

Name of Candidate	KRITIKA GOYAL		
Medium Eng./Hindi		Registration Number	
Center	ONLINE	Date	20/07/2022

INDEX TABLE		
Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
11	15	
12	15	
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16	15	
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18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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

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

EVALUATION INDICATORS

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

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

Q1.

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Green Budgeting refers to budgeting where the expenditure and revenues are oriented towards Investing in green projects.

[e.g] - green highways

→ Strong Strategic framework

- Effective Policy for approvals, grants
- Incentivisation to enhance investment in green projects

[e.g] subsidy on Electric vehicles

- Plug And Play Approaches for clearance of projects

→ TOOLS

- Use of geospatial technology for evidence based results

[e.g] - GIS in Agriculture going green & benefits as a result.

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- o Measuring GDP via green GDP
[e.g] Done in Uttarakhand.

- o Natural Resources Accounting as done by
MOSPI

→ BUDGETARY GOVERNANCE

- o Funds to specified sectors.
[e.g] green Industrial growth via PLI
scheme
- o Coordination among ministries.
[e.g] pm Gati Shakti Plan
- o Use of e-governance for project approval
[e.g] PARIVESH Portal.

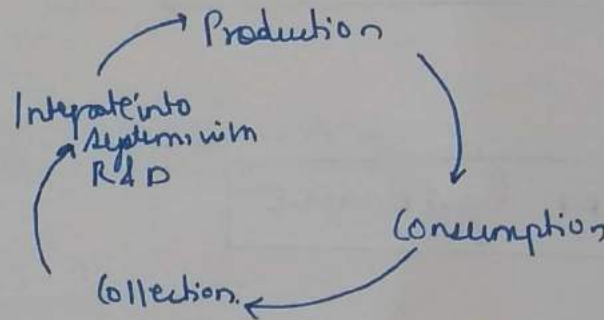
The Budget 2022-23 pushes towards
green budget as well through
Monetization Plan, Atmanirbhar Bharat.

Q2.

The NITI Aayog has called for development of circular economy in the country in the coming few years.

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Circular economy model

→ **NEED**

- ① To fulfil India's commitment to Paris Agenda and
- ② To decarbonize economy
[< 50% dependence on coal, oil].
- ③ To promote sustainable development
[by not throwing waste in environment]
- ④ To monetize waste so created
[India is 3rd largest electronic waste generator, Global E Waste monitor report]³⁰

⑤ To enhance manufacturing share in economy
[Currently at 16.1% of GDP contribution]

⑥ Cost effective, manufacturing promoted
measures.

→ Challenges.

① Lack of technical know-how for circular economy

② Informalised economy locks capital for circular economy

③ Skilled workforce is required to push circular economy

④ Policy ecosystem is missing to incentivise industry.

⑤ High costs in initial setup of circular economy

Global coordination & push to domestic research.

Formalise and credit boost via Mudra Yojana, 59 minute loan portal.

Skilling under schemes.
[e.g.] Green Skills programme
[e.g.] ASEEM Portal.

Strong regulatory framework is needed.

Subsidise circular economy initiatives.

Circular economy can help the country to achieve target of 5 trillion dollar economy by 2024

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Q3.

The Major Ports Authorities Act has been passed in order to overcome previous issues of legislative framework for major ports.

With 111 major ports in country, the Act is a much needed step in right direction

AUTONOMY AND FLEXIBILITY

- (a) Raising loans has become easier without central government's permission for 50% of loans for major ports.
- (b) Dispute resolution mechanism has been provided separately to instil confidence among investors.
- (c) Major Port Authority for every major port to plan activities and also development of major ports.

(d) Enhances focus also on Inland Navigation which constitutes less than 1% of total modal mix

→ GOVERNANCE

(a) Focus of resolution of disputes via mediation
Conciliation

(b) The Major Port Authority created has power to develop ports and take decisions.

(c) SARON system for grievances addressed.

(d) Development of coastal economy as a result.

(e) Single Window Approach For all major port issues to be resolved via major port Authority.

The Act is a step in right direction to achieve goal of SARAR Approach and vision & push to a blue economy

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The NITI Aayog has put forth Raft Model law on Conclusive titling in order.

to shift from presumptive land titling

o Presumptive land title means



unclear land titles

o Conclusive land title means



land titles are fixed

→ Need to shift

① land disputes are increasing
[7.5 million people have land disputes over 2.5 million hectares of land, Centre of Policy Research]

② Agricultural growth possible with conclusive landtitle.

Clear land title → Credit to Agriculture

③ Urban land planning becomes easier as a result

④ Industrial growth possible with clear

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and faster land acquisitions

- ⑤ Tax collection on lands can be enhanced with clear titles
- ⑥ Vacant land can be utilized with clear titles

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HURDLES

- ① Lack of updated records
- ② Colonial time period Zamindari system has meant poor record keeping
- ③ land remains a sensitive topic
- ④ Digital knowhow of personnel is less.
- ⑤ Courts, burdened with litigation

SOLUTIONS

- ① Use of technology e.g. GPS, GIS.
- ② consultation with stakeholders concerned while updating records.
- ③ SVAMITVA scheme to be harnessed
- ④ SKILL India, Digital India to be leveraged.
- ⑤ ADR mechanism to be promoted.

The Digital land records Modernization Programme can ensure conclusive land titling.

(B) ECONOMIC PROSPERITY

- o Reduces Current Account deficit
[currently at 1.2% of GDP]
- o Push to a 5 trillion dollar economy with continuous methanol energy supply.
- o Part of global value chain with -:
 more energy needs fulfilled → more production → more exports

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ISSUES

- (a) Research is less in this domain
- (b) Investment in methanol economy is not much
- (c) Huge dependence on coal
- (d) Regulatory framework not there

SOLUTIONS

- o Push Innovation in methanol sector.
- o PLI scheme needed to boost this sector.
- o Awareness generation.
- o Well coordinated policy needed.

The NTI Aayog's Roadmap on Methanol Economy must be leveraged to run India on methanol

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Geospatial Technologies are a step taken to manage and reduce disaster risk with help of technology which gives information on earth's vital elements

[e.g] → Geospatial Technology like GIS, GPS to understand earth's geographical features.

