

**VAJIRAM & RAVI**  
SURE SHOT TEST SERIES 2025

General Studies  
Full Length Test  
Test - 3 (GS - 3)  
Test Code - A21053503

Evaluator Code:  
Date of Assignment:  
CQ:

NAME:

PRAKHYA

Time allowed: 3 Hours

STUDENT. ID.:

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Email:

UPSC ROLL NO.:

6302004

Submission  
Date:

28 July 2025

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 - 9 AM

End Time - 12 PM.

Mode of Examination

Online Offline 

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**

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## 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. Explain the concept of the "Missing Middle" in India's industrial ecosystem. How does it affect economic growth and employment generation?

(10 marks, 150 words)

The concept of 'Missing Middle' in India's industrial ecosystem highlights the absence of mid-sized industries in industrial ecosystem.

Indian Industrial ecosystem is dominated by MSMEs & then there is large No. of big industries but scalable middle industries are absent.

Reasons:

- (i) Intentional Discrimination to continue to get MSME benefits.
- (ii) Red tapism & Regulatory hurdles also prevent growth.
- (iii) Lack of specific schemes & incentives to cater Middle sector.

(Don't write anything in this part)

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Effect of Missing Middle on India's Growth & Employment

- (i) High Informalization of workforce  
(More than 90% employed in informal sector)
- (ii) Checks growth of Economies of Scale
- (iii) Low contribution of Industrial manufacturing to overall GDP (27%)  
& continuous low growth rate.
- (iv) Low tax base for State to tax.
- (v) Absence of resilient supply chains.
- (vi) Low domestic research & innovation in Industries.

Way forward

- Middle Industries specific incentives like PLI.
- Special incentives to check Dwarfism.

Thus, "Missing Middle" can be the missing puzzle of India's Industrial growth story which needs to be fixed.

Introduction

Body

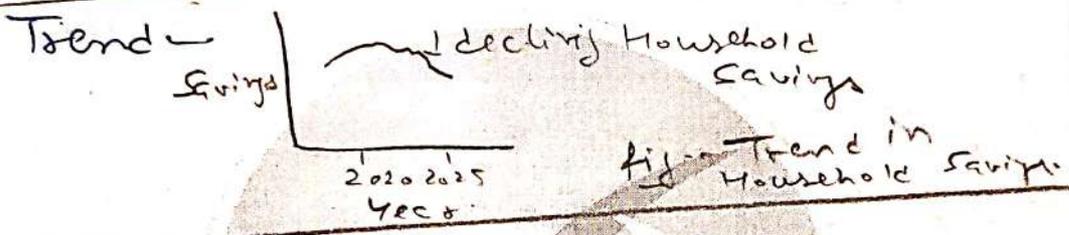
Conclusion

Presentation

Marks:

2. Household savings form a crucial pillar of domestic capital formation. In light of their recent decline, elucidate the underlying causes and propose strategies to strengthen savings behavior in India. (10 marks, 150 words)

Household savings had been a salient feature of Indian economic resilience, but they are now declining.



### Causes for decline

- 1) Increasing Investment by households in Shares, bonds etc.
- 2) Financials guiding households against savings & advising investment for greater returns.
- 3) Rising financial literacy for investment
- 4) Increasing Consumption Expenditure by households reducing savings

5) High food inflation → denting Household savings.

This has created a challenge of Capitalization of Indian economy where economy is driving due to investment & not real infrastructure creation as it was earlier the case, supported by household savings.

## Measures to Boost Savings Behavior

(i) Promote ease of banking of Savings  
→ Net banking & savings literacy.

(ii) Provide greater returns for Savings schemes against volatile investment returns.

(iii) Make Savings more lucrative for youth.

Thus, Household Savings need to be increased for sustained & resilient economic growth.

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3. Despite its potential, the corporate bond market in India remains underdeveloped. Examine the structural and regulatory challenges impeding its growth.  
(10 marks, 150 words)

Corporate Bond Market  
in India forms a smaller part of Capital Market in India & largely underdeveloped.

Structural & Regulatory, challenges impeding growth of Bond Market

(i) Lack of transparency in Ratings of Corporates

↳ discouraging investments

(ii) Underdeveloped Credit ratings for few Corporates (Large)  
discourages development of bond market for smaller players

(iii) Strict & Rigid guidelines of SEBI to corporate bonds.

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(iv) Lack of Transparency on part of Corporates also discourage investment in their bonds.  
② Recent scam by Wipro promoters

## Steps to Boost Corporate Bond Market in India

- (i) flexible & clear guidelines for Corporate taxs.
- (ii) Strong transparency mechanisms to boost investor confidence.
- (iii) Relaxation in conditions & regulations by SEBI based on Scale of Corporates & their sector.

