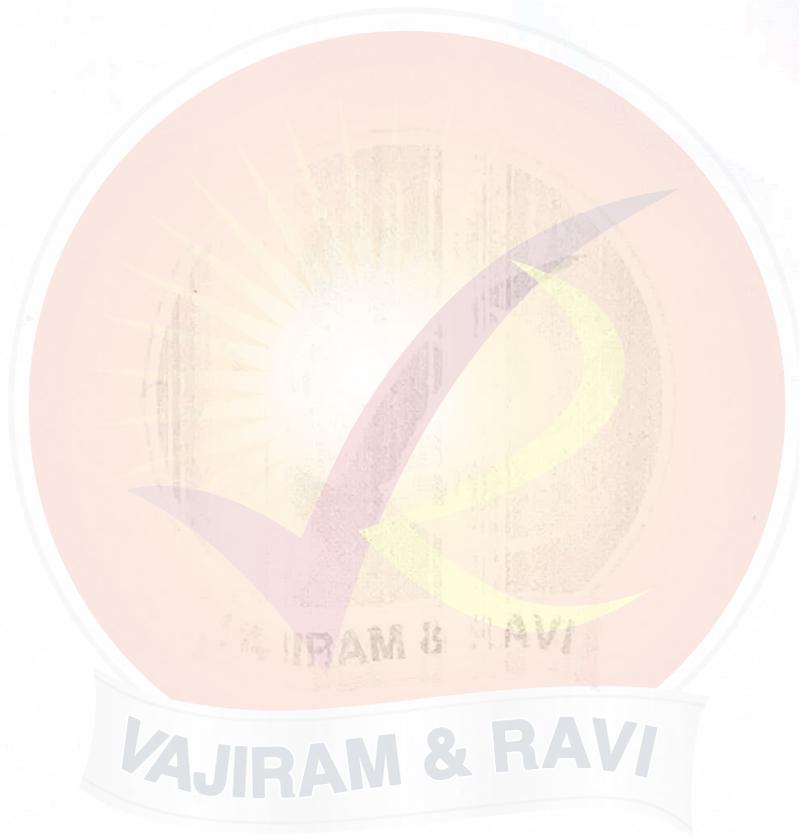


Evaluator/Reviewer Suggestions



(Don't write anything in this part)

VAJIRAM & RAVI

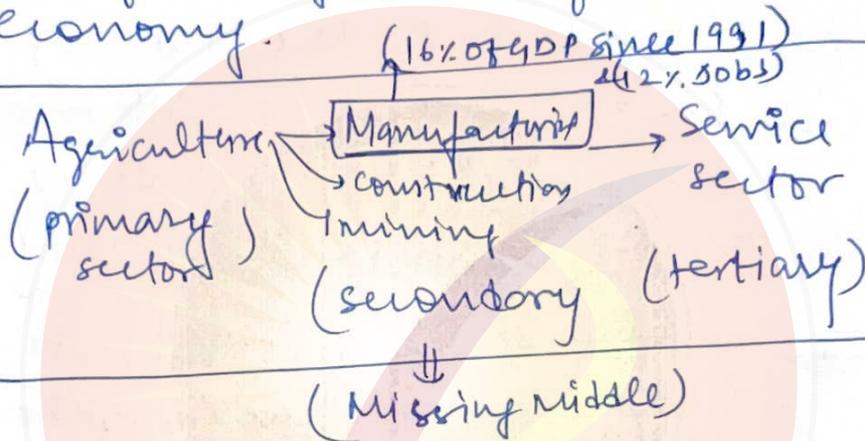
(Don't write anything in this part)

(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.)

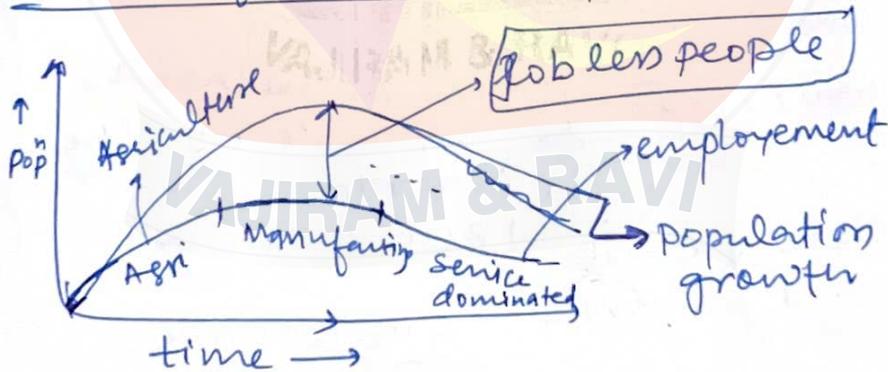
1. Explain the concept of the "Missing Middle" in India's industrial ecosystem. How does it affect economic growth and employment generation?

(10 marks, 150 words)

Missing Middle is generally referred to low role and capacity of manufacturing sector of Indian economy.



Effect of this on employment:-



⇒ ~~Due~~ Due to structural issues as manufacturing could not develop ~~led~~:

(Don't write anything in this part)

VAJIRAM & RAVI

low investment in agriculture, low demand for industrial goods.

↳ But service sector emerged during LPG era led to growth but it being jobless due to low employment elasticity of the sector.

② missing link in the economy.

