



MAINS TEST SERIES (Answer Booklet)

Roll No.	2023029
Name	Jitamitra Sahu
Test No.	25
Subject :	GS-III
Date :	5/4/25

Question Paper Specific Instructions

- All questions are printed in **English**.
- All the questions are **compulsory**
- The number of marks carried by each question (or part) is indicated in the question paper.
- **Word limit** in questions wherever specified should be adhered to.
- Any page or portion of the Page left blank in the Answer booklet must be clearly stuck off

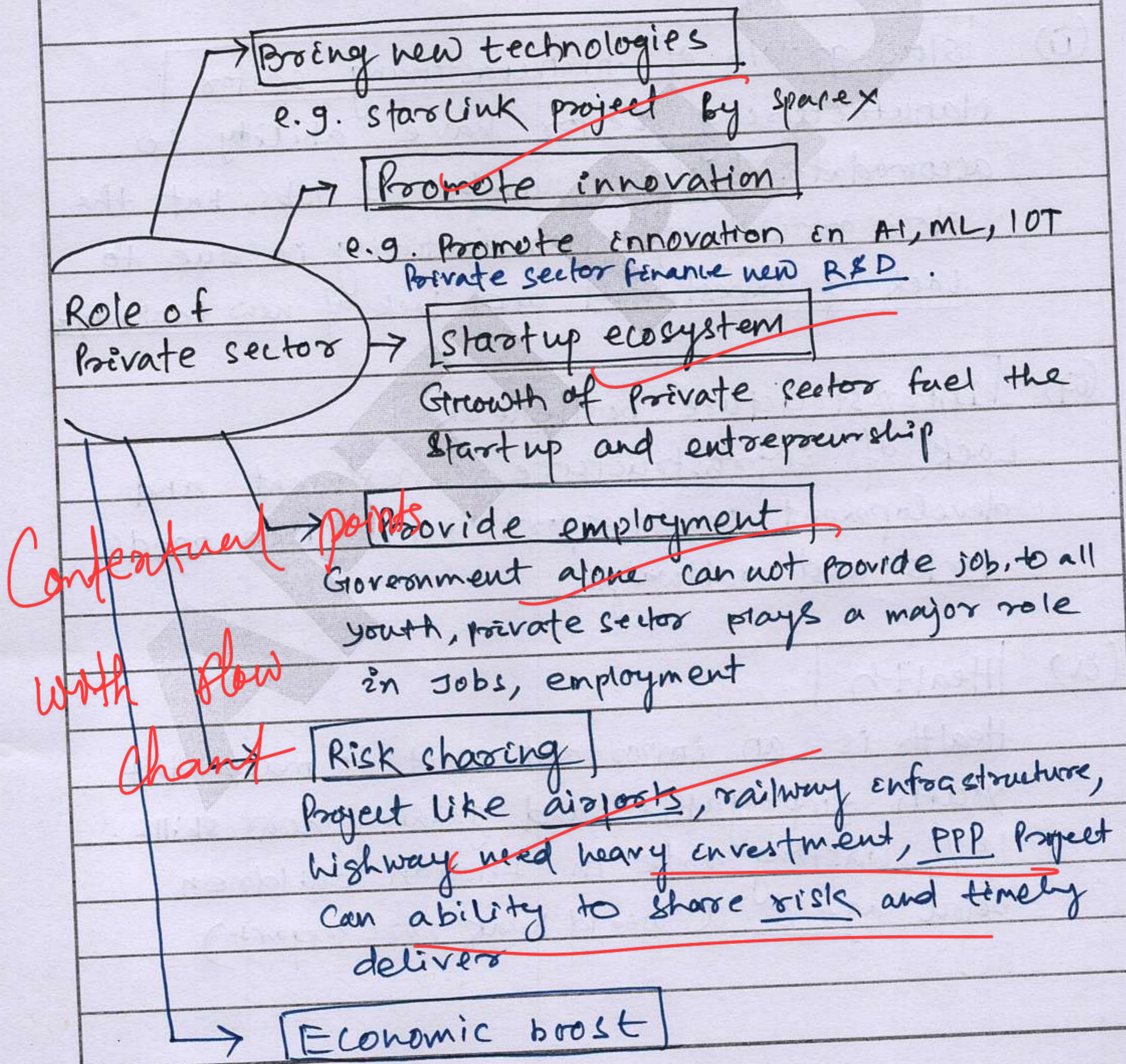
Q No.	Marks obtained	Q No.	Marks obtained	Q No.	Marks obtained
1	8	8	3	15	2.5
2	6	9	3.5	16	4.5
3	2.5	10	3	17	4
4	4.5	11	1.5	18	
5	3	12	—	19	
6	2.5	13	2	20	
7	5	14	—		
				TOTAL	55.5

Dear Aspirant,

- ① Content quality is good but in some questions you have not addressed the core demand of the questions.
- ② Presentations is neat and effective.
- ③ Provide equal respect to both Introduction and Conclusion.
- ④ Try to address the word limit too.
- ⑤ Do use more data / facts to get extra edges.
Keep writing All the Best!

Group - A

Q.1. 8 facilitating a conducive ecosystem for private investment is essential to driving a sustainable cycle of economic growth. India goal to achieve a \$5 trillion economy and aim to viksit Bharat @ 2047. *Very Contextual Introduction*



Key challenges

(i) Education and skills

→ 30% of the graduate are not able to employable due to lack of industry needed linkage

Regulatory Bottlenecks and Bureaucratic Hurdles
[e.g.] Land acquisition delays, GST compliance issues

→ Lack of education and skill enhancement in new technology like AI, robotics

(ii) Slow growth of manufacturing sector

Infrastructure Deficiencies
[e.g.] Inadequate roads, power shortages

Manufacturing sector have ability to accommodate highest number of jobs, but the slow growth of manufacturing is due to

Access to Finance

[e.g.] High lending rates, limited angel investments

lack of investment and lack of new technologies

(iii) Infrastructure bottleneck

Skilled Labor Shortage

[e.g.] IT skill gaps, lack of technical education

Lack of infrastructure investment and development in transport sector like roads, ports and railways

(iv) Inconsistent Policy Implementation

[e.g.] GST implementation, labor law reforms

Health is an important part to make the youth employable and gaining new skills.

18% wasting rate in Indian children below age 6 (World bank 2020 report)

(v) Lack of private investment

Lack of private led innovation, R&D, low participation PPP project
e.g. Vejoya Kelkar Committee recommend private investment for economic growth.

Political Instability and Governance Issues

[e.g.] State-level taxation issues, corruption in approvals

(vi) Regional disparity

Huge regional disparity among states
Lack inclusive development, states like Gujarat, Maharashtra high developed while Bihar have lack of development.

Taxation and Compliance Burden

[e.g.] Tax audits, complex tax filings

Environmental and Sustainability Challenges

[e.g.] Mining sector regulations, water scarcity

Measures

(i) Education and skill : PM Kaushal vikas Yojna, ITI institute

Industry - Academia linkage
e.g. (IIT madras)

USTAAD Scheme

enhance skills and industry ready

(ii) Manufacturing : MSME portal
MSME Samadhan

Make in India

Apply addressed

the Core Demand

Boost the manufacturing sector
One district One product

(iii) Infrastructure : Gati Shakti scheme

(iv) Health : Ayushman Bharat

(v) Regional disparity - 'Mission Purvodaya'
Infrastructure development.

Conclusion is fine

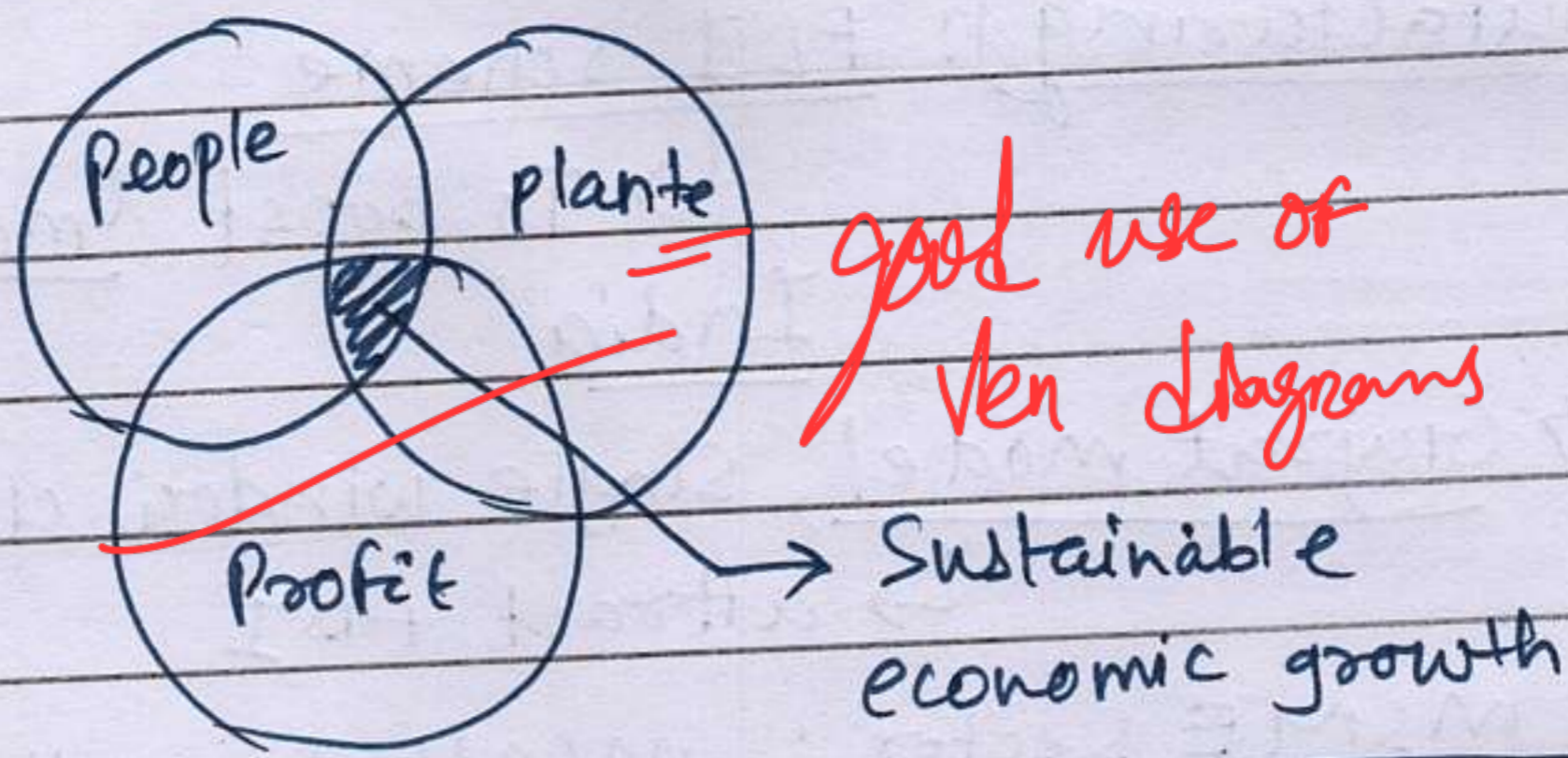
India's goal is to eliminate challenges and boost private investment and achieve the ambitious target of Vikshit Bharat 2047.

② 'Active Inclusion' means socio-economic development of all strata of the society.

Intro can be better



'Active Inclusion' In the context of sustainable economic growth simply the development, without harming the environment.



Measures implemented by government

(i) Poor : PM Awas Yojna
 PM Gharib Kalyan Yojna
 Jan Dhan

Financial Inclusion Initiatives
 [e.g.] Jan Dhan accounts, micro-financing

PDS, MGNREGA
 Provide shelter, food. financial inclusion
 for better benefit of scheme and work

Understand the Core demand of the question

Skill Development Programs
 [e.g.] PMKVY, skill development centers

(ii) women : Subhadra scheme : financial assistance
 for women empowerment.

Reservation and Affirmative Action

[e.g.] Reserved seats in universities, government jobs

STEM : education provide

Nari Shakti : skill provide and employment

SHG : Mission shakti, Kudumbashree

women empowerment

PM Janani Suraksha - health

Social Security and Welfare Schemes

[e.g.] MGNREGA, pension schemes for the elderly

(iii) marginally section (SC/ST)

Ekalaya school model : education provide

Mudra scheme : financial credit provide

Ustaad : skill training

(iv) Manufacturing: PLI scheme

↳ To boost 'make in India'

Inclusive Agricultural Development

[e.g.] Crop insurance, low-interest loans for farmers

↳ Gujarat model, single window clearances

↳ attract FDI

→ MSME Sector: MSME Samadhan Portal.

(v) Agriculture

Promoting Urban Inclusion through Affordable Housing

[e.g.] Affordable housing schemes, slum redevelopment

↳ for agricultural productivity enhancement

(vi) Environment: Compulsory EIA

Education and Digital Inclusion

[e.g.] Digital literacy training, e-governance platforms

↳ Afforestation: CAMPA fund

Project MISTI, promote clean energy like wind, sun energy

Scheme - PM Surya Ghar, etc.

(vii) Health & old age

Ayushman Bharat: Achieving universal health care

Disability and Elderly Inclusion

[e.g.] Disability pension, assistive technologies

old age - PM vayo Vandana Yojna

↳ financial security

child: Mission Anandhanus

↳ immunity

(viii) Service: Establishment of Special Economic Zone (SEZ), Exclusive Economic Zone

Conclusion is 'Active inclusion' aim to uplift the all section of society, by eliminating the challenges like infrastructure bottleneck, enhancing skill and education, we can achieve our goal of sustainable economic growth.

④ H.S Odisha budget 2025-26, focuses on the development of infrastructure, education, women empowerment, health and sustainable growth. good Intro

(i) Infrastructure: Aim to improve the infrastructure of ports, industry to post connectivity, rural connectivity.

Fiscal Indicators: Programme Expenditure: ₹1,70,000 crore (58.62% of the total budget), indicating a focus on developmental programs.

(ii) Manufacturing: Utilizing the full potential of mining sectors of odisha, which contribute more than 50% of state GDP. Attract FDI in mining sector.

Capital Outlay: ₹65,012 crore (6.11% of GSDP), the highest proportion among major Indian states, highlighting significant investment in infrastructure.

Revenue Surplus: Projected at 3% of GSDP, ensuring fiscal responsibility. e.g. Preparation of new vedanta plant in Jharsuguda.

(iii) Women: Subhadra yojna: Financial assistance to women age above 21, help in women empowerment. Sub-scheme up under Subhadra Yojna like

Subhadra Sakhi etc.

Infrastructure Development:

(iv) **Education**: Promote the education and skill enhancement, Highest allocation to Mukhya Mantri Sadak Yojana: ₹3,470 crore for rural road improvements. Mukhyamantri Sahari Vikas Yojana: ₹1,100 crore for urban infrastructure project.

Atal Bus Stand Scheme: ₹1,266 crore for developing 133 bus stands. Scheme: Godavaris Mishra Adarsha vidyalaya PM SHRI School Anvesha project - SC/ST student.

(v) **Health**: Enhance the universal healthcare by Ayushman Bharat scheme

Social Sector:

(vi) **SC/ST**: School and Mass Education: ₹31,185.47 crore to enhance educational facilities. Madho Singh Hata Kharch Yojna: Panchayati Raj and Drinking Water: ₹28,451 crore for rural development and water supply. - Ekalanga school: Education assistance to tribal student Health and Family Welfare: ₹22,741 crore to improve healthcare services

(vii) **Urban Infrastructure**: Proposal of ring road of Bhubaneswar (to reduce traffic) - Develop Urban centre like Sambalpur - Jharsuguda - Bargarh (tricity)

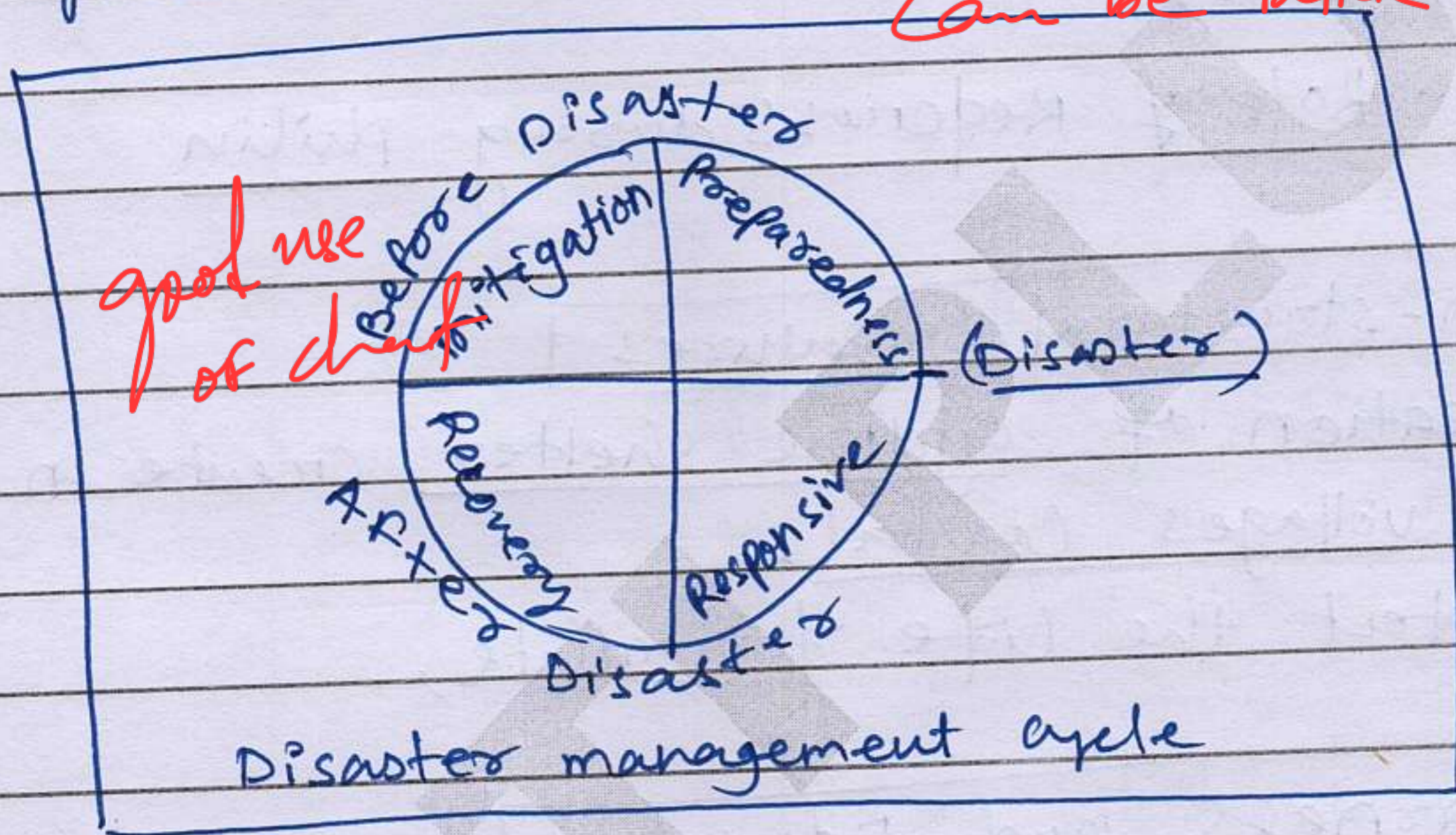
Sectoral Growth Trends:

(viii) **Service Sectors**: Agriculture: Estimated growth of 3.8% in 2024-25, down from 7.6% in the previous year. Manufacturing: Projected growth of 6.6%, a decrease from 8.7% in the prior year. Services: Expected growth of 10%, slightly lower than 11.5% previously. Develop Bhubaneswar at IT hub, lending agency special economic zone

(ix) **Agriculture**: Extension of KAUA scheme, PM-KISHA scheme

Budget of odisha aim to have economic growth of two digit and achieve VIKshit odisha 2036.
Need Improvement

- ⑤ Odisha's transformative journey in disaster management can be witnessed in recent Dana (2014) cyclone, with zero casualty, where as in 1999, Super Cyclone killed more than 10,000 people.
Can be better



(i) Early warning system (EWS)

Formation of the Odisha State Disaster Management Authority (OSDMA) in all coastal district, with 3200 blocks.