Thus, Corporate Bond market have a huge potential to boost growth of Indian economy to go close to \$5 Trillion goal

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4. In light of recent Budget 2025 allocations and the push for green infrastructure, analyze how Viability Gap Funding can be leveraged to promote renewable energy projects. (10 marks, 150 words)

Budget 2025 have used Viability Gap Funding <sup>CVGF</sup> as key component to boost growth of Green infrastructure, incentives to Renewable energy projects is part of it.

VGf to promote Renewable Energy (R-E)

(i) Boosts growth of R-E in remote areas.

eg Incentives to establish Solar parks in Rural areas.

(ii) Incentivizes corporates to develop high initial cost but long return R-E projects

eg Wind Power Parks.

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(iii) Pushes green infrastructure & R.E to decrease regional disparities

⊕ VG F for underdeveloped states.

(iv) Decreases burden on R.E. industries of initial cost & credit arrangement with 40% VG F.

(v) Ensures cost effectiveness for high cost & high impact R.E. projects.

Thus VG F ~~can~~ play important role in fulfilling its Paris Goal of 50% R.E by 2030. along with ensuring energy security.

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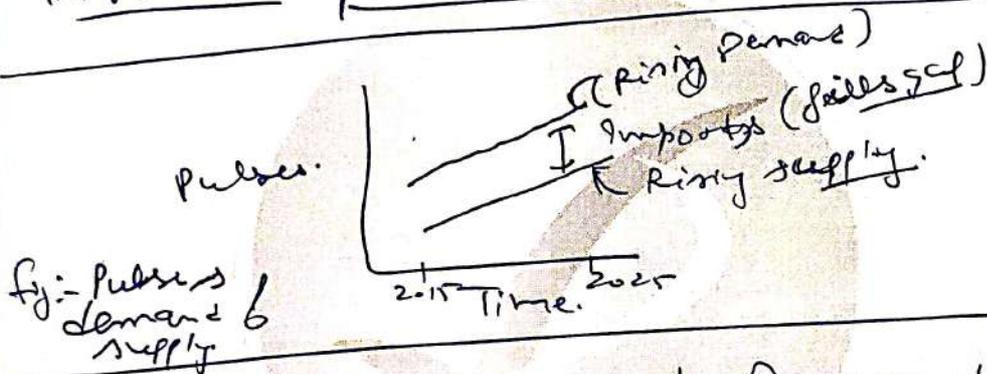
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5. Why is self-sufficiency in pulse production crucial for India? Discuss the policy and technological interventions needed to achieve Aatma Nirbharata in pulses.  
(10 marks, 150 words)

India is largest  
producer / consumer & ~~exporter~~  
of pulses globally.

Need for self-sufficiency  
in pulse production.



(i) To fill the gap of Demand  
& supply mismatch in  
pulse production.

(ii) To decrease import dependence  
ie. 40% pulses imported. (E-S  
2024-25)

(iii) To ensure food security in  
India as pulses major  
source of food security.

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- (iv) Self sufficiency is important to ensure control over food inflation.  
(mostly due to Rising Pulse Prices)
- (v) To control under nutrition & malnutrition → Pulses major source of veg-protein.

Interventions needed to Achieve Aatma Nirbharata in Pulses

- (i) Increase area under Pulse production
- (ii) Climate resilient seeds for Pulses
- (iii) Assured procurement of pulses under MSP.
- (iv) More Benefits for farmers to encourage Pulse prodn.

## Steps taken

- (i) Pulses production promoted by procurement under PM-AASHA
- (ii) Incentives by State Govt like "Blavantea Bhugtan" in HR for Pulse production.

Thus, Pulse self-sufficiency is necessary for India's food & economic self sufficiency.

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6. Examine how space-based solutions are addressing developmental challenges in rural India. What steps can further enhance their outreach and effectiveness?  
(10 marks, 150 words)

Space based Solutions  
developed by ISRO in collaboration with other organizations have played important role in development of rural India.

Solutions Addressing Developmental Challenges in Rural India.

(i) Land record fragmentation is dealt by Bhuvan Portal of ISRO using Space imagery to provide GIS maps.

(ii) Timely weather forecasting - to promote crop. protection

(iii) CROPIC scheme based on satellite imagery used to give claims under ~~under~~ PM-Fasal Bima Yojna.

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(iv) Geo-tagging of projects for employment (3) MGNREGA.

