

# VISION IAS

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## GENERAL STUDIES COMMENT SHEET **2213**

|                   |               |                     |         |
|-------------------|---------------|---------------------|---------|
| Name of Candidate | Mahima Kasana |                     |         |
| Medium Eng./Hindi | English       | Registration Number | 1383501 |
| Center            |               | Date                |         |

| INDEX TABLE           |               |                | INSTRUCTIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------|---------------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q. No.                | Maximum Marks | Marks Obtained | <div>1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).<br/>उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।</div> <div>2. There are <b>TWENTY</b> questions printed in <b>ENGLISH &amp; HINDI</b> इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।</div> <div>3. <b>All questions are compulsory.</b><br/>सभी प्रश्न अनिवार्य हैं।</div> <div>4. The number of marks carried by a question/part is indicated against it.<br/>प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।</div> <div>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.<br/>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।</div> <div>6. Word limit in questions, if specified, should be adhered to.<br/>प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।</div> <div>7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.<br/>उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।</div> |
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## EVALUATION INDICATORS

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

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

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6.

**All the Best**

UPSC

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# UPSC

Q1. An effective approach to green budgeting is underpinned by strong strategic framework, tools for evidence generation and enabling budgetary governance framework. Discuss.

Green Budgeting is a new measure to incorporate climate & environment impacts on GDP & provide budget accordingly.

Need:

① Strong strategic framework

↳ Create effective strategy to invest in environment services

② Tools for evidence

↳ Impact assessment of climate

↳ on economy

↳ Eg: Wildfires → reduced forest resources.

③ Budgetary governance

↳ investment in environment protection

Challenges — difficult to calculate  
Impact of climate  
Industry → against it  
other financial  
constraints  
↳ To invest in social schemes

Thus, green budgeting is the need of the hour, but



- Q2. State the need for circular economy in India and the challenges associated with it. Also, discuss the measures that are required to build a circular economy in India.

Circular economy is the economic growth based on domestic market to reduce dependence from outside.

Need for circular economy

- ① To ensure domestic businesses grow and are not cornered by MNCs.
- ② Sustained growth can be ensured only from sustained demand.
  - ↳ Rising fear of Protectionism
  - ↳ Worldwide → reduce demand
  - ↳ Disruption in world demand due to wave of climate change
- ③ Disruption in supply
  - ↳ Chinese stopping of APIs to India during covid

↳ Breakage in supply chain → poor resilience.

③ ④

Challenges

World dependence → globalisation

Huge competition from MNCs → low costs

WTO & Barrier to domestic policy

Need

- ① Incentivising Indian industry to cater to Indian demands like China → to drive growth
- ② Need to produce goods demanded at home → better sustained
- ③ Then export rest of it.

This will ensure that mold shocks do not impact Indian economy adversely  
eg: Recent War → Inflation



# UPSC

Q3.

The Major Port Authorities Act, 2021 seeks to grant greater autonomy and flexibility to the major ports and professionalise their governance. Discuss.

Ports in India face challenges of

- ↳ poor autonomy from state politics
- ↳ bureaucratic control
- ↳ slow clearance & delays increasing
- transport costs
- ↳ unprofessional management

Port Major ports : Provide easy transport to Indian goods.



- ↳ lie on major route from Indian Ocean
- ↳ potential to become entrepôts

Major Port Authorities Act, 2021 aims to reduce such governance blocks by

- ↳ providing for port authority independent from the bureaucratic control
- ↳ PPP in port management.
- ↳ Encourage investment in ports as international ports similar to Singapore
- ↳ Reduce transport costs

Challenges — Federalism : States see this as a reduction of their powers

- ↳ PPP ~~may~~ are not always efficient
- ↳ Monopolise port handling

Thus, all stakeholders need to be brought in this endeavour for ensuring port development.



04.

Analyse the need for shifting from presumptive land titling to conclusive land titling system in India. Also, highlighting the hurdles in its implementation.