→ the EWS, gives warning about the cyclone information, and warn the localite.

Improved Early Warning Systems

[e.g.] IMD collaboration, mobile-based alerts

(ii) Structural measures

→ Creating ODRF (Odisha Disaster Response force), special force to deal with the disaster, response and recovery during

Community Participation and Awareness Programs

[e.g.] Volunteer training, community preparedness

during disaster.

→ Follow the Sendai framework to create structural measures.

Explore all the

(iii) Integration of force

asked dimensions

Key Lessons for Other States and Countries

train the local community, capacity

Importance of Strong Institutional Frameworks

[e.g.] OSDMA model, institutional coordination

building, integration of ODRF with local community and NGOs.

e.g. Role of Redcross during Philin

(iv) Non-structural measures

Community-based Preparedness

[e.g.] Village-level preparedness, local disaster management teams

Creation of Cyclone shelter, create in all villages Coastal.

→ Protect the life of localite,

(v) Awareness and Education

Early Warning and Communication Systems

[e.g.] Mobile alerts, satellite data use

Create awareness and education about the mitigation of Cyclone, integrate into the school study and frequent mock drill.

Conclusion Odisha holistically improve the all sector of Sendai framework to decrease the risk of disaster
fire e.g. EWS enrollment, creation of ODRF, Cyclone shelter and creating awareness.

⑥ PM-KISAN is central sector scheme, giving direct benefit to the farmer, by financial assistance.
Intro can be better

Key features of PM-KISAN

(i) Financial assistance

→ Giving financial assistance of 6000, Per year.

Direct Income Support to Farmers

[e.g.] ₹6,000 per year, improved cash flow

→ Provide income assistance, that lead to farmer empowerment.

(ii) DBT system: financial assistance directly

to the bank account, reduce leakage and

Reduction of Loan Dependency

[e.g.] Reduced debt burden, financial autonomy

improve financial inclusion.

(iii) Capacity building: the finance, will help in

the further re-investment in the farm,

Promoting Financial Inclusion

[e.g.] Jan Dhan accounts, increased bank linkage

improve the productivity.

(iv) Minimum guarantee: PM KISAN will provide

an assurance of minimum guarantee of

Encouraging Government Accountability

[e.g.] DBT (Direct Benefit Transfer), reduced corruption

(v) Rural distress: help to eliminate rural

distress, income inequality.

Challenges

(i) Under PM-KISAN, only farmer having land

holding will get benefit, while many

landless farmer, agricultural labour

will not get benefit.

(ii) Yearly assistance of ~~6000~~, will not significantly improve the rural distress.

Exclusion of Landless and Tenant Farmers

[e.g.] Tenant farmers, landless laborers

(iii) Inclusion and exclusion error in DBT process, many farmers get excluded of the scheme.

Insufficient Amount to Address Structural Problems

[e.g.] Low income, inadequate capital

(iv) The bank penetration in rural area is still very low, which create a hurdle in the getting benefit.

Limited Impact on Agricultural Productivity

[e.g.] Low yield, insufficient technological adoption

while PM-KISAN aim to improve the condition of farmer and reduce the rural distress, the scheme should be more

holistic and inclusive

Conclusion is fine

Avoid repetition of points

- ⑦ Recent studies on global rainforest like the Amazon deforestation, intensified the condition of tropical forest and climate.
- ⑤

fine trees

Urbanization and industrialization
 Rapid increase of urbanization and industrialization is one of the main reason of shrinking of tropical rain forest.

use of
flow chart

Tropical rain forest deforestation

e.g. western ghats of India reduce due to minning, urbanisation.

Agricultural increase

Stronger Enforcement of Deforestation Laws

[e.g.] Brazil's "Forest Code," Indonesia's logging bans

Increase in agricultural field and demand for more land lead to decrease in tropical rain forest.

Promotion of Sustainable Agriculture and Agroforestry

[e.g.] Shade-grown coffee, agroforestry models

e.g. Amazon rainforest rubber cultivation

Expansion of Protected Areas and Forest Reserves

[e.g.] Amazon's indigenous reserves, Congo Basin reserves

Illegal activity

Enhancement of Community-Based Conservation Programs

[e.g.] Community Forest Management in India, indigenous-led conservation in the Amazon

illegal wood cutting for business and management is one of the main reason of decrease in tropical forest decrease on Africa reason.

Tropical rain forest (5° North - 5° south) generally, characterized by heavy rainfall, home of many species, rich in biodiversity.

Measures to safeguard

(i) Balance between environmental sustainability and economic growth
→ check the uncontrol urbanisation
e.g. Gadgil Committee on western ghats
recommend bio-reservation

International Collaboration on Forest Conservation
[e.g.] COP decisions, REDD+ agreements

International Collaboration

Promotion of Sustainable Supply Chains

[e.g.] Roundtable on Sustainable Palm Oil (RSPO), Forest Stewardship Council (FSC)
→ Afforestation program with the help of UN and climate fund.

→ Paris agreement: Loss and damage fund to mitigate climate change

(ii) Stronger rule and surveillance to check the illegal cutting.

Forest Restoration and Reforestation Initiatives

[e.g.] Bonn Challenge, India's Green India Mission

(iii) Use of new tech like drone, satellite for monitoring.

Scientific Research and Technology Deployment

[e.g.] Global Forest Watch, space-based forest monitoring

Huge forest of tropical rain forest store carbon.

Role in regulating Earth's climate

Regulate the atmospheric circulation

Tropic get maximum light, create low pressure zone, effect the atmospheric circulation

Ground water recharge

Accommodate huge biodiversity

Social protection

deforestation
Tropical rainforest has been huge role to climate change, effecting the global temperature. Maintaining of it, need of hour.

8
3
Technology act as double edge shadow, having both negative and positive to national security.

Challenges to national security

Recruitment

Terrorist organisation use social media to influence youth and brainwash, to join them in the organisation

Privacy Concerns and Legal Frameworks

[e.g.] GDPR in Europe, Fourth Amendment concerns in the U.S.

e.g. Burahan wani social media use to recruit local Kashmiri youth

Risk of Misinformation and Fake News

[e.g.] Disinformation campaigns, fake news during elections

Funding

Cybersecurity Risks

[e.g.] Hacking social media accounts, phishing attacks

Terrorist organisation uses crowd funding via social media, use of crypto currency for cross border funding

Ethical Dilemmas and Overreach

[e.g.] Profiling minorities, surveillance of political dissent

e.g. Al Qaeda use crypto currency

Execution

Terrorist organisation uses technologies like drone, robotics, advanced ML to execute action and maximum damage.

Example?

Enables to national security

(i) Provide safety, enhance new technological development in weapon and e.g. Pinak tank, Agni missile & enhance our superiority and provide national security.

(ii) Track the terrorist

Advancement in the technologies like drone, tracking mobile gives extra edge to national security force.

(iii)

How Law enforcement can leverage social media

(i) Anti-Terrorist Awareness in Social Media

[e.g.] Monitoring extremist content, tracking suspicious behavior

e.g. Operation Sadbhavana in J&K, to influence local youth.

(ii) Use of AI: Track the potential threat and international activity

Early Warning and Crisis Management

[e.g.] Twitter feeds during emergencies, Instagram for live updates

(iii) Personal data protection law: Strict rule

(iv) Engagement with society by social media

Counter Terrorism and Radicalization Prevention

[e.g.] Tracking extremist forums, monitoring radical YouTube videos

Regular community engagement by social media, solving their problem.

e.g. use of platform like X (Twitter)

Social media can be use by terrorist organisation to recruit the youth, strict law can enhance

Public Engagement and Communication

[e.g.] Facebook alerts for missing persons, Twitter for public safety updates

the national security.

305
9 Odisha's ecosystem services and land commons is divided into physiographic division of coastal region, eastern ghat, and western upland. *fair Intro*

Economic significance

(1) Coastal region: Huge coastal region of 480 km, potential for port, export.
e.g. Paradip port, Dhamara port

Agricultural Productivity and Livelihoods

[e.g.] Coastal aquaculture, rice farming in floodplains

(2) Western upland: Rich in mineral and huge minning potential.

Water Resources and Irrigation

[e.g.] Mahanadi river basin, floodplain irrigation

e.g. Keonjhar - Sukinda
Bauxite - Koraput, Kaluhandi
Coal: Talcher, Ib-basin
Keonjhar. Iron ore

Fishing and Marine Resources

[e.g.] Chilika Lake fisheries, marine fish exports

(3) Ecosystem services

Huge tourism potential, accommodate huge range of biodiversity

Forests for Livelihoods and Non-Timber Forest Products (NTFPs)

[e.g.] Sal, bamboo, honey, medicinal plants

Chilika - migratory birds, Isawadi - dolphine
Similipal - Tiger

(4) Land commons: Infrastructure and industrial development, urban centre

e.g. IT hub in Bhubaneswar

Vedanta in Jharsuguda etc.

challenges

~~slow growth of mining~~

~~Lack of investment, better technologies~~

~~Low participation of private sector in infrastructure development~~

~~Connectivity Problem~~

~~Industry-port connectivity~~

Deforestation and Habitat Degradation

[e.g.] Mining in tribal areas, loss of forest cover

~~Land issue~~

~~e.g. Niyam giri land issue with tribals~~

Pollution and Climate Change

[e.g.] Industrial effluents in rivers, cyclone frequency increase

~~Low investment~~

Overexploitation of Land Commons

[e.g.] Land encroachment, unsustainable grazing

~~Low investment in tourism, development~~

Sustainable management policies

(i) Vikshit odisha, Invest in odisha program
- To attract FDI

~~- Private investment~~

Integrated Ecosystem Management Plans

[e.g.] Integrated coastal zone management, community forestry

~~(ii) single window clearance for industry~~

~~(iii) Development of Kalinganagar industrial hub~~

Community-Based Resource Management

[e.g.] Joint Forest Management (JFM), community-run fisheries in Chilika

~~c) Dhamara port~~

~~d) Gopalpur port~~

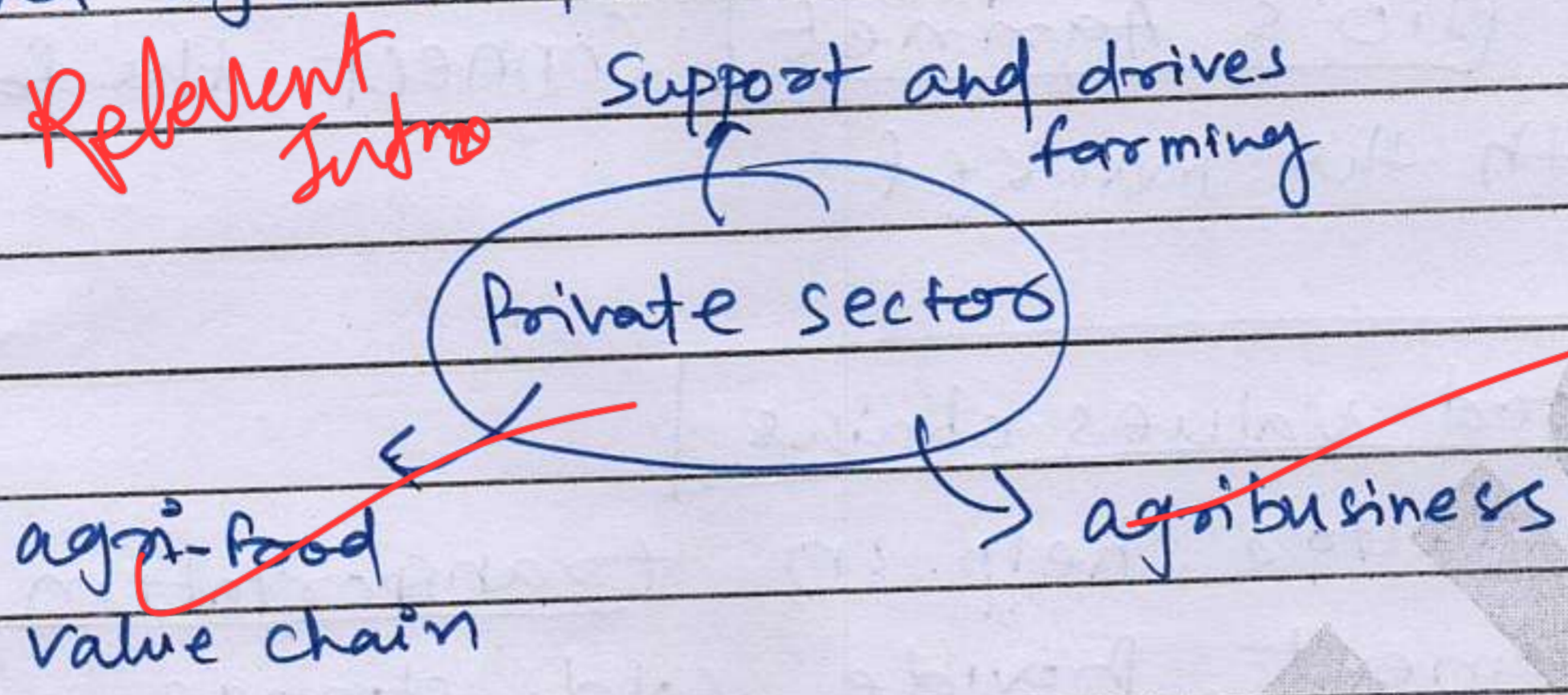
Promotion of Sustainable Agricultural Practices

[e.g.] Rainwater harvesting, organic farming in floodplains

~~campaign like India's best kept secret, ecotourism, etc.~~

the economic significance of odisha's ecosystem services and land common is huge, need of hours is better investment.

⑩
 (3) Private sector involvement in agriculture is essential to grow agribusiness, productivity and agri-food value chain.



(i) Support and drive farming

Private investment / sectors provide the help in production, like information about the soil, water and climate, Better pesticide or knowledge about the production like soil health and is important to know

Investment in Agricultural Infrastructure
 [e.g.] Reliance Fresh cold storage, Adani Agri Logistics

Technology and Innovation
 [e.g.] Drone technology, satellite-based weather forecasting

e.g. ITC's e-choupal provide the complete information about the farming.

Research and Development (R&D) in Agronomy
 [e.g.] Monsanto's GM seeds, Syngenta's crop protection chemicals

(ii) Agribusiness

→ Private sectors promote the Contract farming, i.e. better income guarantee

Market Linkages and Value Chain Development
 [e.g.] E-commerce platforms like BigBasket or Ninjacart, farmer producer organizations (FPOs)

for farmers, they provide the knowledge and financial assistance
 → Agribusiness link the market with farmer eliminating the middle man

→ farmer connect with the market, all over the India

e.g. Jio's Agrinet, connect the farmer with the market.

Agri-Food value chains

Private sector help in transportation, processing and value addition, provide cold-storage and also food processing unit

Supply Chain Optimization
[e.g.] Mother Dairy, Reliance Retail distribution channels

Retail and Consumer Markets
[e.g.] D-Mart, Future Group's Big Bazaar, and Amazon's grocery retail

e.g. BigBasket, Smart (Jio)

Private sector help to increase the earning of the farmer - Ashok Dalwai committee
Need Improvement

16) The wetlands in India have major contribution in ecological service, hosting a huge bio-diversity and provide economic benefit.

Contextual Intro

Increase urbanization

Rapid urbanisation, lead to decrease the wetland

e.g. Sambhar lake of Rajasthan

Encroachment and Land Reclamation

[e.g.] Reclamation of wetland areas for urbanization, illegal farming on wetland land

major threat

Siltation Problem

the silt from the rivers, create shrink of wetland

Pollution from Industrial and Domestic Waste

[e.g.] Sewage contamination in urban wetlands, industrial discharge in lakes

Pollution

Pollution by local community and tourist

Invasive Species

[e.g.] Water hyacinth in the Chilika Lake, invasive fish species in wetlands

Climate change

Climate Change

[e.g.] Reduced water levels in Keoladeo National Park, shifts in migratory patterns of birds

Climate change have been a major role in threat to wetland, decrease water

e.g. Loktak lake of Manipur

Unsustainable Agriculture and Fishing Practices

[e.g.] Overfishing in the Sambhar Salt Lake, use of pesticides near wetlands

Unregulated fishing and shrimp production

illegal fishing affect the bio-diversity of wetland

e.g. Sunderban Wetland.