→ Disaster Risk Reduction

① Hazard and vulnerability risk Assessment via Geospatial technology

[e.g] - landscape susceptibility in Sikkim

② Warning systems in place

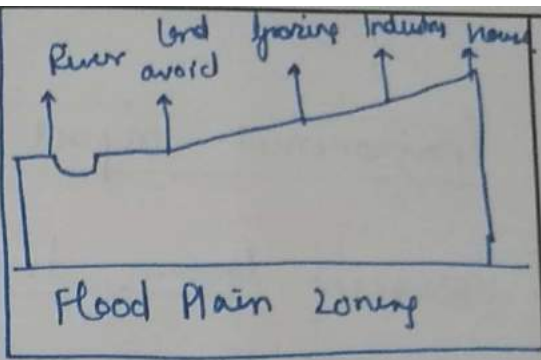
[e.g] IFLOWS, Mumbai

③ Planning and zoning of areas

[e.g] Flood Plains zoning

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DISASTER MANAGEMENT



① Aids effective rescue operations
[e.g] via drores in.

Recent Assam floods.

② Coordination between forces concerned.

[e.g] between NDRF, SDRF.

③ Disbursal of relief material to those who are caught in disaster

④ Assessment of damages so caused.

[e.g] - satellite technology used to assess loss via Manipur landslide

⑤ Rehabilitation ensured via use of technology
[e.g] - mapping rehabilitation camps.

Geospatial technology allows therefore to

fulfill SDG 13.1 for effective disaster prevention and management.

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Environment Impact Assessment aims at assessing losses, damages which would incur after a project is taken.

Current focus

- On lines of precautionary principle to account for precautions while planning activities.
- On lines of polluter pay, to account for damages which may be caused.

Shift needed.

- ① To focus on sustainable development by conserving resources
- ② Watershed development needs to be promoted
[e.g.] Jalgaon model. 30

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③ Afforestation activities need to be emphasized.

④ Protect rights of local communities

[e.g] - Tribals in Mining Areas.

⑤ Push towards carbon neutrality by 2070

⑥ In line with idea of Corporate Social Responsibility

[e.g] Mahindra to go carbon neutral by 2070

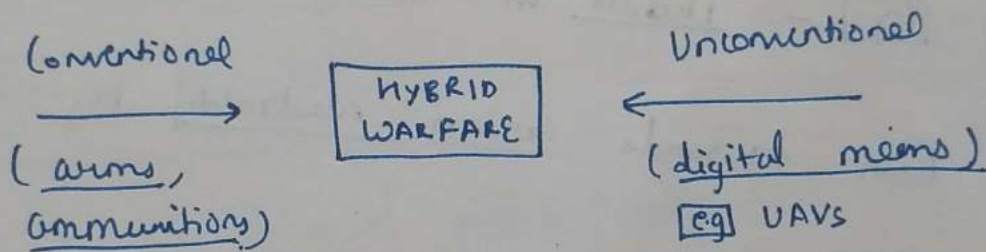
⑦ Ecosystem services so provided by environment to be realized.

The above steps would ensure fulfilling Sustainable development goals and push to a green economy.

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Hybrid Warfare refers to warfare which involves use of conventional and unconventional means to fight a War.

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→ PREPAREDNESS

① There is effective preparedness as -:

- ① Use of Technology being increased [e.g] - Border Protection Grid
- ② Defense modernization being done [e.g] 75 AI products is launched in defense.
- ③ Defense budget is 2-2.5% of GDP allowing for better expenditure, Capital Acquisitions.
- ④ Research in changing warfare being done [e.g] 10 centres of excellence in Academic Institutions to study the same.

⑧ Use of cyber and space capabilities by defence

[eg] Defence Cyber Agency

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① ISSUES

Solution

① Research expenditure as % of defence expenditure is only 6:1. against China's 20:1.

① Bureau of research Advanced Defence System is needed today to boost expenditure (Aparna Chandra Committee)

② Lack of skilled human resources to manage hybrid warfare

② Agriweaver scheme to be utilised

③ Red tapism, IPR issues in unconventional warfare

Clear timelines for approval solving IPR disputes in time.

④ Attacks across border. [eg] UAV attack on J&K Air Space Station

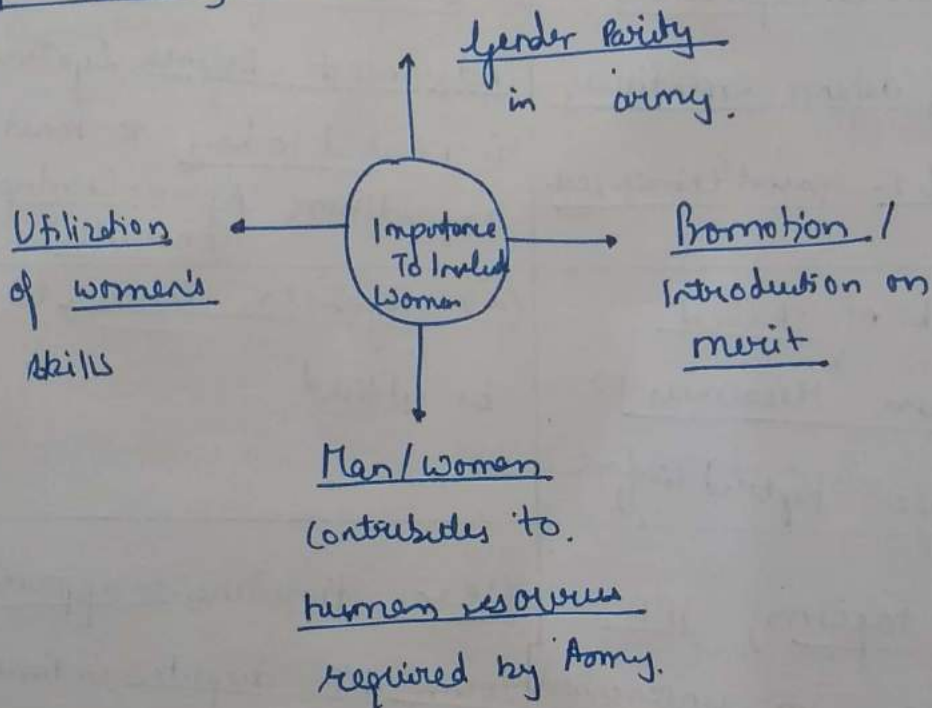
④ UAV technology to be leveraged.

As suggested by Rama Rao Committee, there is need to have Active discourse on hybrid warfare today to boost preparedness.

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With Permanent Commission to Women being granted, there is a greater call now for including women in armed forces, particularly combat roles.

