

TEST CODE 5 1 3 3 5

FIAS – MGP 2022 (C-9) – Full Length Test #3

Time Allowed : Three Hours  
समय : तीन घंटे**ForumIAS**Maximum Marks : 250  
अधिकतम अंक : 250**GENERAL STUDIES / सामान्य अध्ययन**

Name Of Candidate परीक्षार्थी का नाम	Kanika Goyal		
Roll No./अनुक्रमांक	3517201	Medium/माध्यम	English/अंग्रेजी <input type="checkbox"/> Hindi/हिंदी <input type="checkbox"/>
Center Code/परीक्षा केंद्र		Date/दिनांक	11.09.2022

\*Center Code : For Online - 1900 / Delhi : Karol bagh - 1901, ORN - 1902, Mukharji Nagar - 1903 / Patna : Boring Rd. - 2001 / Hyderabad : Jawahar Nagar - 2101

INDEX TABLE / अनुक्रमणिका			INSTRUCTION / अनुदेश	
Q. No. प्र.सं.	Max. Marks अधिकतम अंक	Marks Obtained प्राप्तांक	1. Please do furnish Name, Email, Roll No and Mobile in the answer sheet. कृपया उत्तर-पुस्तिका में नाम, ईमेल, रोल नंबर और मोबाइल नंबर भरें।	
1			2. There are TWENTY questions printed in ENGLISH & HINDI, all questions are compulsory. उत्तर पुस्तिका में अंग्रेजी/हिंदी में बीस प्रश्न दिए गए हैं, सभी प्रश्न अनिवार्य हैं।	
2			3. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के लिए निर्धारित अंक उसके सामने अंकित किए गए हैं।	
3			4. 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. उत्तर प्रवेश पत्र में अधिकृत माध्यम में लिखे जाने चाहिए, जो कि दिए गए स्थान में इस प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के कवर पर स्पष्ट रूप से लिखा जाना चाहिए।	
4			5. Word limit in questions, if 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. प्रश्नों में शब्द सीमा, यदि निर्दिष्ट हो, का पालन किया जाए। प्रश्न-सह-उत्तर पुस्तिका में खाली छोड़े गये किसी भी पृष्ठ या पृष्ठ के भाग को स्पष्ट रूप से काट दें।	
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			Start Time/प्रारंभ करने का समय :	End Time/समाप्त करने का समय :
Total Marks/कुल अंक :			Mode Of Examination/ परीक्षा की विधि :	Online/ऑनलाइन <input type="checkbox"/> Offline/ऑफलाइन <input type="checkbox"/>
*Evaluator's Discretion is the marks awarded at the discretion of the evaluator based on your overall impression, on the basis of (but not limited to) your handwriting, presentation, use of diagrams, flowcharts, facts and figures or absolutely anything that he/she liked in your copy. मूल्यांकन कर्ता का विवेक अंक, आपकी लिखावट, प्रस्तुति, आरेखों के उपयोग, फ्लोचार्ट, तथ्यों और आकड़ों या समग्र रूप किसी अन्य विषय वस्तु, जो मूल्यांकन कर्ता को आपकी कॉपी में पसंद आयी के आधार पर (लेकिन इन्हीं तक सीमित नहीं) पर दिए गए अंक हैं।			For Office Use Only / केवल कार्यालय प्रयोग हेतु	
			ECN CODE/ ईसीएन कोड :	Evaluation Date/ मूल्यांकन तिथि :
			EG/ईजी :	

**Note:** You can discuss your evaluated copy with the Mentor. Raise a ticket from your portal to schedule a mentor call or visit the offline centre to meet mentor (all 7 days, Timings - 11 AM to 6 PM). Further if you are unsatisfied with the evaluation, you can seek re-evaluation of the copy.

Parameters	Excellent	Very Good	Good	Average	Poor	Very Poor
Language						
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**ADDITIONAL REMARKS**



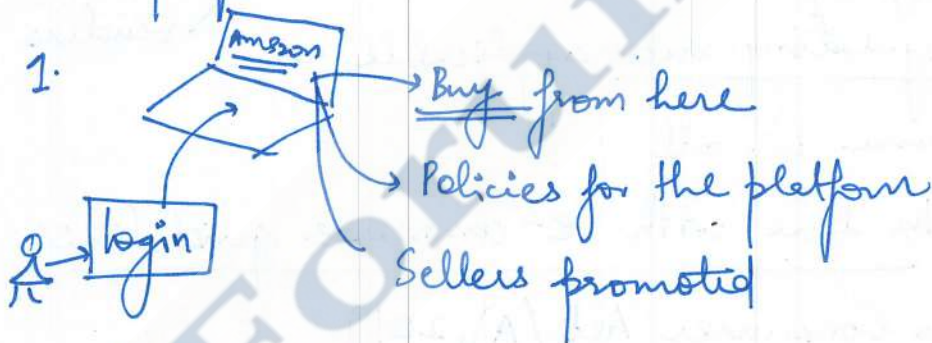
Q.1) Open Network for Digital Commerce (ONDC) seeks to democratize the nation's online market by catalysing a shift from a platform centric to an open model of e-commerce. Enumerate the issues in platform centric e-commerce model and discuss the significance of ONDC. (10 marks, 150 words)

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## Open Network for digital Commerce

aims to integrate all platforms on a single e-platform, along with providing open space for all to register. (with 5m E-commerce buyers)

### Issues in platform centric e-commerce model



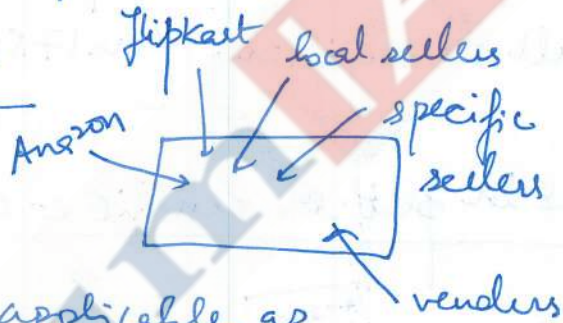
2. Platforms like Amazon, flipkart have gain monopoly

3. Also - specific sellers are promoted by these platforms (eg. Amazon owned Cloudsales)

4. High commission to be paid from the decentralised sellers ( $\sim 20\%$  Amazon)
5. Conditionalities imposed on Refund, Replacement policy
6. Paid reviews of specific products

### Open Network Benefits

1. Single for all
2. Regulatory rules applicable as same for all
3. In line with e-commerce guidelines under Consumer Act (A), 2019
4. Efficient GR Mechanism for customers
5. No predatory pricing
6. No unnecessary surfing.



Thus, a huge step in directions of web 3.0 has been taken in India.

Q.2) Highlighting the existing bottlenecks in infrastructure development in the country, examine the role of PM Gati Shakti-National Master Plan for Multi-Modal Connectivity to overcome these challenges. (10 marks, 150 words)

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Recently, the Budget 2022-23 has increased Capital Budget by ~300%, also creating Infrastructure as a pillar of Atmanirbhar Bharat.

Existing Bottlenecks in Infrastructure development

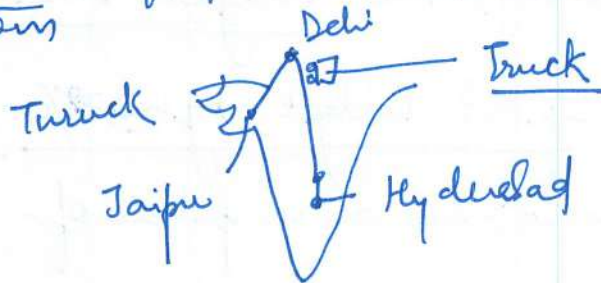
1. high logistics cost ~13-14%.

from → dependence on Roadways  
→ high commercial coach charges  
in Railways  
→ non-efficient Inland waterways

2. Delays in achieving Bharatmala and Sagarmala projects

3. Stalled projects due to absent centre-state cooperation and numerous clearances from various ministries. (HAM Model)

4. linking rural and urban Infrastructure
5. <sup>Presence</sup> Absence of point to point connectivity system



No Hub & Spoke Model

### Role Gati-Shakti Master plan

1. brings all together → Airways  
→ Road  
→ Rail  
→ waterways  
→ Multi-Modal Transit systems  
→ logistics
2. Creates a steering Committee: Centre-state and ministerial cooperation (↓ed time)
3. Setup Project Management Committee under Cabinet Secretary
4. pushes for Multi-Modal logistics plan and hub and spoke model

Thus, with all this India aims at providing Infrastructure for all and achieving target of National Infrastructure policy 2021-26

Q.3) Often cited as responsible for many of the agriculture's maladies, Minimum Support Price (MSP) policy can also provide their remedies. Analyze the statement with special reference to issues related to mono-cropping and climate change. (10 marks, 150 words)

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3.