(v) Satellite based internet in Remote area (2) Arunachal border.

Steps to further enhance outreach & effectiveness

(i) Providing weather service forecasting in local languages

(ii) Training to rural population by Kisan Vigyan Kendras to use technology.

(iii) Rural India centric innovations  
Low cost & battery operated communication to help during disasters.

Thus, Space-based Solutions have played important role in development of Rural India.

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7. Delineate the linkages between urbanization patterns and rising PM 2.5 levels in Tier-II and Tier-III cities of India. What are the various mitigation measures and the government's initiatives to mitigate air pollution in India?

(10 marks, 150 words)

India's large population about 31% lives in Indian cities on one hand & on another Indian cities are constantly listed in Top 10 of global most polluted cities.

Linkages b/w Urbanization patterns & Rising 2.5 levels in Tier II & Tier III cities

- (i) Rising No. of private vehicles  
↳ causing higher emissions
- (ii) Industrialization of Tier-II & Tier III cities also increases emissions.
- (iii) Increasing consumption of energy in Tier-II & Tier III cities → ↑ emissions.
- (iv) Absence of Air quality improvement facilities in such cities.

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(v) Decreasing green cover for urbanization  $\rightarrow$   $\uparrow$  emissions

Mitigation Measures of initiative of govt to reduce Air pollution

(i) National clean Air programme to reduce  $PM_{10}$  &  $PM_{2.5}$  in 101 non attainment cities by 2026.

(ii) GRAP program for Delhi-NCR to tackle air pollution.

(iii) Increasing green cover under Nagar Van Scheme to decrease emissions.

(iv) Enforcement of BSIV & BSIII guidelines for vehicles to decrease vehicular emissions.

(v) Promoting Electric & CNG based public transportation etc.

Thus, Air pollution is a major threat to Ease of Living & must be tackled in a mission mode.

Introduction

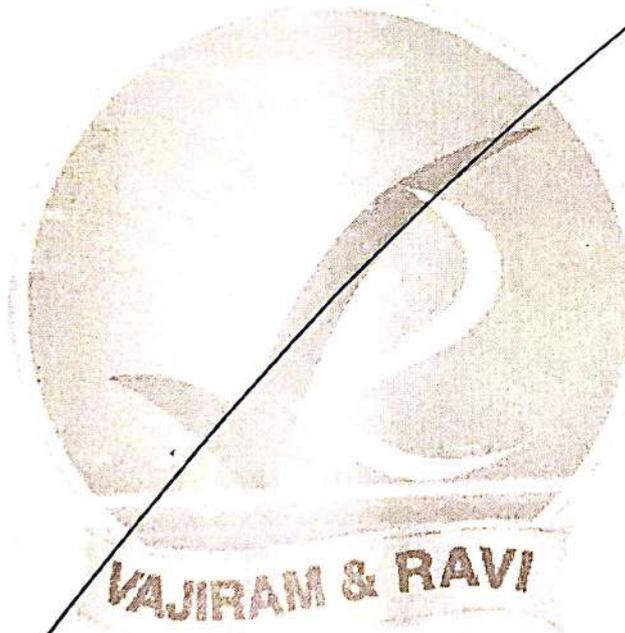
Body

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Marks:

8. Explain the structural and operational limitations of the Disaster Management Act, 2005. How far does the 2025 Amendment address these deficiencies through a shift towards anticipatory and technology-driven disaster governance?  
(10 marks, 150 words)

