

General Studies Full Length Test Test - 7 (GS - 3) Test Code - A21053507	Evaluator Code: Date of Assignment: CQ:
---	---

NAME: Azeem Ahmed Time allowed: 3 Hours

STUDENT ID.: 244R95056 Email: _____

UPSC ROLL NO.: 6405397 Submission Date: 9 August 2025 @gmeil.com

MOBILE NO.: _____

QUESTION PAPER SPECIFIC INSTRUCTIONS

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

There are **TWENTY** questions printed in **ENGLISH**. All the questions are compulsory. The number of marks carried by a question/part is indicated against it. Word limit in questions, wherever specified, should be adhered to. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

Q No.	Marks	Q No.	Marks	Q No.	Marks
Q1	/10	Q8	/10	Q15	/15
Q2	/10	Q9	/10	Q16	/15
Q3	/10	Q10	/10	Q17	/15
Q4	/10	Q11	/15	Q18	/15
Q5	/10	Q12	/15	Q19	/15
Q6	/10	Q13	/15	Q20	/15
Q7	/10	Q14	/15	Total	/250

Instructions:-

- Legible Scanning:** Exercise due diligence in scanning your scripts for clear legibility
- Submissions** marred by poor scanning, notably those with illegible sections or blackened pages due to improper scanning, risk being excluded from the evaluation process.
- Non-Adherence Consequences:** Failure to comply with the aforementioned instructions may lead to the disqualification of your submission.

For Student Only

Start Time - <u>10.00 AM</u>	End Time - <u>1.00 PM</u>
Mode of Examination <u>Online</u>	Online <input checked="" type="checkbox"/> Offline <input type="checkbox"/>
Receiving date - _____	Dispatch date - _____

Parameters		Good	Average	Needs Improvement
Conceptual Understanding				
Understanding Demand of Question				
Structure	Introduction			
	Body			
	Conclusion			
Presentation-Illustrations, flowcharts, diagrams, etc.				
Language and Handwriting				
No. of Questions Attempted				
Adherence to Word Limit: Yes/No				

Mentor's Feedback

VAJIRAM & RAVI

[Faint handwritten text, possibly a signature or date]

Evaluator/Reviewer Suggestions



Evaluator/Reviewer Suggestions



(Answer questions in NOT MORE than the word limit specified for each in the parenthesis. Content of the answer is more important than its length.)

1. Despite the multidimensional nature of poverty in India, consumption expenditure continues to dominate its official measurement. Discuss the limitations of this approach and suggest alternative frameworks for designing inclusive welfare policies.
(10 marks, 150 words)

In India poverty is measured based on calorie consumption of food, 2400 calorie for rural area & 2100 for urban area. This approach have limitations due to multidimension of nature of poverty.

Limitations of Present Approach

- ① Do not adequately measure the multiple deprivations eg Lack of Assets, education, healthcare etc.
- ② It do not account for social deprivation eg gender inequality and caste barriers.
- ③ The consumptive poverty line ignores

the capabilities of person (Amartya Sen)

- ④ It do not account for the welfare benefits to Below Poverty Line Person. Thus person just above poverty line is less disadvantaged.
- ⑤ It is static in nature.

Alternative framework

- ① Adopt poverty measurement framework given by C. Rangarajan Committee (Food + Non food items included)
- ② Adopt Multidimensional Poverty measurement for holistic approach.
- ③ Include social deprivation points in poverty estimation (gender, caste).
- ④ Bring capability based poverty measurement indicators (Amartya Sen)
- ⑤ Bring dynamic scale with feedback loop for update.

— This will lead to holistic measurement to ensure achievement of SDG 1 (No Poverty).

Introduction

Body

Conclusion

Presentation

Marks:

2. The 2025 Economic Survey has highlighted deregulation as a tool for financial deepening. In this context, enumerate the potential benefits and risks of deregulation in the financial services sector. (10 marks, 150 words)

1E Economic Survey 2025
argued for Deregulation which
means removing the regulatory
barriers on financial services to
ensure their rapid growth.

(Potential benefits of deregulation)

- ① Deepening of Financial Services
It will help in expansion of
financial services to underserved areas
- ② Promote financial inclusion by
expansion of Bank Branches and
coming up of Niche Services.
- ③ Expand the variety of services by
infusing innovation.
- ④ Promote financial sector growth
by cutting down regulatory growth.

⑤ Help in economic growth by promotion of credit and savings.

(Risks of Deregulation)

- ① Overprofiteering: It may lead to exorbitant interest rates.
- ② Predatory Lending by online platforms with higher rates in later years (exploitation of consumers).
- ③ Threat to financial sovereignty by foreign lending opt.
- ④ Impact macroeconomic stability by disturbing demand-supply gap.

(Wayhead)

- ① Light but tight regulation.
- ② Proper oversight over the financial services sector.
- ③ Placing adequate safeguards to ensure all stakeholders interest.

This will ensure the financial sector growth, financial inclusion for India's 5 Trillion economy.

Introduction

Body

Conclusion

Presentation

Marks:

3. Assess the impact of the revised MSME definitions on the growth and formalisation of micro and small enterprises. (10 marks, 150 words)

MSME sector

Contribute almost 45% of India's exports and 20% of its GDP. (Economic Survey 2024). The new definition of MSME will give fillip to sector.

(New revised Definition)

	Micro	Small	Medium
Investment	25 crore	25 crore	125 crore
Turnover	10 crore	100 crore	500 crore

Impact on growth and formalisation of Micro → Small enterprise

- ① It will induce formalisation of economy by aligning the criteria with emerging enterprises.
- ② It brings more firms into definition of MSME thus giving them benefits of PLI scheme.

VAJIRAM & RAVI

③ It will help more enterprises with access to technology via TURS scheme and credit streamline via formalisation.

④ Better integration with formal supply chain re Benefits of MSP Sambandh & MSP Sambandh

⑤ More integration with global value chain via formalisation.

Issues pertaining

① Overregulation due to lot of compliance burden.

② High legislatives cost incurs formalisation.

③ Low technology adoption hampers economic growth of MSP.

Way ahead

① Unfuse technology.

② Simplify the regulations.

Also with handholding of MSP and simplifying labour laws further MSP will become growth engine of India.

Introduction

Body

Conclusion

Presentation

Marks:

4. Evaluate the merits and demerits of maintaining rigid Priority Sector Lending (PSL) quotas versus adopting market-driven credit allocation mechanisms to achieve inclusive growth. (10 marks, 150 words)

India adopted Priority Sector Lending norms to support growth of important sectors like Agriculture to ensure inclusive growth in India.

Significance of Priority Sector Lending over Market Driven credit

<u>Merit</u>	<u>Demerit</u>
① It promotes the equitable growth of all <u>sectors</u> in economy.	① It leads to functional distortion of financial services <u>sector</u> , (Banking).
② It gives power to government to influence growth of diverse sector via Priority Sector list.	② Hampers the expansion of <u>financial service</u> sector by reducing their autonomy.