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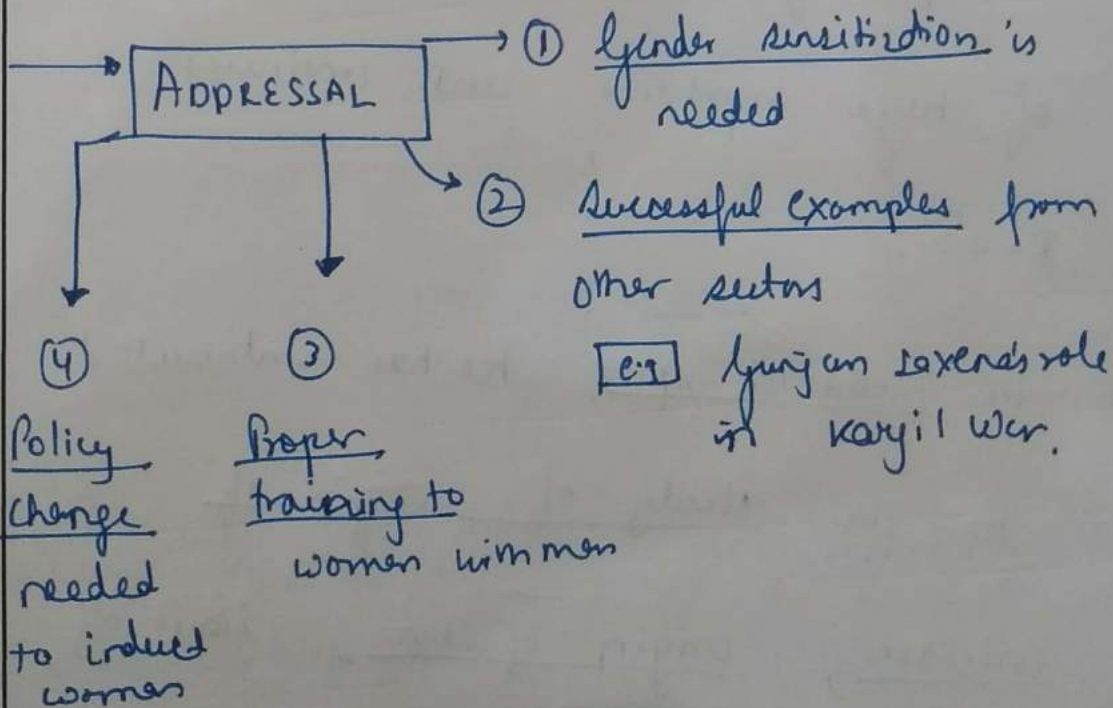
→ Challenges

- ① Patriarchal Attitude prevents Women entry in Combat Role.
- ② Biological Issues. Such as menstruation, child bearing prevent Women entry

③ Difficult terrain and Women Capabilities are doubted upon

④ Lack of coordinated voice from Army echelons on Women Inclusion.

⑤ Women specific training or training with Men? are some issues that need to be tackled.



The recent Agriver scheme so launched could be modified in recent future to push towards Women induction in Army

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Q10.

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S. Chandrasekhar's notable achievements in field of science and technology, space, mathematics, astrophysics is of paramount importance.

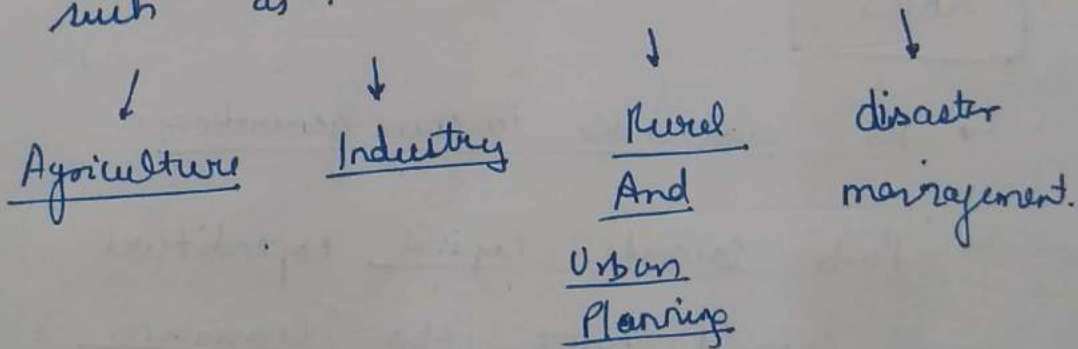
- o In field of Astrophysics, his concept of Chandrasekhar limit was of huge importance and continues to be so.
- o In field of space, he has contributed to the study of - origin of universe, origin of stars, limit of Earth's outer atmosphere

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o In field of mathematics, he had shown
contributions to calculus, algebra,
geometry concepts.

o His work in space also included use
of space technology for common welfare
such as:-



o Further, his work was pioneering in
understanding Universe's secrets such as,
dark matter, dark energy

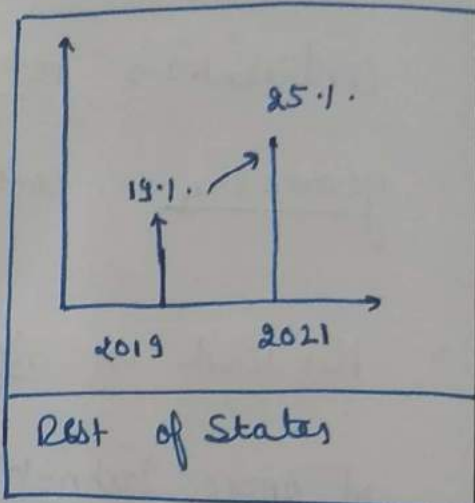
→ His contributions still today remains
unparalleled for advancing science
& technology cause.

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Q11.

The recent RBI report has pointed to a worrisome picture on state finances

on the debt situation of States which has increased in past few years



→ NEED FOR DEBT SUSTAINABILITY OF STATES

↳ For sustainable revenue generation

↳ Push towards capital expenditure which would ensure jobs, economic growth in states.

↳ Falling in debt trap has to be prevented.

→ RBI Report - discussion

① The report points out low debt sustainability due to reduced

Capital expenditure

[9/13 states so studied by SBI had reported less capital investment in 2020-21]

② COVID 19 → fiscal deficit of states has increased

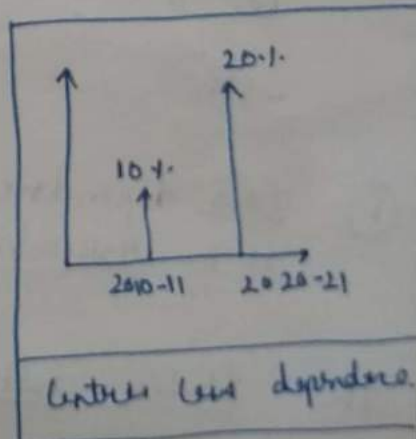


③ Populist measures has reduced debt sustainability

[e.g] farm loan waivers.