Eg. Agriculture produce without value addition. (API low)

③ inequality increased, no trickle down

Eg. World inequality report 2022 (13% population having 50% income)

④ poverty & disguised unemployment in agriculture

way ahead: → make in India, assemble for the world

role of MSME and promotion → PLI scheme, FPI link

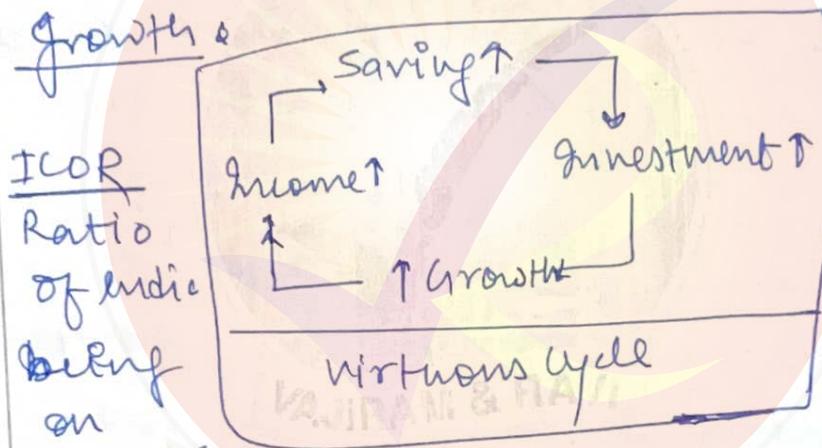
leading to more equitable and inclusive growth with 25% of GDP by manufacturing 100M jobs

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)

As per economic survey (2024-25) household saving has declined from 34% of GDP to 30% now.

↳ saving important for capital formation, as per Harrod-Domar model it is what decide overall growth.



ICOR
Ratio of India being on higher

side more saving are needed
↳ even china have 40%.

Causes of Decline:-

① Profit-wage dichotomy:-

Reduced corporate taxes & growth, doubled profits but not much income

② Inflation :- Rise in this, continues to above 6% (CPI), having expenditure, ↓ savings.

③ low GDP growth compared to other years.

④ COVID-19 extract : stored money used to buy assets by people like land and gold, physical assets.

⑤ rising awareness about finance eg: capital market & stocks.

Strategy to strength savings :-

① inclusive growth with rise in income of middle class of sectors like agriculture and manufacturing.

② monetary policy, ③ Fiscal measures (tax breaks)

Ex: New Regime

④ Financial inclusion further

All, these can help in increasing saving, thereby growth and development, \$7 trillion economy

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

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)

With more than 19 cr Demat accounts and 5th largest capital market by capital Indian market is rising, however corporate bond market still remains underdeveloped.

challenges in the growth :-

① structural challenges :-

(dominated manufacturing & industry with MSMEs which lacks economies of scale and therefore low profitability, this reduces their ratings as well.

② Bond domination by govt securities :- Like 22% statutory liquidity ratio (SLR), takes most money out of the market.

③ crowding out of private.

Regulatory Issue :-

① corporate governance and reliability of its measurement by parties an issue

② Trust deficit due to these regulatory issue, thus bond seen as risky.

③ Nascent developments related to those by SEBI also

④ Lack of 3rd party rating companies and international acceptance very low of CRISIL etc.

way ahead } → regulation by SEBI
 } → Govt support:
 } Ex: Corporate bond development fund announced
 } proper rating

All, these can help to come up healthy private ~~and~~ investment for long term investment in Indian economy and PPP Models

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

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)

'Viability gap' refers to gap between financially viability of the project and its economic viability in long term including socio-economic impacts.

Recent Budget focusing upon green infrastructure has come up with VGF scheme for these project as well as Green Sovereign fund for investing into these project & Green Bonds as well.

VGF for Renewable projects:-

Need → market for renewable under developed.
eg: solar panel still very expensive
Need investment in R&D
Help in fulfilling objectives of INDC.

(Don't write anything in this part)

VAJIRAN || AVI

- ① Renewable energy projects at Decentralized level as well
Eg: PM-KUSUM scheme, National Fund of the projects.
- ② Also VGF for stalled projects.
- ③ To promoting these to backward and low developed areas
Eg: Wind plants in Himalayan states.
↳ Geothermal in Ladakh.
↳ solar project in Rajasthan.
- ④ Further help in industrialization of these states.
- ⑤ Infrastructure and Capital formation which is sustainable.
- ⑥ Promoting international collaboration.
Therefore VGF for renewable not only for domestic need but making India climate responsible nation abroad as well.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

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 the largest consumer (27 MMT) and largest producer ~~of~~ (18 MMT/yr) of the pulses.

Need for self sufficiency:-

↳ Import bill & fiscal burden

① impairing balance of trade - trade.

② Nutritional security: Most important source of protein for Indians as most being vegetarian diet.

③ Malnutrition present:-

Eg: 59% women anemic & ~~st~~ children stunted

④ Inclusive development: - pulses more grown in dry & semi-dry region. (hor-green belt), Regional development Eg: MP & Rajasthan

⑤ Climate resilient: - multi-cropping will help in reducing impact

⑥ soil health: Nitrogen fixa-

tion & reduce fertilizer subsidy bill as well as overall health.

policy & tech intervention :-

① National mission on pulses: -
for overall holistic development.