The Land system in India is such that there are no conclusive land titles leading to:

- Land grabbing
- Land related disputes
- ineffective policy due to unclear land status.

Need to shift to conclusive land titles

- ① To avoid legal battles on land
- ② Proper implementation of land acquisition for development purposes
- ③ Ascertain beneficiaries of schemes like DBT on fertilizers, power etc
- ④ Provide ID to land → better monitoring of land use.
- ⑤ To digitize land records

## Hurdles in Implementation

- ① Legal disputes : land ownership is unclear
- ② Resistance from farmers :  
whose land is at risk due to  
poor bargaining power → rich can  
bribe officials to include land  
within their areas. → BIASEDNESS
- ③ Large number of small farmers  
↳ fragmented land holding  
(86-2% farmers → small)  
(Agri census data)  
↳ difficult & costly to ascertain  
ownership

Thus, this effort will require  
political will & cooperation from the  
landed class to make it unbiased  
& fair.



Q5.

What do you understand by methanol economy? Critically discuss its role in achieving India's energy security and economic prosperity.

Methanol economy is usage of methane & ethanol as alternative fuels to reduce greenhouse gas emissions.

Advantages

Methane & ethanol → burn completely → no release of CO<sub>2</sub>

increase fuel efficiency

Reduce import bill → Petroleum → 85% imported

Cheaper transition to clean economy → unlike expensive hydrogen fuel

Helpful in achieving Net Zero by 2070

## Challenges :

- ↳ Ethanol : produced from sugarcane which is water intensive crop.
- ↳ Indian automobiles : not yet adopted to using hybrid fuels → greater investment is needed here.
- ↳ Other alternatives → electric vehicle → more promising due to less investment needed.

The need here is to move to a diverse energy setup so that dependence on one fuel does not make it a risky proposition.



Q6. Discuss the role of geospatial technologies in developing effective approaches for disaster risk reduction and disaster management.

Geo-spatial technologies are used  
map and study landforms.

Role in disaster management :

① Ascertain <sup>disaster</sup> prone areas

1.1. High risk landforms to landslides  
by studying mountains

② 1.2. Glacial lakes outburst can  
be prevented if source of  
water can be ascertained.

Eg: Nanda devi floods →  
source could not be  
ascertained.

③ Using data to avoid urbanisation  
in risky areas



③ Used to ascertain forested areas →  
to avoid human-animal conflict.

④ Forecasting → floods during rains  
can be warned

Challenges

Poor investment in  
research  
(0.7% of GDP only)

Financial constraints →  
expensive technology

Focus is still not  
towards climate change

Thus, geospatial technologies can  
help make cities sustainable  
(SDG11)

07.

The focus of Environment Impact Assessment (EIA) needs to shift from utilization and exploitation of natural resources to conservation of natural resources. Discuss.

Environment Impact Assessment (EIA) is a method to ascertain the possible impact of a development project on environment.

Focus needs to shift :

① Utilization & exploitation currently

1.1. EIA is funded by the developing company itself → NON BIASED

1.2. Not compulsory in government projects  
↳ Unfair.

1.3. Poor quality reports

1.4. Cases of false information in reports & intentional use of difficult language

1.5. Public disclosure → not transparent



② Conservation of natural resources is needed :