② Helps in supporting the vulnerable sections & vulnerable sectors (eg Agriculture)

③ It leads to more NPA's due to delay in repayment. Issue of form number.

④ It promotes lower end sectors that are more labour intensive. Thus helps create employment.

⑤ It leads to crowding out factor due to less credit availability to private sector.

⑥ Hampers the formalisation of economy.

Way ahead

① Timely updation of Priority Sector List.

② Include all stakeholders in decisions over Priority Sector

③ Give adequate support to other sectors via alternative credit support.

This will ensure inclusive growth in India (SDG 10)

Introduction

Body

Conclusion

Presentation

Marks:

5. Analyse the regional shifts in the cropping patterns of India. Discuss the long-term implications of this shift on nutritional security and water sustainability. (10 marks, 150 words)

Cropping Pattern refers to spatial and temporal distribution of various crops in a region over a time.

Regional shift in the cropping pattern

① North West India
Haryana, Punjab, West UP, shift towards cereals (wheat and Rice) and sugarcane due to Green Revolution, fertilizer subsidy.



② Andhra Pradesh and North East India
Shift to oil palm cultivation with National Mission on Oil palm.

Fig 1: Regional Shift in Cropping Pattern

VAJIRAM & RAVI

③ Madhya Pradesh, Vidarbha region
Shift towards Pulses with
micro irrigation and Shriwastu
Bhugtan Yojana of MP government.

④ Shift to cash crops from food crops
eg Tea, Coffee plantation in
Karnataka, Kerala.

Impact on Nutritional security

- ① Reducing to Cereal centric diets by monocropping.
- ② Increased malnutrition ($> 50\%$ women are anemic NPHSS).

Impact on water availability

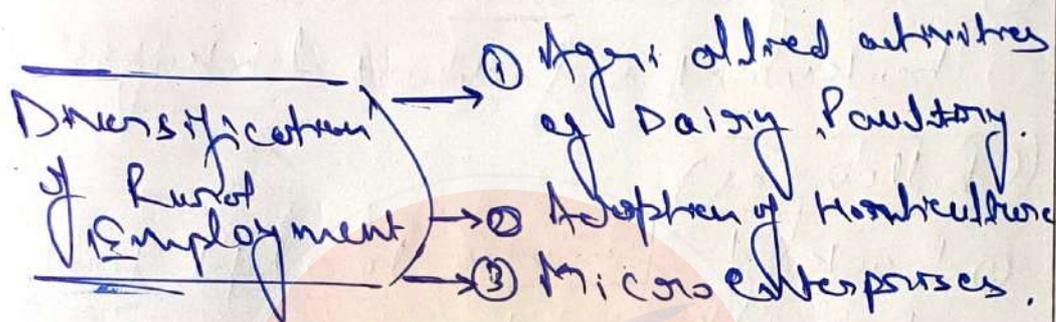
- ① Depletion of ground water (Haryana, Punjab).
- ② Rise of Eutrophication due to soil water runoff.

Thus there is need to
diversify cropping pattern to
ensure Viable, profitable &
Sustainable Agriculture for healthy India.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

6. Despite diversification, rural India faces economic stagnation. Discuss how value chain integration through food processing can revitalise the rural economy.
(10 marks, 150 words)

As per Economic Survey 2024, Rural India despite adoption of agri-allied activities faces stagnation in Income.



Value Chain Integration via Food Processing Industry: Significance

- ① Revitalisation of Rural Economy
It will improve disposable income via value addition to crops.
- ② Generate Employment: Creation of jobs in food processing & Jaggery making.

⑧ Women empowerment

① Kudumbashree model where women SHGs involved in pickle making.

② Improved rural infrastructure via improved incomes (eg schools, markets etc).

③ Integration with value chain via backward & forward linkages.

(Challenges)

① Lack of finances to adopt food processing.

② Low literacy and technological know-how.

③ Absence of backward & forward linkages for selling food processing.

(Way ahead)

① Integration with government scheme for promoting Micro Food Processing

② Providing soft loans.

Also with capacity building of farmers, it will lead to rural development via food processing.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

7. What is ground-level ozone pollution? How is it formed, and what are its effects on human health and the environment? In what way is it becoming a serious concern for Indian cities? (10 marks, 150 words)

Ground level Ozone is lower tropospheric Ozone that is formed via anthropogenic sources and remains near to ground.

Formation

Oxides of Nitrogen + Sunlight + Oxygen
↓
Formation of Ozone.

- ① Formed due to reaction of Sunlight with Industrial effluents.
- ② Release of refrigerant aerols also leads to its formation.

Effects on Human Health & Environment

- ① Trapping of heat / radiations leads to warming / climate change.
- ② Rise of sea surface temperature.

③ Nausea, breathlessness to Asthma patients.

④ Severe level of Ozone contact may lead to irritation in eyes and impairment of lungs.

Reasons for serious concern in Indian cities

① Lack of proper disposal of solid waste.

② Rising piles of electronic waste and discarded refrigerator waste.

③ Rise of erosal pollution and industrial effluents.

④ Rising temperature and urban heat island leading to its increased impact.

Way ahead

① Proper disposal of solid waste.

Also following guidelines for electronic waste disposal will help in curbing ground level ozone.

Introduction

Body

Conclusion

Presentation

Marks:

8. Nanotechnology represents a paradigm shift from 'bigger is better' to 'smaller is smarter'. In this context, examine the transformative potential of nanotechnology in the fulfilment of India's environmental goals.

(10 marks, 150 words)

Nanotechnology is the application of science that involves use of materials with size smaller than 100nm. This leads to materials showing special properties at nanoscale.

Transformative potential of Nanotechnology on environment

- ① Cleaning of Oil Spills (e.g) Nano-Zeppen
- ② Development of environment friendly building material (e.g) Solar roofs with nanotubes to absorb sunlight to produce energy.
- ③ Sustainable Agriculture
Nanotech for seed breeding and soil sensors to maintain moisture.

④ Reducing methane production from post harvest crop losses by using nano-irradiation technology.

⑤ Proper waste disposal by nano-remediation methods.

⑥ Reducing industrial pollution : using nano scrubbers & precipitators.

(Challenges)

① Low Innovation in Nanotech and hence its high cost.

② High cost hinders its adoption in Agriculture (eg Nanofertilizer).

③ Lack of know how about nano technology at wide scale.

(Way ahead)

① Invest in R&D to bring cost of nanotechnology down.

② Incentivise its adoption by giving incentives.