- High yielding seeds,
 - organic & sustainable pesticides
 - Irrigation facilities
 - R&D at Hyderabad Centre
- role of ICAR in promoting

Ex: Pusa-Arhar (Hybrid version)

② pulse 1000 villages for their production.

③ PM Dham Dhanya scheme for holistic approach.

Technological → soil health card
 & weather information
 & cold chains → Awareness
 & value addition
 MSP for all pulse

Ex: 189% of Masur in recent budget

Therefore, moving towards self sufficiency.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

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)

ISRO (Indian Space Research Organization) is leading India in space technology development with deep tech like MOM-2 or Chandrayaan-III but also with respect to inclusive technology & use for rural areas.

Space based solution in rural area :-

- ① Agriculture land as well as overall mapping with satellites. eg: Bhuvan of ISRO.
- ② Communication satellite :-
with respect to communication in far flung areas.
Ex: Hilly and inaccessible
- ③ Cartosat for mapping and help in multiple ways
Ex: SWAMIVA, village mapping.

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

① Weather prediction :- with mapping and imaging by satellite, IMD issuing advisory through apps.

Eg. e-monsoon, meghdoot, Damini (lightning)

② Infrastructure planning & execution :- Roads, bridge in area also using space technology.
Steps For Further :-

① Fiber connectivity (Bharat Net) for Internet & services 2.0

② Digital literacy : PMGDISHA to take full advantage of services by farmers.

Eg. NASSCOM, only 2% farmers actually using apps based information.

③ Capacity building and market link

④ Asherman : Sagarmitras, extension work therefore, further helping with reaching these services through common service centres & KVK.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

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)

According to Lancet report every minute & lines are lost due to air pollution in India. And major cities are moderately to severely polluted.

Urbanization & rising PM_{2.5}: -

- PM_{2.5} major particulate matter is sourced from vehicular emissions.
- ① Rising traffic congestion and vehicular emissions
- ② Thermal power plant in nearby area → due to rising need of power
- ③ Burning of waste - plastic and solid waste
(Improper management due to informal system)
- ④ Nearby areas: stubble burning
- ⑤ Construction activities & dust
- ⑥ Industrial pollution through chimneys due to low restriction

Mitigation measures:-

① National plan on air quality management and Air quality index:-

Reduce PM_{2.5} & PM₁₀ intensity by 25% of 2019 level by 2026.

② Role of CPCB and SPCB in reducing industrial & TPP pollution through guidelines.

③ Infrastructure & reduce congestion.

④ waste management rules for solid, plastic, e-waste under EPA Act, 1986.

⑤ Role of community and swachh survekhan survey for competitive cities eg: Indor first ranked.

⑥ Swachh Bharat mission:- solid waste disposal.

⑦ Technological solutions, e-vehicle etc steps in making cities more habitable thus SDG-11 (sustainable cities)

Introduction	
Body	
Conclusion	
Presentation	
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)

India enacted Disaster Management Act, 2005 after the tsunami of 2004. DM Act, 2005 establishes a three tier structure with ~~two~~ national, state and local level authorities.

Limitations of DM Act, 2005 & overcome by 2025 amendment

DM Act 2005	DM (Amend.) Act, 2025
① No provision for relief standards, technologies etc.	→ provided for there through <u>NDMA</u> and <u>SDMA</u> .
② Urban Disaster increasing, no provision for them	→ provided for <u>Urban Disaster Management Authorities</u> .
③ local/state level no force	→ Establish <u>SDRF</u> at state level.
④ Different - 2 plans for disasters lacked coherence	→ Disaster management plan by <u>NDMA</u> not <u>NDR</u> .

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

Issue with respect to role of Nation crisis management committee.

provided legal & statutory status with clear roles & responsibilities.

& High level committee

→ Headed by DM Minister

Also, shift from relief and response based approach to mitigative and integration of disaster risk into development as well as role of technology considered.

Issues

→ Funds for Urban DMA not allocated.

→ ND Response fund but not mitigation fund

Heat waves still not notified disaster

→ Further centralization

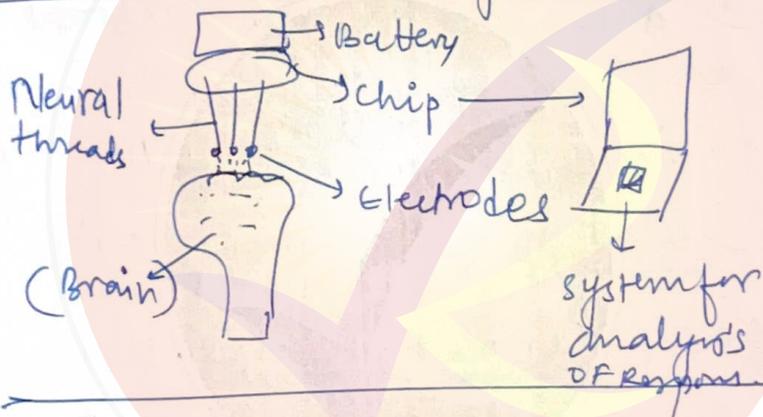
despite, these limitation act provided more comprehensive structure & role & responsibility. with further keeping in mind 10 points of PM modi and sandai, DM.

Introduction	
Body	
Conclusion	
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 aim to understand human intelligence and neural system through use of this network.