④ Naga DISCOM's arrears
[1,00,000 crore dues pending to thermal energy generation companies]

⑤ Less dependence of Centre has increased
↓
leading to less devolution of funds to states



⑥ GST issues has also led to decreasing tax revenue

⑦ Reliance on extra budget borrowings is high.

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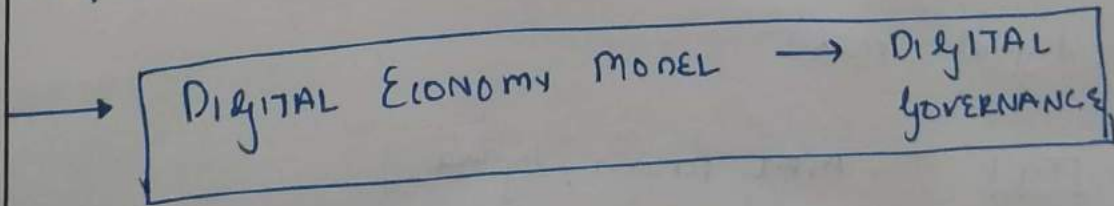
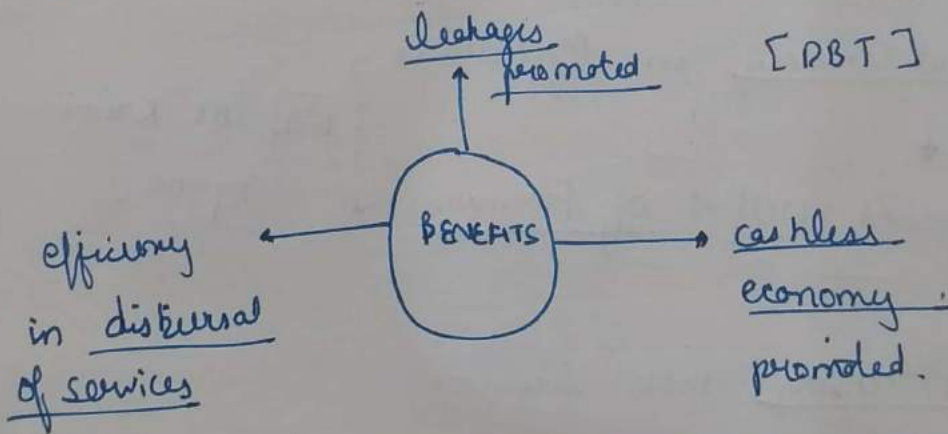
→ SOLUTIONS By REPORT

- ① Review of FRBM Act is needed.
- ② Independent fiscal council as suggested by NK Singh Panel
- ③ Explore Utility of farm loan waiver
- ④ Strong, Coordinated Approach to manage losses of DISCOM
- ⑤ Reliance on Extra Budget Borrowings to be disclosed & should be done away with
- ⑥ Less dependence to be rationalized [Vision Centre for legal policy]

The States debt issue needs to be urgently taken into consideration by all States for a Resilient economy post COVID-19

Q.12.

India has pushed towards digital governance via Digital India which in turn has pushed digital economy in country which offers various good practices for countries to learn.



(a) PM Jan Panchayats has enabled formal banking in country → leading to better directing of DBT scheme

(b) Products like BNIM, NEFT, ATMs

has enabled faster banking services →
allowing for formalization of economy.

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(c) Payment Banks has promoted saving
in country → leading to push to
sustained growth

(d) Digital economy in Agriculture }
↓ } eg SBI Krishi
improved welfare of Farmers } Yojana.

(e) Social Security tools via
digital means

eg - AIAL Pension Yojana.

(f) MSME growth increased

eg - Loan in 59 minute portal.

(g) Women, Vulnerable sections brought
under formal banking via JAM trinity 30

(b) Merchant Banking transactions through -
BHIM

(i) Taxation system via online → Direct Tax Assessment is foolproof
↳ GST online portal

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Issue

SOLUTION

- | | |
|---|--|
| ① <u>Lack of awareness</u> | - <u>PMMDISHA</u> for digital awareness. |
| ② <u>Piracy issues</u> | - <u>Data protection Bill</u> to be passed |
| ③ <u>Infrastructure not proper</u> | ↳ use of <u>Optical fibre network</u> |
| ④ <u>Innovation lacking in digital products</u> | - <u>Regulatory Sandbox Approach</u> . |

With highest fintech Adaption by India at 87.1%, not anywhere else in World,

Digital economy has pushed digital governance

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In India, as a part of crop livestock farming, dairying has assumed importance in agriculture operations to a great extent

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→ LIVELIHOOD OPTION

- Employs 2/3rd of rural population.
- Contribution has increased to Agriculture GDP in past 5 years as Compound Annual Growth Rate is ~7.1%. (ES 2021-22)
- India accounts for ~24% of world milk production [ES 2020-21]

→ SIGNIFICANCE

- ① Income security of farmers along with crops.
[<85% farmers are small & marginal]
- ② Benefits from climate resilient due to

to continuous flow of money

- ③ Nutritional Security of nation, especially children

stunting	32%
Wasting	19%

 (NFHS-5)

- ④ Contributes to Sustainable Agriculture

[e.g.] - Seeds washed in Cow Urine \Rightarrow Zero Budget Natural Farming promoted

- ⑤ Byproducts used in Agriculture

[e.g.] - Cow dung as fertilizer.

Challenges

- ① Dairy is unorganized sector mainly
- ② Diseases by Animals.
- ③ Credit facilities are less.

GOVERNMENT INITIATIVES

- ① FPOs promoted
[e.g.] Amul Cooperative.
- ② Artificial Insemination
To increase to 70%.
[Budget 2020-21]
- ③ Kisshik / Kisan Credit
Cards to Dairy farmers.

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④ Fodder availability remains issue.

Dairy Infrastructure Development Fund.

Fodder farms to be developed.

[Budget 2020-21]

⑤ Processing of milk is very less

Roadside milk processing through Mega food park scheme.

⑥ Greenhouse gas emissions by livestock

- Green fodder
- Organic Agriculture } to be promoted.

⑦ Less productivity of Indian dairy sector

- Rashtriya Gokul Mission → use of biotechnology to ↑ productivity

Further with National Livestock Mission, National Animal Disease Control Programme,

Government aims at enhancing productivity of Dairy Sector.

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The Ralewai Committee aims at doubling farmers income by connecting farmers to value chains of production rather than reliance on MSP regime And subsidy bias

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→ CURRENT System

- ① MSP announced for 23 crops
- ② Various subsidies so announced cost 2-2.5% of GDP [ES 2020-21]
- ③ Utility of schemes of subsidy is not clear.