Measures taken at the national and international level

(1) Ramsar site: Designation of Ramsar site for better protection

National Wetland Conservation Programme (NWCP)

[e.g.] Restoration of Loktak Lake, Protection of Chilika Lake India

Wetlands (Conservation and Management) Rules, 2017

[e.g.] State-level wetland conservation plans, ban on reclamation in sensitive wetland zones

Ramsar Convention and Ramsar Sites in India

[e.g.] Chilika Lake, Keoladeo National Park

(2) One water policy: protect the wetland

National Action Plan on Climate Change (NAPCC)

[e.g.] Wetland management in flood-prone areas, climate change adaptation through wetlands

'Wetland' are called kidney of earth, protection of these are needed to ecosystem restoration.

(17) The rate of unemployment among graduate in India is around 30%, shows the need for the initiatives and tackle the issue effectively.

Reason for increasing Unemployment

(1) Lack of education and skill
Lack of industry ready skill and education among the youth.

Mismatch Between Education and Market Requirements
[e.g.] Graduates lacking employable skills, limited industry-specific training

(2) Lack of industry - Academia linkage
this lead to out dated education, no new / advanced skill and education like AI, ML, robotics.

Growth of the Informal Sector
[e.g.] Casual labor in agriculture, informal retail jobs

(3) Shrinking of manufacturing sector
slow growth of manufacturing sector, due to low investment and lack of new technologies reduce the workforce employment.

Limited Availability of Quality Jobs
[e.g.] Short-term contract work, underemployment in low-wage sectors

(4) Service sector: Service sector has limited capacity to give employment, while it contribute highest to GDP it only provide 30% total employment.

Structural Changes in the Economy
[e.g.] Decline in agricultural jobs, migration of youth to urban areas with no skills

(5) Growth of informal sector
Growth of 'Gig economy' provide alternative employment opportunity.

Provide justice to word limit too

State-specific initiative focus on Odisha

(i) Establishment of World Skill Centre

in Odisha, Bhubaneswar, providing
Skill Development Initiatives: Odisha Skill Development Authority (OSDA)
[e.g.] Skill development in IT and electronics, vocational training programs in rural areas
Next edge technologies

(ii) Skill enhancement: ITI Institute,

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) in Odisha
[e.g.] Skill training for youth in rural Odisha, certification programs for specific trades
PM-Kaushal Vikas Yojna

(iii) Growth of manufacturing sector:

Industrial Corridor, capital
Odisha Livelihoods Mission (OLM)
[e.g.] Promotion of rural entrepreneurship, tribal youth livelihood programs
Investment in mining

- Mega Park on Anugul (Vedanta)

(iv) Service sector: Bhubaneswar IT hub

- Attract FDI

(v) Odisha Invest in Odisha, Viksit Odisha
Program. → FDI attraction

Conclusion is
Odisha have initiated many skill enhance-
ment scheme for reducing unemployment
and boost economic growth.

⑬ Coalition for disaster Resilient Infrastructure (CDRI) is important to implement Sendai framework of disaster-resilient infrastructure.

Appt Introduction

Role of CDRI

(i) Institutional measure

→ Creation of National disaster Risk force (NDRF), and creation of state

1 Strengthening Disaster Risk Governance

[e.g.] Public-private partnerships in resilient infrastructure, collaborative policy design

(ii) Governance clearness: classify the strong rule and procedure of governance during disaster, so that

2 Understanding and Assessing Disaster Risk

[e.g.] Risk mapping tools, vulnerability assessments for infrastructure

(iii) Non-institutional measure

Creation of disaster resilient infrastructure, shelter during disaster
e.g. Green code for building

3 Investing in Disaster Risk Reduction

[e.g.] Funding for resilient infrastructure projects, insurance mechanisms for infrastructure

(iv) Early warning system

→ Early disaster assessment, Prediction and implement early warning system
e.g. Use of AI on sikim to prevent ALOF

Do write more

(v) Community Participation and Awareness

1 Capacity Building and Knowledge Sharing

[e.g.] Training workshops, research publications on resilient infrastructure, local community participation, NHO, Civil Society involvement, training in disaster management.
e.g. Role of Red cross

2 Creating Standards and Guidelines for Resilient Infrastructure

[e.g.] Guidelines for flood-resistant buildings, earthquake-resilient infrastructure

CDRI support the India's commitment to the Sendai framework for disaster Risk Reduction in mitigation risk.

③ Antimicrobial resistance, develop when the pathogen was immune to the drug, and there will be no further result of taking drugs in the body.

Ant Introduction

Reasons for antimicrobial resistant

(i) In consistent taking of drug:

It will gives resistance power to the pathogen, further when ones body got effected, we need higher dose of drug.

Overuse and Misuse of Antibiotics

[e.g.] Antibiotics for cold/flu, unregulated drug sales

example?

(ii) Frequent use of drug

frequent use of drug, & over the time give immunity to the pathogen, over the time it get more strength.

Inadequate Infection Control in Healthcare Settings

[e.g.] Contaminated medical equipment, overcrowded hospitals

(iii) Lack of generic drug in India

Lack of Proper Surveillance and Data

[e.g.] Lack of AMR databases, limited research funding

→ Generic drug in every case, seriously affecting our body.

Agricultural Use of Antibiotics

[e.g.] Antibiotic use in poultry, unregulated veterinary practices

(iv) Doctor

Inadequate Access to Healthcare in Rural Areas

[e.g.] Limited access to healthcare, non-compliance with prescribed courses

→ Lack of medical professional advice, e.g. Use of paracetamol, without advice and proper testing.

Measures

Cultural and Socioeconomic Factors

[e.g.] Traditional medicine, lack of awareness

(i) National antimicrobial resistance program

↳ Awareness about the drug resistance

(ii) Involvement of doctor prescribed medicine

Inappropriate Pharmaceutical Marketing

[e.g.] Promotion of broad-spectrum antibiotics, unnecessary prescriptions

→ strict rule
(iii) follow the medication, regularly without break.

Resistance Development Due to Incomplete Treatment

[e.g.] Not completing antibiotic course, counterfeit medicines

Probal probalnutce, affecting may health disease, need for better awareness.

15

Armed forces special Powers Act 1958 (AFSPA)

fail in preventing human rights violations and ensuring adequate protection for soldiers life.

Relevance of AFSPA

(i) Protection of law and order in destabilize state like North-east and Jammu-Kashmir

(ii) Gives military extra powers for Search, arrest, fire without any order.

Origins and Purpose of AFSPA

[e.g.] Naga insurgency, Maoist insurgency

Effectiveness in Addressing Insurgency

[e.g.] Kashmir insurgency, Maoist Naxalite movements

(iii) Trial without court procedure - violate the human right (Art. 21)

Human Rights Violations

[e.g.] Fake encounters in Kashmir, extra-judicial killings in Manipur

(iv) Extra powers of military, stop the socio-economic development.

(v) Reduce the financial burden on the state, as under AFSPA centers took care of the law and order.

Potential human right violation

↳ Many extra judicial killing by military

↳ Promote further hatred and anger among local

↳ cannot be trial without court.

↳ violate fundamental right.

Protection of military

→ military is not trained to operate in civil society

Distorted Public Perception

[e.g.] Kashmir valley unrest, insurgency in the northeast
→ this creates many challenges and lead to failure of tactics

→ militant use the local as shield and

Legal and Constitutional Concerns

[e.g.] Judicial challenges to AFSPA, constitutional violations

Way forward

Failure to Address Root Causes

[e.g.] Economic underdevelopment in conflict zones, lack of political autonomy

→ Better training and monitoring
→ civil and military engagement

→ Local participation in the governance

International Criticism

[e.g.] UN reports on human rights violations, international condemnation

AFSPA have been a draconian rule violating the human right, need of the hour is reformation.

11
7.5
" Intelligence reform in India can only be effective if it is integrated with police modernization.

→ Lack of development of and adaptation of new technologies

Challenges

Fragmented Intelligence Gathering Systems
[e.g.] Delayed intelligence sharing, lack of coordination between agencies

→ Evolving nature of crime like crypto, demand advanced

Lack of Modern Technology and Infrastructure

[e.g.] Lack of drones for surveillance, absence of integrated cyber intelligence tools

→ Lack of investment in strengthening

Inadequate Training and Human Resource Development

[e.g.] Limited training on cybersecurity, insufficient number of forensic experts

→ Lack of capable personnel to handle

Political Interference and Lack of Autonomy

[e.g.] Political influence on investigations, interference in police action

→ Evolving nature of the crime .
Lack of infrastructure of state police

Explain it briefly

Development of intelligence is important to tackle the evolving nature of crime.

Total Marks : 250

Time : 3 Hours

Candidates should attempt all questions of Group A with word limit of 300 words and any 10 questions of Group B with word limit of 250 words.

Question 1 to Question 5
20 marks each (answer in 300 words)

Question 6 to Question 18
15 marks each (answer in 250 words)

GROUP A

- Q.1** Facilitating a conducive ecosystem for private investment is essential to driving a sustainable cycle of economic growth. In this context, discuss the key challenges that hinder India's goal of achieving a \$5 trillion economy.
ଆର୍ଥିକ ଅଭିବୃଦ୍ଧିର ଏକ ସ୍ଥାୟୀ ଚକ୍ର ଚଳାଇବା ପାଇଁ ଘରୋଇ ନିବେଶ ପାଇଁ ଏକ ଅନୁକୂଳ ଇକୋସିଷ୍ଟମକୁ ସୁଗମ କରିବା ଅତ୍ୟନ୍ତ ଜରୁରୀ। ଏହି ପରିପ୍ରେକ୍ଷୀରେ, ଭାରତର \$5 ଟ୍ରିଲିୟନ ଅର୍ଥନୀତି ହାସଲ ଲକ୍ଷ୍ୟକୁ ବାଧା ଦେଉଥିବା ପ୍ରମୁଖ ଚ୍ୟାଲେଞ୍ଜଗୁଡ଼ିକ ଉପରେ ଆଲୋଚନା କରନ୍ତୁ।
- Q.2** What is meant by 'active inclusion' in the context of sustainable economic growth? Discuss the measures implemented by the government to promote active inclusion.
ସ୍ଥାୟୀ ଆର୍ଥିକ ଅଭିବୃଦ୍ଧି ପରିପ୍ରେକ୍ଷୀରେ 'ସକ୍ରିୟ ଅନ୍ତର୍ଭୁକ୍ତି' କ'ଣ ବୁଝାଏ? ସକ୍ରିୟ ଅନ୍ତର୍ଭୁକ୍ତିକୁ ପ୍ରୋତ୍ସାହିତ କରିବା ପାଇଁ ସରକାର କାର୍ଯ୍ୟକାରୀ କରିଥିବା ପଦକ୍ଷେପଗୁଡ଼ିକ ଉପରେ ଆଲୋଚନା କରନ୍ତୁ।
- Q.3** To address the growing threat of drug-resistant bacteria, researchers are investigating how a particular superbug evolves to resist an antibiotic considered the last line of defense. In this context, explain the concept of antimicrobial resistance and discuss the key factors contributing to antibiotic resistance in India.
ଔଷଧ-ପ୍ରତିରୋଧୀ ଜୀବାଣୁର ବର୍ଦ୍ଧିତ ବିପଦକୁ ସମାଧାନ କରିବା ପାଇଁ, ଗବେଷକମାନେ ଅନୁସନ୍ଧାନ କରୁଛନ୍ତି ଯେ କିପରି ଏକ ନିର୍ଦ୍ଦିଷ୍ଟ ସୁପରବଗ୍ ଶେଷ ପ୍ରତିରକ୍ଷା ରେଖା ଭାବରେ ବିକଶିତ ହୋଇ ଏକ ଆଣ୍ଟିବାୟୋଟିକ୍ ପ୍ରତିରୋଧୀ ପାଇଁ ବିକଶିତ ହୁଏ। ଏହି ପରିପ୍ରେକ୍ଷୀରେ, ଆଣ୍ଟିମାଇକ୍ରୋବାୟାଲ୍ ପ୍ରତିରୋଧର ଧାରଣା ବ୍ୟାଖ୍ୟା କରନ୍ତୁ ଏବଂ ଭାରତରେ ଆଣ୍ଟିବାୟୋଟିକ୍ ପ୍ରତିରୋଧରେ ଅବଦାନ ରଖୁଥିବା ପ୍ରମୁଖ କାରଣଗୁଡ଼ିକ ଉପରେ ଆଲୋଚନା କରନ୍ତୁ।
- Q.4** Analyze the key highlights of the Odisha Budget 2025-26, focusing on its fiscal indicators, major policy initiatives, and sectoral growth trends. Discuss its implications for economic development in the state.
ଓଡ଼ିଶା ବଜେଟ୍ 2025-26 ର ମୁଖ୍ୟ ସୂଚନାଗୁଡ଼ିକ ବିଶ୍ଳେଷଣ କରନ୍ତୁ, ଏହାର ଆର୍ଥିକ ସୂଚକ, ପ୍ରମୁଖ ନୀତି ପଦକ୍ଷେପ ଏବଂ କ୍ଷେତ୍ରୀୟ ଅଭିବୃଦ୍ଧି ଧାରା ଉପରେ ଧ୍ୟାନ ଦିଅନ୍ତୁ। ରାଜ୍ୟରେ ଆର୍ଥିକ ବିକାଶ ପାଇଁ ଏହାର ପ୍ରଭାବ ଆଲୋଚନା କରନ୍ତୁ।
- Q.5** Discuss Odisha's transformation in disaster management over the past two decades. What key lessons can other states and countries learn from its approach?
ଗତ ଦୁଇ ଦଶନ୍ଧି ମଧ୍ୟରେ ବିପର୍ଯ୍ୟୟ ପରିଚାଳନାରେ ଓଡ଼ିଶାର ପରିବର୍ତ୍ତନ ବିଷୟରେ ଆଲୋଚନା କରନ୍ତୁ। ଏହାର ଆଭିମୁଖ୍ୟରୁ ଅନ୍ୟ ରାଜ୍ୟ ଏବଂ ଦେଶମାନେ କ'ଣ ପ୍ରମୁଖ ଶିକ୍ଷା ପାଇପାରିବେ?

GROUP B

- Q.6 Can PM-KISAN be the game-changer in transforming India's agricultural support system and addressing rural distress?**
କ'ଣ ପ୍ରଧାନମନ୍ତ୍ରୀ-କିଷାନ ଭାରତର କୃଷି ସହାୟତା ବ୍ୟବସ୍ଥାକୁ ପରିବର୍ତ୍ତନ କରିବା ଏବଂ ଗ୍ରାମୀଣ ଦୁର୍ଦ୍ଦଶାର ସମାଧାନ କରିବାରେ ଖେଳ ପରିବର୍ତ୍ତକ ହୋଇପାରେ?
- Q.7 Recent studies on global rainforest deforestation reveal a critical situation. How can efforts be intensified to safeguard tropical forests and enhance their role in regulating Earth's climate?**
ବିଶ୍ୱ ବର୍ଷାଜଳ କ୍ଷୟ ଉପରେ ସାମ୍ପ୍ରତିକ ଅଧ୍ୟୟନ ଏକ ଜଟିଳ ପରିସ୍ଥିତି ପ୍ରକାଶ କରେ। ଉଷ୍ଣକଟିବନ୍ଧୀୟ ଜଙ୍ଗଲକୁ ସୁରକ୍ଷା ଦେବା ଏବଂ ପୃଥିବୀର ଜଳବାୟୁ ନିୟନ୍ତ୍ରଣରେ ସେମାନଙ୍କର ଭୂମିକାକୁ ବୃଦ୍ଧି କରିବା ପାଇଁ ପ୍ରୟାସକୁ କିପରି ତୀବ୍ର କରାଯାଇପାରିବ?
- Q.8 Technology serves as both an enabler and a challenge to national security. In light of this, discuss how law enforcement agencies can leverage social media to enhance national security.**
ପ୍ରଯୁକ୍ତିବିଦ୍ୟା ଜାତୀୟ ସୁରକ୍ଷା ପାଇଁ ଏକ ସମର୍ଥକ ଏବଂ ଏକ ଚ୍ୟାଲେଞ୍ଜ ଭାବରେ କାର୍ଯ୍ୟ କରେ। ଏହାକୁ ଦୃଷ୍ଟିରେ ରଖି, ଆଇନ ପ୍ରବର୍ତ୍ତନ ଏଜେନ୍ସିଗୁଡ଼ିକ ଜାତୀୟ ସୁରକ୍ଷାକୁ ବୃଦ୍ଧି କରିବା ପାଇଁ ସାମାଜିକ ଗଣମାଧ୍ୟମକୁ କିପରି ବ୍ୟବହାର କରିପାରିବେ ତାହା ଆଲୋଚନା କରନ୍ତୁ।
- Q.9 Discuss the economic significance of Odisha's ecosystem services and land commons, highlighting the challenges they face and the need for sustainable management policies.**
ଓଡ଼ିଶାର ଇକୋସିଷ୍ଟମ ସେବା ଏବଂ ଭୂମି ସାଧାରଣ କ୍ଷେତ୍ରର ଆର୍ଥିକ ଗୁରୁତ୍ୱ ବିଷୟରେ ଆଲୋଚନା କରନ୍ତୁ, ସେମାନେ ସମ୍ମୁଖୀନ ହେଉଥିବା ଚ୍ୟାଲେଞ୍ଜ ଏବଂ ସ୍ଥାୟୀ ପରିଚାଳନା ନୀତିର ଆବଶ୍ୟକତା ଉପରେ ଆଲୋଚନା କରନ୍ତୁ।
- Q.10 Agricultural growth and transformation are impossible without an active private sector that supports and drives farming, agribusiness, and agri-food value chains. Discuss.**
କୃଷି, କୃଷି ବ୍ୟବସାୟ ଏବଂ କୃଷି-ଖାଦ୍ୟ ମୂଲ୍ୟ ଶୃଙ୍ଖଳକୁ ସମର୍ଥନ ଏବଂ ଚାଳିତ କରୁଥିବା ଏକ ସକ୍ରିୟ ଘରୋଇ କ୍ଷେତ୍ର ବିନା କୃଷି ଅଭିବୃଦ୍ଧି ଏବଂ ପରିବର୍ତ୍ତନ ଅସମ୍ଭବ। ଆଲୋଚନା କରନ୍ତୁ।
- Q.11 "Intelligence reform in India can only be effective if it is integrated with police modernization, ensuring the enhancement of both technological and human capabilities of State police personnel." Discuss the challenges associated with India's intelligence framework in this context.**
"ଭାରତରେ ଗୁପ୍ତଚର ସଂସ୍କାର କେବଳ ସେତେବେଳେ ପ୍ରଭାବଶାଳୀ ହୋଇପାରିବ ଯଦି ଏହା ପୋଲିସ ଆଧୁନିକୀକରଣ ସହିତ ସମନ୍ୱିତ ହୁଏ, ରାଜ୍ୟ ପୋଲିସ କର୍ମଚାରୀଙ୍କ ପ୍ରଯୁକ୍ତିବିଦ୍ୟା ଏବଂ ମାନବ କ୍ଷମତା ଉଭୟର ବୃଦ୍ଧିକୁ ସୁନିଶ୍ଚିତ କରେ।" ଏହି ପରିପ୍ରେକ୍ଷୀରେ ଭାରତର ଗୁପ୍ତଚର ଢାଞ୍ଚା ସହିତ ଜଡ଼ିତ ଚ୍ୟାଲେଞ୍ଜଗୁଡ଼ିକ ବିଷୟରେ ଆଲୋଚନା କରନ୍ତୁ।
- Q.12 India is among the first countries to develop a comprehensive 'Cooling Action Plan' in line with the Montreal Protocol to combat ozone layer depletion. Discuss the extent to which this plan can aid in reducing both direct and indirect emissions while meeting the cooling demands across various economic sectors.**
ଓଲୋନ ସ୍ତର ହ୍ରାସକୁ ମୁକାବିଲା କରିବା ପାଇଁ ମଣ୍ଟ୍ରିଆଲ ପ୍ରୋଟୋକଲ ସହିତ ଏକ ବ୍ୟାପକ 'କୁଲିଂ ଆକ୍ସନ ପ୍ଲାନ' ବିକଶିତ କରିବାରେ ଭାରତ ପ୍ରଥମ ଦେଶମାନଙ୍କ ମଧ୍ୟରେ ଅନ୍ୟତମ। ବିଭିନ୍ନ ଆର୍ଥିକ କ୍ଷେତ୍ରରେ ଶୀତଳତା ଚାହିଦା ପୂରଣ କରିବା ସହିତ ଏହି ଯୋଜନା ପ୍ରତ୍ୟକ୍ଷ ଏବଂ ପରୋକ୍ଷ ନିର୍ଗମନକୁ ହ୍ରାସ କରିବାରେ କେତେ ସାହାଯ୍ୟ କରିପାରିବ ତାହା ଆଲୋଚନା କରନ୍ତୁ।
- Q.13 "A disaster-resilient world requires robust and resilient infrastructure." In this context, examine how the Coalition for Disaster Resilient Infrastructure (CDRI) can support India's commitment to the Sendai Framework for Disaster Risk Reduction in mitigating disaster risks.**
"ଏକ ବିପର୍ଯ୍ୟୟ-ପ୍ରତିରୋଧୀ ବିଶ୍ୱ ପାଇଁ ଦୃଢ଼ ଏବଂ ସ୍ଥିର ଭିତ୍ତିଭୂମି ଆବଶ୍ୟକ।" ଏହି ପରିପ୍ରେକ୍ଷୀରେ, ବିପର୍ଯ୍ୟୟ ପ୍ରତିରୋଧୀ ଭିତ୍ତିଭୂମି ପାଇଁ ମେଣ୍ଟ (CDRI) ବିପର୍ଯ୍ୟୟ ବିପଦ ହ୍ରାସ କରିବାରେ ସେଣ୍ଟାଲ ଫ୍ରେମୱାର୍କ ପ୍ରତି ଭାରତର ପ୍ରତିବନ୍ଧକକୁ କିପରି ସମର୍ଥନ କରିପାରିବ ତାହା ଯାଞ୍ଚା କରନ୍ତୁ।