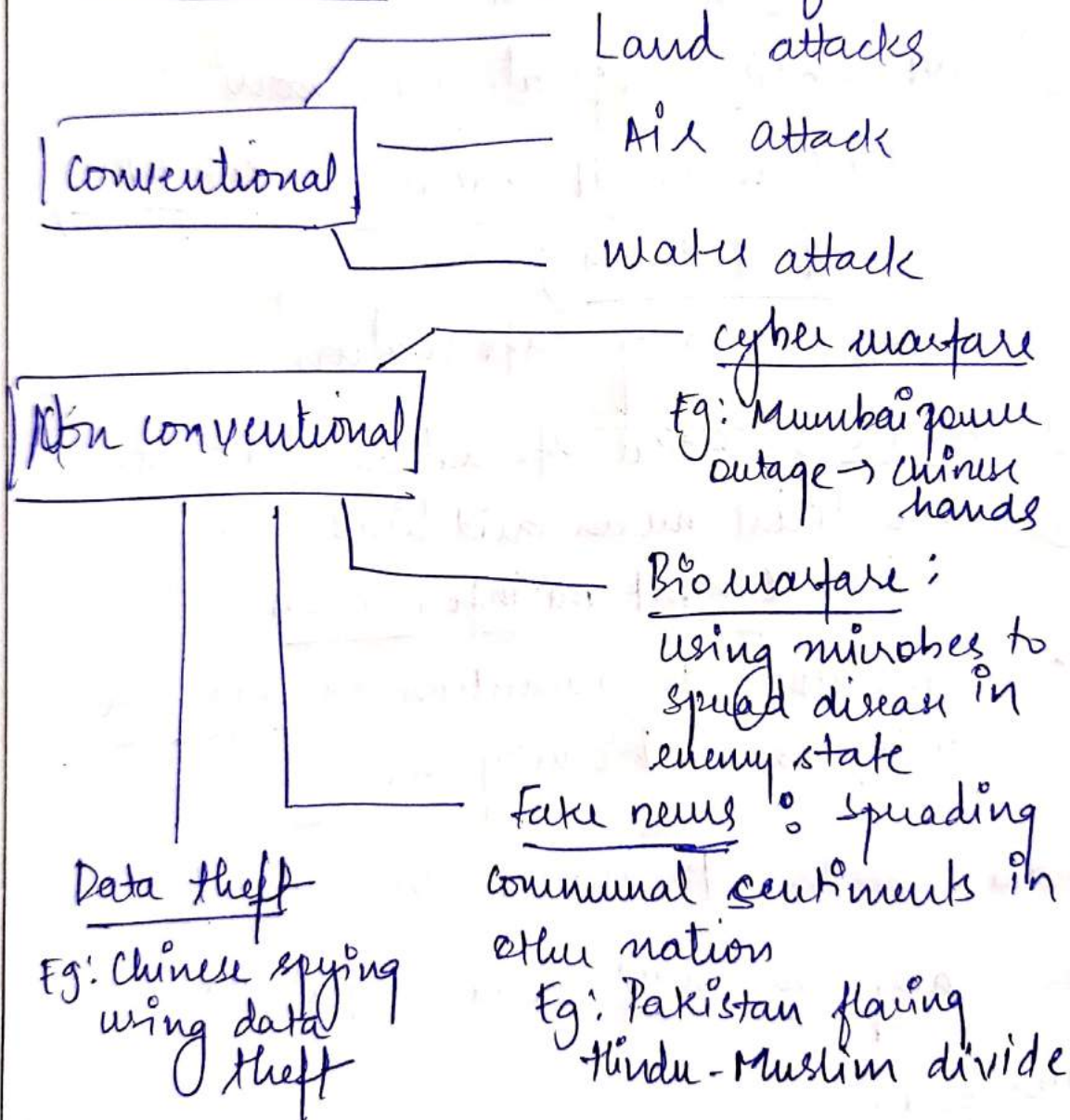
- 2.1. Strengthening EIA by using unbiased means.
- 2.2. Not to be funded by industry
- 2.3. Compulsory Gram Panchayat involvement.
- 2.4. Using ~~pro~~ experts to ascertain impact → focus on quality of report.

In order to ensure that economic growth is sustainable; it is essential to follow rules on environment protection



Q8. What do you understand by hybrid warfare?  
Discuss India's preparedness in this context.

Hybrid warfare includes conventional &  
non conventional measures of warfare.



Such non conventional measures make it  
difficult to ascertain source and  
combat it effectively.