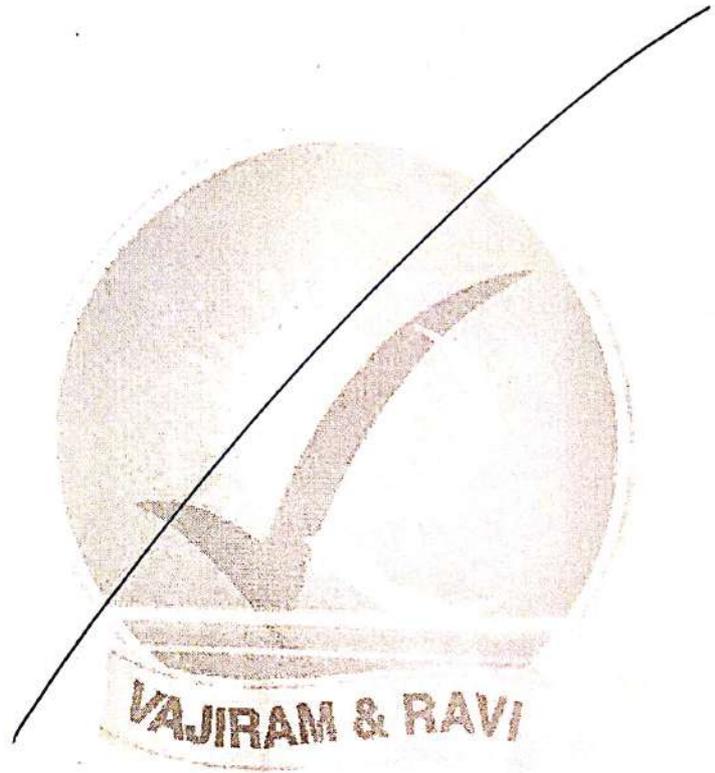


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# VAJIRAM & RAVI



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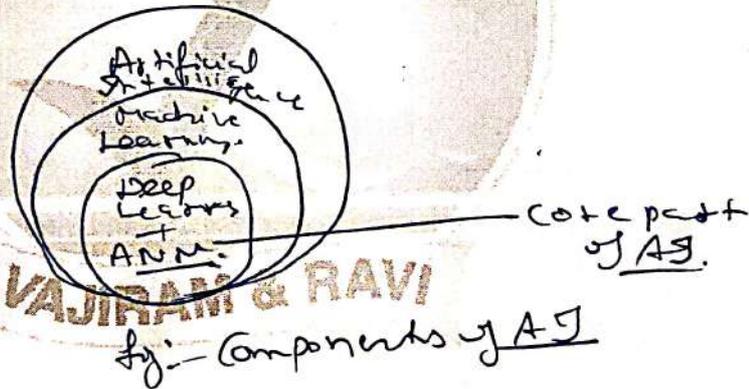
Presentation

Marks:

9. What do you understand about Artificial Neural Networks? List out its applications across various fields. (10 marks, 150 words)

Artificial Neural Networks (ANN) is a system where machine replicates action & arrangement of human neurons for learning and tasks performance.

It is a core part of Artificial Intelligence ecosystem.



## Applications

### (A) Healthcare

(i) Can shorten time of drug development & discovery

(ii) Can help us understand functioning of human brain.

## B) Education

- Can provide educational support  
↳ specifically tailored content for different groups esp PwD.

(C) Governance - can boost quality & efficiency of service delivery.  $\Rightarrow$  Use of AI to exclude fake beneficiaries in Midday Meal.

(D) Law Enforcement  $\rightarrow$  with help of facial recognition technology, forensic specialisation can help security agencies.

(E) Agriculture  $\rightarrow$  can ensure precision & climate smart Agriculture.

(F) National Security can be boosted if AI powered drones & AI defence systems used against threats.  $\Rightarrow$  Use during Op Sindoor.

Thus, ANN have use across multiple sectors & disciplines but it should be guided by rules & human oversight.

10. "Internal security challenges in India are increasingly shaped by external and transnational dynamics." Examine the statement with relevant examples.  
(10 marks, 150 words)

India's internal security is constantly challenged by external non-state & transnational state & non-state actors.

Security challenges shaped by External & transnational dynamics.

(i) Cyberattacks carried out by external state & non state actors across boundary.

(e.g) Mumbai power grid cyber attack (2019)

(ii) False Indian currency notes are also printed outside India & have both external & transnational dynamics

(e.g) Injected into India by terrorist orgs by Nepal.

(iii) Misinformation & Social Media  
fake news often used for  
radicalization ⇒ Pakistani outfits  
like LeT & JeM spreading fake  
news to radicalize youth from  
across border.

(iv) Terror recruitments are  
also done by external actors  
using digital tools like  
dark web sitting in different borders.  
⇒ ISIS Kerala recruitments.

⊖ Steps taken:-

(i) Use of technology like AI &  
drones to counter terror  
terror outfits across borders  
⇒ Op Sinsoor

(ii) CERT-IN & Cybercrime Coordination  
Centre to enhance cyber  
security.

(iii) NIA provided with extra territorial  
jurisdiction.

India's security Thus, challenges to  
external & transnational deepening from  
dynamics

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11. While tariff rationalization aims to enhance economic efficiency, it may also pose challenges to certain sectors. Critically assess the potential trade-offs involved in the Union Budget 2025-26's approach to tariff reforms.

(15 marks, 250 words)

Tariffs are used as means of promotion & regulation of trade. Recently Budget 2025-26 made some significant reforms in this area.