- Q.14 Discuss how the key features of the Paris Call contribute to strengthening cybersecurity. Additionally, outline the measures taken by the Government of India to address cybersecurity challenges.**
ପ୍ୟାରିସ୍ ଆହ୍ୱାନର ପ୍ରମୁଖ ବୈଶିଷ୍ଟ୍ୟଗୁଡ଼ିକ ସାଇବର ସୁରକ୍ଷାକୁ ସୁଦୃଢ଼ କରିବାରେ କିପରି ଅବଦାନ ରଖେ ତାହା ଆଲୋଚନା କରନ୍ତୁ। ଏହା ସହିତ, ସାଇବର ସୁରକ୍ଷା ତ୍ୟାଲେଞ୍ଜର ମୁକାବିଲା ପାଇଁ ଭାରତ ସରକାରଙ୍କ ଦ୍ୱାରା ନିଆଯାଇଥିବା ପଦକ୍ଷେପଗୁଡ଼ିକର ରୂପରେଖା ଦିଅନ୍ତୁ।
- Q.15 "It may be time for the government to consider new legislation to replace the Armed Forces Special Powers Act, 1958 (AFSPA), as it has been ineffective in both preventing human rights violations and ensuring adequate protection for soldiers who risk their lives in the defense of the nation." In this context, examine the relevance of AFSPA in addressing contemporary security challenges.**
"ସରକାରଙ୍କ ପାଇଁ ସଶସ୍ତ୍ର ବାହିନୀ ସ୍ୱତନ୍ତ୍ର କ୍ଷମତା ଆଇନ, ୧୯୫୮ (AFSPA)କୁ ବଦଳାଇବା ପାଇଁ ନୂତନ ଆଇନ ବିଚାର କରିବାର ସମୟ ଆସିପାରେ, କାରଣ ଏହା ମାନବାଧିକାର ଉଲ୍ଲଙ୍ଘନକୁ ରୋକିବା ଏବଂ ଜାତିର ପ୍ରତିରକ୍ଷାରେ ନିଜ ଜୀବନକୁ ବିପଦରେ ପକାଇଥିବା ସୈନିକଙ୍କ ପାଇଁ ପର୍ଯ୍ୟାପ୍ତ ସୁରକ୍ଷା ସୁନିଶ୍ଚିତ କରିବାରେ ପ୍ରଭାବହୀନ ହୋଇଛି।" ଏହି ପରିପ୍ରେକ୍ଷାରେ, ସମସାମୟିକ ସୁରକ୍ଷା ତ୍ୟାଲେଞ୍ଜର ମୁକାବିଲାରେ AFSPAର ପ୍ରାସଙ୍ଗିକତା ଯାଞ୍ଚ କରନ୍ତୁ।
- Q.16 "Identify the major threat to wetlands in India. Discuss the measures taken at the national and international level in protection and conservation of wetlands in India."**
"ଭାରତରେ ଆର୍ଦ୍ରଭୂମି ପ୍ରତି ପ୍ରମୁଖ ବିପଦ ଚିହ୍ନଟ କରନ୍ତୁ। ଭାରତରେ ଆର୍ଦ୍ରଭୂମିର ସୁରକ୍ଷା ଏବଂ ସଂରକ୍ଷଣରେ ଜାତୀୟ ଏବଂ ଅନ୍ତର୍ଜାତୀୟ ସ୍ତରରେ ନିଆଯାଇଥିବା ପଦକ୍ଷେପଗୁଡ଼ିକ ଆଲୋଚନା କରନ୍ତୁ।"
- Q.17 Examine the reason for increasing unemployment among Indian youths in recent years in India. Evaluate the role of state-specific initiatives, with a focus on Odisha, in tackling the issue effectively.**
ଭାରତରେ ସାମ୍ପ୍ରତିକ ବର୍ଷଗୁଡ଼ିକରେ ଭାରତୀୟ ଯୁବକମାନଙ୍କ ମଧ୍ୟରେ ବେକାରୀ ବୃଦ୍ଧି ପାଇବାର କାରଣ ଯାଞ୍ଚ କରନ୍ତୁ। ଏହି ସମସ୍ୟାକୁ ପ୍ରଭାବଶାଳୀ ଭାବରେ ମୁକାବିଲା କରିବାରେ ଓଡ଼ିଶା ଉପରେ ଧ୍ୟାନ ଦେଇ ରାଜ୍ୟ-ନିର୍ଦ୍ଦିଷ୍ଟ ପଦକ୍ଷେପଗୁଡ଼ିକର ଭୂମିକା ମୂଲ୍ୟାଙ୍କନ କରନ୍ତୁ।
- Q.18 Elaborate upon the growing issue of space debris in recent times. Also discuss the significance of ISRO's recent mission in achieving the zero debris target.**
ସାମ୍ପ୍ରତିକ ସମୟରେ ମହାକାଶ ଅଲିଆର ବର୍ଦ୍ଧିତ ସମସ୍ୟା ଉପରେ ବିସ୍ତୃତ ଭାବରେ ଆଲୋଚନା କରନ୍ତୁ। ଶୂନ୍ୟ ଧ୍ୱଂସାବଶେଷ ଲକ୍ଷ୍ୟ ହାସଲ କରିବାରେ ISROର ସାମ୍ପ୍ରତିକ ମିଶନର ଗୁରୁତ୍ୱ ବିଷୟରେ ମଧ୍ୟ ଆଲୋଚନା କରନ୍ତୁ।

(GS PAPER III: FULL SYLLABUS)

GROUP A

Q.1 Answer

APPROACH:

Introduction: Define a conducive investment ecosystem and its role in economic growth.

Body: Discuss key challenges—policy uncertainty, infrastructure gaps, regulatory hurdles, financial constraints, and global economic factors. Provide relevant examples and data.

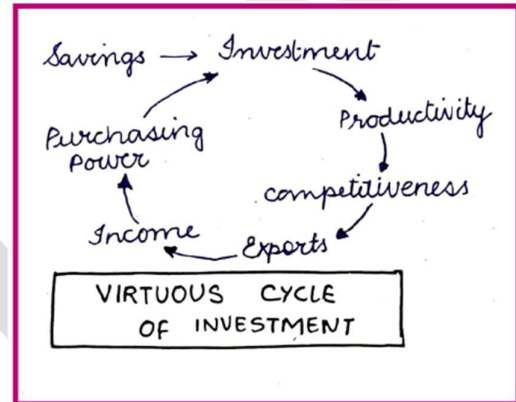
Conclusion: Suggest reforms to enhance investment, ensuring sustainable economic growth.

Introduction:

Economic Survey 2018-19 has advocated “Investment” and especially private investment to be the key driver of a virtuous cycle of productivity, jobs, export, demand and savings to realise the goal of \$5 trillion economies by 2024-25.

As per Economic Survey 2017-18, India’s Investment slowdown of 6-7% from 2005-07 to 2017-18 is largely driven by a slowdown in private investment. Therefore, it is crucial in reviving private investment as can be seen from the examples of China (45% investment rate), Japan (1950-70), the Asian tigers, etc.

Body:

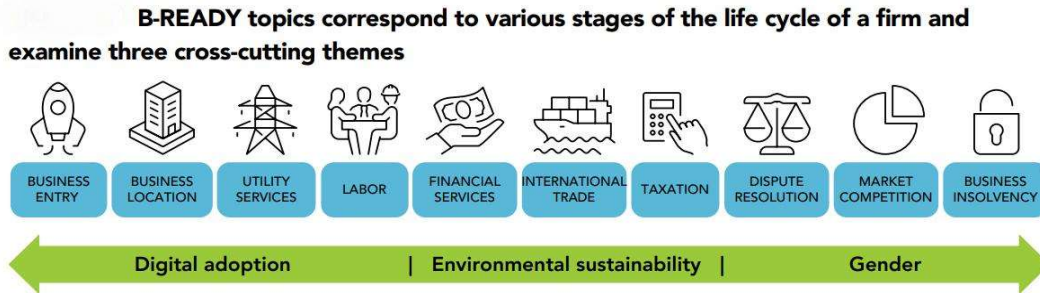


This virtuous cycle will be a catalyst for India to achieve an annual real growth rate of 8% to make India the world’s 3rd largest economy worth \$5 trillion by 2024-25. Therefore, the government has taken several steps like **Make in India, Startup India, etc, to boost investment.**

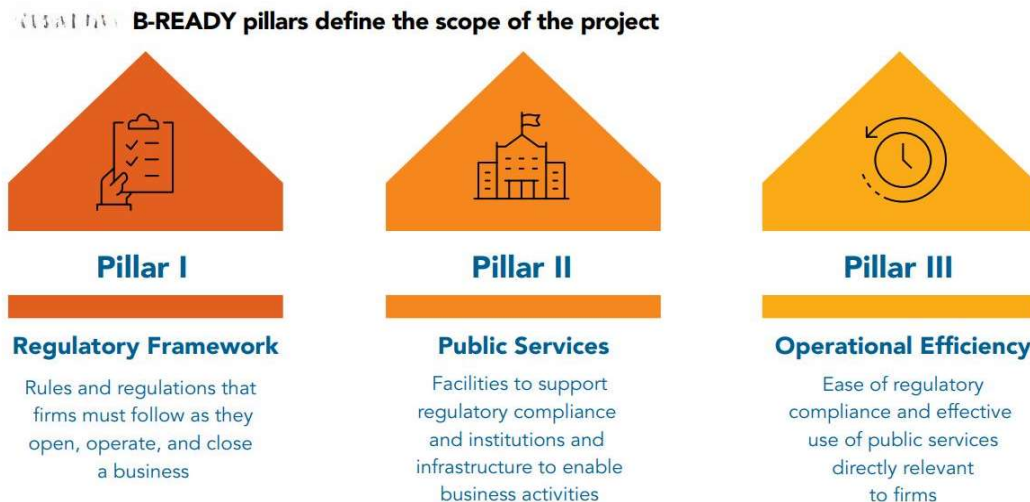
However, there are several obstacles in the way of achieving a \$5 trillion economy led by private investment:-

Issue	Details
Twin Balance Sheet Problem	Though reducing, the rate of Non-Performing Assets (NPAs) is still high (9.3%), affecting the lending capacity of banks and the demand for loans from corporates, particularly in sectors like power and telecom.
Liquidity Crisis	The IL&FS crisis led to a liquidity crunch in the financial market, reducing fund availability for investment.
Low Rate of Investment & Growth Slowdown	Investment rate is at 29%, which needs to rise to 36% (as per NITI Aayog) to achieve the \$5 trillion economy goal.
Poor Ease of Doing Business	India ranks low (163rd) in contract enforcement, dampening investor confidence.
Agricultural Distress	High variability and low productivity in agriculture reduce the purchasing power of the majority of India's population.
Late Convergence Stall	Economic Survey warns of challenges like rising protectionism, structural transformation issues, poor education & skill development, and climate change effects on agriculture.

Energy Dependence	India imports over 80% of its oil and 50% of its natural gas, making it vulnerable to currency fluctuations and geopolitical risks.
Second-Generation Reforms	Slow reforms in land, labor, and skilling reduce investor confidence.



Source: B-READY project.



These obstacles, along with global slowdown risk, low rate of exports (1.7% for goods) etc., need to be resolved at the earliest to reignite the “Animal spirit” of private investment in the economy.

Conclusion:

Focusing on resolving NPAs, MSMEs slowdown, and liquidity crisis should be the top agenda of the government. Along with these, taking holistic steps on the sectoral problem of Agriculture, manufacturing and services should be the priority. Recent steps like project Sashakt, KISAN scheme, Foreign trade policy, improvement in Ease of Doing Business ranking, etc. are steps in the right direction.

Q.2 Answer

APPROACH:

Introduction: Define ‘active inclusion’ in the context of sustainable economic growth and its significance in ensuring equal opportunities for all.

Body: Explain key aspects of active inclusion, such as social protection, inclusive labor markets, and equal access to resources. Discuss government measures like MGNREGA, Skill India, and social welfare schemes.

Conclusion: Highlight the role of active inclusion in fostering economic growth, reducing inequalities, and achieving sustainable development.

Introduction:

Active inclusion refers to both the 'pace' and 'pattern' of growth. Active inclusion is that which increases capabilities and allows more people to contribute to and participate in the benefits of growth. Pure economic growth can lead to inequality as a long-term cost, while active inclusion seeks to ensure that benefits are distributed 'equitably' among all sections.

Active inclusion empowers by increasing rewards to work, thus creating conditions for the many to contribute to and participate in the growth process. Expenditure on agricultural productivity, health and education, employment and MSME credit will all aid active inclusion.

Body:

Core components of active inclusion:

- Adequate income support to the employed, quality employment generation, inclusive labour markets.
- Access to essential services such as housing, education, finance, health, social security, etc.
- Removal of gender, caste, communal barriers.

Steps taken by the Government and their role in Active Inclusion:

Category	Schemes/Initiatives	Objective
Employment and Labour Welfare	Parampargat Krishi Yojana	Promotion of organic farming, integrated farming, and livestock to double farmers' income.
	PM KISAN	Input support to farmers for agricultural growth.
	Make in India, Start Up India, MSME promotion	Creation of quality jobs in the manufacturing sector, reducing underemployment in agriculture and allied sectors.
	PM Shram Yogi Mandhan Yojana	Social security for unorganised and small-scale workers.
	Coastal Employment Zones (CEZs) under SAGARMALA	Promoting large-scale production for exports, overcoming the limitations of SEZs.
Access to Services	PMAY (Rural and Urban)	Providing affordable housing.
	Article 21A	Free and compulsory primary education.
	Ayushman Bharat, Mission Indradhanush	Health initiatives including vaccination, institutional deliveries, and healthcare services.
	ICDS, MDMS	Nutritional support through Integrated Child Development Services (ICDS) and Mid-Day Meal Scheme (MDMS).
	JAM Trinity, Stand Up India, MUDRA loans, SIDBI, NABARD	Financial inclusion and credit access for rural development.
	Employee State Insurance	Social security initiatives.

	Corporation, Atal Pension Yojana	
Bridging Gaps	Beti Bachao Beti Padhao (BBBP)	Empowerment and education of the girl child.
	Maternity Benefits Amendment Act	Enhancing maternity benefits for working women.
	Sensitization of police and administration	Addressing communal and caste-related issues.
	Black Money Act, Fugitive Economic Offenders Act	Tackling economic inequality and financial fraud.