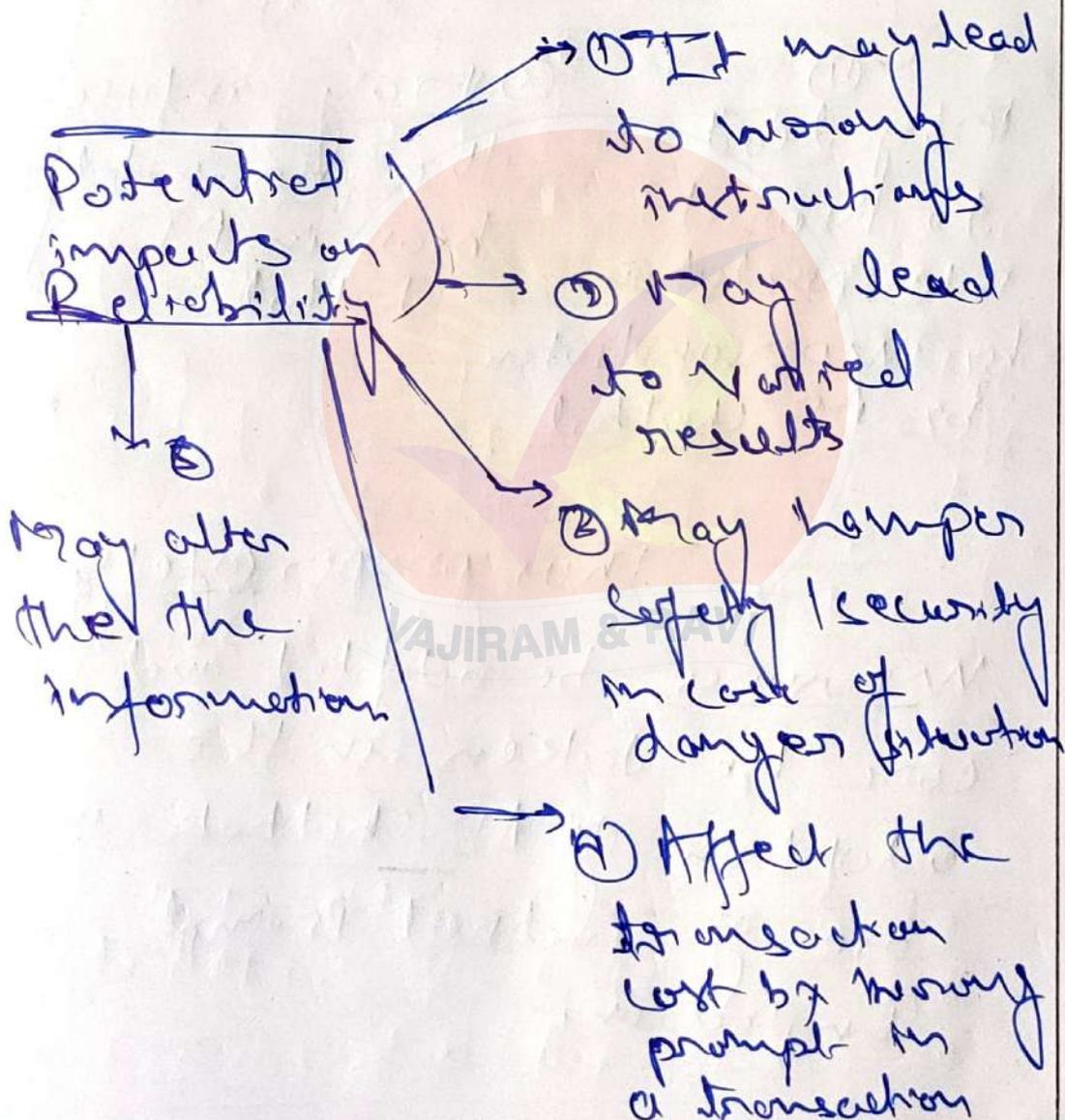
This nanotechnology will help in achieving India's INDC targets.

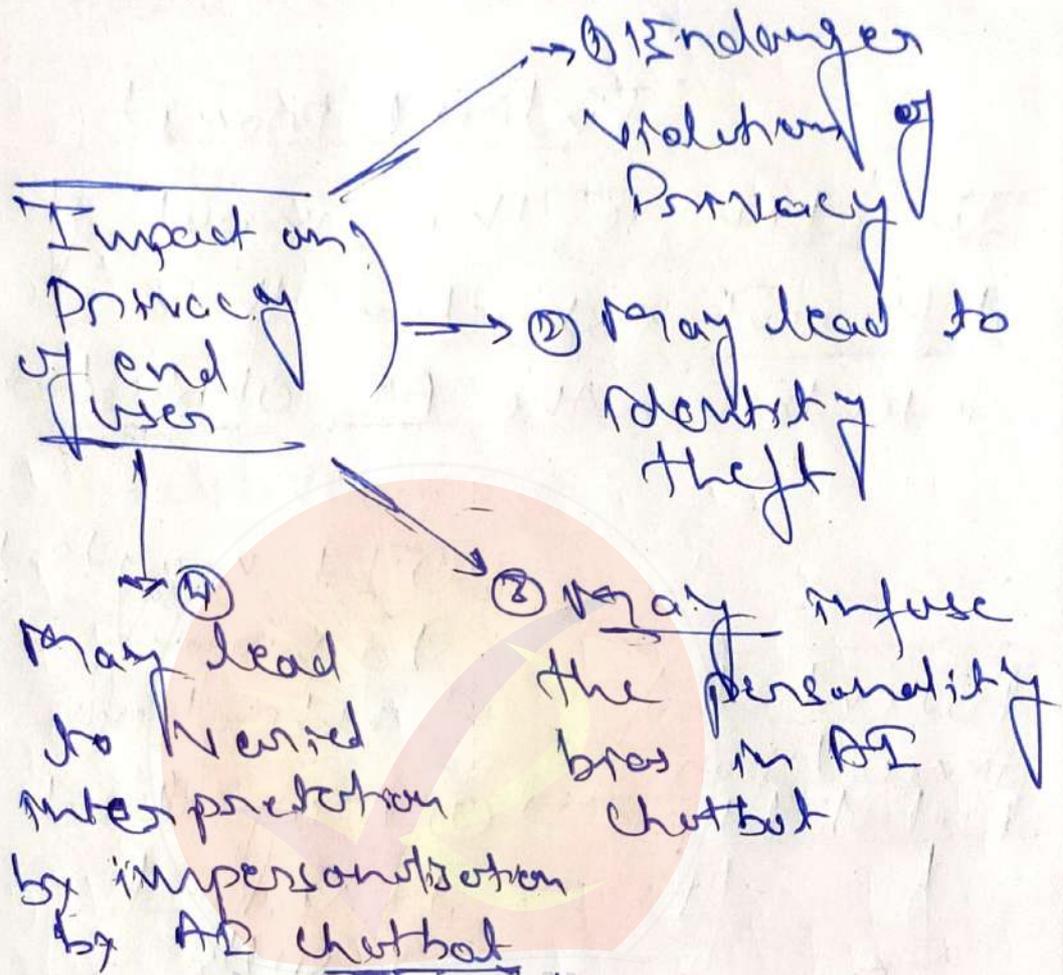
Introduction	
Body	
Conclusion	
Presentation	
Marks:	

9. What is 'Indirect Prompt Injection' in the context of AI chatbots? Examine its potential impact on the reliability of digital assistants and the privacy of end users. (10 marks, 150 words)

Indirect Prompt

Injection is the input of different instruction than intended in the AI application.