## Positive Impacts of Tariff Rationalization

- (i) Promotes Exports of surplus goods of steel etc.
- (ii) Regulates imports → to provide conditions for development of domestic industries like drone sector.
- (iii) Promotes competitiveness & quality improvement in domestic industries.
- (iv) Supply chain resilience is ensured using tariff rationalization.  
 (a) Cuts in Tariffs for sectors like electrical components etc.

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Challenges for Sectors due to Tariff Rationalization

1) May lead to increase in cost of production → due to increase in tariffs.

2) Tariff cuts for imports can lead to Dumping of foreign goods

↳ harm domestic industries

↳ Solar panel industry

3) ~~can~~ may create factors for Trade War

↳ Retaliatory Tariffs by U.S

4) Threat of supply chain disruptions. ↳ shortage of Rare earth minerals

5) Severe Impact for MSMEs → dependent on few suppliers & lacking supply diversification

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For keeping all these  
Benefits & challenges in mind,

Budget 25-26 proposed tariff  
cuts for:-

- 1) Pulses.
- 2) Necessary life saving drugs eg. Cancer drugs.
- 3) Cotton

→ Increased for sectors like:-

- 1) Processed food products
- 2) Dairy. etc

→ Similarly Exports of Onion, Pulses  
were prohibited to ensure food security.

## Way forward

→ Diversification in supply chains by  
multiple FTAs

→ Exploiting new markets & partners  
of S America, Europe etc.

→ Support to domestic Industry to  
increase competitiveness.

Thus, tariff rationalization  
should be used with caution as  
a tool of economic Policy.

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12. A shift from fiscal deficit targeting to debt-to-GDP ratio as the fiscal anchor signals a more holistic approach to fiscal discipline. Do you agree? Give reasons in support of your arguments. (15 marks, 250 words)

Fiscal Responsibility & Budget Management Act (FRBM Act) provides for 60% debt to GDP ratio for general govt and 40% for centre & 20% for States.

CFR) It also provides for fiscal deficit target of 4.5% that ~~had~~ is already achieved by govt & is now focussing on debt to GDP ratio. (Post 2021 Amendment) Earlier F.D. target was 3%.

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Debt to GDP ratio - as fiscal anchor is more holistic becoz:-

- (i) It is a stock indicator while F.D is a flow variable. (Changes every year)
- (ii) Debt to GDP ratio shows past and future obligations of govt.

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(iii) It is the tool used by Credit rating agencies to give Sovereign Ratings. → Thus better indicator of fiscal health.

(iv) Promotes govt for more fiscal prudence to clear off past burdens.

(v) Include off-Budget borrowings also, which were not part of F.D.

Fiscal deficit gives a narrow perception of fiscal discipline, But Debt to GDP ratio is more broad & holistic as clear from above points.

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But these are some.

Challenges:-

(i) Subjective nature of Debt to GDP ratio creates some challenges in measurement.

(ii) Lacks clear short term guidelines to achieve fiscal discipline.

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Thus, Debt to GDP ratio is a more holistic tool of fiscal discipline as supported by N.K Singh committee also, to achieve long term fiscal sustainability.



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Marks:

13. India's food processing sector is moving towards greater formalization and efficiency. Critically assess how initiatives like the PLI scheme and Pradhan Mantri Formalisation of Micro Food Enterprises (PM-FME) contribute to this transformation. (15 marks, 250 words)

## India Food Processing Industry

(FPI) is a sunrise sector & a global champion (Top 5), contributing around 25% to India's Agri exports.

In achieving it Govt Initiatives like PLI & PM-FME have played an important role.

### Positives

- (i) Provides for Cluster based development to promote economies of scale.
- (ii) Incentives under PLI promotes technological upgradation of FPI sector → ↑ efficiency.

(iii) Under PM-FME, → quality of products & competitiveness has improved → ↑ overall efficiency

(iv) Now, FPS contributes around 8% to Agri GVA & 8% to manufacturing sector GVA (highlighting efficiency and formalization)

Yet some challenges remain unresolved as:-

(i) Informalization of Industry

43% of FPS ~~enterp.~~ is still in informal sector (Eco Survey 2024-25)

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(ii) High Informal Labour = 14.2 lakh

of labour force in informal FPS

↳ highlights lack of formalization

(iii) Similarly, low investment in FPS sector (6% of total) is a sign of high informalization

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(iv) Lack of control over quality  
& sub-standard products  
still acts as hurdles in  
efficiency of FPS sector.

## Way forward.

- Promote more private sector investment in FPS sector.
- Promote cluster based approach & revival of food parks.
- Develop cold supply chains infrastructure
- Provide more incentives for formalization.