Ex. Neuralink developed such system.



Principle:- Human brain having electrodes and neural networks. Working on this principle, sends signal through neural threads → therefore analysing these can help understanding human intelligence.

Applications:-

- ① Medical application in disease.
Eg: Alzheimer patient can be treated
- ② Forming advance prosthetics
incorporating neural settings
- ③ Mental illness with rising cases
can be treated
- ④ Enhanced cognitive functions
as well as sensory perception, thus helping people with these difficulties.
- ⑤ Deep AI :- Neural network based AI.
- ⑥ SuperAI with deep AI, IoT devices etc can further be integrated.

Issues

- Equity ensuring
- expensive, further inequality
- Privacy Issues.
- Designer biometric type misuse

Therefore, addressing above issues and further development with proper IPR is what can help in Inclusive deep tech.

VAJIRAM & RAVI

(Don't write anything in this part)

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 faces multiple internal security challenges in form of left wing nationalism to north-east insurgency and organized crime and terrorism.

Role of external & transnational factors:

① Porous borders therefore illegal migration, drug trafficking, counterfeit and illegal trade.

Eg: Chinese product and satellite ~~are~~ Starlink used in Manipur crisis by infiltrators

② Role of Golden Crescent & Triangle in drug trafficking and insurgency.

Eg Funds and drug through these further fuel insurgency in north east.

③ Illegal migration & infiltration from Pakistan border, Afghanistan. Terrorism in J&K (e.g. Pahalgam attack)

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

④ Cyber space (transnational in nature)

↳ Funding through cryptocurrency
Eg: Zakat donation to Islamic organisation

↳ Deep fake: In illegal planning & execution of terror attacks

↳ Social media: In recruitment for these insurgencies

Eg: Operation Pigeon of Kerala to track & track these in state

Way ahead → Borders security with infrastructure and technology integration

as per Madhukar Committee:

↳ Community participation & sensitization.

↳ Development in region.

Eg: Bastar region with this improved

↳ Perception management ↓ Radicalization

Therefore making a peaceful India to progress and Vishit Bharat.

Introduction	
Body	
Conclusion	
Presentation	
Marks	

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

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 taxes imposed on international trade and movements. These are tool to regulate trade and maximize national interests.

Tariffs for economic efficiency and development:

① Counter veiling duties :- Imposed to neutralize the subsidies and benefit give in origin country thus competitiveness & fair market

② Anti dumping also against market disruption by another country & protect national interest.

③ Tariffs on agriculture & food commodities for food security
eg: Imposit duties on oil seed for growth of this sector.

However certain issues :-

when going for economic efficiency i.e promoting imported cheaper material could have adverse impact in multiple ways.



therefore, tariff barrier need to protect internal industry and its growth. The time it reaches to its potential & reap economies of scale.

eg: Recent efforts by USA to ruin its manufacturing with these.

VAJIRAM & RAVI

However, tariff liberalization with rationalization can promote efficiency as well.

Ex: Cheaper raw material increases overall competitiveness

Ex: Cheaper cell phones in India \Rightarrow Affordable by all \Rightarrow Digital inclusion & reduced poverty

Issues of inverted tariff where raw material ^{cheaper} ~~expensive~~ and finished good ^{expensive} ~~cheaper~~ could strand the manufacturing.

Therefore, need for calibrated approach keeping in mind both efficiency as well as sovereignty & reduced dependency in long run.

Introduction	
Body	
Conclusion	
Presentation	
Mark	

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)

India fiscal deficit stand at around 5% GDP annually average way more than targeted under FRBM Act, 2003 at 3%, whereas debt to GDP ~90%.

Recent focus on targeting not the fiscal deficit rather debt to GDP ratio.

Debt to GDP better than Fiscal Deficit?

- ① Fiscal deficit target are yearly target whereas debt to GDP also considers previous borrowings.
- ② Focus on debt to GDP overall health of government and finances and reduced populist measures.
- ③ Reduce chances of 'March Rush' spending in last month.
- ④ broader planning, long term.
- ⑤ Incorporate effect of changing base as well.

Issues with this :-

- ① May give govt a way to escape as debt to GDP is contribution of all even previous govts as well.
- ② Established practice of fiscal deficit and data may not be utilized.
- ③ Impact of certain events like COVID-19 may not allow for proper calculation eg: Rise in debt to GDP by 20%, from 170 to 90% due to that period.

Way ahead :-

- ① Targeting & fiscal health needs multiple parameters.
and → As per FRBM Act also
 - ← Fiscal Deficit = 3%.
 - ← Revenue deficit = 0%.
 - ← Debt to GDP : 20% to States, 40% Centre

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

Therefore a holistic approach with all should be considered.

② Also rising investment on Capital development to now ~3% (Capex) by govt can be excluded.

③ Measures like effective revenue deficit which exclude grants to state can be adopted & targeted.

④ Also primary fiscal deficit which exclude payment

⑤ Further rationalization of subsidies and targeted welfare.