Conclusion:

Inclusion is essential for sustainable growth but only active inclusion is sustainable. Since India still reels under inequality, poverty, health and other challenges, the government must fulfil its duties under Article 38, 41, 42, 43 of Directive Principles by better implementation of the above programmes.

Q.3 Answer

APPROACH:

Introduction: Define antimicrobial resistance (AMR) and its implications for public health.

Body: Explain the mechanisms of AMR development and key factors contributing to antibiotic resistance in India, such as overuse, self-medication, and lack of sanitation. Provide examples.

Conclusion: Emphasize the need for stringent policies, awareness, and research to combat AMR.

Introduction:

Antibiotics are drugs that treat infections caused by bacteria. When certain bacteria are no longer eliminated by previously curable antibiotics, and thus become resistant to the effect of those drugs, it is known as '**Antibiotic Resistance**'. Antibiotic resistance is a naturally occurring phenomenon that can be slowed, but not stopped. Over time, bacteria adapt to the drugs that are designed to kill them and change to ensure their survival. For example, in the case of **Methicillin-Resistant Staphylococcus aureus (MRSA), the bacterium, S. aureus, is no longer killed by the antibiotic, methicillin.**

"Superbugs" is a term used to describe strains of bacteria that are resistant to the majority of antibiotics commonly used today.

Body:

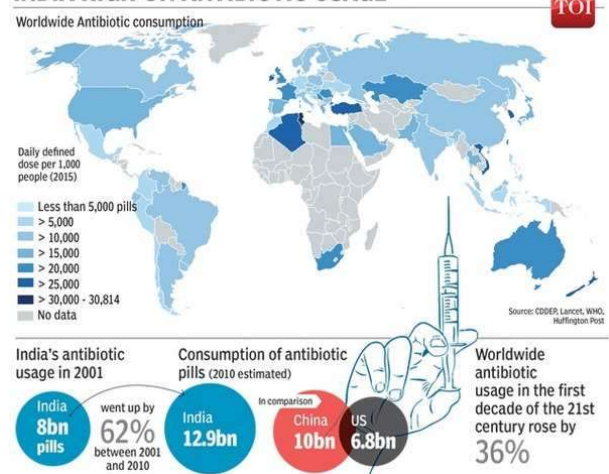
Antimicrobial Resistance in India:

"The Scoping Report on Antimicrobial Resistance in India" prepared by DBT shows India has some of the highest antibiotic resistance rates, particularly the Carbapenem class of antibiotics, one of the last-resort antibiotics to treat serious bacterial infections in humans, and resistance to them among various gram-negative bacteria was extremely high.

In India, 60,000 newborns die each year of Antibiotic-Resistant Neonatal Infections. The report also shows the highest prevalence of MDR-TB in India across the world.

Factors Responsible in India:

INDIA HIGH ON ANTIBIOTIC USAGE



UN Adhoc Interagency Coordination Group (IACG) on Antimicrobial Resistance Report listed out various reasons for spread of AMR in Indian setting:

Category	Issues
Misuse of Antibiotics	Overuse, misuse, and abuse of antibiotics like Colistin due to self-medication and incomplete courses.
Hospital Acquired Infections	High prevalence of infections such as MRSA (Methicillin-resistant <i>Staphylococcus aureus</i>).
Agricultural & Livestock Misuse	Poor hygiene in poultry farms driven by profit motives, leading to excessive antibiotic use. Overuse of fungicides, leading to <i>Candida auris</i> becoming a superbug.
Cultural Factors	Negligence of hygiene during mass gatherings like Kumbh Mela. Increased non-vegetarian consumption for protein requirements.
Regulatory Issues	Lack of regulations to control antibiotic overuse and faulty medical practices such as pharmaceutical waste disposal.

Way forward:

- **Strengthening surveillance, regulatory frameworks, professional education and oversight of antimicrobial prescription and use, and increasing awareness among all stakeholders are also significant.**
- **India's medical societies in 2012 adopted the Chennai Declaration, a set of national recommendations to promote antibiotics.**
- **Taking the learnings forward from the implementation of the National Policy on containment of AMR and subsequent the National Action Plan on AMR 2017-21 should be implemented with letter and spirit.**
- **India's Red Line campaign - which demands that prescription-only antibiotics be marked with a red line, to discourage the over-the-counter sale of antibiotics- is a step forward.**

Conclusion:

The National Health Policy, 2017 also terms antimicrobial resistance as one of the key healthcare issues and prioritises development of guidelines regarding antibiotic use, limiting over-the-counter use of antibiotics and restricting the use of antibiotics as growth promoters in livestock.

Q.4 Answer

APPROACH:

Introduction: Provide an overview of the Odisha Budget 2025-26, highlighting its fiscal objectives and overall economic vision.

Body: Analyze key fiscal indicators, major policy initiatives, and sectoral allocations. Discuss trends in infrastructure, social welfare, and industrial growth with relevant examples.

Conclusion: Assess its potential impact on Odisha's economic development, fiscal sustainability, and long-term growth prospects.

Introduction:

The Odisha Budget 2025-26, presented by Chief Minister Mohan Charan Majhi, projects a GSDP of ₹10.63 lakh crore with a 12% growth rate. The budget focuses on rural development, infrastructure, and fiscal discipline while maintaining a revenue surplus and managing a fiscal deficit of 3.2% of GSDP.

Body:

Fiscal Indicators

Indicator	Value
Revenue Surplus	₹31,800 crore (3% of GSDP)
Fiscal Deficit	₹34,200 crore (3.2% of GSDP)
Expenditure	₹2,66,800 crore (9% increase from 2024-25 RE)
Receipts (excluding borrowings)	₹2,32,600 crore (8% increase)

Major Policy Initiatives

Scheme Name	Allocation	Purpose
Antyodaya Gruha Yojana	₹7,550 crore (over three years)	Housing for the poor
Mukhya Mantri Sadak Yojana	₹3,470 crore	Rural road connectivity
Mukhyamantri Sahari Bikas Yojana	₹1,100 crore	Urban infrastructure development
MLALAD Scheme	Increased from ₹3 crore to ₹5 crore per constituency	Local area development by MLAs

Sectoral Growth Trends

Sector	Growth Rate (2024-25)	Growth Rate (2023-24)
Agriculture	3.8%	7.6%
Manufacturing	6.6%	8.7%
Services	10% (highest contribution to GSDP at 37%)	-

Per Capita GSDP

Region	Estimated Per Capita GSDP
State	₹2,03,085
India	₹2,30,195

Major Policy Initiatives

• **Antyodaya Gruha Yojana:**

- Aims to provide concrete houses to poor families affected by poverty, disasters, and displacement.
- ₹7,550 crore allocated over three years, with ₹2,603 crore for 75,000 houses in 2025-26.

• **Rural and Urban Infrastructure Development:**

- **Mukhya Mantri Sadak Yojana:** ₹3,470 crore allocated to improve rural roads and connectivity.

- **Mukhyamantri Sahari Bikas Yojana:** ₹1,100 crore for civic amenities in cities.
- ₹200 crore for developing 322 hectares in Bhubaneswar for IT, research, and service sectors.
- **Legislative Area Development:**
 - **MLALAD Scheme:** Annual allocation per constituency increased from ₹3 crore to ₹5 crore, with a total allocation of ₹735 crore.

Category	2023-24	2024-25 (Projected)	Remarks
GSDP Growth Rate	-	7.2%	Higher than India's 6.4%
Sector-wise Growth			
Agriculture	7.6%	3.8%	Decline indicates challenges
Manufacturing	8.7%	6.6%	Industrial slowdown
Services	11.5%	10%	Fastest-growing sector
Sectoral Contribution to GSDP			
Agriculture	-	28%	Significant share
Manufacturing	-	35%	Strong industrial base
Services	-	37%	Largest contributor
Per Capita GSDP	-	₹2,03,085	Lower than India's ₹2,30,195

Implications for Economic Development

1. Fiscal Stability and Growth:

- A revenue surplus of **3% of GSDP** ensures financial stability.
- Increased capital outlay (**17% growth**) will drive infrastructure-led growth.

2. Infrastructure and Employment Generation:

- Rural and urban connectivity projects will enhance trade and employment opportunities.
- Investments in IT and research sectors in Bhubaneswar will boost skilled employment.

3. Social and Economic Equity:

- The **Antyodaya Gruha Yojana** addresses housing needs for vulnerable populations.
- The enhanced **MLALAD** scheme empowers local governance for region-specific development.

4. Challenges and Concerns:

- Declining growth in **agriculture and manufacturing** sectors may impact overall economic momentum.
- The **fiscal deficit at 3.2% of GSDP** remains within limits but requires efficient debt management.
- Lower **per capita income** than the national average indicates the need for more inclusive growth policies.

Conclusion:

The Odisha Budget 2025-26 emphasizes balanced economic growth with significant investments in infrastructure, housing, and rural development. While the revenue surplus and fiscal prudence indicate financial stability, the slowdown in agriculture and manufacturing poses challenges. Strategic policy implementation will be crucial for sustaining long-term economic growth and improving living standards in the state.

Q.5 Answer

APPROACH:

Introduction: Highlight Odisha’s vulnerability to natural disasters and the need for an effective disaster management system.

Body: Discuss key initiatives like early warning systems, community preparedness, cyclone shelters, and policy improvements. Provide examples from Cyclone 1999 to present.

Conclusion: Emphasize Odisha’s success in minimizing disaster impact and the key lessons for other regions in resilience and preparedness.

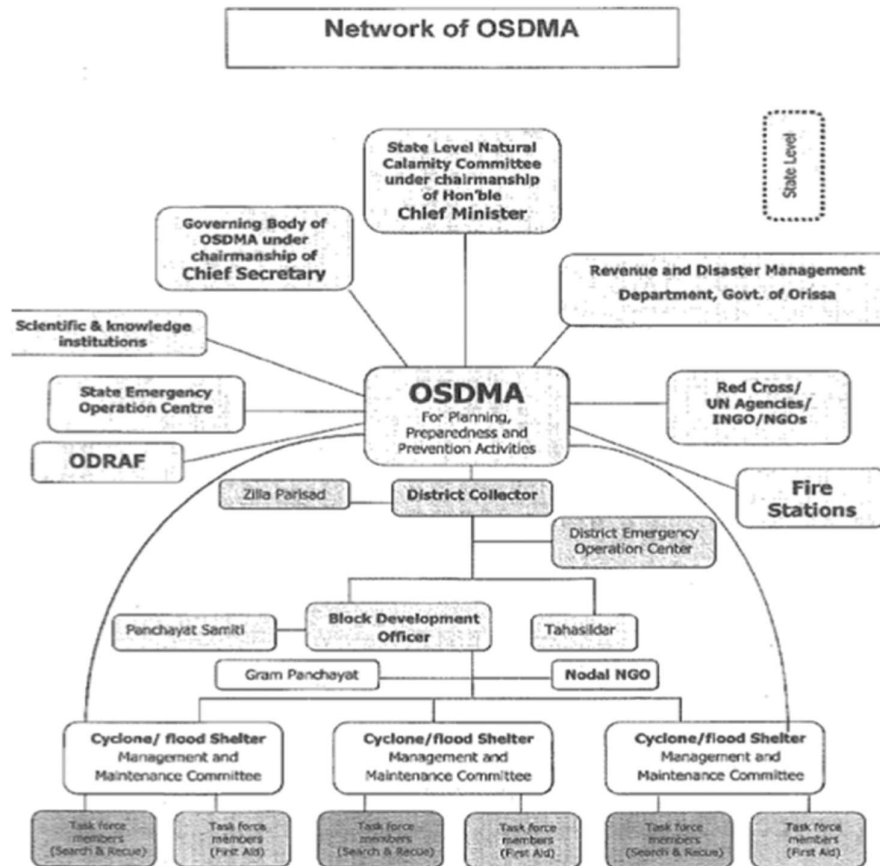
Introduction:

Odisha has undergone a remarkable transformation in disaster management since the devastating Super Cyclone of 1999. With a goal of ‘zero-human casualties,’ the state has developed a robust disaster preparedness framework, making it a global model in disaster resilience.

Body:

Key Aspects of Odisha’s Disaster Management Approach

Key Aspect	Details
Institutional Framework	Odisha was the first Indian state to establish a disaster management authority (OSDMA) in 1999, before the NDMA was set up in 2005.
Community-Centric Approach	Local communities, self-help groups, and trained volunteers play a central role in disaster preparedness, risk reduction, and relief.
Early Warning Systems	Odisha has a last-mile early warning system with sirens, watchtowers, and mass messaging across 1,200 coastal villages.
Disaster-Resilient Infrastructure	Over 800 multipurpose cyclone shelters, evacuation roads, and embankments have been built to mitigate cyclone impact.
International Collaboration	Partnerships with global organizations like the World Bank have strengthened Odisha’s disaster management capacity.



Lessons for Other States and Countries

- **Proactive Planning:** Investing in disaster resilience before calamities strike reduces loss of life and economic damage.
- **Community Involvement:** Engaging local communities enhances disaster response and builds long-term resilience.
- **Infrastructure Development:** Constructing resilient infrastructure minimizes the impact of disasters.
- **Technology and Innovation:** Advanced early warning systems and real-time data can significantly improve preparedness and response.
- **Adaptability:** Disaster management should be dynamic, evolving with emerging climate risks and challenges.

Conclusion:

Odisha's experience highlights that disaster preparedness must be a developmental priority. With climate change intensifying natural calamities, governments worldwide must adopt a proactive, community-driven, and technology-integrated approach to disaster management.

GROUP B

Q.6 Answer

APPROACH:

Introduction: Define PM-KISAN and its objectives in providing direct income support to farmers.

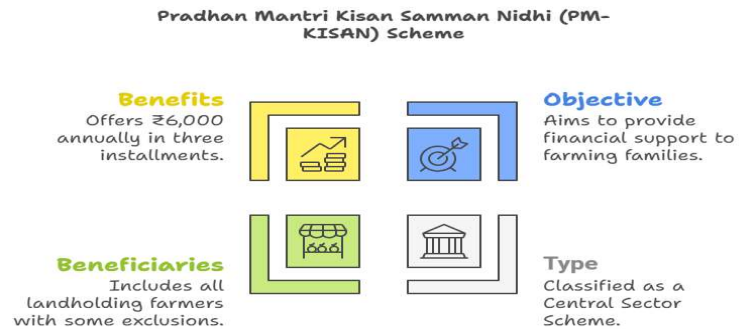
Body: Discuss its impact on rural livelihoods, financial inclusion, and agricultural investment. Address challenges like beneficiary exclusions and implementation hurdles. Compare with other agrarian support schemes.

Conclusion: Evaluate its potential as a transformative policy and suggest improvements for maximizing its effectiveness.

Introduction:

Rural India, primarily being agricultural, is handicapped by issues of lower incomes, falling productivity, farmer suicides etc, whose manifestation can be directly witnessed through agitations all around like- Farmer rallies in Delhi, Silent marches in Mumbai. Apart from this, issues of migration, caste and gender barriers impact the rural distress landscape.

PM-KISAN is a structured income support scheme for small and marginal farmers owning less than 2 hectares of land. There are about 12.50 crore small and marginal farmer families in India. It is a direct cash transfer scheme providing Rs. 6,000 per annum , in three equal installments of Rs. 2,000 each.



Body:

PM KISAN can help alleviate the distress:

- Potential of greater efficiency in enabling poor households to directly purchase the required goods and services, as well as enhance their market choices.
- Utilization of income support to buy necessary inputs. E.g. Seeds, fertilizers, etc.
- Can act as a social security support during distress times. According to data from the All India Financial Inclusion Survey (NAFIS) released by NABARD, average savings per household in rural areas is only Rs 9650.
- It can reach about most of the farmer families compared to loan waivers that can benefit a maximum of 30 per cent of the peasantry, and the higher MSP policy which can benefit a maximum of 10-15 per cent of the peasantry.
- Help reduce agricultural indebtedness.
- Enhance rural consumption.

Limitations of PM KISAN:

Issue	Details
Inadequate Financial Support	PM-KISAN's Rs. 2,000 every four months is insufficient to relieve financial stress for small and marginal farmers, providing only Rs. 17 per day per household.
No Link to Land Size	The cash transfer is uniform and not based on the size of the farmer's land, leading to possible discrepancies.
Exclusion of Tenant	Tenant farmers and agricultural laborers, who are among the most

Farmers & Agricultural Laborers	vulnerable, are left out of the scheme.
Incomplete Tenancy Records & Lack of Digitization	Many states (e.g., Jharkhand, Bihar, Gujarat, Tamil Nadu) lack digitized land records, making it difficult to identify beneficiaries.
Not a Substitute for Agricultural Reforms	PM-KISAN should complement, not replace, reforms in Agri-marketing and agricultural investments to enhance productivity and sustainability.
Doesn't Address Core Agricultural Issues	The scheme does not tackle key concerns like land productivity, underemployment, income diversification, storage, and wastage, making it insufficient as a standalone solution.

Steps needed- Need to manage:

- **Production Risks:** Irrigation coverage expansion, cheaper inputs, Zero Budget Natural Farming, soil management.
- **Weather & Disaster Related Risks,** crop insurance under PM Fasal Bima Yojana needs to be farmer friendly. Farmers must also be appraised by the Agri-Meteorological Advisory Service.
- **Price Risks:** MSP awareness beyond rice and wheat, contract farming. Move towards livestock, fisheries and integrated farming.
- **Credit Risks:** More access to formal credit, financial cum digital literacy and Awareness generation in the required field.
- **Market Risks:** Promotion of e-NAM, exposure to commodities market, long term contracts on pre-determined prices, etc.

Conclusion:

Policy Risks -

- Implement model APLM Act, reduce scope of Essential Commodities Act to situations of natural calamities. Encourage R&D and start-ups in the field of Agriculture as a Service (AaaS).
- Promote MSMEs to reduce underemployment in agriculture and migration.

Q.7 Answer

APPROACH:

Introduction: Highlight the critical role of tropical rainforests in regulating Earth's climate and the alarming deforestation trends.