## India's efforts

- ① National cybersecurity policy, 2013
- ② IT Act, 2000 : Blocking Chinese websites & media.
- ③ NATGRID : operational now
  - ↳ connects 11 agencies (lik RAW, IB & others)
  - ↳ spread of information
- ④ NCIIPC : Critical information protection
- ⑤ New social media guidelines
  - ↳ combat misinformation
- ⑥ Signature to convention on Chemical weapons & Bio weapons

India needs to invest in research to be ready for new challenges in warfare.



Q9. Discuss the challenges associated with inclusion of women in armed forces, particularly in combat roles in India. How can these challenges be addressed.

The Supreme Court recently ruled that Women cannot be excluded from Permanent Commission in armed forces due to reasons of gendered norms.

## Challenges with inclusion

① Armed services are dominated with men. As our army chief pointed out, men will have difficulty taking orders from women.

This Patriarchal system is a major barrier to women's equality.

② Thinking that women are unfit for combatant roles → colonial & patriarchal

Eg: Israel has women in their army.



③ Women themselves have not considered this avenue for jobs → gendered roles assigned.

④ War crimes → women will face the brunt

Need of the hour

① Training to armed forces on gender sensitivity

② International experience :

Using Israel's help in combating stereotypes

③ Training to women for combatant roles.

Thus, an equal status in all spheres is essential to do away with stereotypes.

SDG5 : Gender equality can be met only when this happens

# UPSC

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Q10

S. Chandrasekhar was one of the greatest scientists of the 20th century whose prolific contributions spanned across astrophysics, space and mathematics. Elaborate.

S. Chandrasekhar contributed to science during 20th century.

## Contributions

① Chandrasekhar limit : This limit defined whether a dying star would become a black hole or red giant.

②



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# UPSC

Q11.

State finances in India present a worrying picture, with debt sustainability being a major concern. Discuss in context of the recent RBI report on state finances -

Recent RBI report on state finances highlights glued poor fiscal situation of states with high debt as seen from.

① High discom debt → not accounted in state debt but to be borne by states.

② Freebie culture → Political tools

to win votes. → Power subsidy  
③ Poor resource generation potential  
unlike Centre which can print notes.

④ States crossing FRBM limit of 3.5% Fiscal deficit to GDP

Issues created by such debt

① Strain on state resources



② Poor spending on social welfare  
if states are highly indebted

③ FABM limit breach

↳ FDI potential of states is  
unhindered → as FDI investors  
assess fiscal deficit limits

④ Silankan failure → due to fiscal  
problems

↳ India needs to ensure election  
freebies are not misutilized.

⑤ UDAY failure → DISCOMs failing  
But, alongside

① Fiscal deficit is not a problem if  
it is invested in capital assets

② 3.5% limit is not based on  
any study

③ Investment in social sector is  
essential

↳ India is a welfare state  
↳ need to differentiate between  
freebies & social schemes

It is essential to ensure that state finances are not misutilized by

- ↳ Fiscal prudence on part of states
- ↳ Avoid political freebies
- ↳ Investing in capital assets instead of subsidies
- ↳ Focus on effective resource management

It is important to follow certain budgetary norms to avoid a Sri Lanka type failure



Q12.

The Indian experience provides several lessons of an inclusive digital economy model that enables formal digital governance structure at a low cost and with easier access. Discuss, India has one of the world's lowest internet costs making it easily available to poor users as seen from :

- ① More than 750 million internet users and counting.
- ② Almost 99% of internet users use it on mobile.

## INCLUSIVE DIGITAL ECONOMY

### ① Bharat net programme

1.1. spreading optical fibre to Gram panchayats nationwide.

1.2. Using USOF (Universal Service Obligation Fund)

② Direct Benefit Transfers : have been a success which :



2.1 Reduced intermediaries &  
corruption.

2.2. Made benefits directly available

③ Gender inclusive :

3.1. PM-JAY : accounts to be opened  
in female head's name

3.2. Give women financial ownership

④ Health :

4.1. Easy vaccination during COVID  
pandemic using COVID shows  
digital success.

⑤ Education

5.1 Swayam Prabha Channels → reach  
rural students.

5.2. Free NCFERT books online →  
reduce cost of education

⑥ Better accessibility

6.1. UMAN or portal for government  
schemes details.

## Challenges

Technical glitches  
Eg: COWIN platform

Mostly mobile based  
Internet usage

Rural connectivity  
not up to the mark

Digital illiteracy →  
digital divide

As India moves on from 4G to 5G era,  
cost of digitalization will reduce &  
bring in better digital governance  
structures with high speed &  
low latency.