All, these with technology integration can help in better fiscal health with indicator like debt to GDP which are international practices.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

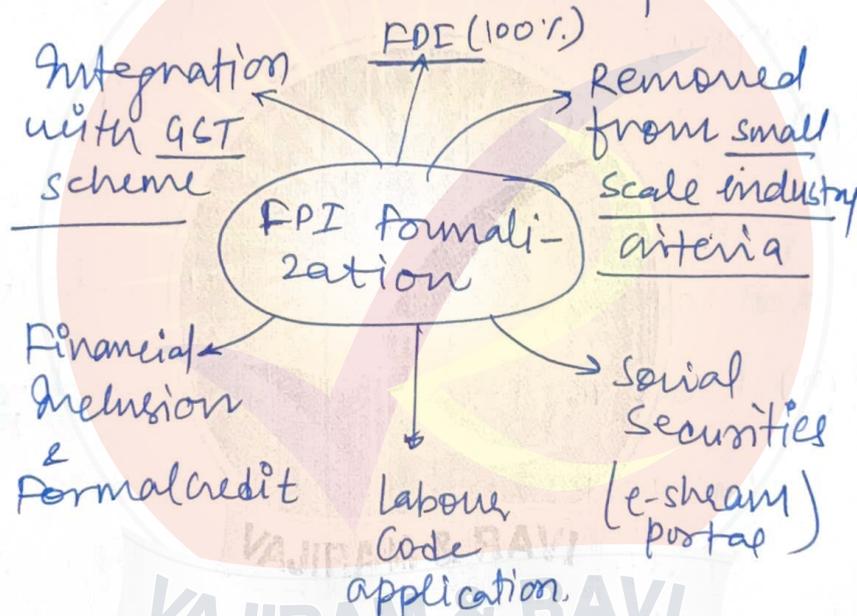
(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

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)

Food processing industries (FPI) contributed around \$46 billion to export and ~12% employment as per Economic Survey 2024-25.



Formalization Efforts & Role :-

- ① PM Formalization of Micro Food Enterprises : Scheme aim to integrate in formal system with multiple ways like credit, labour

Registration process to specific provision for exporting FPIs.

② PLI: Production link incentives as a nudging scheme where by increasing production, govt provide monetary benefits on surplus.

③ E-shramic portal: For integration of employees from these sector for social security. (EPFO data)

④ Providing for backward linkages

PM Sampada scheme :- Aim to create infrastructure like cold chains and collection centres

E-warehouse receipt on e-NAM and private warehouses.

↳ Promotion of contract farming enterprises.

Eg: SARAL Supermarket to

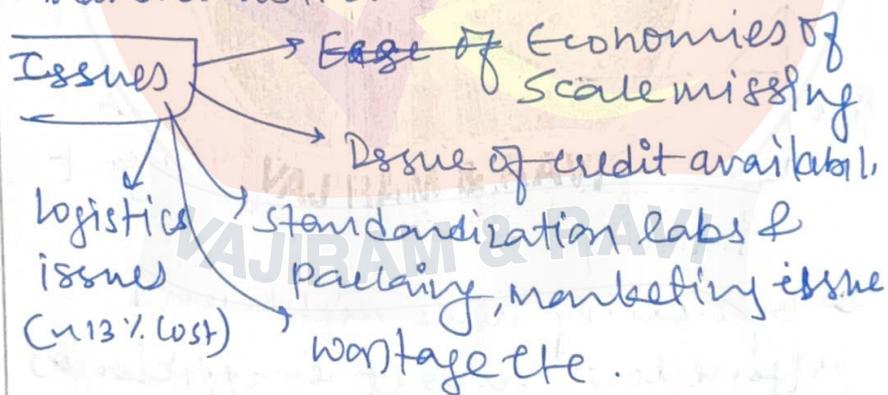
(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

Reduce supply chain inefficiencies

- ⑤ Forward linkages with manufacturing like cotton & textile, wood & furniture also been focused.
- ⑥ Skilling through 'skill india' and 'labour code' for easy compliance.
- ⑦ 'One lab for all testes' for standardization and expert oriented, ↓ sanitary & phytosanitary issues
- ⑧ Corporatization: Mahagrapes of Maharashtra.



Despite, challenges sector is growing at phenomenal pace and inclusivity of it due to backward & forward linkage further make it 'Sunrise' industry for all.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

(Don't write anything in this part)

VAJIRAM & RAVI

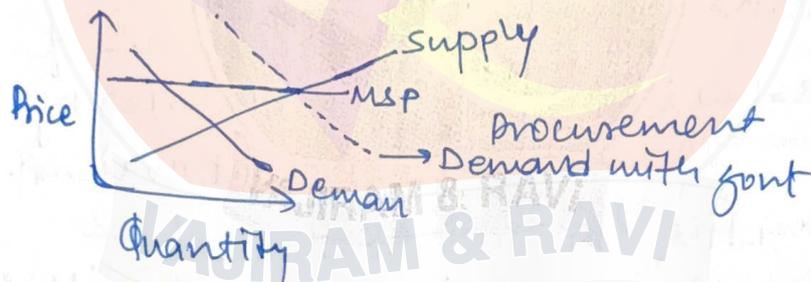
(Don't write anything in this part)

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, 120 words)

Minimum support price is granted to farmers to assure a minimum income ^{for farmer} and food security for consumer. Govt gives MSP for 23 crops and announced before sowing seasons.

Legalization of MSP Issues:-

- ① Market distortion permanently:-



⇒ By creating deadweight and welfare loss, market inefficiencies legalization will strengthen it.

- ② Fiscally unsustainable with further rise in fiscal burden of the govt from 2.5 lakh cr to more.