Minimum support price is the fixed floor price guaranteed to the farmers, when they sell their crops in Agricultural markets (usually GRAM, APMC)

### Maladies of MSP

#### 1. Mono-cropping

↳ open procurement system in wheat and rice  
↳ higher than market price of the food grains

\* promotes farmers to plant wheat and rice  
↳ land degradation, hard pan topography  
↳ declining water tables  
↳ lesser nutrition  
↳ greater dependence on MSP

## 2. Climate change

→ high water sprugling crops

eg. 1kg rice  $\approx$  3200 L water, 1kg sugarcane  
(FRP)  $\approx$  4000 L water ( $\approx$  94% Ground water  
agriculture)

→ Desertification in Punjab - Haryana.

However it can be a Remedy :-

### 1. Promoting crop diversification

• Increased MSP on pulses, horticulture,  
oilseeds, millets

eg. 3x  $\uparrow$  in soybeans to push cultivation

eg. National Mission on Palm oil & PM-AASHA

### 2. Abating climate change

↳ agro-climatic crops (extension services)  
- promoting area specific crops

eg. Millets in Rajasthan, lavender revolution  
J&K

abates climate change → Increased adaptation

Thus, a thoughtful utilisation of  
tool of MSP is necessary for SDG 2 and  
doubling farmers income and increasing  
its reach (Sant Kumar committee)



Q.4) Explain the critical role of the fisheries sector for development of coastal areas. Describing the major outcomes of the 12th ministerial of WTO, discuss India's concerns related to the impact of these outcomes on fisheries sector in the country. (10 marks, 150 words)

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India has a coastal boundary of 7516 km, with fisheries contributing ~13-12% of Agricultural exports and ~10cr livelihoods.

Critical role of fisheries sector

1. Development of Integrated farming system
  - Aquaponics
  - removes seasonal agricultural unemployment
2. Reduces outmigrations of males to the urban cities (eg. from Gujran → Hyderabad)
3. Empowering women (~50% women) workforce in fisheries
4. Tribes development and SC communities
5. Food processing Industries → channelised new development (Sagarmala - Blue economy)

## The outcomes of recent 12<sup>th</sup> Ministerial at WTO

1. Curb on fishery - Illegal
2. Encroaches beyond EEZ
3. Impacts the Biodiversity
4. beyond sustainable limits.

### India concerns

1. Benefits — as provide assurance to small farmers against Illegal Trawlers introduced by China in borders of countries

### 2. Concerns

↳ Targetting of small fishers as Illegal fishing

↳ Imposition of phytosanitary barriers and counterfuting policies → to curb impost eg. by South east ASEAN.

Thus, India need to ensure its

Concerns are flagged and the fishers have sustainable livelihood (SDG 11)

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Q.5) What are the advantages of liquid nano urea over conventional fertilizers? Also bring out other applications of nanotechnology in the agriculture sector. (10 marks, 150 words)

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Liquid nano urea has been developed by IFFCO for utilisation in farms.

Its advantages

1. half litre of nano urea = ~6-7 bags of traditional urea  
i) resets the ratio of NPK in fields  
 $11:3:1 \rightarrow 3:2:1$ .
2. directly supply of nutrients to the crops, traditionally only ~35% is made available
3. Abates eutrophication of canals and lakes nearby — fertilization harms
4. Reduces amount of time spent on farms  
↳ other employment ↓<sup>d</sup> Disguised
5. Benefits state → ↓<sup>e</sup> Subsidy burden.

Other Nano technologies can benefit farmers by :-

i) Pre-sowing state

- nano sensors requirement of the soil
- nanobots → tilling adequately w/o losing micronutrients
- Pusa Decomposer.

ii) Post-sowing

- providing targetted nutrients to the plants
- fortification on farm - ↑<sup>ed</sup> value
- pesticides - or repellent crops by engineering at nano levels.

iii) Storage :-

- keeping crop safe / fungal effect
- sensors / roosting
- weather sensors.

Thus, the Technology brings immense benefits, should be promoted through Krishi Vigyan Kendras, Agri Business Clinics, ICAR, Pusa Institute

Q.6) Discuss the reasons for rising anti-microbial resistance (AMR) in India and the efforts to control it. Can traditional medicine help in controlling AMR in the country? (10 marks, 150 words)

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Anti-Microbial resistance is when certain bacteriae, viruses, protozoas etc. develop resistance to certain medicines/drugs thus, rendering them ineffective to cure the diseases caused by these microorganisms.

Reasons for rising AMR

dependence on few  
high consumption of drugs without requirement  
ep. Ibuprofen.

release of effluents (mix) sewage waters

encroachments of the wetlands (no area for nutrients to seep)

entering the microbial chain (Biomegnification)

Efforts to control

- creation of schedule H (only <sup>or</sup> prescription)
- keeping certain drugs preserved (ep. to manage XDR, MDR tuberculosis)

- Instructions on Biomedical waste management [common facilities within 75km] curb on open dumping & incineration
- Sanitisation Instructions under BMW, 2016 rules.

How Traditional Medical can help :-

- derived from Nature itself  
↳ By nature resistant to microbes (eg. Malaria Chloroquine)
- provide effective alternative system when allopathy fails to respond (eg. Kenya President's daughter getting vision in Kerala)
- focuses on the bodily elements and how responds (Naturopathy)
- One health approach integrated within it

Thus, ensuring curbs on supply, developing pharmacogenetics and ensuring developing ISM, can collectively forge a "Healthy India".

Q.7) Critically evaluate the various government initiatives to promote renewable energy in the country. How far can the Energy Conservation (Amendment) Bill, 2022 contribute towards the objective of decarbonizing the economy? (10 marks, 150 words)

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Renewable energy share has increased  $\sim$  175 GW in country with aim to take it to  $\sim$  400 GW by 2030 (Glasgow Panchamrit commitment)

### Government Initiatives

#### i) National Solar Mission

- solar thermal energy - plants
  - photovoltaic technology  $\rightarrow$  under PLI promotion
- Benefit:  $\sim$  50 GW solar capacity, cost  $\sim$  27/unit from  $\sim$  8-97/unit

#### ii) National Mission on enhanced energy efficient

- $\rightarrow$  Renewable Energy obligations
- $\rightarrow$  Wind energy plants  $\rightarrow$  Auctions
- $\rightarrow$  Perform Achieve and Trade

iii) Market creation: Green Team Ahead  
Market on Power exchanges

iv) promoting small hydro power projects  
(PM-Devine) to the north east

v) However → heavy cost on discoms  
→ low household adoptions  
(high initial cost)  
wind energy prices bottomed  
(heavy losses)

Recent (A) to Energy Conservation Bill

- ① Allows RWA / Industrial Associations  
to directly buy energy from GENCOMS
- ② promote household to setup solar  
grid → can sell, can get remitted
- ③ Incentive on using Renewable  
energy to the Industry, Government  
agencies and department.

Thus, a revolution has to  
take to ensure a energy sustainable



Q.8) Frequent sea incursions and accelerated coastal erosion pose a grave threat to our environment. Analyzing their impacts, propose some corrective measures. (10 marks, 150 words)

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8.

The oceans are 70% of our earth, and the impact of global warming is becoming increasingly evident.

### Frequent sea incursions

- heavy water flow to the inland areas
- heavy water → submergence of coral reefs "Rainforests of the oceans"
- Impact low level - Biodiversity - ecotone region
- Absorbs the pollutants, chemicals of the coastal cities → harming the ecology further (Benthic zones)

### Frequent and Accelerated coastal erosion

- eroding coastal topography
- Affects the low-lying mangroves 

- threatens the species there  
(eg. Gharial, Oliver Ridley at Bhitarkanika)
- Affects the coastal cities → reduces land scape
- Affects river water flow : → high flooding by increasing the initial water flow.