Q13.

Dairying is a viable livelihood option for a large section of population. In this context, discuss the significance, challenges faced and associated government initiatives for the dairy sector in India.

India is the world's largest milk producer & consumer.

Indian farmers depend on this sector to :

→ insulate them from risk of agriculture failure.

Eg: Drought times

→ Add summation → diversifying to dairying.

→ Annul : Growth led to increased income to farmers of Kaira district in Gujarat.

→ Value addition in milk like Cheese, curd, paneer, etc help increase demand & price.

## Challenges :

- ① Disease in cattle : Eg. Lumpy skin  
disease → death of cattle.
- ② Poor Quality European breed  
↳ Indian breed better drought  
resistant
- ③ Indian breed not being used because  
of poor milk output compared  
to foreign bovine varieties.
- ④ Fodder for cattle
  - ↳ Expensive proposition
  - ↳ Eats up plastic → causing  
death.
  - ↳ No availability of information  
as to what fodder is best.

## Government Initiatives :

- ① Rashtriya Gokul Mission to preserve  
Indian bovine breed.



- ② Artificial insemination to ensure  
best variety.
- ③ Banks to protect spreads of  
best variety bulls.
- ④ Investment in research on best  
breed.

This will create an additional source  
of income to farmers & diversify  
their risks.

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Q4.

The imperative to increase farmers' income must shift to creating value chains and must not be reliant on the MSP regime and subsidy bias prevalent in the current Indian agricultural system. India's aim to double farmers' income by 2022 is yet to be realized.

This vulnerability of agriculture persists due to huge dependence on MSP & subsidy.

① MSP:

- 1.1. According to Shanta Ram Committee, only 6% farmers receive MSP.
- 1.2. Focus only on Rice & wheat
  - ↳ Reduce soil nutrition
  - ↳ devoid of nitrogen
- 1.3. huge fertilizer & pesticides use
- 1.4. Regional disparities: Mostly Punjab & Haryana farmers receive MSP benefits.
- 1.5. Loss → poor warehouse & cold storage facility.



## ② Subsidy :

2.1. Fertiliser subsidy → 0.5% of Budget  
(e survey 2021)

↳ Soil nutrition worsened

2.2. Power subsidy → By states

↳ Excessive exploitation of water

↳ Political reasons to give subsidy

2.3. Benefits received by rich farmers  
who can afford other equipments  
like tractors & labour.

Need to shift to value chain creation :

Value chains are value addition in agricultural produce as we move from primary produce to final product.

Important reasons :

① Better remuneration to farmers

② High value products → export demand  
Eg: Processed foods have greater  
demand worldwide

③ India produces world's second largest  
horticultural products

↳ huge potential to invest here  
as less than 2% is currently

processed.  
↳ Help shift from Rice-wheat  
system.

④ Value addition makes demand  
more elastic as opposed to inelastic  
demand for primary goods.

Thus, value chains need to be created  
to make sure farmers receive  
better income.



Q15.

What are the challenges in ensuring sustainable river management in urban areas? Highlight the remedial measures that can be taken for river management with a special focus on the recently launched River Cities Alliance.

Sustainable river management refers to using river resources without exploiting its resources beyond its replenishment cycle.

Urban areas have grown haphazardly due to which we see many river management challenges like:

① Flood plain encroachment

Eg: Hyderabad built on flood plain of Musi river.

② Illegal river sand mining

[Eg: Sand mafia in Rajasthan]  
reduces water holding capacity of river → causing floods.