→ Shift Needed

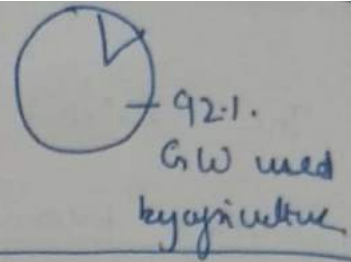
Ⓐ Issues with Current System

- ① Unsustainable Agriculture is being practiced.

[e.g] - fertilizer subsidy → $\begin{matrix} 8:4:1 \\ N:P:K \end{matrix}$ use of fertilizer

- ② Power subsidy leads to depleting

ground water levels



③ Farm loan waivers

benefitted only 50% farmers (SBI study)

④ Expenditure Investment in Agriculture Infrastructure
[ES 2020-21]

⑤ MSP issues

- only few crops (rice, wheat) preferred
- benefits large farmers & neglects Eastern India

(B) Benefits of value chains

① Boost to storage, transport & marketing of agriculture produce.

② Enhance food processing in Agriculture
[only 15% produce] → NITI Aayog is processed

③ Boost research in agriculture to push for Innovative products.

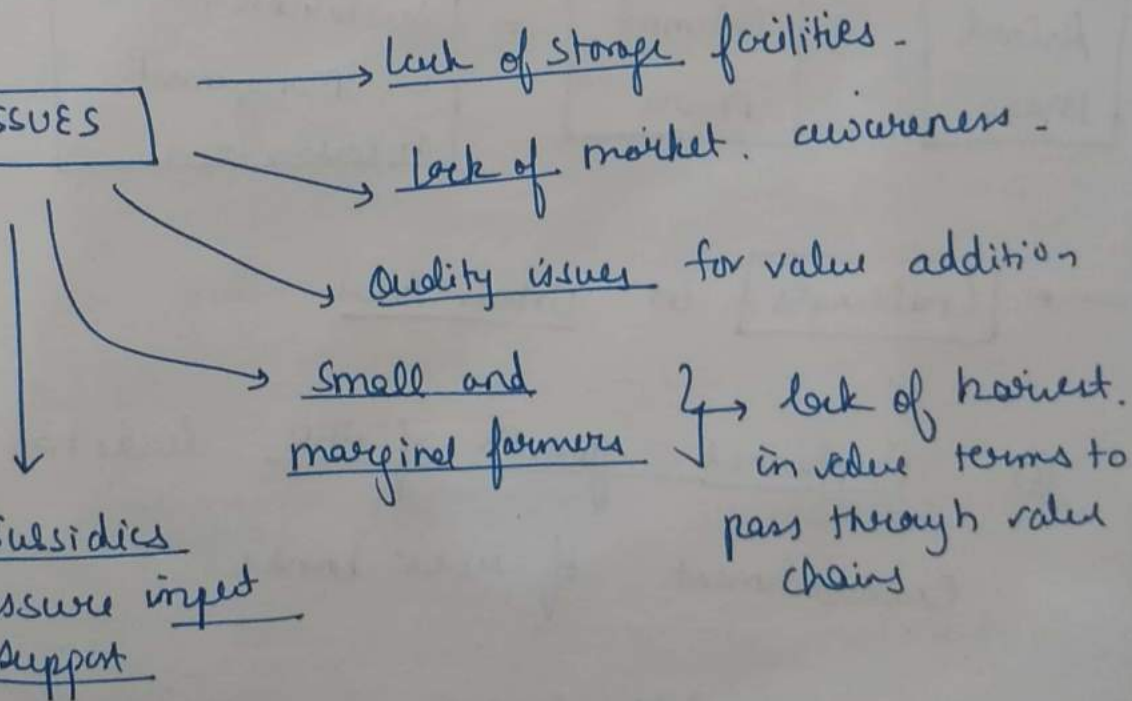
[71.1% of Agriculture GDP spent on research]

(4) Better returns to farmers.

(5) Certainty of produce to be bought due to Contract farming being promoted.

(6) Push to exports of agriculture produce.
[now India is 13th largest exporter]

ISSUES



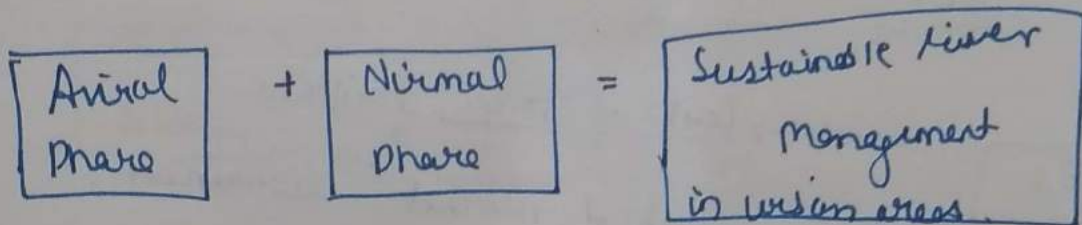
The Way forward lies in exploring utility and rationalizing subsidy but also pushing agriculture to value chain via Investment in Agriculture via Agriculture Infrastructure Development fund⁹

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Sustainable river management refers to, managing rivers to ensure proper flow of rivers, along development of cities, without pollution of rivers



→ Challenges in Urban Areas

① Unplanned growth of cities leads to encroachment of river banks

e.g. - old Delhi planning.

② Industrial Emissions pollute rivers.

e.g. - Yamuna polluted due to NCR Industries.

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③ Mining on river banks unsustainably.

e.g on banks of Musi river.

④ Lack of proper storage, reservoir system to manage heavy flow of rivers.

⑤ Reforestation further creates challenges
↓
soil erosion.
↓
slipping into rivers
↓
floods situations.

⑥ Agriculture runoff from fields lead to eutrophication of rivers.

→ REMEDIAL MEASURES

○ River Cities Alliance is recently launched.

by Ministry of Jal Shakti to properly:-

- for coordinate States river planning with river activities banks
- funding in river conservation activities
- databases policy making
- learn from best practices of each other

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o Focus on Watersted development

[e.g.] Jalpaon model

o Awareness & consciousness to prevent overextraction.

[e.g.] green ops scheme.

o Building Storage, Reservoir & desilting of rivers needed

o Warning mechanism for disasters.

[e.g.] IFLOWS, Mumbai

o Building resilience { Community (Apada Mitro scheme),
Disaster resistant Infrastructure }

o Promoting { Circular economy, Organic agriculture } → reduce CO₂ emissions

The Rivers Lites Alliance is innovative mechanism to build human, institutional, State Capacities to manage rivers by states.