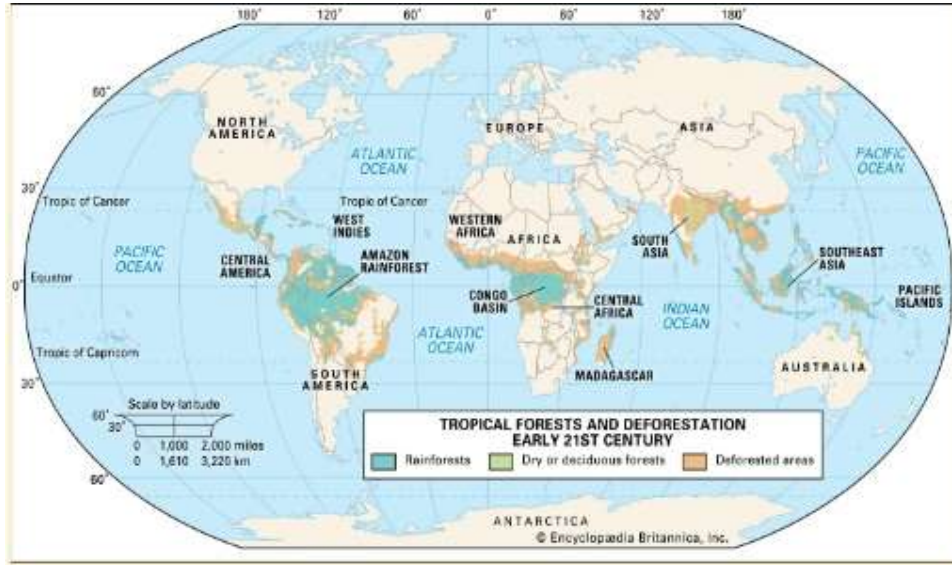
Body: Discuss conservation efforts, policy measures, sustainable practices, and global cooperation. Provide examples like the Amazon Fund and REDD+ initiatives.

Conclusion: Emphasize the urgency of intensified actions and the need for global commitment to preserving rainforests.

Introduction:

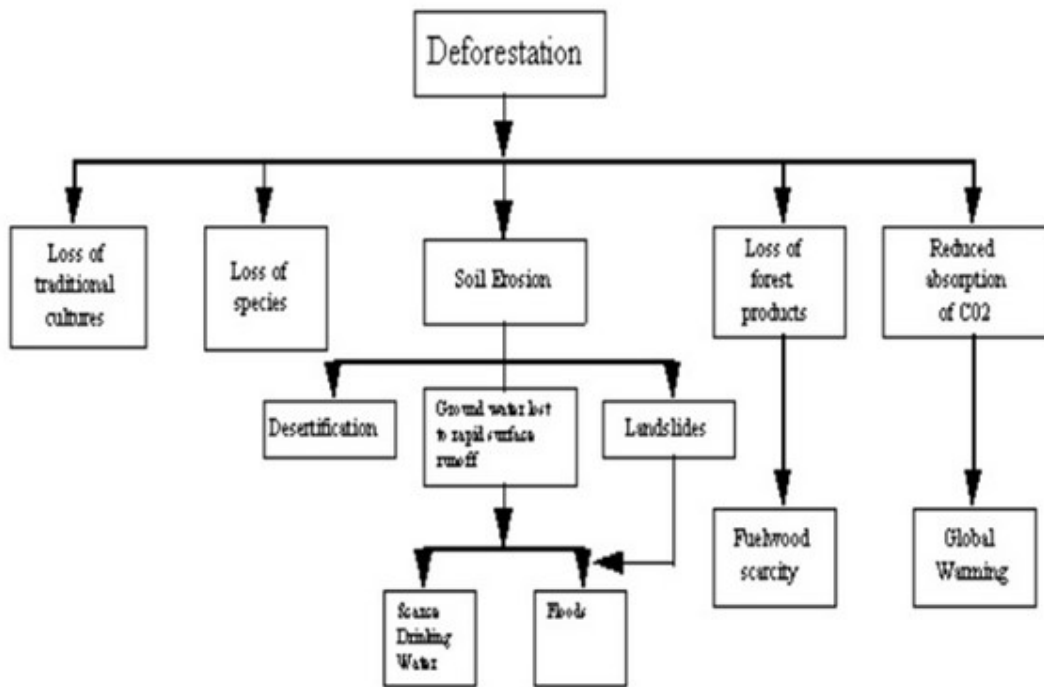
Rainforests are closed-canopy forests growing within 28 degrees north or south of the equator, characterized by high levels of rainfall (200 cm), and high species diversity. Such forests are in Asia, Australia, Africa, America, and Central America, Mexico and on many of the Pacific Islands. They play a major role in carbon sequestration and thus regulation of temperature.

The FAO's State of the World's Forests (SOFO) 2024 report, highlights the importance of innovation in the forest sector to address global challenges, including climate change, and emphasizes the need for technological, social, policy, institutional, and financial innovations.



Body:

Causes of Deforestation:



Cause	Details	Examples
Agricultural Expansion	Primary reason for deforestation, especially for subsistence-based agriculture and plantations.	Africa (Gulf of Guinea Coast, Congo Basin) Indonesia and Malaysia (Plantation Agriculture)
Developmental Activities	Deforestation due to urbanization, infrastructure expansion, hydroelectric projects, and mining.	Brazil: Balbina HEP submerged 24,000 km ² of

		rainforest
Lapses in Government Policies	Lack of enforcement of regulations leading to forest degradation due to agriculture and logging.	80% of forest degradation in Indonesia and Brazil
Climate Change & Forest Fires	Increased frequency of forest fires due to climate change and El-Niño events.	Amazon Rainforest (Brazil) Indonesia (1997 El-Niño event)

Stepping Up Efforts to Protect the World's Tropical Forests:

The international community and the state, along with communities, are trying to save the rainforest through various programs such as REDD and REDD-Plus (Focus areas of these programmes are sustainable management of the rainforest). Various SDGs like SDG 2 (Food Security), 13 (Climate Action), 15 (Life on land) are related to saving rainforests. Yet, there are many miles to go-

- **Social Forestry:** By giving ownership and management rights to the local population, the rainforest can be saved, as the forest provides a livelihood to the local populace. In Guatemala, the community-owned forest enterprise is managing 4.2 lakh Ha of forest successfully.
- **Use of technology:** It can provide real-time monitoring of rainforest and can help in the successful implementation of government policies.
- **Teaching about the importance of the environment** and how they can help to save rainforests.
- Restoring damaged ecosystem by planting trees on land where forests have been cut down.
- Encourage people to live in a way that does not hurt the environment.
- Establishing parks to protect rainforests and wildlife.
- Supporting companies that operate in a way that minimizes damage to the environment.

Conclusion:

The **International Tropical Timber Organization (ITTO) under the UN**, which promotes the sustainable management and conservation of tropical rainforests, is a pioneer in this regard, and it should make a consensus on sustainable use of its resource. Sustainable managing the rainforests and creating sustainable supply chains require a balancing act. The role of tropical rainforests is undisputed in mitigating the effect of global warming; there is a need to boost the mitigation strategy to save the tropical rainforests.

Q.8 Answer

APPROACH:

Introduction: Define social media's role in modern communication and its impact on national security.

Body: Discuss how law enforcement agencies can utilize social media for intelligence gathering, crisis management, misinformation control, and public engagement. Provide relevant examples.

Conclusion: Highlight the importance of responsible usage and technological advancements in strengthening national security.

Introduction:

India's National Security landscape is threatened with various external challenges such as stressed and susceptible borders, terrorism as well as internal challenges such as left-wing extremism and separatist movements.

21st century technological advancements have been a double-edged sword for national security purposes, as on one hand technology has become the yardstick of defence prowess of the country, e.g. Nuclear Triad and on the other hand, it has become the softest target to destabilize any country, e.g. Communication Networks.



Body:

Aspect	Role of Technology in National Security	Challenges Posed by Technology	Use of Social Media for National Security
Threat Response	Helps counter evolving threats like ASAT missiles.	Terrorists using satellite phones and VoIP (e.g., Mumbai attack).	Identifying flashpoints of disturbances and gauging public mood.
Border Security	Faster and securer infrastructure, e.g., CIBMS.	Increased arms race (nuclear, space militarization, etc.).	Engaging citizens for secure communities (e.g., Twitter Samvad).
Surveillance	High-risk zone monitoring via SWATHI Radar, UAVs.	Use of social media for radicalization (e.g., ISIS activities).	Fact-checking fake news, rumors, and misinformation.
Critical Infrastructure Protection	Systems like CMS securing communication networks.	Cyberattacks on national databases (India 2nd most attacked).	Preparing SOPs and emergency communication.
Intelligence Gathering	Actionable, interoperable intelligence via NATGRID.	Organized crime using sophisticated hacking methods.	Operation Chakravayuh for de-radicalization of youth.
Military	Nano-tech in LCA Tejas making it lighter and	Risks of emerging arms race and global	Building actionable intelligence through public

Advancements	stronger.	militarization.	data analysis.
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Conclusion:

For safeguarding and effectively utilizing social media and cyber space revising National Cyber Security Policy, Institutionalizing National Social Media Policy are the urgent steps to tackle distinct social media challenges. Also creating awareness, empowering agencies- technically, legally and financially, implementing National Security Strategy Doctrine effectively to capitalize upon upcoming technological advancements is the step forward.

Q.9 Answer

APPROACH:

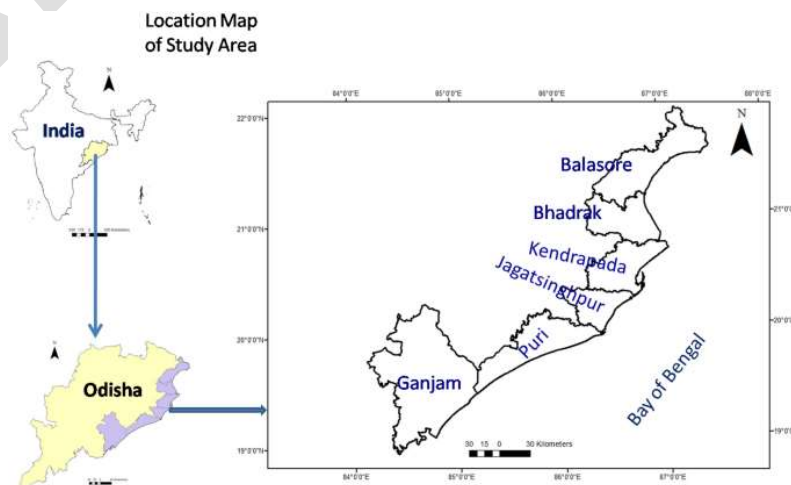
Introduction: Define Odisha’s ecosystem services and land commons, emphasizing their economic importance in livelihoods, agriculture, and industry.

Body: Discuss key ecosystem services like fisheries, forestry, and water resources, their contribution to the economy, and the challenges such as deforestation, climate change, and overexploitation. Provide examples.

Conclusion: Emphasize the need for sustainable management policies to balance economic benefits with environmental conservation.

Introduction:

Odisha's ecosystem services and land commons, including forests, pastures, and uncultivated lands, contribute significantly to its economy, with an estimated annual value of ₹36,890 crore (\$5 billion). These resources provide crucial livelihood support, regulate climate, and maintain biodiversity. However, they face severe threats such as land degradation, overuse, and encroachments, necessitating sustainable management policies.



Body:

Economic Significance and Challenges

- **Economic Contribution:** The state's economy relies heavily on natural resources, with key services such as food, water, raw materials, and climate regulation valued at over ₹60,000 per hectare per annum. These resources also support agriculture and rural livelihoods.
- **Challenges:** Unsustainable exploitation, land degradation, biodiversity loss, soil erosion, and water shortages threaten these ecosystem services. Additionally, Odisha's vulnerability to climate change exacerbates these risks.

Need for Sustainable Management

- **Policy Integration:** Recognizing the economic value of ecosystem services in policymaking is crucial for their protection.
- **Legal and Institutional Reforms:** Strengthening land governance, preventing encroachments, and promoting sustainable land use practices.
- **Community-Based Management:** Engaging local communities in conservation efforts to ensure the long-term sustainability of land commons.

Conclusion:

Odisha's ecosystem services are vital for its economy and environmental stability. Addressing threats through sustainable policies, institutional reforms, and community participation is essential to safeguard these resources for future generations.

Q.10 Answer

APPROACH:

Introduction: Define the role of the private sector in agricultural growth and transformation, emphasizing its significance in modern agribusiness and value chains.

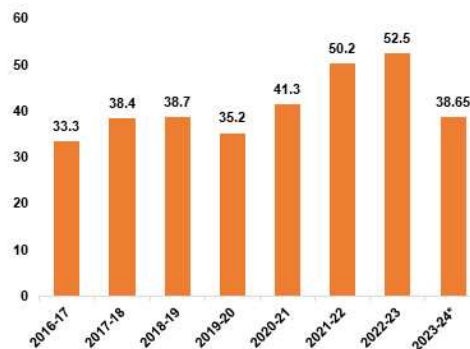
Body: Explain how private sector involvement enhances productivity, infrastructure, and market linkages. Discuss challenges such as regulatory constraints and smallholder inclusion. Provide examples of successful private interventions in agribusiness.

Conclusion: Highlight the need for policy support and public-private partnerships to ensure sustainable agricultural transformation.

Introduction:

To elevate farmers from their current distress, enhancing private investment in the agriculture sector is very crucial and the government aims to increase private investment from 13 % to around 30 %.

India's agriculture exports trend (US\$ billion)



Note: *Until January 2024
Source: The Ministry of Commerce & Industry

Body:

Sector	Investment	Role
Public Sector	Investment is falling as a large proportion goes into subsidies for fertilizers, irrigation, and other agricultural inputs rather than actual investment. Mostly from the government side.	Frames/provides legislation, policy guidelines, support pricing, and subsidies. Provides inputs like fertilizer and energy at concessional rates.
Private Sector	Investment has declined due to excessive government regulations and control over the sector. Mostly from individual farmers; corporate sector investment occurs mostly after the harvest.	Ensures superior service delivery to the end consumer. Maximizes service at an affordable price.

Role of the Private Sector In



Sector	Private Sector Involvement
Agriculture	Supports new technology adoption requiring high skill and capital-intensive methods like Precision Agriculture, Polyhouse cropping, and self-propelled sprayers.
Farming	Private sector engages in contract farming; e.g., PepsiCo's Frito Lay division collaborates with agronomists and service providers to assist smallholder farmers in potato production and direct procurement.
Agri-food Value Chain	Companies like Reliance Fresh directly partner with farmers for fresh fruits and vegetables, improving farmer livelihoods, enhancing produce quality, reducing wastage, and minimizing intermediaries.
Allied Activities	
Livestock	Companies like DeLaval provide dairy solutions to improve production, animal welfare,

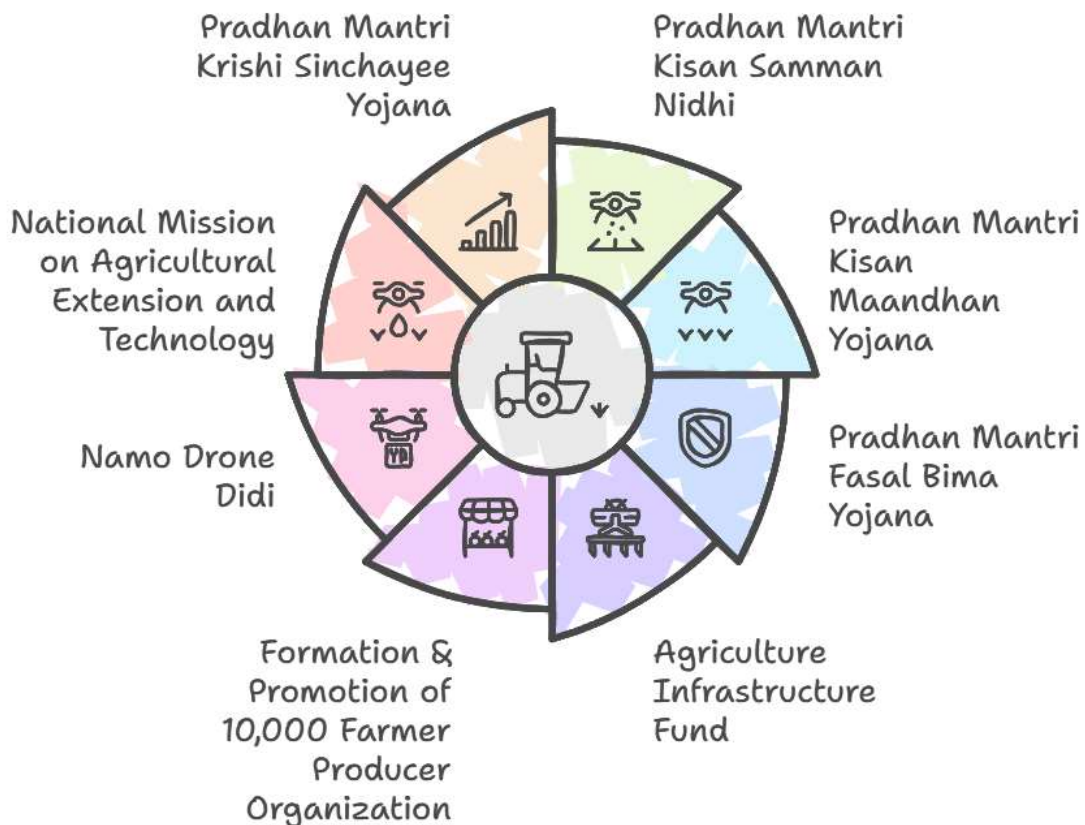
	and quality of life.
Fisheries	Innovations in cost-effective services; e.g., Signode India Ltd developed Modified Atmospheric Packaging for dry fish in Kerala, increasing shelf life and export potential.

Challenges for the Private Sector in Serving and Driving Agriculture

- Land lease Policy: Weak land rights led to tenure insecurity that ultimately results in reduced land productivity because of poor land management.
- Land Fragmentation: It has inhibited the ability of the farmers to invest in new technologies, making the private sector unviable for small farmers as the average farm size in India is 1.5 hectares (NITI Aayog report)
- Contract Farming: The fear of exploitation by the big corporate houses, which is shedding farmers' way from making a contract with them, like PepsiCo India Holdings sued farmers for illegally growing and selling a potato variety registered in the company's name.
- Agriculture markets are very much fragmented in India, with each farmer confined to a single mandi in many products in many states and making it impossible for the private sector to contact each farmer individually.