### Measures to abate

1. Blue economy development as green economy
2. Mitigation through increasing Mangrove cover (eg. Gujarat)
3. Adaptation → flood channels, creating CRZ and Island development zones and following effectively.
4. ensuring less warming of oceans → not releasing warm Industrial water.  
Small steps at the individual level can ensure a saved coastal economy for all.

Q.9) Emerging internal security threats of the 21st century call for a modern, efficient and responsive police force. In this perspective, present a case for well-rounded police reforms. (10 marks, 150 words)

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Police is the first responder  
in the state facing any internal security  
challenge

- LWE
- cyber crime
- border incursion
- communicative Media

presence  
of non-  
state actors

It has performed by

- through SPG (odisha)
- Greyhounds (Andhra)
- reduced LW Extremism
- coasted safety in Mumbai  
post 26/11 attacks

Action  
under section  
505, 153A  
to curb  
Hate speech,  
fake news.

responding to cyber crime challenges  
(special cyber cell in Maharashtra,  
Cyber dome of Kerala police)

Need police reforms

① Infrastructural

- providing Investigation Infrastructure
- prison infrastructure
- connecting to forensic, Gait Analysis labs.

② Training of officers in specialised

threats

- ↳ cyber policing
- ↳ effective reporting

- ensuring adequate SOP when acting under s 69A of IT Act 2000

③ Border crimes: arms and ammunition

④ Collaborative centre and state forces

- eg. Greyhounds & CoBRA forces  
Assam Police & Assam Rifles

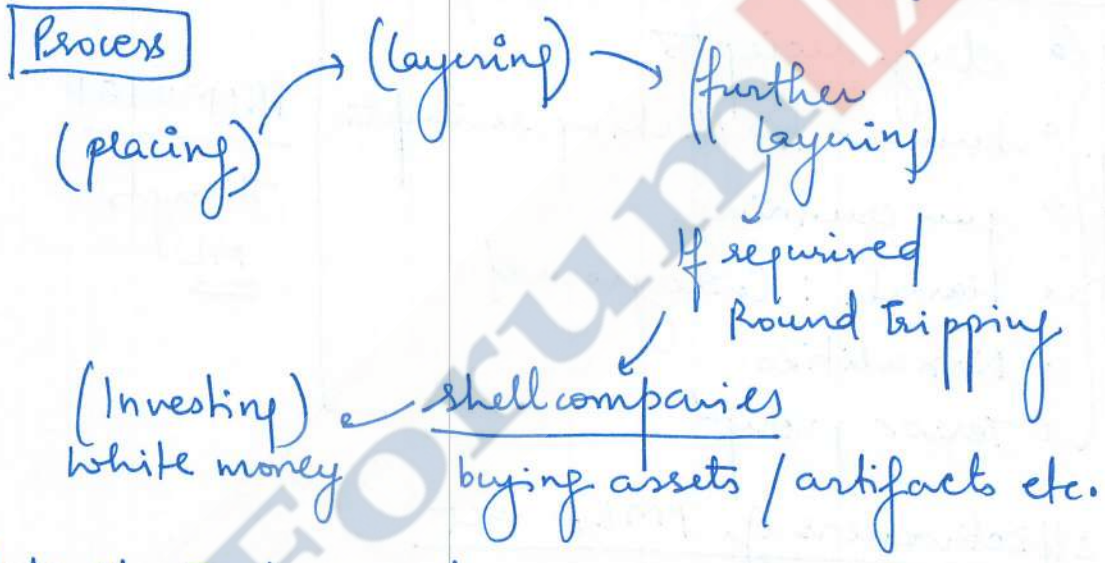
\* should not clash or override.

To ensure it, the provision under 'Modernisation of Police forces schemes', following the guidelines of Malikath and Prakash Singh case have to implemented.

Q.10) Money laundering undermines the integrity of the financial system and threatens national security. Elaborate. How effective has Prevention of Money Laundering Act, 2002 (PMLA) been in checking the problem of money laundering in the country? (10 marks, 150 words)

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10. Money laundering refers to the process where illegal black money is converted to white/clean money by using multiple loopholes in the system.



Integrity of financial system

- Tax evasion ~ 30% lost to Money laundering.
- Reinvesting laundered money as FDI (e.g. from Tax havens Mauritius, Singapore)

- Moral hazard for other tax payers in the economy.
- harm the health of overall financial ecosystem (Banking softwares) (Investing)
- creates bubble in stock market (DHFL)

### Threatens Internal security

- Organised crime
- drug receipts
  - human trafficking receipts
  - gun running
  - Havals : Underground
  - Naxalities
  - Terror groups
- PROMOTED  
through  
ML

### Effectiveness of PMLA act

- has curbed Money laundering, by placing AML software in banks
- creation of ED → to take strict actions
- International collaboration: FATF
- Allows EIRP to be registered easily.

Thus, the menace has to be

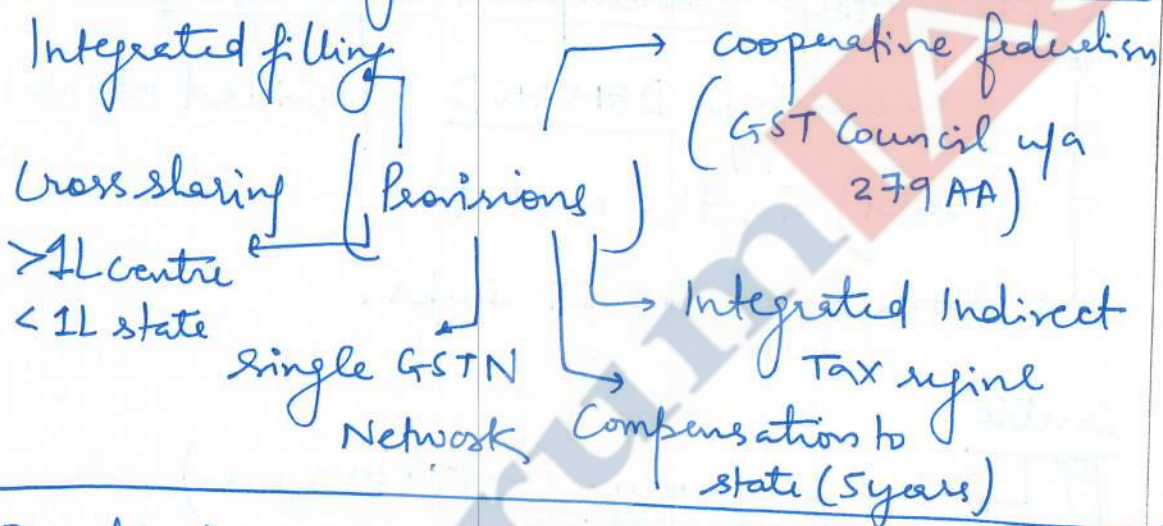
controlled with strict and effective  
measures.

Q.11) In the five years since its launch to create "One Nation, One Tax, One Market", Goods and Services Tax (GST) has been a cause of celebration as well as a source of worry for the stakeholders. In light of this statement, assess the performance of GST. (15 marks, 250 words)

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## Goods and Services Tax was

implemented from July, 2017 in the Indian economy.



## Benefits brought to the stakeholders

1. The consumers (cascading effect)

- ↳ No Double charging of Tax on goods
- ↳ fixed Tax slabs on Items
- ↳ can make effective decisions

2. for producers

- ↳ easy e-way bill
- ↳ faster rebates
- ↳ on point solution

- greater working capital

### States

- ↳ fixed provision of taxes to collect
- ↳ compensation of any loss from centre
- ↳ promoting consumption expenditure
  - ↳ creating DEMAND (provided where sold) in the market
- ↳ attracting more IT hubs.