Thus proper safety measures be adopted and care be taken in the adoption of AI chatbots in case of Inherent Prompt Injection.

10. Analyse the major reasons for the spread and survival of Naxalism. What solutions do you suggest to curb it? (10 marks, 150 words)

Naxalism is an ideological warfare against the state with an aim to overthrow the government @ Left wing Extremism.

Reasons for spread & survival

- ① Ideological reasons: Maoism that inspire control over resources & anti-state struggle
- ② Poverty and alienation of Tribals from Jd, Jmf, Jm
- ③ Developmental deficit in the Tribal regions (eg schooling, healthcare poor).
- ④ Role of external actors @ Enemy state supporting Naxals with funds, weapons etc.

⑤ Porous borders, thick forest and difficult patrolling.

Ways to curb Naxalism

Security measure | Developmental measure

① Adopt SAMADHAN Strategy against Naxalism

② Modernisation of Police stations.

③ Deploying local intelligence.

④ Have special forces with local people

⑤ Restoria Retaliation.

① Ensure Development in Tribal areas.

② Institutionalise Surendera cum Rehabilitation scheme

③ Special Development Package for Naxal Affected Districts

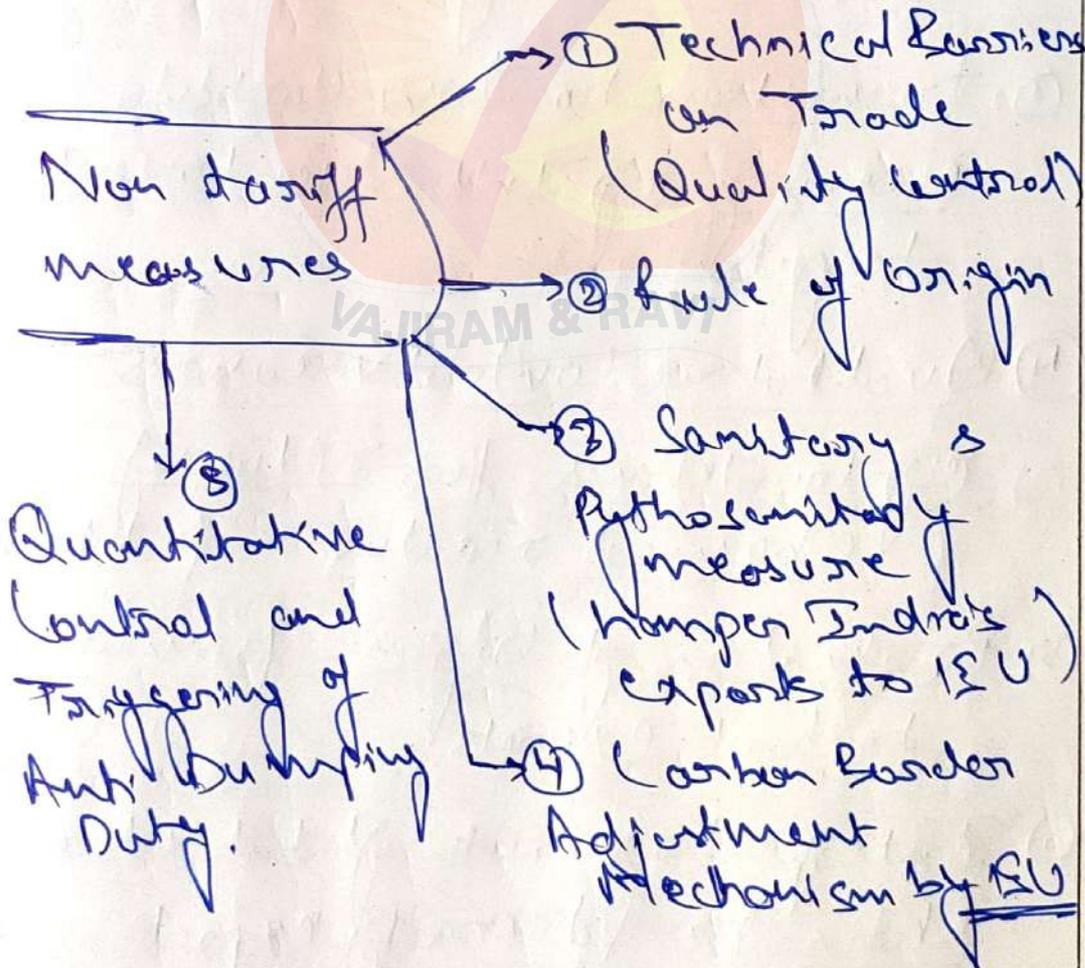
④ Training & Capacity Building via ROSHINI scheme

More to this adopting winning Hearts & minds strategy will help in curbing Naxalism in India.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

11. "Non-tariff measures have become a key instrument of economic diplomacy and protectionism in the post-globalisation era." Evaluate how India can balance compliance with global trade rules while safeguarding its economic interests.
(15 marks, 250 words)

The WTO mandate for free and fair trade in post globalisation era. However non tariff barriers had led to protectionism in trade.



VAJIRAM & RAVI

India's measures for compliance while safeguarding trade interest

- ① Signing of FTA's, PTA's
 - ⊙ India signed CETA with UAE, Australia and ECTA with UK recently.
- ② Compliance with WTO rules via PLI scheme: Root out of trade distorting subsidies.
- ③ Transition to low carbon economy ⊙ India's Panchamrit targets
- ④ Qualitative control measures
 - ⊙ Guidelines for reducing chemical residue in food items
- ⑤ Promotion of organic farming to boost exports.
- ⑥ Integrating with global value chain to diversify export

destinations eg Africa, Latin America

① Infusing technology to improve the competitiveness of India's exports.

② Trade in local currency to avoid SWIFT mechanism.

eg Rupee Ruble Trade with Russia.

Challenges

① Quantitative control measures should persist.

② Issue of competitiveness across trade.

③ Trade deficit and high tariffs issue hampers trade relation with USA.

Thus India needs to streamline its tariffs and take steps to improve competitiveness to achieve its economic interests.

action	
vision	
station	

12. Discuss the macroeconomic risks posed by unregulated Virtual Digital Assets. How can India reconcile its financial stability objectives with the opportunities offered by blockchain innovation? (15 marks, 250 words)

Virtual Digital Assets (VDA)

like Bitcoin are the blockchain based financial assets that do not have financial control by centralised authority.

(Macroeconomic risks by VDA)

① Macroeconomic instability

It may create demand-supply gap in currency posing risk of inflation.

② Hamper Gross Fixed Capital Formation by diverting investments to VDA.

③ Reduces governments role in effective allocation of resources & financial planning. Hamper

inclusive growth.

- ④ Pose threat to financial sovereignty: It may manipulate the financial equity market.
- ⑤ Threat of illegal activities i.e. terror funding, organised crimes posing threat to economy.

ways to reconcile with benefits of blockchain technology

- ① Effective law on Virtual Digital Assets to monitor their growth.
- ② Placing effective safeguards in regulatory body as suggested by Supreme Court.
- ③ Bring formal sector Digital Assets like e-Rupee to give

viable alternative to people.