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

③ logistic disaster as no capacity to store and buying all 23 crops would be a disaster.

④ international issues: Breach of WTO de-minimus limit and resort to peace clause.

⑤ Reduce competitiveness further
Eg: Not joined RCER because of it
way ahead:-

① Moving from price support to income support system

Eg: PM-KISAN: 6000 ₹ per family.

② Infrastructure Investment:-

→ PM Sampada Scheme
→ PM Gram Sadak Yojana
→ Kisan Rail, Kisan Road

③ Market reform for better price discovery by farmers.

Eg: ~~the~~ G-NAM, e-chopal.

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

④ Shanta Kumar Committee :-

Warehouse by private to increase capacity.

⑤ Ashok Dalwai Committee :-

Use of technology, Agri extension services and credit.

⑥ Ms Swaminathan :- Use of DBT in place of MSP and also for other subsidies.

⑦ Focus upon value addition and export with targeted export not what is left, and certain policies signed by Prof. Ashok Gulati to reach to \$50 bn to \$100 bn.

Therefore, all efforts help in doubling farmer income and reducing demand for legalization of MSP.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

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

(15 marks, 250 words)

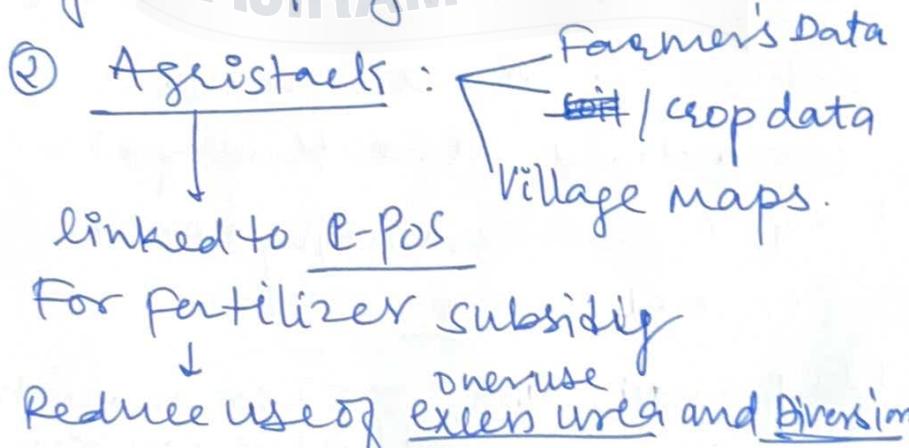
Digital public infrastructure (DPI) are infrastructure which allow access to all (non-excludable) & freely provide to citizens.

Eg: Aadhar, DPI etc.

Govt launched DPI repository at G20 meet which has 52 DPI from more than 16 countries.

DPI for global climate action:-

① DPI repository and impact fund for its further use by developing countries.

② AgriStacks :
 
 Farmer's Data
 crop data
 Village maps
 linked to e-Pos
 For fertilizer subsidy
 ↓
 Reduce use of excess urea and diversion

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

→ Thus helping farmers reduced climate change (mitigation) as well as adaptation.

③ Use of adhar and related infra for providing govt services and better governance.

④ Helping SIDS (small island countries) through initiatives like CDRI and use of DPI.

⑤ Disaster resilience: Use of DPI in risk reduction and early recovery.

⑥ Financial inclusion through UPI and other DPI like in india. Eg: more than 90% transactions done through these.
↳ >43% farmers using UPI as per mekinsey.

⑦ PMJAN + PDA: - 52% accounts and >50% women.

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

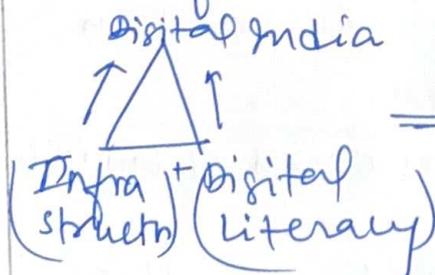
Issues with DPI :-

- ① Not all countries have capacities to adopt, therefore first building.
- ② Only some like india & smaller contributing to repository.
- ③ Issue of tech breach and hacking.

Way ahead :-

- ① Capacity development by india within as well as ent side.
Eg: knowledge network with African nation
- ② Training and cyber security

Therefore, for full utilization



⇒ Both should be focused equally digital inclusion with DPI.

Intr: cilit	
Boo:	
Cor: sion	
Pro: sion	
Mar:	

(Don't write anything in this part)

VAJIRAM & RAVI

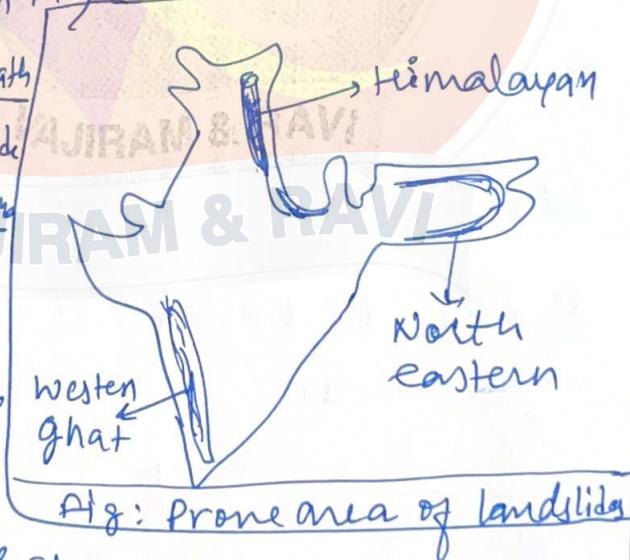
(Don't write anything in this part)

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)

More than 29% of the Indian land is prone to landslides and specially the Himalayan region and western ghats.