### Centre

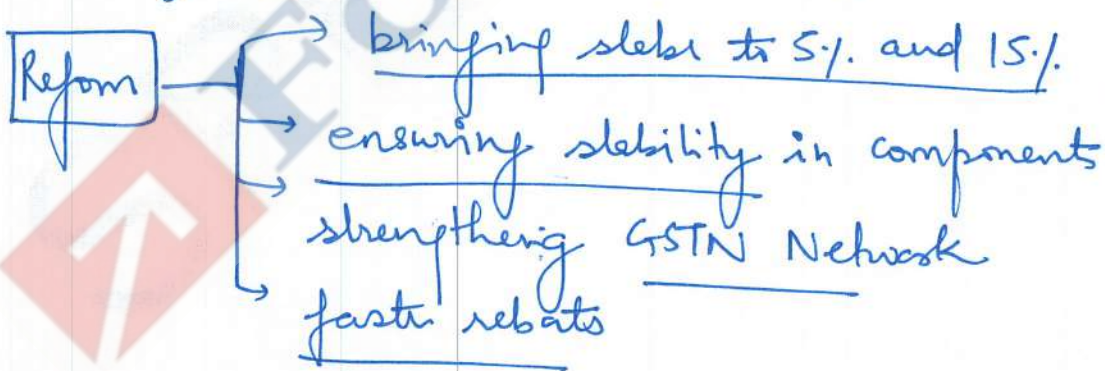
- ↳ Tax buoyancy (→ 70% increase)
- ↳ operation clean money post demonetisation benefitted by GST
- ↳ Easy Tax calculation.

### As a cause of worry

- \* Centre-state tensions : with  $\frac{1}{3}^{\text{rd}}$  voting power and  $\frac{3}{4}^{\text{th}}$  majority required centre hold sway at GST council

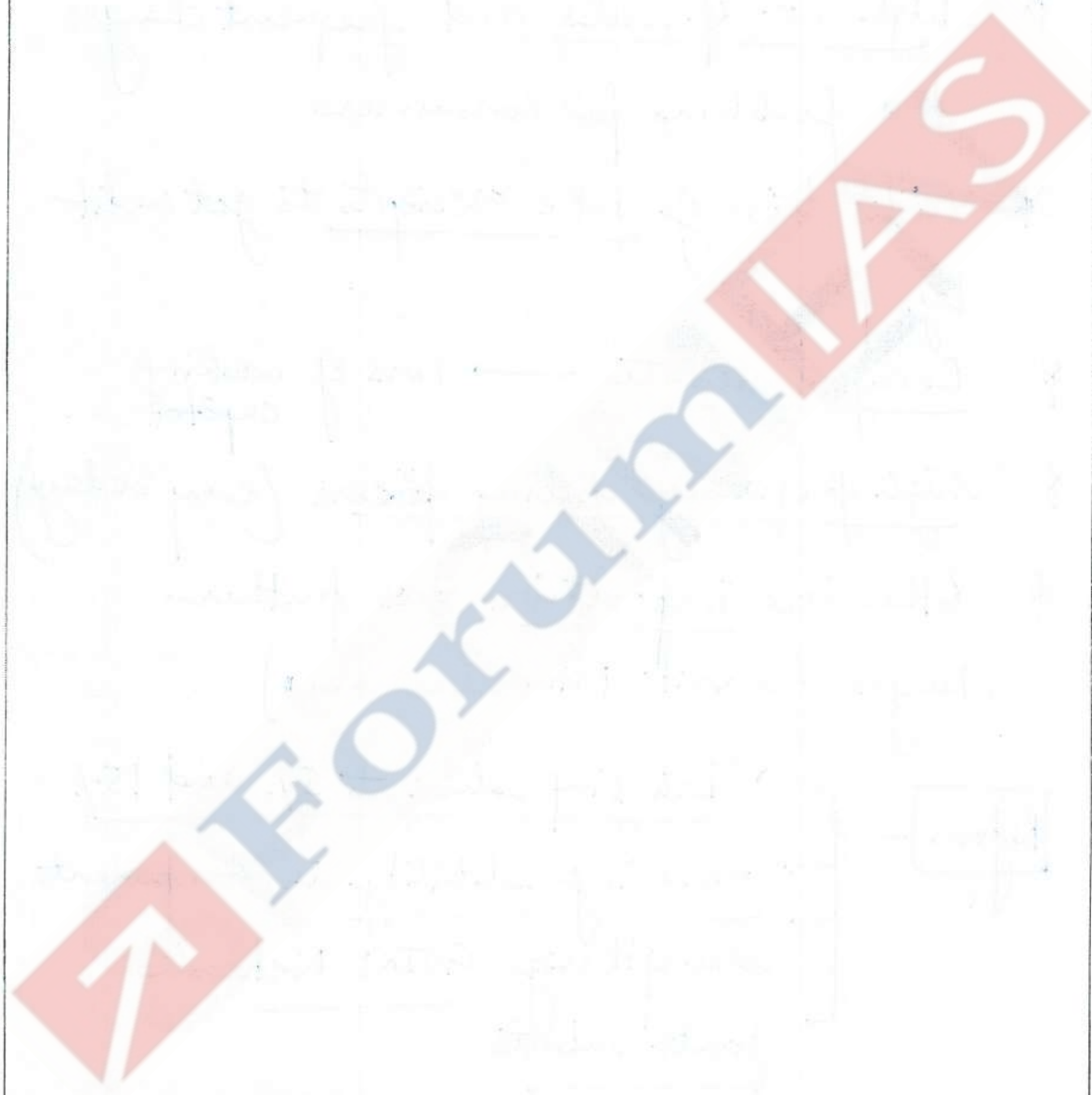


- \* No compensation during COVID-19 → high fiscal deficit on state expenditure.
- \* high no. of slabs and frequent changes  
↳ problems for consumers
- \* utilisation of fake receipts to get credit by people
- \* Delayed rebates → loss of working capital
- \* high frequency filing process (every 20 days)
- \* Other tax imposition - as further charges (Molih Minerals cases)



GST is a revolution, acknowledged world over, it is central to ensure that the proper collaborative mechanism is forged.

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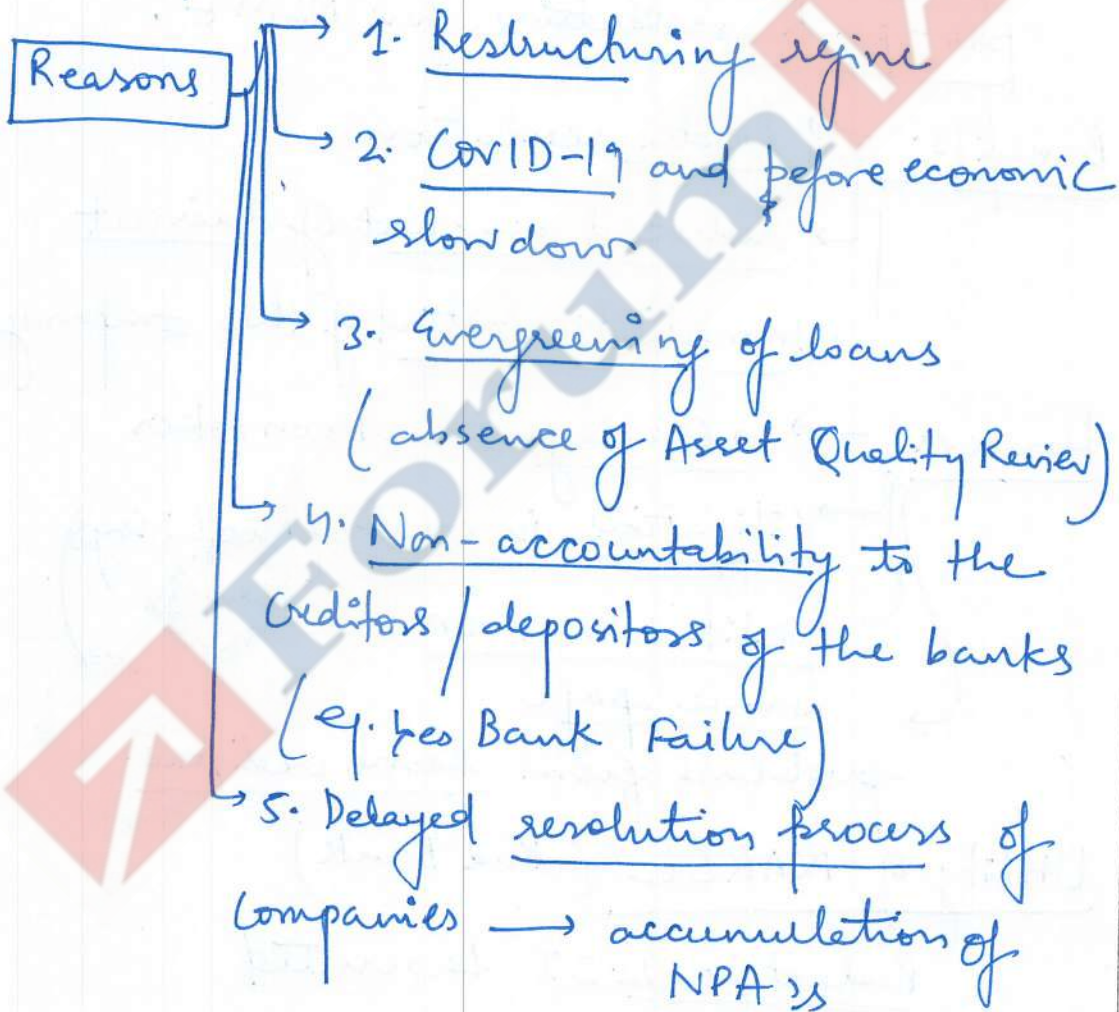