- ④ Collaboration with global bodies like FATF, IMF, World Bank, IEU for rules, guidelines on Virtual Digital Assets.
- ⑤ Promote research and innovation in blockchain to effectively monitor VDA.
- ⑥ Awareness generation among people about danger posed by VDA.
- ⑦ Enhancing cyber security.
Moreover adopting the global best practices like Tollan project of USA and Potomac Convention will help in effective monitoring of VDA.

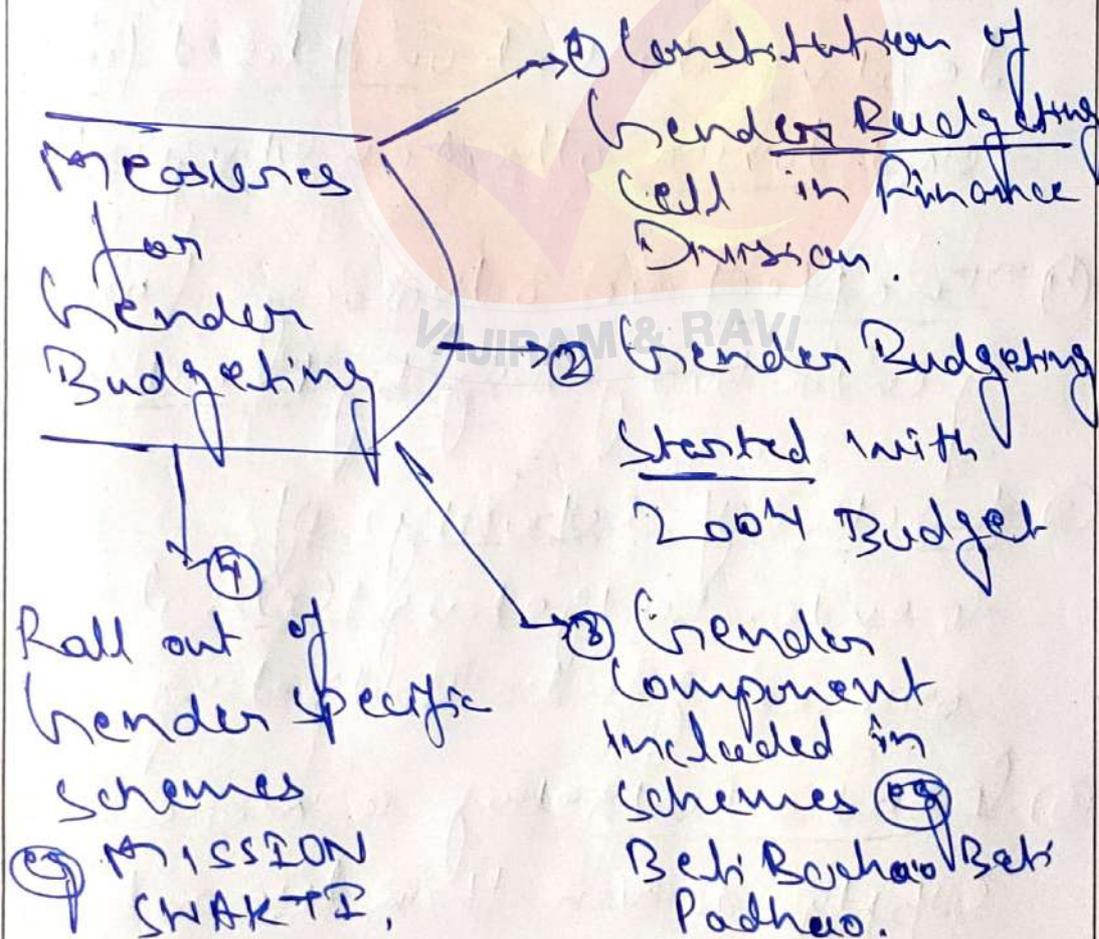
Introduction	
Body	
Conclusion	
Presentation	
Marks:	

13. Despite progressive measures, gender budgeting in India has not translated into substantial gender equity." Discuss the major bottlenecks in its implementation and suggest government measures to make it more impactful.

(15 marks, 250 words)

Gender Budgeting

means bringing the gender perspective in the budgeting process. It involves gender component in funds allocation.



Major bottlenecks in implementation

- ① Lack of proper women representation in Budget Division.
- ② Lack of evidence based research to support the gender component in schemes.
- ③ Poor implementation of schemes leading to unt utilised funds and lower allocation subsequently.
- ④ Ineffective advocacy for gender budgeting by Ministries
- ⑤ Lack of Capacity of Gender Budgeting Cells to oversee gender Budgeting.
- ⑥ Gender Budgeting is more supply driven than demand driven initiative.

Measures to make it impactful

- ① Establish Gender Budgeting Cell in each Ministry.
- ② Constitute Gender Budgeting Committee in Parliament.
- ③ Capacity building of members involved in gender budgeting.
- ④ Promote evidence based research to give inputs for gender budgeting.
- ⑤ Promoting awareness about gender budgeting for more support to it.
- ⑥ Ensuring proper implementation of schemes & fund utilisation.

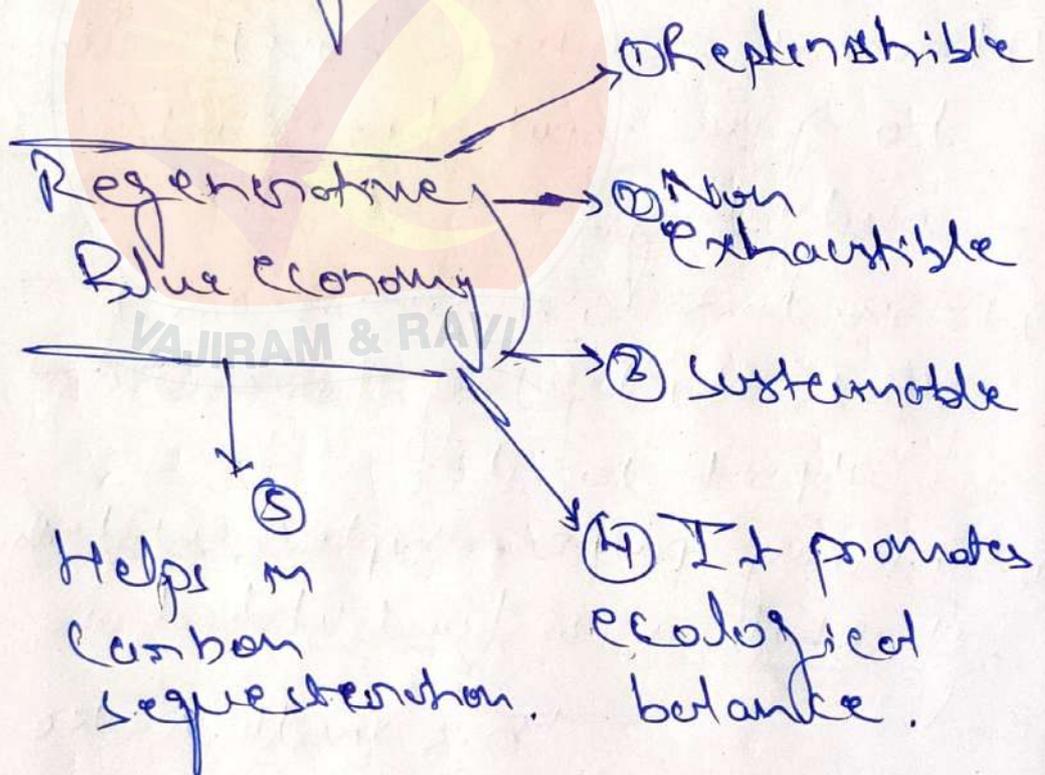
→ This will make

India inclusive to achieve SDGs: Gender equality.