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Thus, FPS sector  
have a lot of potential to  
increase India's exports & to  
boost Indian economy & food  
security simultaneously

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14. Do you agree that granting a legal guarantee to Minimum Support Price (MSP) may create a fiscally unsustainable and economically inefficient agricultural system? Suggest viable alternatives to ensure fair farmer remuneration without distorting the market. (15 marks, 250 words)

MSP (Minimum Support Price) is announced by govt of India for 22 crops. There is a continuous demand to ~~legally~~ provide a legal guarantee to it.

## Current Scenario

It is provided by Executive Order on recommendation of Commission for Agricultural Costs & Prices (CACP), on which final decision is taken by Committee on Economic Affairs.

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Unsustainable & Inefficient Agricultural System due to legal guarantee

(i) Goes against WTO determining Clause. → This violation of global Trade regulation

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- (ii) WTO clause frequently utilised by countries like ASIAN to put restriction on India's Agri exports.
- (iii) Will ~~be~~ proliferate Economic disparities - as MSP procurement more from states like Punjab, H.R.
- (iv) Unsustainable cropping pattern will continue to further promoted → water guzzling crops like Rice in water deficient regions like Punjab.
- (v) Discourages market from giving fair share to farmers  
As MSP not seen as lower limit but Maximum price prevalent in market.
- To deal with all these challenges following alternative can be explored:-

(i) PM-AASHA providing for alternatives in form of:-

a) Price deficiency payment

b) Private procurement

where farmers ~~are~~ <sup>get</sup> ensured prices if price falls below fixed level.

(ii) Can promote Contract farming with legal safeguards for farmers.

(iii) Penetration of e-NAM with digital awareness & postal use frainly.

Thus, MSP as a price support mechanism can be slowly replaced with much efficient alternative for some crops & can be retained for some crops ~~to~~ to ensure food security & overall economic growth.

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15. Digital Public Infrastructure (DPI) can empower developing countries to lead the global climate action narrative. Discuss with suitable examples.

(15 marks, 250 words)

Digital Public Infrastructure is the infrastructure in form of applications, devices & connections, which ~~is~~ is necessary to provide physical & digital services.

DPI empowering developing countries to lead global climate Action.

(i) Promoting Agri sustainability.  
↳ By using schemes like soil health card, Janmet JD's etc. to improve soil productivity.  
↳ Action against soil degradation.

(ii) Monitoring Green House Emissions from Agri Sector & Industries.  
Using satellites like Cartosat, RISAT.  
↳ Framing policies accordingly.

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(ii) Green House Gase Emission Reduction

↳ by using less energy intensive alternatives

↳ eg Digital health services by Telemedicine replacing frequent hospital visits.

(iv) Promoting Environmental Sustainability

↳ Online payments via UPI instead of paper currency.

(v) Renewable Energy. Grid can be monitored using DPS. It also promotes energy efficiency using Smart meters.

(vi) Infrastructural Efficiency is

ensured by programmes like National Infrastructure Pipeline, monitored by PM GATI SAKTI, National Investment and Infrastructure Management Grid.

challenges Yet there are some

(i) Energy Intensive technologies like Blockchain, AI form core of DPG use

↳ can increase GHG emissions.

(ii) Challenges of Cybersecurity affecting most vulnerable

↳ Cyber frauds.

Thus, DPG although provides with a variety of Climate Smart Solutions yet need to be made for Environment & people friendly

16. Analyse the reasons behind the increasing vulnerability of the Himalayan region to landslides. What steps can be taken for their management and control? (15 marks, 250 words)

Landslides is a constant cause of concern in Himalayan regions and around 60% of Himalayan region is vulnerable to it.

Reasons behind Increasing vulnerability of Himalayan Region to landslides:-

(i) Increasing No. of Glacial Lake outbursts (GLOFs)  $\rightarrow \uparrow$  Landslides of Charnoli disaster

(ii) Rising heavy infrastructure development in already fragile Himalayan region.  
L. (e.g) Chara Dham Highway  
↳ Teesta Dam causing floods & landslides in Sikkim.

(iii) Large scale deforestation for development making slopes more

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prone to landslides

↳ landslides on Char Dham road projects.

(iv) Unusual rainfall & Cloud bursts fuelled by climate change

↳ ↑ landslides @ Kedarnath.

(v) Apart from it Himalayan region is naturally prone due to

presence of active tectonic plates

↳ causing frequent earthquakes & landslides.

Steps taken for Management & Control

(1) National Sustainable Himalayan Ecosystem

plan promoting afforestation & green cover to check landslides

(2) Regular monitoring of LOFs in higher altitudes by Satellite imaging.