Q.12) Discussing the reasons for high Non-Performing Assets (NPAs) in Indian banking sector, critically examine the utility of Insolvency and Bankruptcy Code (IBC) and National Asset Reconstruction Company Ltd (NARCL) for reducing financial stress on banks. (15 marks, 250 words)

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Non-Performing Assets are the loans that have not been repayed by the debtors to the banks. ~9.5% NPA are reported with 80% in PSBs.



## Utility of IBC in resolving

1. Creates Insolvency Professional & Creditor in control period with fixed 520 days period to either liquidate or resolve.

2. Further Amendment also provide for pre-pack resolutions for MSME.

Benefits:

- faster resolutions
- reduced amount of haircut
- immediate control of the company

However

- in 660 days have been taken
- litigations in court (Ruchi Soya case)
- creditors not on same page
- problems from home creditors.

## Utility of NARCL (Bad Bank)

Budget 2022-23 has created  
National Asset Reconstruction Company  
Limited.

## Benefits

1. purchases NPA's from the banks by issuing an offer
2. Bank has option to float Swiss challenges (others can outmatch the offer and buy asset)
3. Allows banks to be freed of NPA and provisioning & focus on banking function

However → Government cannot take  
burden of non-prudential loans  
↳ difficult of sale remains with NARCL  
↳ can embed effect on fiscal health.

Therefore these are important measures but a broader fiscal prudence has to be adopted by the Banks for ensuring no collusive loans are issued, and with adequate credit assessment.

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Q.13) While post-independence policies have transformed India from a 'ship to mouth' economy to a net exporter of agri-products, nutrition security is yet an unrealized objective. Analyze.  
(15 marks, 250 words)

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The year of 1960s when India faced a challenge of import of 'black wheat' of PL-480 it decided to forge Green Revolution → targetted nutrients, fertilizers.  
→ HYV seeds  
→ high yied crops  
→ targetted cropping  
Increased the production by 4 times

Transformation through green revolution

1. Net exporter of wheat, rice and other grains (Bajra, Maize)
2. Yellow revolution in South India in 1980s
3. Pulses production through Rainbow revolution in 2016.
4. Effective irrigation techniques ep. Bengal 3 crops a year of rice (Aaus, Aaam, Boro)

## Nutrition Security yet farfetched

1. focused on rice and wheat  
- through MSP, through ensuring  
at least food to eat under PDS, TPDS.
2. Millets, pulse, oilseed production  
suffered
3. decline in horticulture farming  
(previously for sustainable needs also  
with needs)

Therefore

Today

- ~ 35% children stunted
- ~ 28% children have low  
weight to age ratio  
(wasted)
- ~ 57% females/girls anemic
- rank poorly on global hunger  
index.

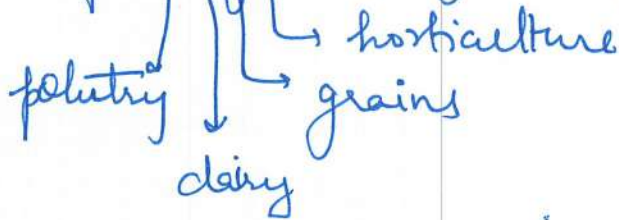
Steps to take in agriculture

1. promoting crop diversification and



agroclimatic cropping (eg. millets in Rajasthan, pulses in Haryana)

2<sup>o</sup> focusing on Integrated farming



3<sup>o</sup> MSP to be changed to ensure - farmers cultivate nutritionally secure crops

4<sup>o</sup> Changing the subsidy regime → promoting organic farming (Budget 2022-23)

5<sup>o</sup> Promoting production of oil seeds, millets (NEast, South India) through govt programmes eg. TL: Millets mission

As, various schemes implemented at state level eg. Rajasthan Banswara, Telangana Jan Bheginderi for millets, Uttarakhand Shajona Lodhas have shown that focusing on crop diversification on field we can forge a healthy India.

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Q.14) Examine the critical role of Food Corporation of India (FCI) in food management in the country. Highlight various challenges faced by the FCI and suggest reforms to make it more effective in its functioning. (15 marks, 250 words)

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Food Corporation of India, ensures that the provisions of NFSA Act 2013 to provide food grains at Fair price shops is fulfilled.

Critical role

1. Procurement from APMC — at MSP prices (wheat and rice)

2. Storing it in godowns for further distribution, also creating a Buffer stock for emergency needs.

3. Distributing the grains to the state agencies for distribution offer fortification (Rice Kernels) if required

4. Ensuring that the grain is sent to the FPS shops (RFID tracking system)

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### Challenges faced by FCI

- ① high economic cost of procurement.
- ② proper transport Infrastructure  
( $\sim 40\%$  wasted Dalwai committee)  
- point to point connectivity  
no multimodal transit  $\rightarrow$  high logistics costs.
- ③ Storage Infrastructure  $\rightarrow$  rotting  
grains, open warehouses, managing stock as per requirement
- ④ Open market sale of buffer  
(throwaway prices on NCDEX, Star Agriplatforms)

⑤ leakages by state agencies in transport to Fair price shops.

Measures to take

① providing technological support

↳ sensors on grain  
↳ CCTV installments  
↳ e-tracking systems on trucks

② Utilising multimodal connectivity systems → reduced logistic cost of food grains.

③ Delegation to state for management  
— reduces cost of transportation

④ PM-AAASHA :- providing gap credit to farmer on sale to market → reduces open procurement obligations

with reforms, FCI can effectively focus on delivering target under NEFA 2013 and SDG 2 (zero hunger)

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Q.15) What do you understand by Artificial Intelligence (AI)? Analyze its predictive and prescriptive applications to improve governance in the country and list out the challenges inherent in AI. (15 marks, 250 words)

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Artificial Intelligence refers to training computer systems to think and take decisions similar to human minds by integrative data analysis of a thing or phenomenon. (eg. AI chess games)



Predictive and prescriptive applications of AI

① for provisioning e-governance services to the people

- by data analysis of targetted beneficiaries.
- performance of previous schemes

- Report of various surveys and the  
measures required - healthcare,  
infrastructure etc.

\* Creating sensor, EWS system in case  
of Natural disasters

\* Epidemic Information management.

## ② Application in Business

- customer analysis
- tracking and responding to various applications
- Data analysis of sectors to invest in.
- selecting the suitable candidates for workforce

## ③ Application in agriculture

- post/pre sowing support :-  
which crop to be sowed eg. soil  
health and .
- post harvest management → when to  
sell



• weather forecasting support.

## Challenges Inherent to AI

- \* biases of human beings (Cathy O'Neil study) - can easily start discriminating
- \* problem of decision out of emotional context - only on data and facts
- \* Challenge of Utilising demographic divided - if not skilled can take in 200 million people out of workforce
- \* Irreversible control over the mind and decision making :- Human Touch
- \* Safeguarding environment - biodiversity (purely commercial decisions)

Therefore as India has put at the UN, the need of IR4.0 is to promote technology with a human touch world over.