Conclusion	
Conclusion	
Conclusion	
Conclusion	

14. What is a Regenerative Blue Economy? How does it differ from conventional blue growth models? Highlight the role of the Regenerative Blue Economy in mitigating climate change and halting biodiversity loss. (15 marks, 250 words)

Regenerative Blue Economy refers to water based economy that replenishes itself over a time after it is harvested @ Agri based economy.



Difference from conventional model

<u>Regenerative</u>	<u>Conventional</u>
<p>① Generates on its own once harvested</p> <p>⊙ <u>Algae</u></p>	<p>① It <u>needs</u> to be <u>cropped</u> for <u>generation</u></p> <p>⊙ <u>Mangrove as Tuna!</u></p>
<p>② It is more environment friendly.</p>	<p>② <u>Less</u> Carbon Sequestration due to <u>slow growth</u>.</p>
<p>③ Non exhaustible and sustainable</p>	<p>③ <u>Exhaustible</u> over a <u>time</u> ⊙ fish catch.</p>

Role of Regenerative Blue Economy in mitigating climate change and holding Biodiversity loss

- ① Carbon sequestration
- ⊙ Blue green Algae

① Carbon farming by its fast growth.

② It increases the biodiversity by providing habitat to diverse species.

③ Maintain the oxygen and nutrient supply to the diverse species.

④ It ensures the symbiotic relationship with diverse species.

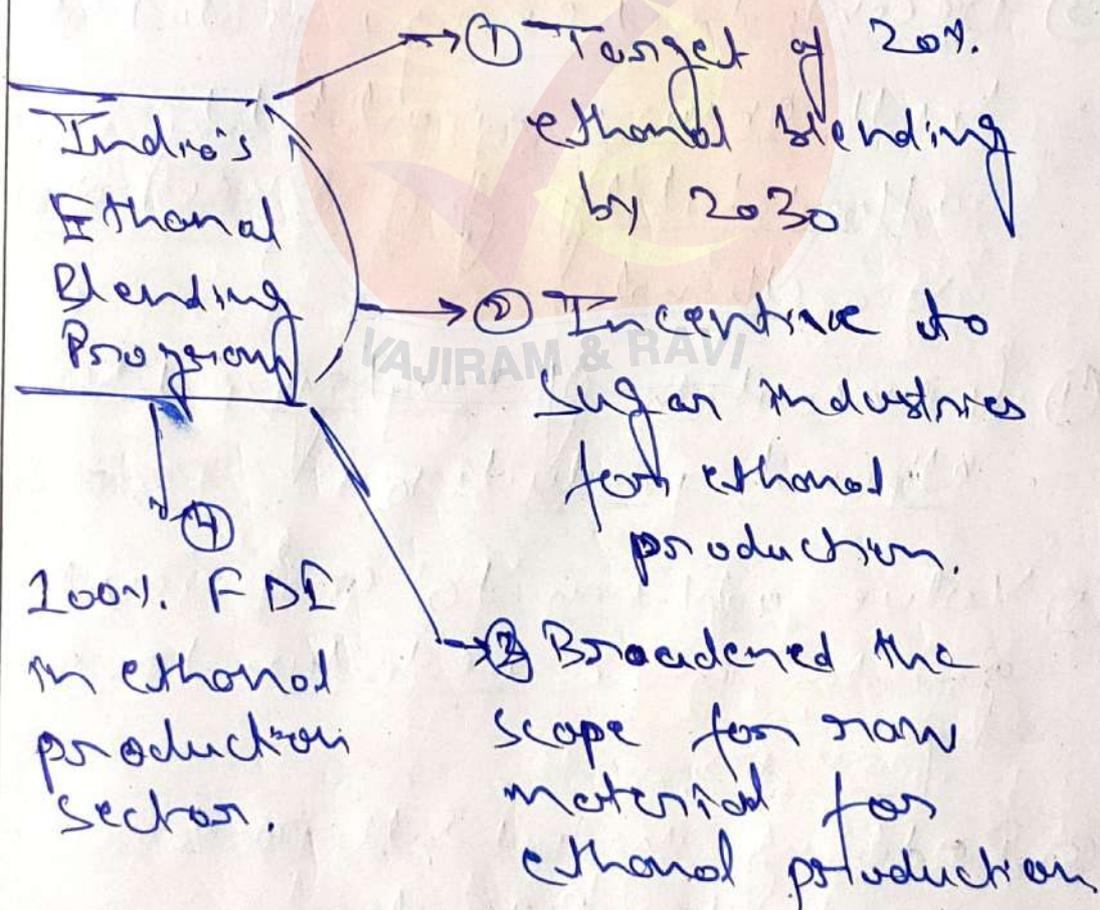
⑤ Post replenishment helps in habitat protection and its carbon sequestration potential.

Thus more research is needed on Blue green economy for its sustainable utilisation.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

15. Do you think India's ethanol blending programme can significantly enhance energy security in the coming decade? Justify your answer.
(15 marks, 250 words)

India is largest producer of sugarcane in world. This makes India a viable destination for ethanol production for energy security & green economy.



(Significance of Ethanol Production)

- ① Energy Security: It will reduce the dependence on oil import from West Asia.
- ② Secure Green Energy Production
Ethanol is more greener than crude oil.
- ③ Decentralised energy production will ensure availability, affordability of green economy via ethanol.
- ④ Generation of employment via ethanol production.
- ⑤ Value addition to crops and greater price realisation to farmers.
- ⑥ Reducing import Bill and avenue for exports.

(Limitations)

- ① Large scale production may hamper food security.
- ② It requires large investment and high initial cost.
- ③ Blending beyond 20% may require engine modification.
- ④ Ethanol cannot be a base fuel due to its low energy density.