③ Poor cooperation between states

Eg: Canal dispute between

## Tamil Nadu & Karnataka

- ④ Overly populated river sides →  
most vulnerable to flooding.
- ⑤ No coordination on discharge of  
water from dams  
↳ flooding in low lying areas.

### Measures needed :

- ① Proper "rule curve" for release  
of flood water from dams
- ② Investment in an Early warning  
system  
↳ IMD forecasts are not accurate
- ③ Interstate coordination is a must
- ④ Taking into account climate crisis  
↳ Eg: Non-timely rains → cause  
flooding.  
↳ Investing in flood proof housing
- ⑤ Sponge cities experiment of China :



5.1 Using ~~marble~~ asphalt → better  
absorbs water than cement.

⑥ strict check on flood plain encroachment

⑦ Proper drainage system to  
avoid clogging of water  
→ avoid post flood disease  
spread → like dengue.

Thus, flood proofing of cities is essential  
to ensure no lives are lost.

India's focus must be on attaining  
SDG 11 : Sustainable cities.

River cities Alliance : Cities that  
fall on same rivers work together in  
coordinated manner to ensure cooperative  
river management

Q16. Haphazard growth and poor management make the Indian cities the locus of disasters, both large and small. Comment. Also, discuss the current gaps in policies in addressing these challenges. Around 59% of Indian landmass is prone to earthquakes & 60% of cultivable area is prone to droughts.

This shows the vulnerability of Indian geography to disasters. This vulnerability has been increased by

### ① Haphazard growth :

#### 1.1. Causes congestion in cities

- ↳ Reducing area per person
- ↳ low investment on social welfare
- per person → poor resources
- ↳ According to UN, 17% of urban population in India → in slums
- ↳ Vulnerable to disease : Eg: Dengue in Delhi

#### 1.2. Poor drainage

- ↳ Eg: Hyderabad → 100 year old drainage → so worsens floods (Eg 2020 floods)



## 1.3. Encroachment on riverbeds

Eg° Brahmaputra encroachment → floods in Assam

1.4. Poor disaster assessment before urbanisation  
↳ landslides in Himachal due to stress of urbanisation on land.

## ② Poor management

2.1. Instant relief difficult in not reachable areas

Eg° Flood affected Kedarnath

2.2. Poor coordination between different arms of state & NGOs causes  
↳ chaos during relief work.

~~2.3.~~

## Gaps in policies

① No power to local bodies to take decisions

↳ increases time taken in response

② Poor investment in disaster resilient infrastructure.

Eg: Delhi → Zone 4 of earthquake →  
yet no compulsory earthquake ready  
~~proof~~ buildings.

③ Not-so-stringent regulation

3.1. we still see floodplain encroachment

Eg: Yamuna encroachment in Noida

3.2. Sand mafia in Rajasthan

④ Poor investment in research in disaster management.

Even R&D is only 0.7% of  
GDP.

⑤ Psychosocial support → not available.

It is estimated that 10% of tsunami  
hit people (2004) had severe mental  
health issues

Thus, India needs to strictly adhere to  
Sendai framework which focuses on  
Pre & Post disaster phases.



Q17.

Discuss the extent of the problem of narco-terrorism in India, what measures have been taken by the government to counter and control this problem?

Narco-terrorism is the drug trafficking used to squad which is against the

Extent

① India lies between golden crescent & golden triangle



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 2. **Title**  
 3. **Journal**  
 4. **Volume**  
 5. **Issue**  
 6. **Page(s)**