Reason for vulnerability:-

- ① Seismic reason :- prone to earthquakes due to converging Indo-Australian and European plate.
- ② Heavy rain fall in the region:
Eg: Flash floods
in Kedarnath and landslide in Uttarakhand
- ③ Tourism led infrastructure
Eg: Hotels and roads etc
- ④ Rising infrastructure in the



VAJIRAM & RAVI

region, without EIA.

Eg.: Char Dham project and silkyaq tunnel mishap:

Recent like: — Himachal: Simla-Kalka
Ysikkim etc. Highway

Steps to control :-

① Integration of risk of disaster into the development (mainstreaming it)

Eg. Use of Environment Impact assessment before commencing project like tunnels (Rohtang) Atal or Doha-Sadiya bridge).

② Understanding Risk :- with Zoning of hazard of landslides and preparing maps.

③ Investment in disaster risk reduction through structural measures like securing loose rocks, plantation and proper tunnels in case of floods

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

④ Ecological tourism :- Reduce burden and allow only which could be handled with proper sanitization. eg: No plastic on hills.

⑤ Not allowing illegal structures
eg: hotels on hill tops.

⑥ Understanding climate change induced risks eg: cloud burst and lake outbursts led landslides.

⑦ Capacity building : with awareness, mock drills of forces with people and curriculum related, thus reduces losses in case happens

All, these can help in both mitigation as well as adaption to this rising trend of landslides in India.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

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)

Indias more than 36% of the forest is forest prone as per Forest survey of India. ~~And~~ rise in forest fires due to rising temperature & heat waves, draughts as well as heavy & untimely rainfall etc.

Cause of wildfire in forests :-

- ① Presence of flammable trees
Eg. Chir tree in Himalayas.
- ② Ignition can start with manmade ~~reason~~ reasons
Eg. Vehicular emission, cigarette butt etc.
- ③ climate change: Draught leading to tree shedding leaves and accumulation.
- ④ Heat waves led forest fires.

Recent forest fires :-

① Los Angeles fire in USA :- Due to untimely rainfall forest in nearby area and later when it dried, forest fire cause at one place spreaded to whole area.

↳ Further increased due to prevailing winds & ↑ magnitude.

② Forest fires in Australia :-

wildfire are common here due to draught and heat waves. However with climate change rising further.

Policy & framework in India :-

① Policy: Disaster Management Act, 2005: For such forest fire and plan, 2019 underlined as well.

② Forest fire management plan also guidelines.

Framework :-

① Mapping & zoning of fire prone areas by Forest survey of India.

② Use of technique like Burn & scar to identify patches of burn

③ Green patches in between, as well as zonation to contain fires from spreading.

④ Community partnership in awareness and steps in case happen fire in nearby area

⑤ Burning of dried leaves & produce so that it cannot cause later, by forest officials.

Therefore, a multipronged and multi participative approach this can be tackled.

Introduction	
Body	
Conclusion	
Presentation	
Remarks:	

(Don't write anything in this part)

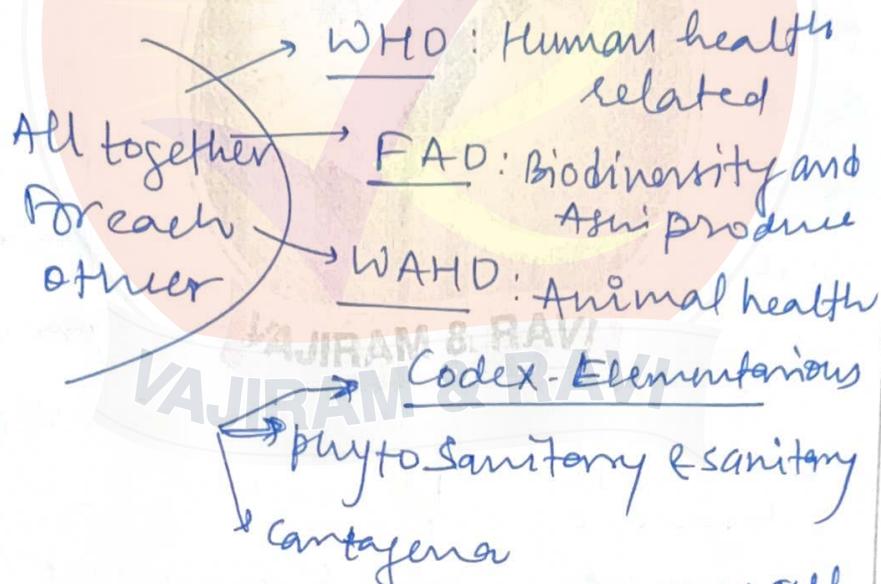
VAJIRAM & RAVI

(Don't write anything in this part)

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)

One health approach refers to taking all ecosystems like Human, animals as well as environment together for considering or policy making and implementation.

One health approach :-



All coming together for overall one health approach, therefore comprehensive.