(Way ahead)

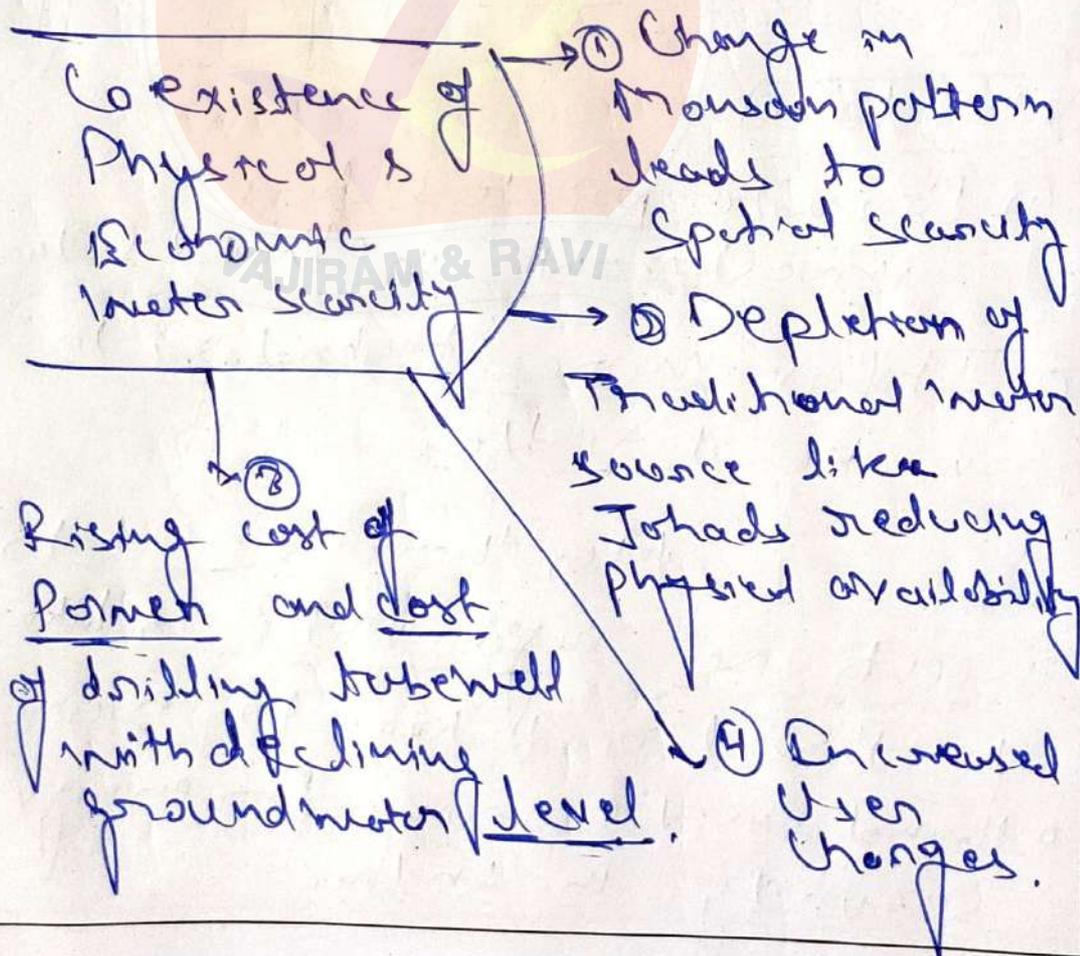
- ① Promote private sector's investment in ethanol sector.
- ② Infuse more technology to make it viable.

Also there is need to incentivise sugar mills to take up ethanol production to ensure ethanol based economy for energy security in India.

roduction	
ody	
onclusion	
resentation	
arks:	

16. The coexistence of physical and economic water scarcity in Indian agriculture reflects a deeper crisis in water governance. Examine the factors contributing to this and suggest reforms to make irrigation more equitable and sustainable.
(15 marks, 250 words)

As per Agriculture Census 2016, 51% of Indian agriculture is still handy. Physical and economic water scarcity will further make agriculture unviable.



VAJIRAM & RAVI

(Factors contributing to this)

- ① Climate change and changing Monsoon pattern: This led to declining water table.
- ② Flood irrigation: It has only 40% water use efficiency.
- ③ Pollution of rivers, streams & ponds due to eutrophication or disposal of effluents in them.
- ④ Decline of traditional water harvesting structures (eg) ISs in Tamil Nadu.
- ⑤ Changing cropping pattern with water guzzling crops in dry regions.
- ⑥ Poor water governance in absence of any law and on water.
- ⑦ Low user charges and power subsidy.

Reforms needed

- ① Adoption of PM Krishi Sinchai Yojana: More crop per drop by micro irrigation.
- ② Rejuvenate the traditional water harvesting structures.
- ③ Follow Mishra Shah Committee to bring law on water governance.
- ④ Promote creation of FPO's to incentivise adoption of technology for efficient irrigation.
- ⑤ Incentivise farmers to grow agro climatic crops.

Also as argued by Asok Dalmeida Committee, promotion on On Farm Water Harvesting will lead to efficient irrigation for sustainable agriculture.

Introduction

Body

Conclusion

Presentation

Marks:

17. The absolute monopoly of Indian Railways has constrained its capacity for modernisation and efficiency. In this context, do you agree that privatisation is a viable solution? Substantiate your answer.

(15 marks, 250 words)

Railways though efficient mode of transportation, cater to only about 40% of freight and passenger transport in India. Absolute government monopoly hinders its growth.

Drawbacks of Absolute government Monopoly

- ① Cross subsidisation issue: High cost of freight transport discourages freight by trains
- ② Low adoption of technology signal systems leading to frequent train accidents
- ③ Poor efficiency due to over capacity utilisation of tracks

upto 150% (delays & cost overrun)

④ Poor railway infra eg slow adoption of safe LBT coaches and slow modernisation of platforms.

⑤ Lack of last mile connectivity for freight/cargo shipment.

(Case for Privatisation)

Viable solution

Non Viable solution.

① It will bring more capital to invest in Infra modernisation

② It will lead to better technology adoption.

③ It will bring efficiency by optimum utilisation

① It goes against the public service nature of rail way.

② May lead to profiteering at cost of people's right to low cost transport.

③ May lead to adoption of only

of Unused Railway Assets.

profit making routes.

① Will end losses
Subsidisation and
make freight route
attractive!

④ May lead to
neglect to hill
sparsely populated
regions like
North East

② Improve the
Quality of service.

⑤ May lead to
unemployment.

Way ahead

① Pollon Bibek Debroy Committee
recommendation for augmentation
of Railway Assets

② Sam Pitroda Committee advised
to privatise the non core
services.

③ Modernise railways by adopting
technology.