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# UPSC

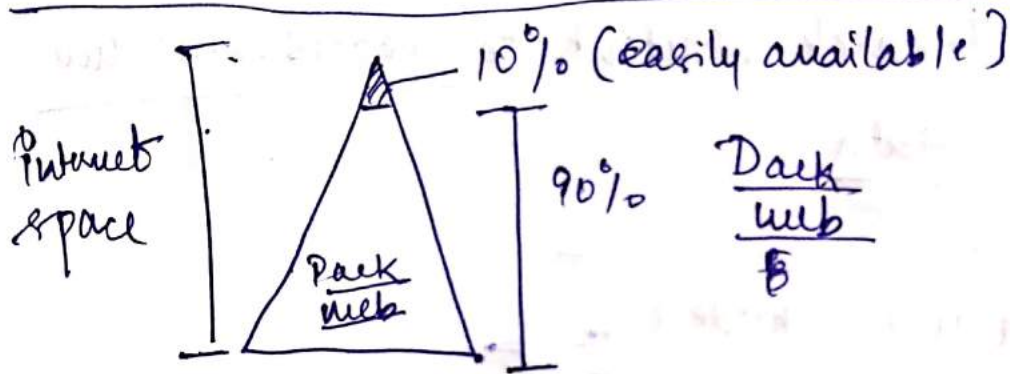
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Q8.

The dark web can be an ideal platform for sexual criminal and terrorist activities. Discuss with examples. Also, suggest measures to tackle the misuse of dark web.

Dark web is that part of internet which is not accessible using conventional browsers. Other ones like "TOR" are used.



Platform for criminal act:

- ① Use by terrorists to crowdfund money from sympathisers
- ② Used as a source of black market activities  
Eg: illegal animal parts sale  
(Rhino & Elephant teeth)



- ③ Human trafficking
- ④ money laundering

But, alongside it is used by:

- ① Journalists in oppressive regimes

Eg: Journalists in Taliban's Afghanistan

- ② Research students to access sensitive data

## Measures needed

- ① International cooperation :

Since dark web does not have any territorial boundaries, an international law needs to be drafted.

- ② Data protection law in India :

to ensure one's privacy (Article 21)  
is protected

# UPSC

- ③ Better cyber analysts in government
- ↳ Training in cyber education to Police.
  - ↳ Professional cyber experts needed

- ④ Cyber security training in schools & offices to protect women & children from harassment.

- ⑤ Better information sharing:  
NATGRID is a useful platform in this context.

Thus, dark web needs to be kept in check to avoid any social effects of its use. ⇒ Article 21 → Puttaswamy judgement → Right to privacy of utmost importance.



# UPSC

Q19.

What is catalysis? Highlight the characteristics of catalysts. Also, elaborate why catalytic reactions are important for human beings.

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# UPSC

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Q20. Electric mobility offers solutions to the problems associated with climate change, growing fuel prices and urban transportation issues. Discuss in the context of India.  
India's Panchamrit goals envision us to be Net zero by 2070. Electric vehicles offer an easy solution to achieve this target.

## Need for Electric Vehicles

### ① Climate change :

1.1. Rising  $CO_2$  emissions due to ~~the~~ petroleum usage  $\rightarrow$  need to shift to lower emission fuels.

#### 1.2. Electric vehicles

- $\rightarrow$  Zero emissions of greenhouse gas
- $\rightarrow$  Zero Noise pollution
- $\rightarrow$  More efficient fuel usage than petroleum

### ② Growing fuel prices :

2.1. ~~Exhaustible~~ Exhaustible resources like coal, petroleum



have ever increasing prices → due to constrained supply

2.2. 1973 oil price shock → teaches us how such shocks can cause inflation, & BoP crisis.

2.3. Electric vehicles → do not use oil & thus are not subject to such shocks

2.4. Reduce Import burden

③ Urban transport issues

3.1. High population pressure → need for cheap transport

3.2. Huge congestion due to personal vehicles

↳ electric taxis  
↳ EV Buses are a solution to decongest roads.

Solution to the problems

EVs offer a cheaper transport with better fuel efficiency

## Need of the hour

- ① Investing more in Lithium & other battery resource exploration.
- ② Better relations with Lithium triangle (South America) nations
- ③ Focus on safety
  - ↳ Recent blasts in EV ~~scooter~~ scooters
- ④ Incentivise EVs
  - ↳ subsidising EV to reduce cost.
  - ↳ currently EV cars are expensive

Thus, Electric vehicles offer a solution to climate change, fuel price & urban transport.