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- (3) Early warning systems to provide proactive information.
- (4) Environmental Impact Assessment (EIA) to reduce vulnerability & minimise ecological damage.

## Way forward

- Community training & engagement in afforestation drives.
- Building Himalayan sustainable & specific infrastructure to suit local needs.

Thus, landslides although natural can be regulated & prevented to an extent with proactive stakeholder approach & Himalayan specific development.

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17. Forest fires are yet another symptom of climate change. Analyze the various causes for wildfire in forests. Give two examples of recent wildfires. Mention the policies and frameworks aimed at tackling wildfire in India. (15 marks, 250 words)

Forest fires affects around 58% of India's ~~23~~ 24% forest cover. They are rising due to multiple effects of climate change like heatwaves, uneven rainfall & extreme weather patterns.

## Causes for wildfire in forests

(i) Natural → due to falling of stones, lightening in dry vegetation.

(ii) Anthropogenic.

1) forest fires started by poachers to diverse forest staff.

2) Unintentional fires caused by unchecked camping left by tourists etc.

(iii) fires caused due to neglect of

tribals and forest staff  
Due to cigarette & Bidi stumps.

(ii) Apart from it forest fires in Chir Pine forest is caused by resin of pine leaves if they are not removed continuously.

(iii) Recent Increasing fires due to

(i) frequent extreme weather patterns like drought, uneven rainfall, lightning etc.

(ii) Heat-Waves exacerbated by El-Nino also accelerates forest fires.

## Recent Incidents

(1) Forest fires in Goa (2024) - went on for weeks. destroying biodiversity and vegetation.

(i) Uttarakhand forest fires (2024)

Map showing forest fire regions in India.



## Policies & Frameworks

- (i) Overall policy guided by NDMA Forest fire management guidelines.
- (ii) Van Aghi Portal to monitor & control forest fires.
- (iii) Regulated forest fires in Chit Pine forest fires to prevent large scale destruction in dry season.
- (iv) Community engagement  
Collecting dry wood, leaves etc. to remove fuel for fires.
- (v) Constant Monitoring by ISRO using satellite imagery & early warning systems.
- (vi) UNEP fire ready formula to manage forest fires & prevent them.

Thus, forest fires must be controlled to improve India's green cover to 33% under GREEN India mission.

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18. One Health approach is key to preventing future pandemics and preserving ecosystems. Analyze how the Biodiversity and Health Global Action Plan adopted at COP 16 aligns with this vision. (15 marks, 250 words)

Recently COP-16 of UNCBD @ cali promoted One health approach for promotion of human & ecological health.

Key to preventing future pandemic & preserving ecosystems.

(i) Checks source of new pathogens

↳ Deforestation - release new loads of virus & other pathogens in human habitats

↳ Nipah Virus.



↳ One-Health components

(ii) Checks Anti Microbial Resistance (AMR)

by regulating use of antibiotics in human & animals.

↳ to check Superbugs.

(iii) Hollistic approach of disease management → as source, vector and target all are covered.

(iv) Promotes Natural Immunity by focussing on health of all stakeholders.

(v) Provides Cost efficient & effective health solutions.

⊕ Use of Biodiversity like Rowolfia, Cinchona for disease treatment guided by one hearts.

Plans are in line with it COP16 targets. 6  
CO2 promoters:-

(i) Health of Ecosystems  
↳ 30 by 30 targets for ocean & land ecosystems

(ii) Digital Sequencing of Biodiversity  
guided by above principles

(Don't write anything in this part)

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(Don't write anything in this part)

(iii) Mechanisms of data sharing about pathogens & AMR.

(iv) Efficient use of Biodiversity to ensure health of all stakeholders.

Key forward

= formulating National policies to implement these plans by Kerala one health approach.

- Timebound implementation & fulfillment of Global commitments

- Localization of one health targets.

Thus, One health approach is a holistic solution to uphold health of Humans, Animals & Ecosystems.

Introduction

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Marks:

19. In light of evolving national security threats, how do the New Criminal Laws address modern threats like cybercrime and organized crime? Outline the challenges perceived in its effective implementation.

(15 marks, 250 words)

New Criminal Laws, (Bhartiya Nyaya Sanhita) BNS provides for clear rules & regulations for various emerging threats, cybercrime & organized crime being part of it.

Provisions in New Criminal Laws for Cybercrime & Organized Crime.

(i) Provides for definition of organized crime for the first time & threats it posed.