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The growing urbanization which today in 2022 stands at more than 34% of Indian population, has resulted in a haphazard growth and poor management of cities leading to increased disasters.

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→ NAPHAZARD GROWTH

① Lack of proper planning has led to illegal encroachment

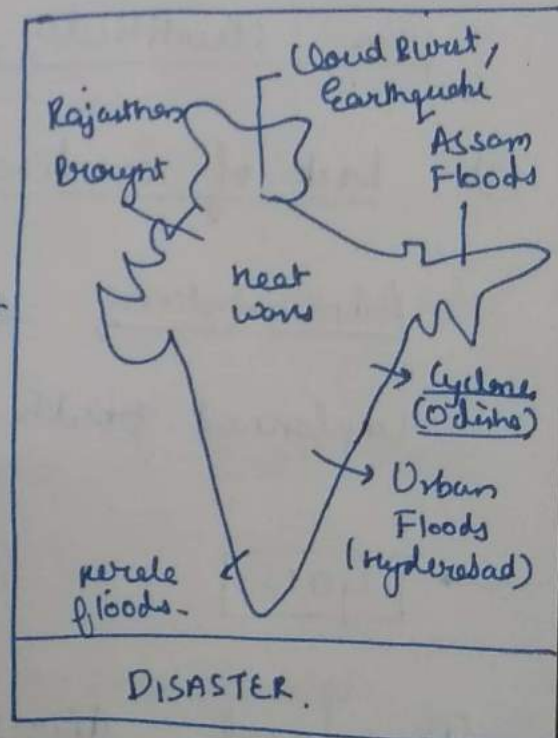
[e.g.] - Silichur Floods

② Construction activities in hilly areas → unplanned

[e.g.] - Uttarakhand Cloudburst

③ Illegal Mining, leading to interference on course of rivers, also causing Earthquakes, landslides

[e.g.] Manipur Landslide, 2022



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- ④ Reforestation due to lack of planning causes landslide hazard, Earthquake vulnerability increase.

→ Poor MANAGEMENT

- ① Urban bodies lack capabilities to plan scientifically.
- ② Lack of coordination between district Administration, Urban bodies lead to unplanned growth.

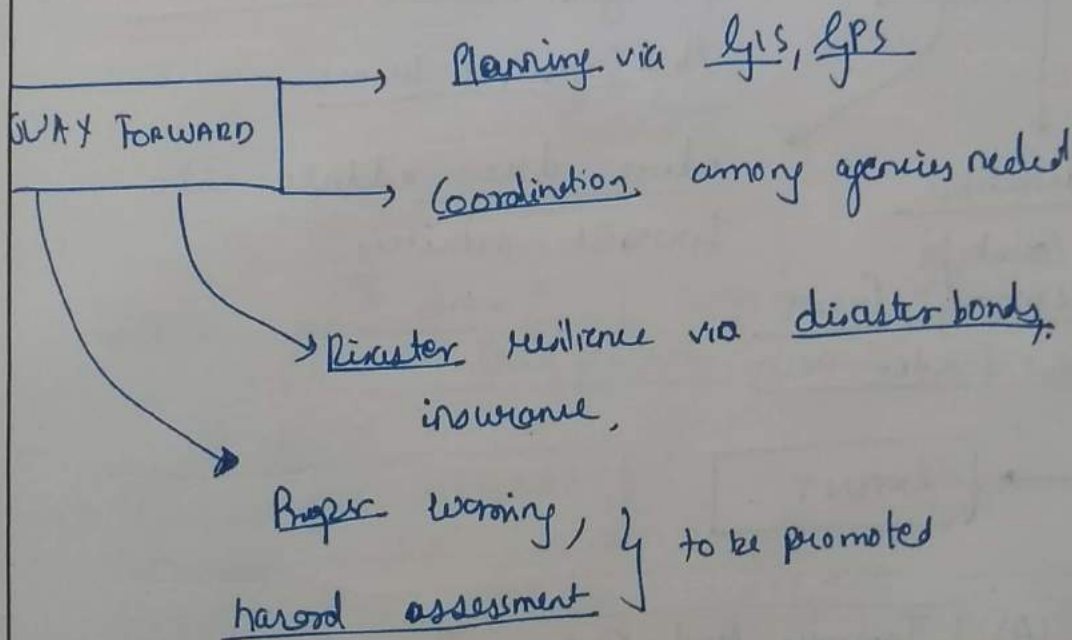
→ GDPS

- ① Local disaster management plan is not available.
- ② Coordination between Centre & State poor on urban management.

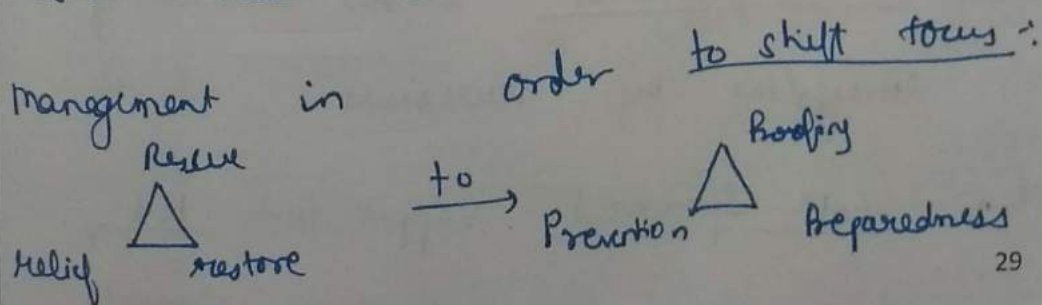
③ Technology not leveraged in Urban planning