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Q.16) How is 5G different from previous generations of tele-communication technology? Underlining the transformative application of 5G technology, discuss various challenges in its roll-out. (15 marks, 250 words)

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5<sup>th</sup> Generation Telecom services  
application will be floated in India by  
November - December 2022, as the spectrum  
auctions were completed early August 2022.

How 5G is different ?

- low latency ( $\approx 4x$  less)
- high speed ( $\approx 100$  mb) 4G ( $\approx 2-3$  mb)
- More devices can be connected
- Greater spread of servers.

Transformative application of 5 services

\* Utilised in IR4.0 to help Business  
servers to function effectively without  
disruption.

\* Allow data analysis and pave way

## for Quantum computing

- \* promote increased application of  
~~AI and Tech~~ Robotics, drone technology  
(low connection costs)

eg. Auto drone survey for agricultural fields.

- \* socially education for all → by creating  
closer servers (simple small towers  
have to be installed)

— Model / demons tration /  
hologram based education

- \* promotes Research and development  
in India
  - In-Vivo Modelling
  - Matches super computing requirements
  - various Test beds for startup

\* personal oriented applications, themselves integrating various 5G services.

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## Challenges in roll out

\* deployment of servers

↳ Airports - airwaves

↳ Biodiversity - Impact on Birds.

\* Spectrum allocation bought by few oligopolies → ensuring services to all

\* Already established 4G Infrastructure won't be effectively utilised

\* Can further digital divide

↳ Capitive Networks

\* The Inhibitions of Telecom companies over net neutrality obligations of TRAI

\* Tariff regulations for 5G.

India has <sup>to</sup> make a steady deep

to ensure the service is for all. (SPG10)

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Q.17) Why is Environmental Impact Assessment (EIA) seen as a regulatory hurdle to development rather than an integral part of developmental planning? How far can the recently proposed ranking system for State EIA Authorities (SEIAA) help in changing this perception? (15 marks, 250 words)

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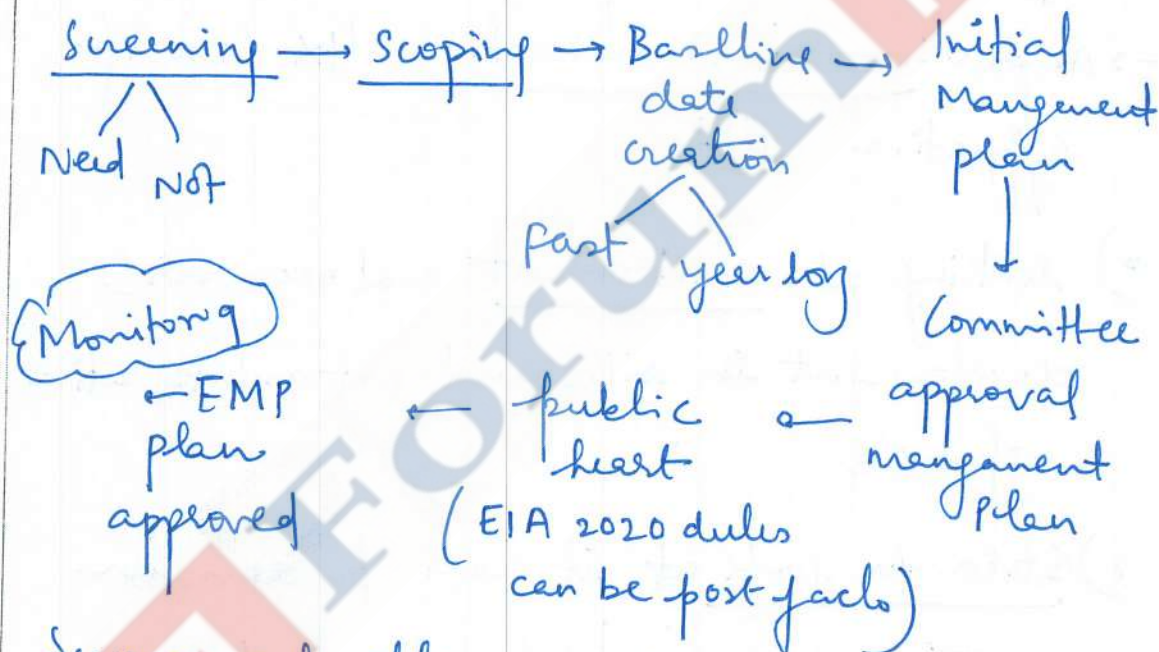
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## Environment Impact Assessment

is mandatory for projects under EIA

Notification 2006, under EPA Act 1986.

### Process



Seen as a hurdle

- huge process of approvals to be taken (changed through Parivesh portal) yet many ministries have to lend approval.

•) development not integrated in Industrial and Infrastructural plans  
( PM 20 points agenda have to integrate)

•) Absence of realisation of heavy post failure cost (eg. Tapovan Hydro power dam collapse)

→ As per Sandoz Framework → 4X less if effective EIA

•) looking at environment and economic development in silos and not as integrative process

•) States too look at it as a burden in promotion of Industrial Infrastructure.

eg. Recent opposition to ESA in Kerala.

SEIAA <sup>Ranking</sup> Amendment can help by :-

•) Creating stakes in environment management.



- ) creating political implications  
→ if lower ranking
- ) lends spirit of competitive federalism  
(eg. Wetland preservation under RAMSAR)  
now 175 sites.
- ) allows better plan adoption — that  
delivers on ground
- ) reduce risk of disaster with provision  
of effective monitoring.

Thus, SEIAA Ranking is a  
innovative step, MOEFCC can further  
promote EIA by ensuring greater citizen  
centricity, 4P partnership, and conveying  
development and environment for  
developed India by 2047 meeting Panchsanskrit  
goals.

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Q.18) Unscientific, unmindful and unregulated tourism in the ecologically fragile areas has increased the vulnerabilities of these regions towards a plethora of disasters. Examine the statement and suggest strategies for sustainable tourism. (15 marks, 250 words)

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Tourism sector has burgeoned  
in recent years, with growing middle  
class population in India.



-  Coastal tourism
-  Hill stations
-  western Eastern  
ghats
-  forest tourism.

Increased vulnerabilities towards disasters:-

i) ~~Heavy~~ Hilly areas

- high burden/overflow → reduced  
ecological carrying capacities.

5   
landslide vulnerability

eg. Recent slips in Kinnaur, Kasul Himachal

- heavy plastic, carbon pollution →
- glaciers melting → GLOFs

### Coastal regions

- floating Coastal zone Regulations
- high pollution and emission to coastal areas → increased warming  
marine heat waves → disasters  
(Indian Ocean 2005) (cyclones 3x increase since 2020)
- Reducing Mangrove cover  
(2nd line of defense)

### In the forest ecosystem

- human wildlife conflicts
- habitat encroachment
- reduced biodiversity (depleting species)  
IUCN Red data book.

## In the western ghats

o Increased fragility — as increased construction activities to accommodate tourists