UN convention on Biodiversity (UNCBD)
and COP-16 :-

* Biodiversity and global health
action plan for one health :-

① preservation of biodiversity
and ecosystem services from
monocropping and genetically
modified crops can help
in reducing vulnerabilities.

Eg: plague & famine during
19th century in Germany
due to overdependence on one.

② Biodiversity in insect
helps in further biodiversity
and reduces chances of
one's upsurpation.

eg: locust attacks (FAO)

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

③ Health of animals directly correlate to of humans

eg: FMD disease in meat or flies in fruits.

↳ therefore holistic approach.

④ Rising pest and disease due to climate change ⇒ more focus required even now.

⑤ infectious disease rising.

eg: Nipha, Zika etc

Therefore, taking this one health approach in letter and spirit is the need of the hour, with participation of all.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

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)

Today the nature of warfare and security threats have transformed themselves due to rise of role of cyber space.



New criminal Laws To counter:-

① Amendment to Telegram Act to now Telecommunications Act, 2019

For security of cyber space.

② IT Act, 2008 and Recent guidelines for intermediaries :- Reduces chances of cyber crimes like child pornography sexual harassment etc.

③ New Bharatiya Nayay Sahita (BNP) replacing IPC and Bharatiya Nagrik Suraksha Sahita (BNSS) replacing CrPC, also incorporates cyber space as online one.

④ INA Act, 2008 :- Increased powers of INA with respect to organized crimes like counterfeit, money laundering, drug trafficking as well as international jurisdiction of it.

⑤ PMLA, 2002 :- Amended to make it more robust,

upheld by supreme court in nigpal singh case. For example:-
no~~t~~ need of warrant, delay
baill etc.

challenges in implementation:-

- ① Policing:- CAI: lack 70-80%
weaponary in WB and RJ police.
↳ lack of good vehicles, & communicat
- ② Technology familiarity and
related digital literary issues.
- ③ No training regarding changes
to the forces provided.
- ④ Issue of corruption and
political interference still

Therefore modernizing forces
with reforms and amendment
in law is equally important
as per Prakash singh case of
supreme court, use of modernization fund
and making SMART Policing.

Introduction	
Body	
Conclusion	
Presentation	
Mark	

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

20. Discuss how integrated border infrastructure and management policies can balance security imperatives with the socio-economic development of frontier communities. (15 marks, 150 words)

India having a vast boundary with > 15000 km of land and > 7500 km of maritime boundary being porous, rugged and broken, ^{calls for} need of comprehensive border infrastructure and management.

Integrated Border Infra and Management :-

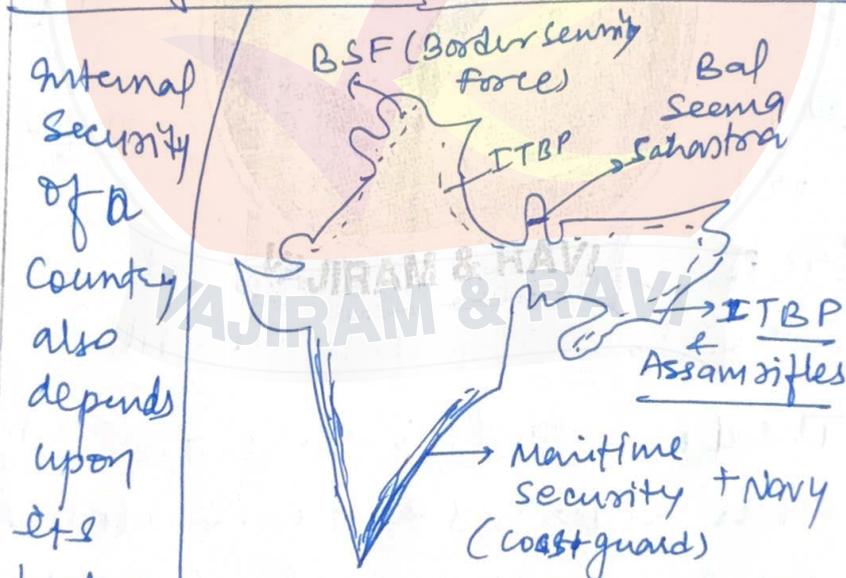


Fig: Forces protecting borders.

Border management:-

① Management of porous borders
and reduce illegal migration.

Eg: Influx on Assam seen due
to these.

② Illegal activities causing
internal disturbances.

Eg: Drug trafficking from

→ Golden triangle → Manipur crisis

→ Golden crescent → Punjab crisis
& drug menace

③ Reduce threat from border
invasion:

Eg: Pakistan military during
Kargil war, threat frontiers

④ Terrorism & organized crimes:-

↳ smuggling of drug, arm
and infiltrators for
terror activities can hamper
peace & stability, therefore
development as well.

(Don't write anything in this part)

VAJIRAM & RAVI

(Don't write anything in this part)

⑤ Development of Frontier Communities

↳ Vibrant village program aim for infra, development.

↳ Operation pahal: community participation.

↳ Border road organization for development of road and connectivity.

↳ Overall, education and health facilities.

Therefore leading to socio-economic development.

As said by honorable defense minister border area people are not mere citizen but strategic assets. Therefore

mutual development of both communities as well as security with comprehensive border infra & management is ensured.

Introduction	
Body	
Conclusion	
Presentation	
Marks:	