④ Corruption, governance issues to manage disaster at local level

⑤ Lack of capacity building of Authorities -



Cities need better planning and

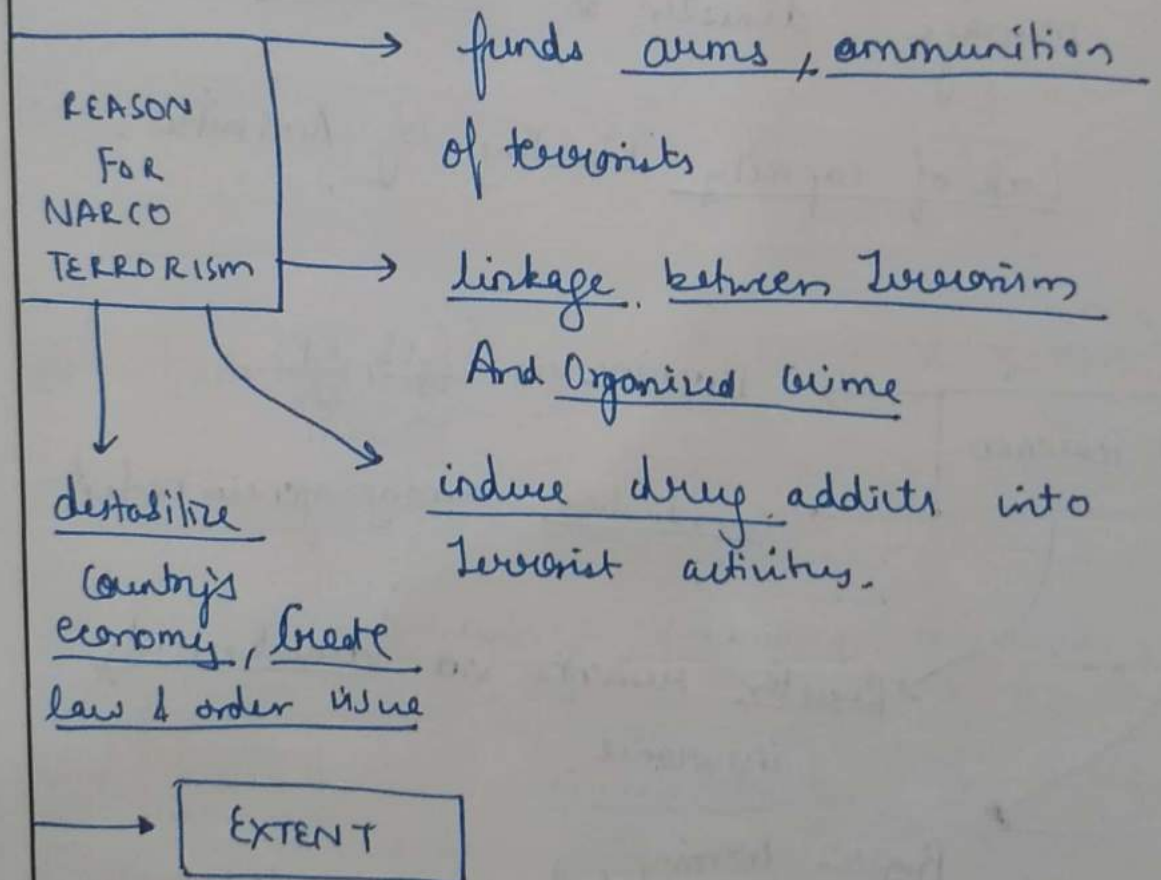


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Narco Terrorism refers to a link between terrorist activities and usage of drugs in order to sustain former activities.



(A) Jammu And Kashmir

↳ Porous borders allow for drug struggling by terrorists

↳ State sponsored support from ISI /₃₀ Pakistan provide drug channels

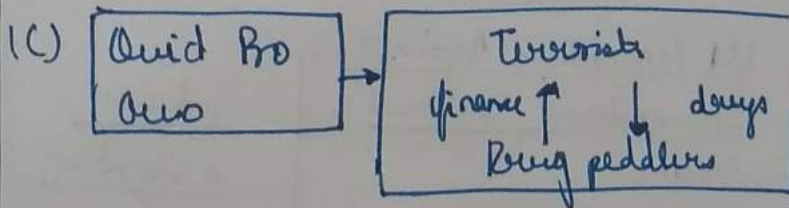
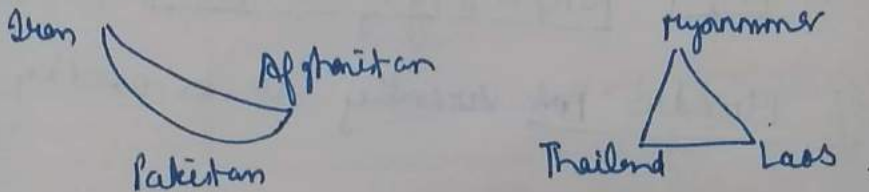
to terrorists.

↳ Link between Terrorists and Global
terror networks via drugs.

(B) North East

↳ Drug smuggling via Chitlagong will visit.

↳ India at centre of two important centres.



→ GOVERNMENT MEASURES

① Intelligence system via NATGRID.

② Border fencing via Border protection

Grid, CIRMS to check drug trafficking

③ Coordination between NIA and NCB
to examine link of Narco - Terrorism

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④ Use of social media monitored to check the drug trade by terrorists

⑤ Laws
 — NDPS Act } to drug seizure
 — NIA Act } to investigate terrorist Acts.

⑥ States Coordination — Enhanced
 e.g. Punjab & Gujarat Police seized drugs off Mumbai Port recently to be used by Terrorists