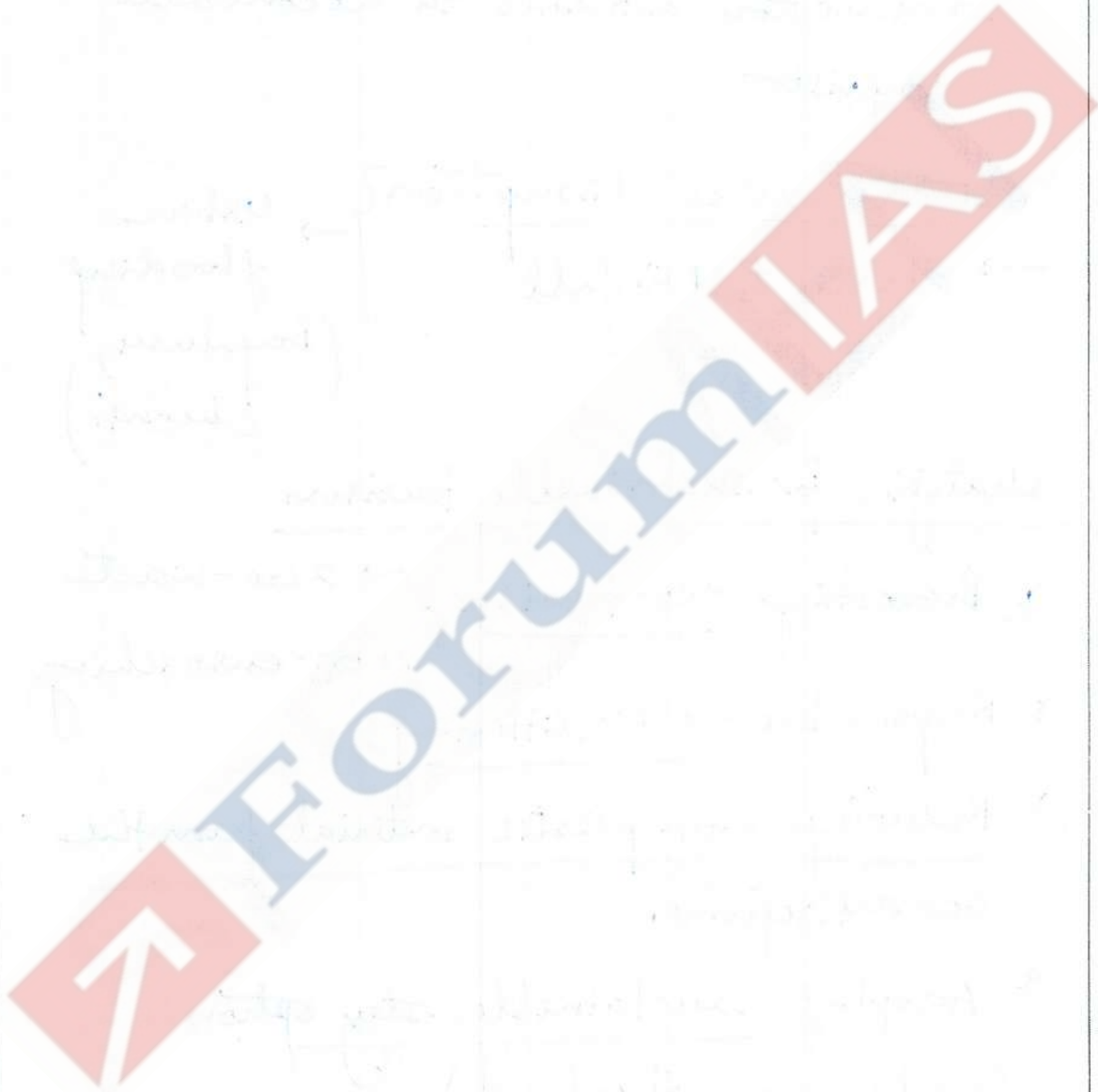
- river course disruption
  - aberrant rainfall
- } → urban flooding  
(Bengaluru, Chennai)

## Strategies for sustainable tourism

- \* Promoting eco-tourism → zero-waste  
↳ non-encroaching
- \* Responsible → no littering
- \* Reducing any plastic material from the coastal regions.
- \* Adopting sustainable stay options  
(ecohomes - Switzerland)

Tourism as a sector promote interconnections, ensures learnings but it has to be sustainable for forging a future for all SDG 14 & SDG 15.

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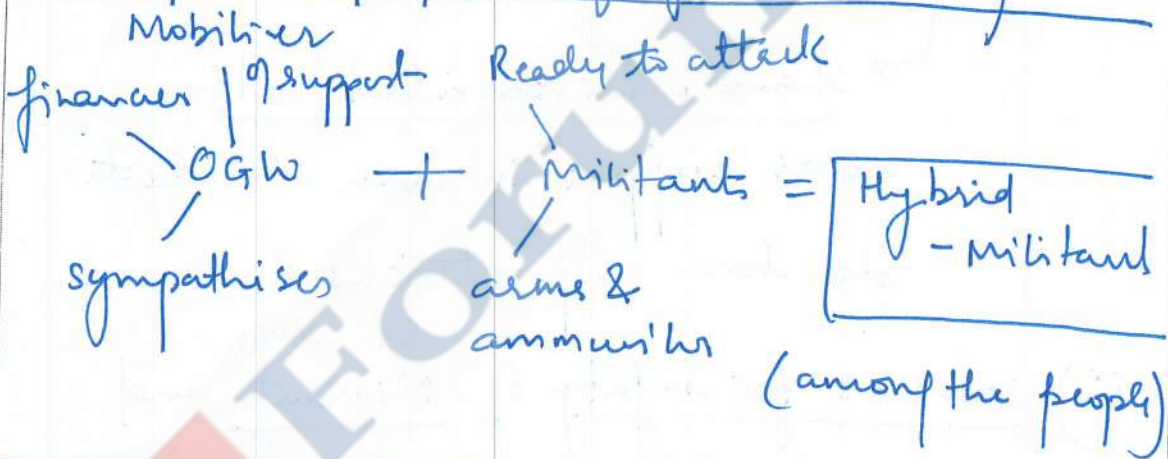


Q.19) How are 'hybrid-militants' different from militants and Over Ground Workers (OGW)? In what ways have hybrid-militants changed the security concerns in Jammu and Kashmir? Also recommend effective measures to counter them. (15 marks, 250 words)

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Hybrid Militants are a combination  
of militant (ready to forge attack on  
security forces, people) and Over Ground  
workers (financial, sympathising, mobilising  
support to people forging such acts)



Changed security concern in J&K :-

- i) Rise of Fidayeen, Kashmir Resistance  
fronts operating on the Dark web  
away from Intelligence sight.

eg. In shopian estimated only 5 groups but  
↳ 25 operating on the dark web.

ii) Operate as normal people - reflecting  
dissent to the government

however → been radicalised through  
the separatists, groups on  
Dark web

↳ have been provided with  
arms support in case decide to  
do lone wolf attacks.

iii) concerns for safety of Migrants and  
Kashmiri Pandits (return in 2008)

- the fear of demographic change  
spread post A-370

- the OTT platforms, films have  
further fomented divisive violence.



iv) Increased support from Pakistan

↳ Chinese help of weaponry  
(limiting India to South Asia)  
emboldened post-Taliban capture of  
Afghanistan.

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Measures to counter :-

- i) Targetting the source of information to the Hybrid Militants
- ii) Ensure that people cooperate and such practices are collectively opposed
- iii) ensuring Border managements  
↳ BLoP, Integrated check Posts  
Pakistan collaboration : DGMO  
— no entry point for training, arms.
- iv) Arms - Ammunition curb in T&K.
- v) Youth empowerment under Himayat, employment scheme.

J&K is the true 'Heaven on the earth' and for safety of India, we have to ensure prosperous J&K.

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Q.20) Explain the linkages of human trafficking with other illicit activities such as drug trafficking, gun-running, and terrorism. Discuss the measures to tackle the menace of human trafficking with special reference of draft Trafficking in Persons (Prevention, Care & Rehabilitation) Bill 2021. (15 marks, 250 words)

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## Human Trafficking or flesh trade

affect women, with ~95% being women and 5% children trafficked across border

linkages with other activities :-

### i) Party trafficking

- financed and finances human trafficking

- similar markets where flesh trade is done

- Deals done through Dark Web, usually crypto dominated

### ii) Gun running : illegal arms and ammunition sale .

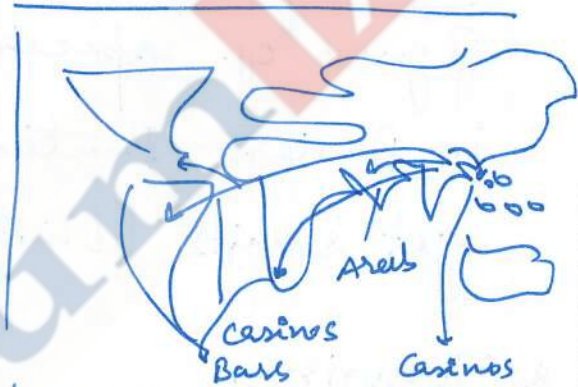
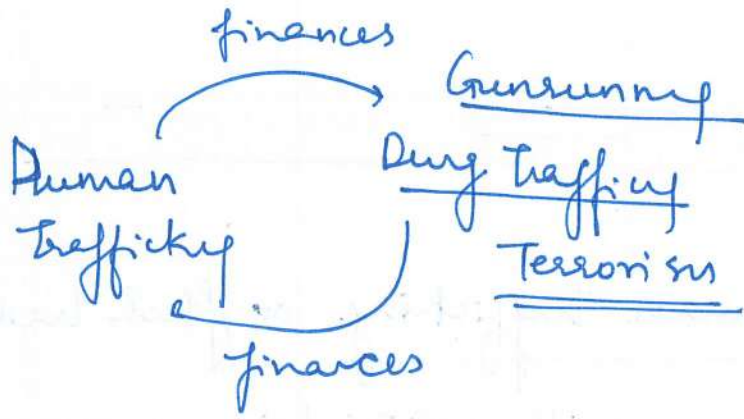