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(ii) Cybercrime provisions in line with IT Act, 2000 provisions to ensure holistic law enforcement.

(iii) Provides for strict non-bailable punishment for organized crimes like Human trafficking etc.

- (iv) Provides for acceptance of digital evidence to fast-track convictions
- (v) Timelines for FIR filing, investigations, chargesheet filing etc.

## Challenges w/ Effective Implementation

- (i) Transnational Nature of Crimes of both cybercrimes & organized crime is not properly addressed.
- (ii) Lack of trained manpower & law enforcement to investigate these crimes
- (iii) Digital nature of these crimes accelerated by Blockchain & AI development is not properly addressed.
- (iv) Lack of Intra country & Inter-country coordination → to deal with large scale crimes

## Suggestive Measures

3) Adding Provisions to BNS w.r.t cryptocurrency & AI.

1) Cooperation between national & international Law enforcement agencies

Cyber Crimes & Organized Crimes

2) Training of Staff w.r.t digital nature of crimes

4) Use of technology like AI, Big data analytics for proactive monitoring.

Thus, BNS has taken a leap forward in addressing Cyber Crimes & Organized Crimes, yet it should be supplemented by effective capacity building & monitoring.

Production	
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20. Discuss how integrated border infrastructure and management practices can balance security imperatives with the socio-economic development of frontier communities. (15 marks, 250 words)

India shares a long boundary with different hostile neighbours creating various internal security challenges for India.

Integrated Border Infrastructure  
↳ Against Management to balance.  
Security & Socio-economic development

(i) Creates Economic opportunities  
for border communities.

↳ Suggests promoting tourism in Kashmir.

(ii) Builds Trust & Credibility for Administration in locals.

(iii) Challenges propaganda of Non-State Actors

↳ of neglect & underdevelopment

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(Don't write anything in this part)

(iv) Improves connectivity & connections with mainland population & economy.

(v) Security ensured by cutting supply of recruits for terrorists

⇒ Kulgam (South Kashmir) terror recruitment declines due to developmental activities

(vi) Engages community with Security forces for holistic border security.

⇒ Village Defence Committees in J&K.

Steps taken to Build Infrastructure

(i) Border Area development program to boost infrastructure development & connectivity. (By BRO)

(ii) Vibrant villages program to ensure development of border

(Don't write anything in this part)

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Infrastructure & connectivity along with community development.

(iii) Special Development Packages to Boost economy via Tourism  
(e.g) Vande Bharat in Kashmir.

(iv) Community skill development by scheme like ROSHNI, HIMAYAT etc.

Way forward

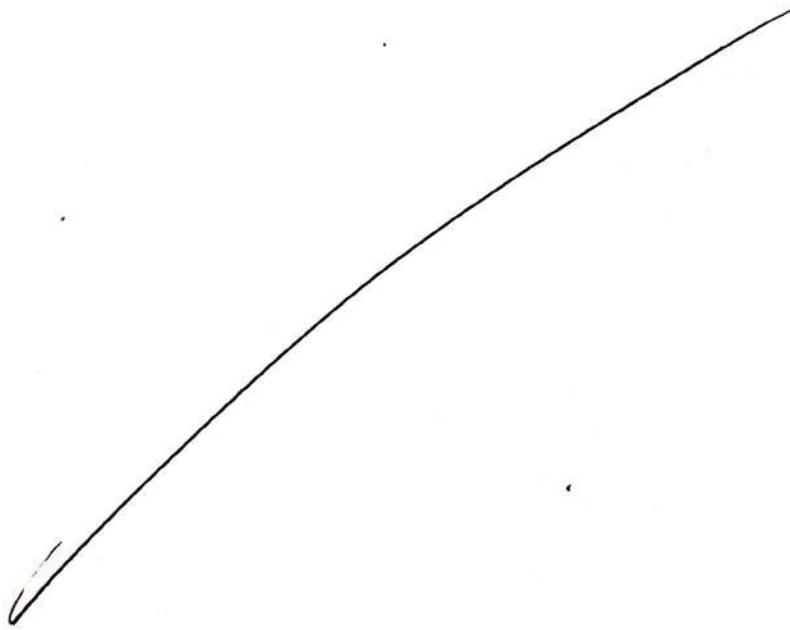
- Constant Collaboration with border Communities
- Promotion of democratic practices with regular elections & PRGs of local body formations
- Incentives to Industries to boost border economy & employment

Thus, a multistakeholder action based on border area infrastructure development

management is key for ensuring India's safety & security.

Introduction	
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# Space for Rough Work



**Space for Rough Work**