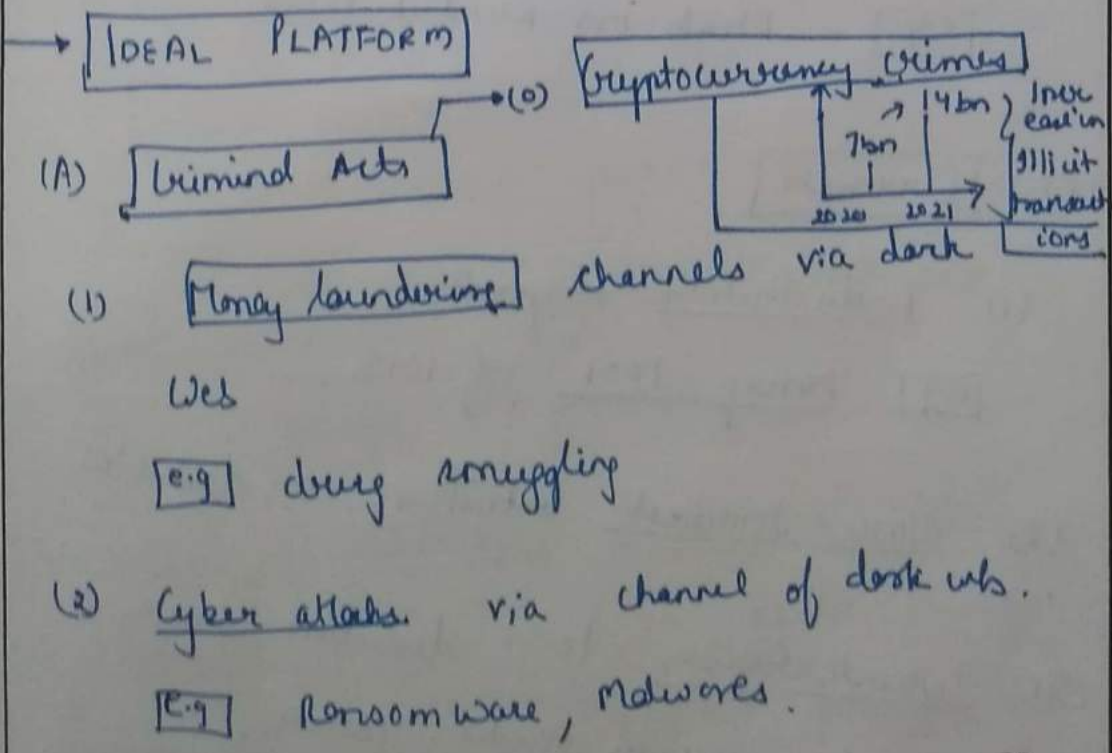
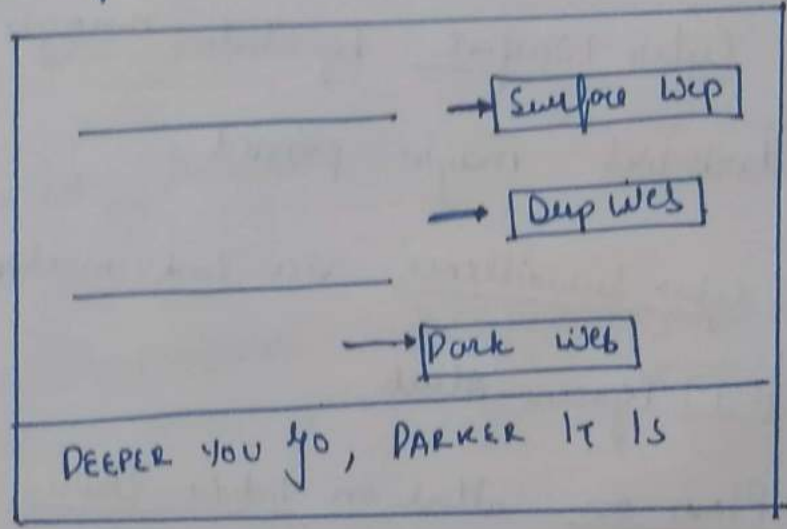
⑦ Global Coordination
 — UN Convention Against Transnational Organized Crime
 — UN Convention To Suppress financing of terrorist Acts
 India is a signatory

Further, the need is to pass Comprehensive Convention on International Terrorism to Control Narcotics Terrorism

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Dark Web refers to that part of web which is not generally in public domain and remains outside scope of law enforcement Agencies

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(3) Planning of Criminal activities here

[e.g] murder, Conspiracy.

(4) Insurgent Activities may be promoted here on dark web.

(5) Cyber Warfare by states through tool of dark web may be planned.

(6) Cyber Surveillance via such mechanism

[e.g] - Pegasus Attack

(7) Plans on attack on India's Critical Infrastructure

[e.g] - DTrack on Kundukulam.

(B) Terrorists

(1) Radicalization of youth.

[e.g] Amag tool of ISIS.

(2) Narco terrorist activities on dark web.

(3) Cyberterrorism to destabilize country & create security situation issues.

→ MEASURES

(A) DOMESTIC

① Utilization of information on dark web v.a

NATGRID

② Building capacities of institutions to unearth dark web activities.

③ Coordination between ED and NIA in this direction

④ Anti virus software installation [CyberSwatta Kendras] to protect citizen privacy

(B) INTERNATIONAL

① Regional coordination under framework of SCO, BIMSTEC to share data on dark web.

② Global coordination under epis of FATF and UN to manage the same.

With use of technology to plan criminal acts & terrorist acts, need to build human resources capacities for effective response to these issues.

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Catalysis refer to enhancing the utility, or any process in any activity so concerned. Catalysis, today, is a part of various functions

e.g. → Selective Catalytic Reduction technology ↘ BSVI norms.

Characteristics

- ① Could be natural or artificial
- ② Enhance productivity of a system
- ③ Timely completion of activities. Concerned.
- ④ Controllable in nature
- ⑤ Ensure efficiency when used in

products

⑥ Utilized in various acts

eg hydrogen fuel cells catalytic
reaction.

→ HUMAN BEINGS

① In human body, catalytic reaction.

ensure digestion of food.

② In other functions, various benefits :-

- Catalysis in \implies Reduced CO₂
transport emission.

- Catalysis in \implies crop production
Agriculture

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- Catalysis in Animals \implies enhanced livestock productivity.

- Catalysis in fuel cells \implies clean energy produced.

- Catalysis in Industrial activities \implies more production, manufacturing

The above highlights that catalysts are of great importance to human beings.

20.

India has pushed towards electrical mobility via its FAME Policy in order to decarbonize transport in the country, and achieve goal of sustainable economy.

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PROBLEMS

(A)

Climate Change

[Surpassing of 1.5°C limit of temperature increase, IPCC report]

[India has 21/25 of World's most polluted cities, World Air Quality report]

(B)

FUEL PRICE ↑

SOLUTIONS

- Electric Mobility by using renewable fuels such as battery, hydrogen fuels aims to curb issue of greenhouse emissions via transportation.

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- India imports 85% of oil
- geopolitical tensions has put pressure on oil prices.
- CAD of India is 1.2% GDP

- Focus on indigenization of electric vehicles technology
- reduction in usage of petrol would cut down on India's growing import bill

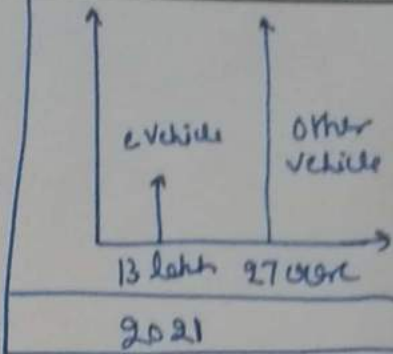
(C) TRANSPORTATION URBAN ISSUES

- Lack of parking spaces
- CO₂ emissions ↑ on rise.
- Lack of awareness on
- high costs of vehicles

- Along with electric mobility, focus on transit oriented development
- Clean transport via e vehicle.
- Raising awareness via dedicated programmes.
- Subsidized cost of electric vehicles.

Issues still remain

- ① low demand of e vehicle
- ② Nuge Investments needed in charging infrastructure
- ③ Nuge R&D costs involved
- ④ Lack of Coordination among ministries concerned [Road, Renewables etc]



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Way forward

- ① Incentivize electric vehicle purchase [reducing GST]
- ② Production incentives of raw material [PLI scheme] to be leveraged.
- ③ Coordination among Ministries is needed.

With states such as Madhya Pradesh, Uttar Pradesh launching their e vehicle policy, there must be further boost to this sector which needs to be given. to achieve Carbon Neutrality by 2070.