

Organised crime

- aim is profit making
- weapons are secondary, business is primary
- try to avoid conflict
- messes with political, & business.

Linkages b/w the two

1) Tactical ways

↳ Terrorists use organic crime
to finance & organic crime
use terrorists for protection

eg: Opium production & smuggling
from Afghanistan

2) Strategic ways

↳ Help each other to recruit
foot soldiers

↳ To get information & intelligence
regarding government officials

↳ Smuggling through each other's
channels.

Terrorism & Organic crime are embedded
into one other. A holistic approach
to deal with them is needed.

~~together~~

20. There is a view that the 'civil society is emerging as the new frontier of war', in the 4th generation of warfare. Do you agree with this view? Substantiate with logical arguments. (250 words) 15

ऐसा माना जाता है कि नागरिक समाज, युद्ध की चौथी पीढ़ी में एक नए मोर्चे के रूप में उभर रहा है। क्या आप इस विचार से सहमत हैं? उचित तर्कों के साथ पुष्टि कीजिए।

Civil society, though forms an important link b/w govt. & citizens is ~~still~~ in present world viewed a face of threat.

Civil society as new frontier of war

- To ideologically radicalise youth by picking up sensitive issues
eg: Kashmir separatists are radicalised and recruited from colleges

- Obstruct in economic & military infrastructure in name of environment & human rights

eg: continuous oppression of Indian army's Kashmiri squatters

- Work as on-ground workers
- Help many nations with information.
eg: Chinese strategies
- IB reports: 2-3% of GDP lost due to NHOs.

However, civil society plays a credit role in any democracy

- gives voice to unheard.
eg: genuine HR violation + come up
- Environmental activists get a say
- In line with fundamental rights like Art - 19
- Necessary & constructive criticism should be welcome.

Civil society and government both needs to give breathing space to each other. Civil society needs to be

sensitive towards government priorities
and government needs to appreciate
the use of civil society. The new
regulations under FCRA can give

this balance