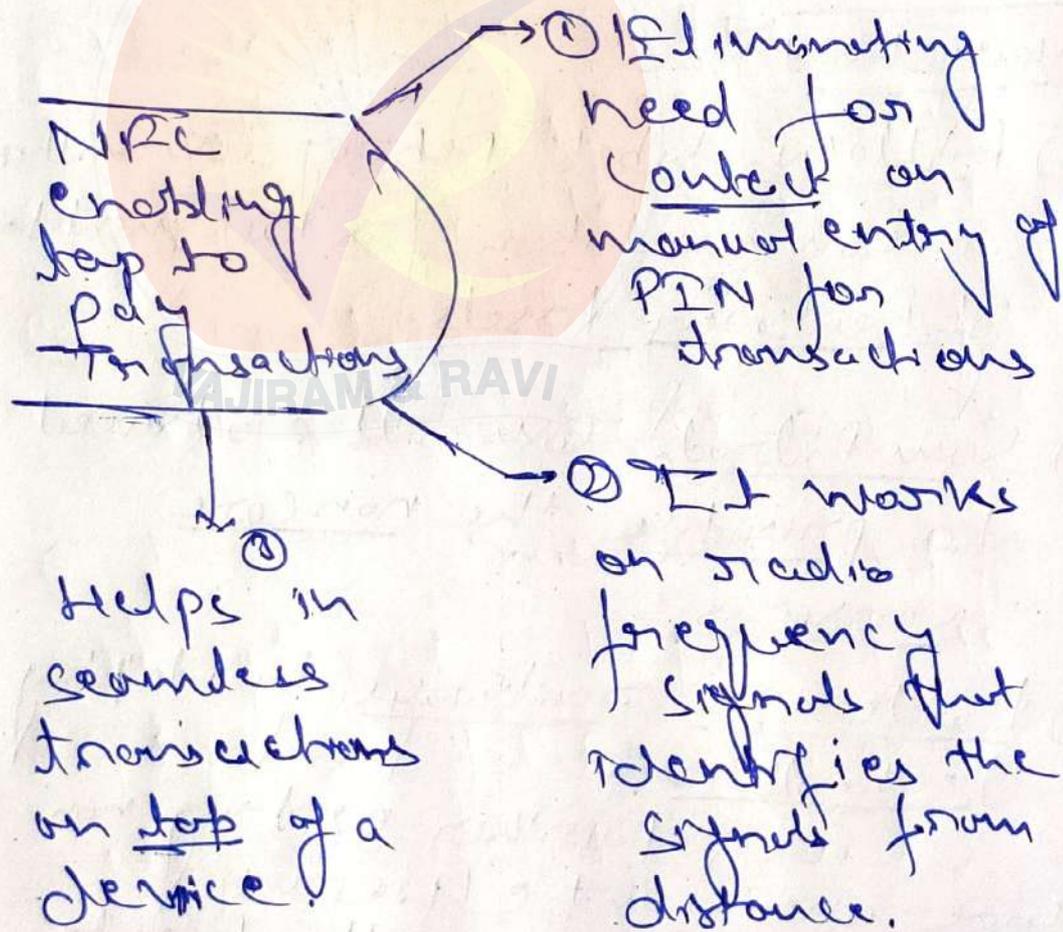
Further existing non
core areas and efficient
management via Public Private
partnership will privatise Railways.

roduction	
dy	
clusion	
esentation	
orks:	

18. What is Near Field Communication (NFC) technology, and how is it enabling tap-to-pay transactions? Highlight its benefits and limitations? Does it carry any potential risks? (15 marks, 250 words)

Near Field Communication

(NFC) works on Radio Frequency Identification Technology that detects the signals from short distance.



Benefits of NFC

- ① Saving time on transactions
 - ⊙ NFC based toll payments.
- ② Reducing cost of businesses
 - ⊙ No need of labour force / human resource for Billing.
- ③ It is environment friendly
 - ⊙ Saving fuel and reducing carbon emission is less
 - stoppage for toll payments.
- ④ Reduce the chances of payment failure in case of slow connectivity by enabling Radio frequency identification.

Limitations

- ① Poor adoption of NFC due to low financial inclusion.
- ② It has limit on transactions, hampers its adoption.

② It may fail in case, the device not in clear line of sight.

④ It requires power, in infrastructure, not viable for remote areas not having 24x7 power.

(Potential risks)

① Risk of data theft.

② Cyber security issue with hackers hacking account.

③ Security risk with aerial espionage by enemy country

Thus proper safeguards be placed before full adoption of NAC to make its successful in India.

Introduction

Body

Conclusion

Presentation

Marks:

19. Discuss how the shift from Cash-based transactions to digital financial networks in drug trafficking and money laundering poses new challenges for enforcement agencies. What countermeasures should be taken to prevent the same?
(15 marks, 250 words)

The rise of dark web, deep web and virtual Digital Assets in drug trafficking and money laundering transactions is making its detection difficult by law enforcement agencies.

Challenges posed by the shift

- ① Rising anonymity: Deepweb & Darknet makes the transactions difficult to detect.
- ② Inability to reach the origin point of transaction: The decentralised ledger of blockchain based virtual asset makes its monitoring difficult.

③ But of Juris diction transactions makes it difficult to enforce laws.

④ Nexus between organised crime & money laundering leading to harmful transactions by dark web. They are difficult to trace.

⑤ Absence of clear laws on digital virtual assets pose difficulty for enforcement agency.

(Countermeasures needed)

① Policy / Law on the Virtual digital Assets.

② More coordination between law enforcement bodies like IED with CERT In and other cybersecurity bodies.

③ Effective coordination with foreign countries, (Interpol)

- ④ Establish Multi Agency Centre to stackle these cases.
- ⑤ International Collaboration via FATF and other bodies.
- ⑥ Adopting global best practices like Talith Manual of USA
- ⑦ Signing of Polemario Convention for global efforts against organised crimes.
- ⑧ Improve cyber capability to detect online frauds.
- ⑨ Better monitoring of Borders via CBMs to rend the nexus

Thus with all sound approach it will help in ending the nexus of organised crime of money laundering & drug trafficking.

roduction	
ody	
onclusion	
esentation	
arks:	

20. The retreat of Himalayan glaciers, driven by global warming, has increased the frequency and intensity of Glacial Lake Outburst Floods. Discuss the underlying causes of Glacial Lake Outburst Floods and recommend adaptive strategies to manage such disasters effectively.

(15 marks, 250 words)

Glacial Lake Outburst Flood is the sudden outflow of accumulated water of glacial lake due to glacier retreat @ Uttarakoshi flood.

Causes of Glacial Lake Outburst Flood

- ① Global warming: It leads to fast retreat of glaciers.
- ② Change of Topography @ Tunneling or Infrastructure projects.
- ③ Seismic activity @ Earthquake in Himalayas.

④ Volcanic activity may lead to glacial retreat and outburst flood.

⑤ Alteration of glacial lake boundary may lead due to land slide / land slip may induce flood.

⑥ Rising Black carbon pollution due to anthropogenic factors leading fast retreat of glaciers.

Adoptive strategies

(Preventive measures)

① Prevent topography change in Himalayan region in sensitive areas.

② Proper land use planning and zonation of glacial lakes for Risk Assessment.

① Installation of Early Warning System

④ Combating Climate Change in Himalayan region

② Mitigation measures

① Rapid response force and Training of locals in rescue, response.

② Planning of Relief work, Search and operation by involving NDRF, Local Authorities.

③ Proper rehabilitation of affected people.

④ Ensuring livelihood of affected.

Also adoption of Sendai Framework and PM 10 Point Programme will help in effective tackling of hazard.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

Space for Rough Work



Space for Rough Work