Way forward:

Key Agricultural Initiatives



- Land Leasing: Implementation of a model (agricultural) land leasing act proposed by the NITI Aayog to simplify the leasing of farmland to boost private sector morale.
- Contract farming: SFAC speedy implementation of the Model law on contract farming announced in the budget 2017-18, and encouraging the Small Farmers Agri-Business consortium would encourage private sector participation.
- Government initiative: Enacting a liberal APMC law, scaling up digital technologies, encouraging private players to set up mandis, warehouses, cold storage, and Mega food parks should be the priorities.

Conclusion:

NITI Aayog has indeed launched several initiatives and reports in 2025, including a "Fiscal Health Index 2025" and a policy report on "Expanding Quality Higher Education through States and State Public Universities," focusing on improving fiscal health and higher education quality.

Q.11 Answer

APPROACH:

Introduction: Define India's intelligence framework and its role in national security.

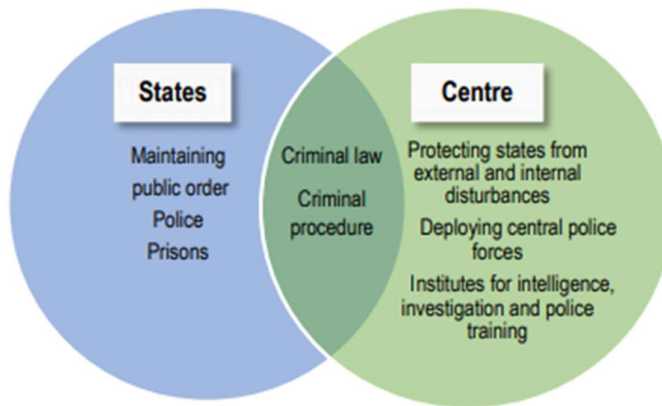
Body: Discuss challenges like outdated technology, lack of coordination, inadequate training, and insufficient integration with police modernization. Provide relevant examples.

Conclusion: Emphasize the need for a holistic reform approach, integrating intelligence and police modernization for enhanced security.

Introduction:

Intelligence reforms without the police reforms are pointless because the local policemen develop the strategic intelligence given by the central agencies which needs enough cognitive and analytical skill to process the intelligence. Thus there is a need for comprehensive and not piecemeal reforms.

Figure 1: Responsibilities of centre and states with regard to police

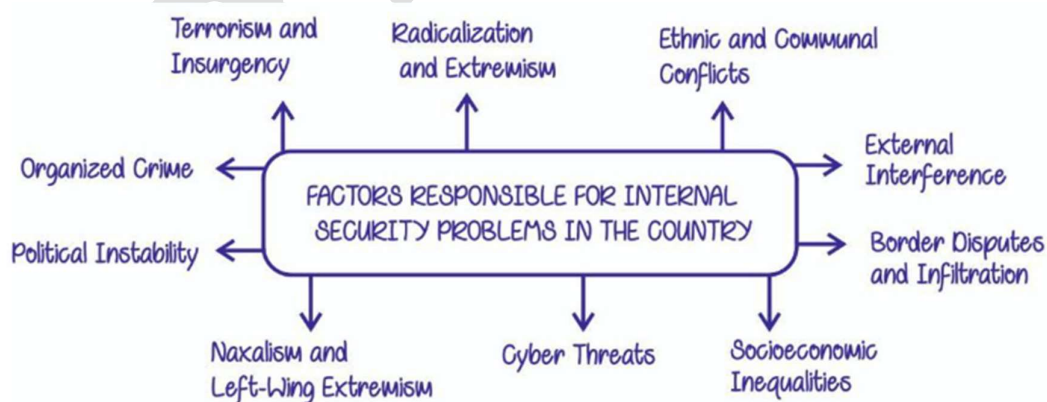


Body:

Category	Key Initiatives
Police Modernization	<ul style="list-style-type: none"> - Establish open and separate direct recruitment mechanisms for intelligence agencies through UPSC. - Outsource specialized needs of national security management rather than relying only on police personnel. - Use the Modernization of Police Forces Scheme to address deficiencies in state police infrastructure. - Improve forensic laboratories, equipment, training infrastructure,

	communication systems, and police mobility.
Technological Up-gradation	<ul style="list-style-type: none"> - Enhance in-house technical research and development capabilities. - Upgrade offensive and defensive capabilities in cyber warfare. - Empower Indian Police with IT and Criminal Intelligence through NCRB. - Build a National Resource Centre for IT solutions for police organizations. - Upgrade crime analysis technology. - Provide IT and Fingerprint Science training for police capacity building.
Capacity Building of State Police Personnel	<ul style="list-style-type: none"> - Familiarize police personnel with electronic evidence gathering processes. - Ensure knowledge of rules and regulations for data access and intermediary liability. - Appoint a National Intelligence Director to improve interagency coordination and eliminate duplications. - Introduce legislation in Parliament to define the charters, functions, and duties of intelligence organizations. - Separate investigation duties from law-and-order responsibilities (e.g., NIA).

Deficiencies in Intelligence framework in India



Issue	Details
Inefficient Coordination	After the Kargil intrusion (1999), the Intelligence Bureau (IB) created a Multi-Agency Centre (MAC) that receives intelligence mainly from Central agencies.

	However, in 2011, state special branches contributed only 11% of inputs.
Lack of Dedicated Intelligence Cadre	Intelligence agencies rely on police officers rather than language experts, scientists, IT professionals, or cyber specialists, affecting efficiency.
No Unified Intelligence Authority	Agencies like NATGRID, IB, MAC, and CCTNS exist, but there is no single authority to coordinate them, leading to slow responses during crises like the 26/11 attack.
Lack of Checks and Balances	The intelligence system lacks oversight, and political interference (e.g., CBI politicization) reduces efficiency.
No Legislative Backing	Most intelligence agencies operate through executive orders without clear oversight. For example, CBI and RAW report to the PMO, DRI to the Finance Ministry, and Military Intelligence to the Defense Ministry.

Conclusion:

Given the immense contemporary security challenges India is confronting, as it emerges as a global power, a paradigm shift is needed to modernize intelligence work in a holistic manner, which may require radical changes in the existing intelligence culture with short term, medium term and long term objectives clearly identified.

Q.12 Answer

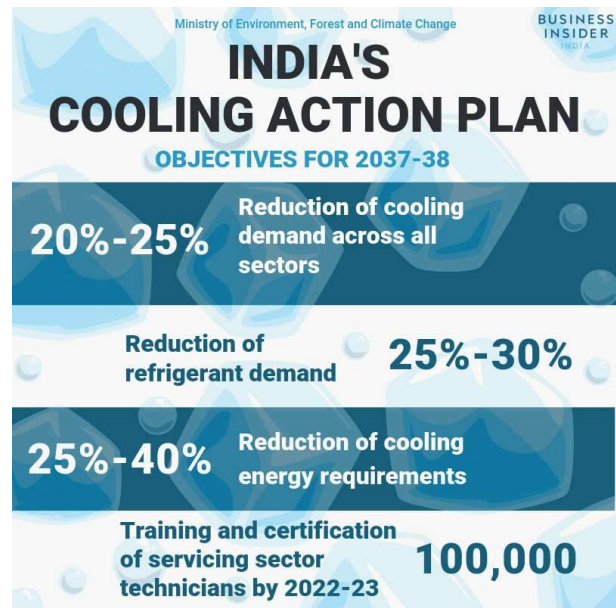
<p>APPROACH: Introduction: Define the India Cooling Action Plan (ICAP) and its objectives in addressing cooling demands while reducing emissions. Body: Explain how ICAP mitigates direct emissions through energy-efficient cooling technologies and indirect emissions via sustainable policies. Discuss its impact across sectors like residential, commercial, transport, and agriculture. Provide examples of initiatives under ICAP. Conclusion: Highlight ICAP's significance in balancing economic growth with environmental sustainability and its role in meeting India's climate commitments.</p>

Introduction:

India, as a part of the Montreal protocol and the landmark Kigali Amendment, is one of the first countries to devise a cooling action plan in an attempt to phase out ozone depleting substances. India Cooling Action Plan (ICAP), led by the Ministry of Environment, Forests and Climate Change (MOEFCC), provides a 20-year perspective (2017-18 to 2037-38) to address the cooling requirements across sectors and ways and means to provide access to sustainable cooling for all. With people around the world living through the fourth hottest year on record in 2018, the need for cooling solutions is more urgent than ever. India's cooling demand is projected to grow by 8 times in the next 20 years.

Targets and Framework of ICAP:

- Assessment of cooling requirements across



sectors in the next 20 years and the associated refrigerant demand and energy use.

- Map the technologies available to cater to the cooling requirement, including passive interventions, refrigerant-based technologies, and alternative technologies such as not-in-kind technologies.
- Suggest interventions in each sector for sustainable cooling and thermal comfort for all.
- Focus on skilling of RAC service technicians.
- Develop an R&D innovation ecosystem for indigenous development of alternative technologies.

Body:

ICAP's Role In Reducing Direct Emissions

Direct emissions are due to the release of refrigerant. They can occur during normal operation or because of leaks from pipes and components:

- Reduction of cooling demand across sectors by 20% to 25 % by year 2037-38.
- Reduction of refrigerant demand by 25% to 30% by year 2037-38.
- Reduction of cooling energy requirements by 25% to 40% by year 2037-38.

ICAP's Role in Reducing Indirect Emissions

Indirect emissions are due to energy consumption and contribute 2/3 of the total emissions:

- Promotion of passively-cooled building design with natural and mechanical ventilation.
- Adoption of adaptive thermal comfort standards to specify pre-setting of temperatures of air conditioning equipment for commercial built spaces.
- India will also seek to support the development and deployment of low-GWP refrigerant alternatives.

Socio-economic Benefits Accrued by ICAP:

- Thermal comfort for all – provision for cooling for EWS and LIG housing.
- Skilled workforce for better livelihoods and environmental protection.
- Make in India – domestic manufacturing of air-conditioning and related cooling equipment.
- Cooling is also linked to human health and productivity. Linkages of cooling with Sustainable Development Goals (SDGs) are well acknowledged.
- The cross-sectoral nature of cooling and its use in development of the economy makes provision for cooling an important developmental necessity.

ICAP and Impact of Cooling Different Sectors:

Sector	Planned Measures	Expected Impact
Household	Improving efficiency of ACs and fans through better servicing and adoption of adaptive thermal practices.	30% reduction in cooling energy requirements; 20% TR reduction by 2037-38.
Construction	Implementation of building energy codes, thermal comfort standards, eco-labeling of cooling products, and energy-efficient housing designs.	Reduced cooling load in buildings, increased energy efficiency.
Agriculture	Development of robust cold-chain infrastructure to reduce post-harvest losses.	Increased refrigeration use; potential rise in carbon footprint.
Transport AC	Encouraging public transport, hybrid, and electric vehicles to reduce dependency on air-conditioned passenger cars.	Lower energy consumption in transportation cooling.

Limitations of ICAP:

- The CAP does not take into consideration the needs of 90% of the Indian population and is skewedly focused on 10% of the population.
- The NCAP has not indicated the benchmark for thermal comfort that needs to guide energy efficiency measures for all users of active as well as passive cooling.
- Its actual intent seems to be "myopically" focused on the market for personal air conditioners, ignoring the fact that demand for cooling is driven by people and not by the sale of air conditioners.
- Implementation of the guidelines needs a framework that has not been drawn out.

Conclusion:

ICAP must be based on the fact that about 60 per cent of current space cooling energy consumption is by top 10 per cent of the population, this is only way ahead to give thermal comfort for all. India needs thermal comfort defined to guide interventions for energy efficiency in buildings and there is also a need to estimate cooling demand based on thermal comfort definition and not on sales of ACs. Implementation roadmap should be drawn out considering different sectors and their different requirements.

Q.13 Answer

APPROACH:

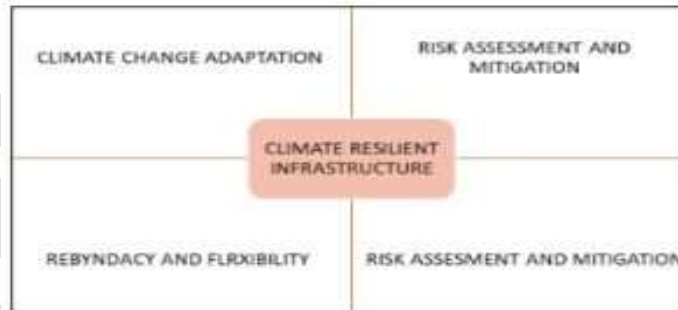
Introduction: Define CDRI and its objectives in enhancing disaster-resilient infrastructure.

Body: Explain how CDRI aligns with India's commitment to the Sendai Framework through capacity building, risk assessment, technological collaboration, and policy support. Provide relevant examples.

Conclusion: Highlight CDRI's role in strengthening India's disaster preparedness and promoting global resilience.

Introduction:

Economic losses from disasters that damage infrastructure can reach huge proportions. The **World Bank estimates that annual disaster losses are already close to \$520 billion and those disasters push up to 24 million people in a year into poverty.** So by ensuring that all new investments in infrastructure are made in a risk-sensitive way, a significant reduction in economic losses from disasters can be realised.



Body:

Disaster Resilient Infrastructure creates a Disaster Resilient World:

When infrastructure fails, disaster follows. So the countries need to look beyond immediate relief and rehabilitation and focus on "build back better" after a natural catastrophe besides reducing infrastructural losses, disaster-resilient infrastructure will also help achieve targets on reduction in mortality, number of affected people, and economic losses due to disasters.

For example, post-disaster damage analysis, after the 1995 Great Hanshin-Awaji Earthquake in Hyogo Prefecture, Japan, it was found that buildings constructed to the 1971 standard performed far better than those built to an earlier standard; and those of the 1981 standard performed best of all, with only a very small share suffering collapse. It demonstrated the effectiveness of Japan's seismic design standards and continuous improvement there of.

International agreements - reiterating benefits of investing in resilient infrastructure:

The Sendai Framework for Disaster Risk Reduction: It identifies investing in Disaster Risk Reduction (DRR) for resilience and building back better in reconstruction as priorities for action towards reducing disaster risk.

Sustainable Development Goals: Goal 9 recognises disaster-resilient infrastructure as a crucial driver of economic growth and development.

Sendai Framework for Disaster Risk Reduction (SFDRR) and Coalition for Disaster Resilient Infrastructure (CDRI)

The Sendai Framework for Disaster Risk Reduction (SFDRR) highlighted the role of improved disaster resilience, including that of infrastructure, as a cornerstone for sustainable development. While inaugurating the Asian Ministerial Conference on Disaster Risk Reduction (AMCDRR, New Delhi), the Prime Minister of India announced that India would work with partner countries and key stakeholders in launching a “Coalition for Disaster Resilient Infrastructure (CDRI)”.



To garner inputs from the wider base of global stakeholders, the Government of India (GOI) in collaboration with the United Nations Office for Disaster Risk Reduction (UNISDR) hosted the International Workshop on Disaster Resilient Infrastructure in New Delhi, India from 15-16 January 2018.

Aspect	India’s Commitment & Challenges	Role of CDRI & Global Learning
Understanding Disaster Risk	India needs to enhance early warning systems and risk reduction efforts.	Learning from global best practices to improve mitigation.
Disaster Risk Governance	Strengthening policies and institutions for better disaster management.	CDRI supports policy frameworks for disaster resilience.
Investment in Risk Reduction	Balancing economic growth with disaster-resilient infrastructure.	CDRI provides funding and technology for resilient infrastructure.
Early Warning & Preparedness	India needs better early warning systems and post-disaster recovery strategies.	Japan's expertise can help in early detection and rehabilitation.
Building Back Better	Challenges in protecting property and infrastructure from extreme weather.	Learning from countries with strong disaster mitigation policies.

International Collaboration	India can benefit from partnerships for disaster risk reduction.	CDRI facilitates global cooperation in disaster resilience.
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India's initiative for **Coalition for Disaster Resilient Infrastructure** will help in the development of appropriate infrastructure to face natural calamities, for both the least developed and developing countries. CDRI will act as a synergy between Disaster Risk Reduction, Sustainability Goals and Climate Accord providing for sustainable and inclusive growth.

Conclusion:

Japan's unique path to improved building safety can be emulated by Indian policymakers to build its infrastructure disaster resilient, by initiating steps like:

- Legal framework, for uniform national building standards(under the Building Standard law).
- Building Code- Recognized as a minimum standard.
- Quality Assurance Mechanism.
- Role of local governments in building quality assurance, for carrying out building confirmation, structural review, inspection, and so.

Q.14 Answer

APPROACH:

Introduction: Define the Paris Call and its objectives in strengthening cybersecurity.

Body: Explain its key features, including multi-stakeholder collaboration, cyber resilience, and protection of critical infrastructure. Discuss India's cybersecurity measures like policy frameworks, CERT-In, and data protection initiatives.

Conclusion: Emphasize the importance of international cooperation and national efforts in tackling cybersecurity threats.

Introduction:

Recently, the UNESCO Internet Governance Forum (IGF) meeting convened in Paris, "The Paris Call for Trust and Security in Cyberspace" was commenced, aiming at developing common principles for securing cyberspace.

The goals mentioned in the Paris Call and the principles adopted, represent a consensus of priorities between states, corporations and civil society. Paris call gives a fresh momentum to the issue of creating globally acceptable cybersecurity norms by mounting support from multiple stakeholders. Important points are as follows.

Body:

Category	Key Points
Inclusive Regulatory Process	Recognize the responsibilities of the private sector in improving trust, security, and stability in cyberspace. Adopt a strong multi-stakeholder approach to enhance collaboration among the government, private sector, and civil society to combat cyber criminality.
International Law	Encourage better coordination in regulating cyberspace and the use of ICT in line with the principles of the U.N. Charter and international humanitarian law. Focus on maintaining international peace and security.
State Sovereignty	Promote the exclusive role of sovereign states in hostile cyber activities. Advocate for measures preventing interference with elections.