Fig: distinctions



- receipts used to target women
- Utilising force to capture - acquisitions of guns esp. especially by Naxal forces in Bastar - Dantewada → selling to get recruits (LWE financed)

### \* Terrorism

- \* is financed through the trade of Humans, Drugs, guns, money laundry
- ↳ utilise the Trafficked as workers (ISIS, Iraq)
- ↳ suicide bombers
- ↳ utilise it to blackmail people → further finance terrorism

## Measure to tackle menance

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### → Prevention of Trafficking bill

- provision for effective checks of rackets operating in the Red light area
- providing care and rehabilitation support to those willing to move out of the profession of sex work.
- ensuring effective opportunities are created through training and employment

Thus it → attacks the rackets

↓ ↓  
→ reduce financing of crime  
→ provide support to forced women

### → Ensuring awareness among people

→ drug consumption → Youth  
(wastage of demographic + fomenting  
internal security challenges)

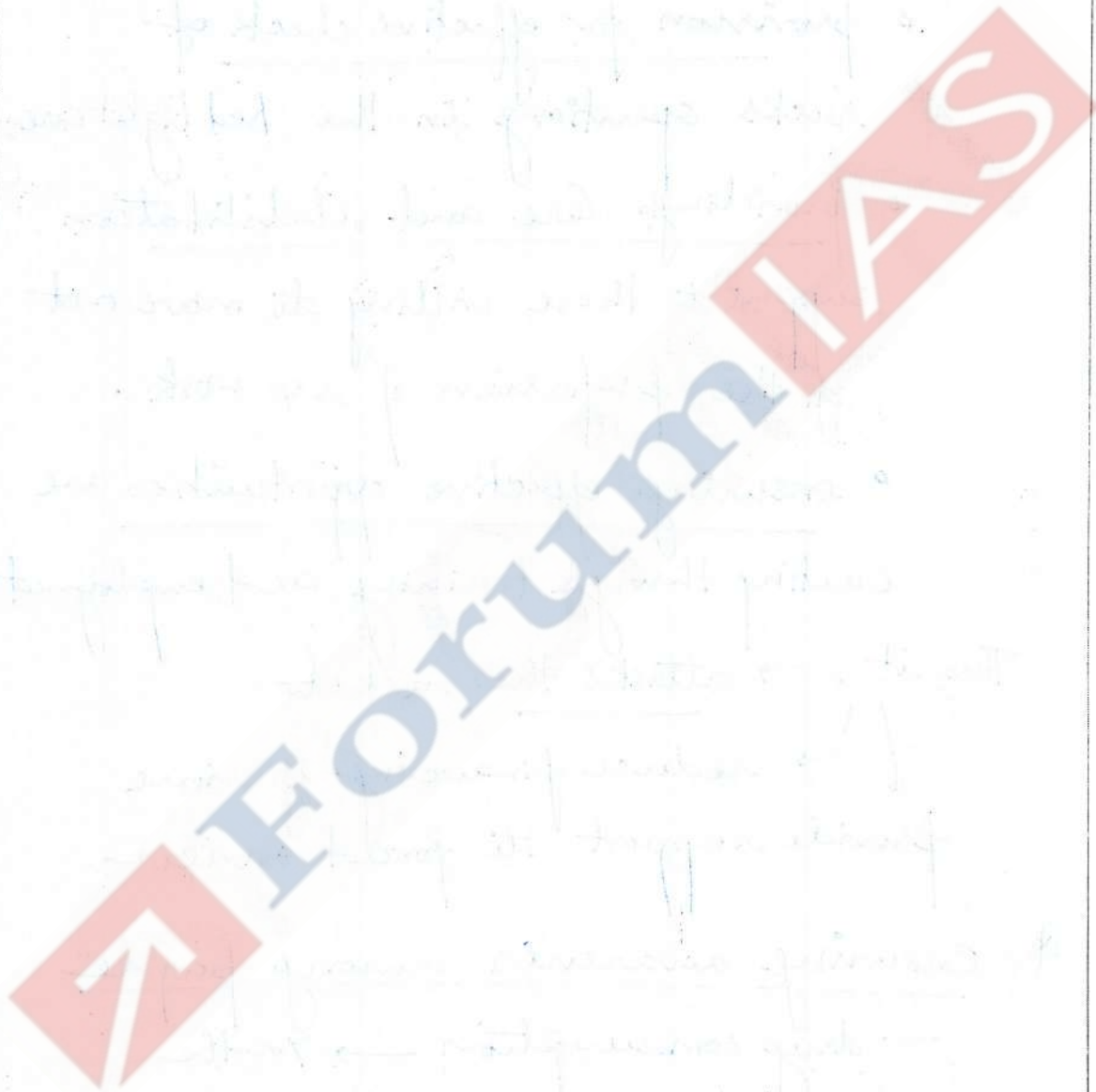
### → Training forces to effectively tackle

(specialised investigations) \* cyber crime  
cell for forces

XXX-X-GSI/20

Thus, ensuring proper support, and training to forces  
and women can ensure the menance is curbed.

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**Feedback**

(For OFFICE use only)

<b>Structure/ Presentation</b>
<b>Question Interpretation</b>
<b>Content</b>
<b>Value Addition</b>
<b>Total</b>

### Mentor Feedback Questions

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### Test Goal

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### Outcomes

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### Marking Scheme

Mark	Good	Average	Below average
10 Marker	3.75 – 5.0	3.0 – 3.5	< 3.0
15 Marker	5.75 – 7.0	4.0 – 5.5	< 4.0
✓✓	Key / Relevant Point		
✗	Vague / Irrelevant		

\* Subject to change without prior notice.

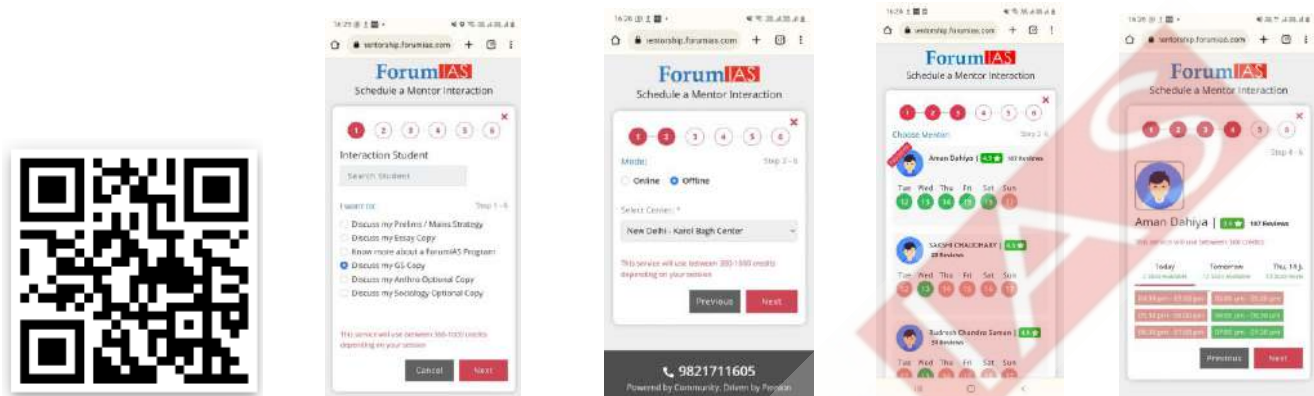


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