Protection of Citizens	<p>Safeguard individuals and critical infrastructure from harm.</p> <p>Ensure protection against any invasion.</p>
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Challenges in the domain of cybersecurity:



- Ransomware: It spreads a virus that latches onto customer and business information that can only be removed if one meets the cybercriminal’s egregious demands. Ransomware attacks are one of the areas where cybercrime is growing rapidly.
- Rapidly growing digital footprint: Use of Internet services is growing rapidly, but users don’t have much knowledge of threats and protection systems, even professional people become victims of cyber bullying, phishing, online bank frauds, etc.
- Cryptocurrency: Cryptocurrencies in major economies are unregulated, Ransomware attacks, Hawala transactions, Terror funding, Money laundering, etc., are possible through payment via cryptocurrencies.
- Data piracy and commercial use of user data: For better targeted advertisements with the help of data mining, MNCs are selling user data. It poses a serious threat to cybersecurity and privacy of individuals.
- Cyber warfare: Modern warfare is changing, with internet attacks economies can be crippled along with critical infrastructures, along with this misleading information warfare is spreading.

Steps taken by the government to tackle challenges in the domain of cybersecurity:

- India’s stance has gradually shifted to a multi-stakeholderism from a multilateralism approach.
- Requirement of data localization (storing of data within the country) and server management is being advocated.
- National Cyber Security Policy, 2013: The Policy is aimed at building a secure and resilient cyberspace for citizens, businesses and the Government.
- Computer Emergency Response Team (CERT-in) launched ‘Cyber Swachhta Kendra’ (Botnet Cleaning and Malware Analysis Centre) a new desktop and mobile security solution.
- Development of Public Private Partnerships is an important strategy under the National Cyber Security Policy 2013. For ex., antivirus company Quick Heal is providing a free bot removal tool.

- Sectoral and state CERTs: CCERTs on power and finance sectors have been launched by the Indian government. State CERTs are also on the way.

Conclusion:

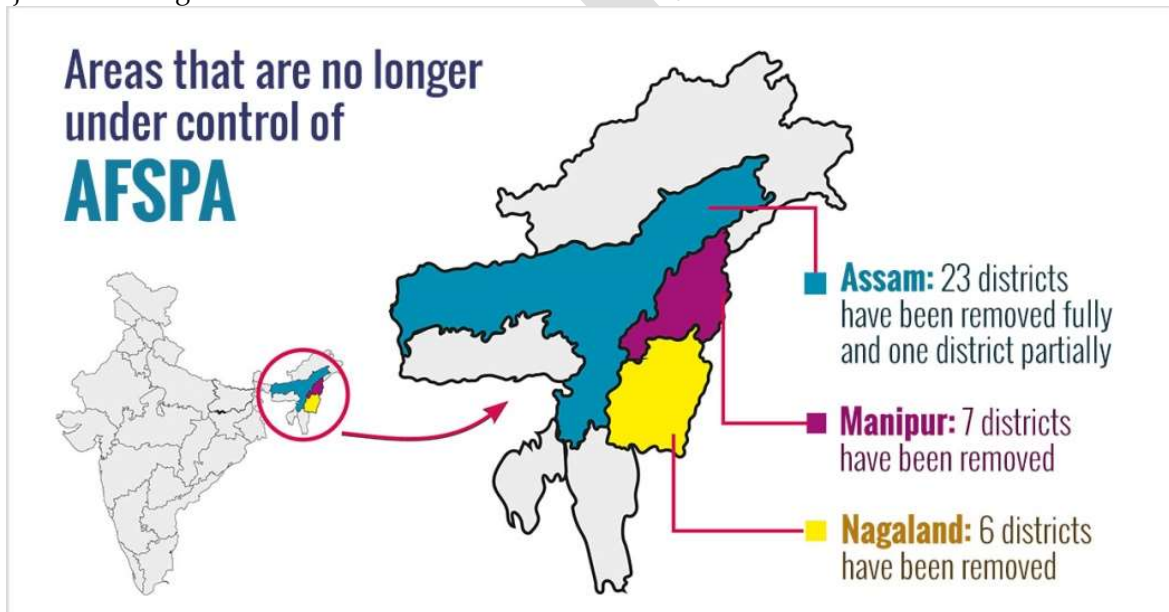
Looking forward to becoming a secure cyber ecosystem, India has joined hands with several developed countries like the United States, Singapore, Japan, etc. These agreements will help India to deal with the challenge of sophisticated cyber threats. Encouraging cybersecurity in the country, the government of India has offered a fund of 5 crores to companies that work for the research and revolution of cybersecurity.

Q.15 Answer

APPROACH:
Introduction: Define AFSPA and its objectives in ensuring national security and maintaining public order.
Body: Analyze its effectiveness in addressing security challenges, concerns over human rights violations, judicial scrutiny, and the need for reforms or alternatives. Provide relevant examples.
Conclusion: Evaluate whether AFSPA remains relevant or requires replacement with a more balanced legal framework ensuring both security and human rights.

Introduction:

AFSPA gives armed forces power to maintain public order in “disturbed areas”. But over the years, there have been allegations of army excesses from residents of Manipur and Jammu and Kashmir. Supreme Court (July 2016), based on a PIL by the Extra-judicial Execution Victim Families Association, Manipur, held that excessive force cannot be used on people even in insurgency-hit areas while hearing a petition on extra-judicial killing.



Body:

Arguments in Support of AFSPA	Arguments in Favor of Repeal of AFSPA
Safeguards from legal harassment for soldiers.	Failed to protect human rights: Critics argue that AFSPA leads to human rights violations.
Operational requirement in disturbed areas.	Section 4: Allows armed forces to shoot to kill or destroy property on mere suspicion.

Repeal may demoralize armed forces, and militants may motivate locals to file lawsuits against the army.	Sanction for excessive use of force: Criticized for enabling soldiers to act with impunity.
Necessary to maintain law and order, otherwise, situations may spiral out of control.	Violation of Human Rights & Article 21 (Right to Life) of the Indian Constitution.
Success in reducing militancy in conflict-prone regions.	Section 6: Prohibits prosecution without the sanction of the central government, leading to lack of accountability.

Failed to protect our soldiers

Supreme Court has ruled that armed personnel would face criminal prosecution if found using excessive force even in areas where AFSPA is in force. Important observations:

- Indefinite deployment of armed forces in the name of restoring normalcy under AFSPA “would mock at our democratic process”, apart from symbolizing a failure of the civil administration and the armed forces.
- There is no concept of absolute immunity from trial by a criminal court.
- These observations of the Supreme Court completely dilute any protection offered under the AFSPA.
 1. Soldiers can be dragged to criminal courts.
 2. Today, numerous decades-old cases are being opened, and more and more retired officers and men are being called for investigations.

Conclusion:

We must, therefore, ponder whether the AFSPA is currently serving any useful purpose. In areas where AFSPA is in force, the population is completely against it. On the other hand, the fact that hundreds of officers and men have moved the Supreme Court shows that they are not fully confident that the AFSPA can actually protect them from legal harassment. A new legislation that strengthens both respect for human rights as well as protection to our soldiers is thus required.

Q.16 Answer

APPROACH:

Introduction: Define wetlands and their ecological significance.

Body: Identify major threats –urbanization, pollution, encroachment, climate change. Discuss national efforts (Wetlands (Conservation and Management) Rules, Ramsar sites) and international initiatives (Ramsar Convention).

Conclusion: Suggest policy reforms, stricter enforcement, and community participation for sustainable wetland conservation.

Introduction:

Wetlands are areas with standing or flowing water (Marshes, lakes, bogs, and swamps), either permanent or seasonal.

Ecological Importance	<ul style="list-style-type: none"> - Biodiversity reservoirs (support birds, fish, and plant life) - Water conservation (recharge groundwater, control floods) - Climate change mitigation (carbon sinks) - Support fisheries and local economies
Ramsar	The Ramsar Convention is an international treaty signed on February 2, 1971 in Ramsar,

Convention	Iran, dedicated to the conservation and sustainable use of wetlands globally. This day is now celebrated annually as World Wetlands Day .
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Body:

Major Threats to Wetlands in India

Wetlands in India face several threats that endanger their ecological balance and sustainability. The primary threats include:

- **Encroachment and Urbanization:** Rapid urban expansion and infrastructural development lead to the loss of wetland areas.
- **Pollution:** Industrial discharge, agricultural runoff, and untreated sewage severely degrade water quality.
- **Climate Change:** Rising temperatures and erratic rainfall patterns affect wetland hydrology and biodiversity.
- **Over-extraction of Resources:** Excessive fishing, groundwater extraction, and deforestation around wetlands disrupt ecological stability.
- **Invasive Species:** Introduction of non-native species disrupts the natural biodiversity of wetlands.
- **Agricultural Expansion:** Conversion of wetlands into agricultural lands reduces their ability to act as water regulators.

Measures for Protection and Conservation

To address these threats, various national and international initiatives have been undertaken:

National Level Measures

- **National Wetland Conservation Programme (NWCP) (1986):** This initiative aimed to identify and conserve significant wetlands across the country.
- **National Plan for Conservation of Aquatic Ecosystems (NPCA) (2015):** It merged the NWCP and National Lake Conservation Plan to ensure a holistic approach to wetland protection.
- **Identification of Over 2,200 Wetlands for Conservation:** The Ministry of Environment, Forest and Climate Change has recognized critical wetlands requiring protection.
- **State-Specific Conservation Efforts:** States like Gujarat, Andhra Pradesh, Uttar Pradesh, and West Bengal have undertaken specific measures to conserve their extensive wetland areas.

- **Legal Frameworks:** The Wetlands (Conservation and Management) Rules, 2017, regulate activities in wetlands and promote their sustainable use.

International Level Measures

- **Ramsar Convention on Wetlands (1971):** An international treaty for the conservation and sustainable use of wetlands.
- **Ramsar Site Designation:** India is home to **89 Ramsar sites**, with **Tamil Nadu** hosting the most (**20 sites**) followed by **Uttar Pradesh (10 sites)**.
 - The 2023-24 bird census by the Punjab government revealed a significant decline in migratory birds across the province's wetlands.
- **Global Conservation Partnerships:** Organizations such as the International Union for Conservation of Nature (IUCN) and the World-Wide Fund for Nature (WWF) support India's wetland conservation efforts.
- **Migratory Bird Protection:** Initiatives such as the Central Asian Flyway and East Asian-Australasian Flyway ensure the conservation of migratory species dependent on Indian wetlands.

Conclusion

Wetlands play a crucial role in maintaining ecological balance, supporting biodiversity, and sustaining livelihoods. However, they are under severe threat due to human activities and climate change. India has taken significant steps at both national and international levels to conserve these vital ecosystems. Strengthening policy frameworks, community participation, and global cooperation will be essential in ensuring the long-term sustainability of wetlands in India.

Q.17 Answer

APPROACH:

Introduction: Define unemployment and its impact on youth.

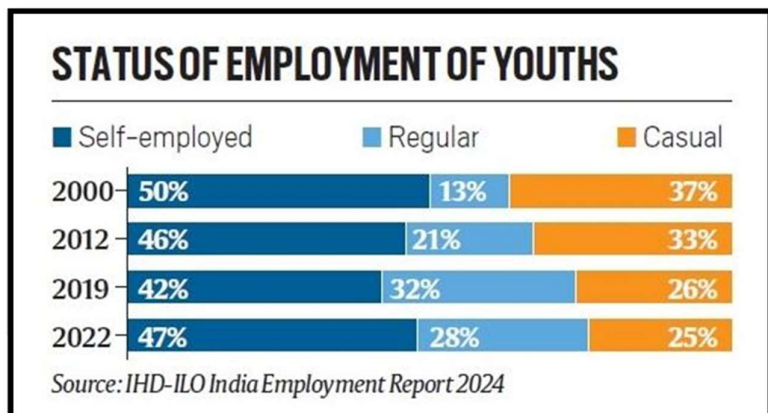
Body: Analyze causes—skill gap, automation, jobless growth, pandemic effects. Discuss Odisha's initiatives like "Skilled in Odisha," MSME promotion, and startup policies. Provide data-driven insights.

Conclusion: Recommend policy reforms, education-industry alignment, and investment in emerging sectors for sustainable employment.

Introduction:

The India Employment Report 2024, jointly published by the Institute for Human Development (IHD) and the **International Labour Organisation (ILO)**, presents critical insights into the Indian labour market. While it highlights some positive trends, such as improvements in job quality and a transition from agriculture to non-farm employment, it also underscores persistent challenges, particularly rising unemployment among educated youth.

Addressing these concerns requires a nuanced approach, including state-specific initiatives. This essay examines the reasons behind increasing unemployment among Indian youth and evaluates the effectiveness of Odisha's policies in mitigating this issue.



Body:

Causes	Explanation
Skills Mismatch and Education Disparities	There is a gap between the skills acquired by graduates and the demands of industries, leading to difficulty in finding suitable employment.
Structural Dependence on Agriculture	Despite a shift towards non-farm employment, agriculture still employs nearly half of India's workforce, limiting opportunities in industrial sectors.
High Youth Unemployment and NEET Population	In 2022, 28% of youth were neither in employment, education, nor training (NEET), with female youth being more affected.
Informality and Job Insecurity	Over 90% of jobs in India are informal, resulting in job insecurity, low wages, and lack of social protections.
Gender Disparities	Women's workforce participation remains low due to social norms, lack of skill training, and prevalence of low-paying informal jobs.

Role of Odisha in Tackling Youth Unemployment

Odisha's recent employment trends, as outlined in the Periodic Labour Force Survey (PLFS) 2023-24, reflect both progress and challenges in addressing youth unemployment. The state's initiatives have led to a decline in overall youth unemployment, though urban joblessness remains a concern.

- **Decline in Youth Unemployment:** Odisha's youth unemployment rate has fallen from 13.8% in 2022-23 to 11.1% in 2023-24. In rural areas, the rate dropped significantly from 12.7% to 9.3%.
- **Labour Force Participation Rate (LFPR) and Worker Population Ratio (WPR):** Odisha's LFPR increased from 63% to 67.1% in rural areas and from 51.5% to 53.2% in urban areas. The state's WPR stands at 62.9%, higher than several other states like Kerala, Karnataka, West Bengal, and Telangana.
- **Challenges in Urban Employment:** While rural unemployment decreased, urban unemployment rose slightly from 21.8% to 22.9%, indicating the need for targeted urban employment policies.
- **Sectoral Dependence on Agriculture:** More than 48.5% of Odisha's workforce remains engaged in agriculture. While this sustains employment levels, it highlights the need for diversification into industrial and service sectors.

Policy Recommendations:

- **Enhancing Employment-Intensive Growth:** Encouraging labour-based manufacturing and expanding employment opportunities in services and agriculture can create more jobs for young people.
- **Bridging the Skills Gap:** Odisha can focus on skill development programs aligned with industry demands to reduce the education-employment mismatch.
- **Formalizing Employment:** Strengthening labour laws and social security measures can help transition workers from informal to formal employment.
- **Targeted Urban Employment Policies:** Addressing urban unemployment requires investment in infrastructure, MSMEs, and the gig economy to generate sustainable jobs.
- **Promoting Women's Employment:** Special policies focusing on women's workforce participation, skill-building, and access to financial resources can enhance gender inclusion in employment.

Conclusion:

The India Employment Report 2024 provides a comprehensive view of both progress and challenges in India's labour market. Despite positive trends, youth unemployment remains a pressing issue due to skill mismatches, informality, and structural dependence on agriculture.

Odisha's targeted policies have yielded positive results in reducing rural unemployment, yet urban joblessness persists as a concern. A combination of skill development, employment-intensive growth, and policy reforms can help India, and Odisha in particular, tackle youth unemployment effectively and ensure inclusive and sustainable economic growth

Q.18 Answer

APPROACH:

Introduction: Define space debris and its impact on satellite operations and space sustainability.

Body: Discuss rising debris concerns, risks to space assets, and global mitigation efforts. Highlight ISRO's PSLV-C58/XPoSat mission, POEM-3's role, and debris reduction strategies.

Conclusion: Emphasize ISRO's contribution to sustainable space exploration and the need for global collaboration on debris management.

Introduction:

With the rapid expansion of satellite deployments and space missions, the issue of space debris has become a pressing global concern. Space debris consists of defunct satellites, spent rocket stages, and fragments from collisions or disintegrations, posing significant risks to operational satellites and spacecraft. As the number of satellites in Low Earth Orbit (LEO) continues to grow, the chances of collisions and the creation of additional debris increase, necessitating proactive measures for mitigation.

Body:

ISRO's Innovative Approach to Space Debris Mitigation

The Indian Space Research Organisation (ISRO) has been at the forefront of addressing space debris concerns through its recent **PSLV-C58/XPoSat mission**. This mission incorporated groundbreaking strategies to minimize debris generation while ensuring effective space operations.

Key Features of PSLV-C58/XPoSat Mission	Details
PSLV Experimental (POEM-3) Orbital Module-3	The fourth stage of the PSLV was repurposed into POEM-3, transforming it into an experimental orbital station. This allowed for additional scientific research and technology demonstrations, maximizing the utility of spent rocket stages.
De-orbiting Strategy	After deploying all satellites, the fourth stage was deliberately lowered from 650 km to 350 km. The reduced altitude increased atmospheric drag, ensuring a faster re-entry and burn-up, preventing long-term debris accumulation.
Passivation of the Stage	ISRO expelled all remaining fuel from the stage to eliminate explosion risks. This crucial step prevented fragmentation, which is a primary cause of debris multiplication.
Benefits of ISRO's Zero Debris Approach	Details
Minimal Debris Generation	By utilizing POEM-3 and passivating the fourth stage before controlled de-orbiting, ISRO ensured near-zero debris in Earth's orbit.
Reduced Risk to Space	Removing defunct rocket stages minimizes collision risks, protecting

Assets	valuable satellites and space infrastructure.
Environmental Responsibility	The spent stage re-entered Earth's atmosphere, burning up completely without leaving harmful fragments in orbit.

POEM-3: Advancements in Sustainable Space Exploration

ISRO's **POEM-3** served as an innovative and cost-effective orbital platform for scientific experiments and technology demonstrations. Developed by the **Vikram Sarabhai Space Centre (VSSC)**, POEM-3 leveraged the fourth stage of PSLV as a space lab, demonstrating India's commitment to sustainable space missions.

Global Significance of ISRO's Efforts

ISRO's successful deployment and disposal of POEM-3 align with global efforts to promote responsible space exploration. The mission demonstrated India's capability to manage space debris efficiently and contribute to international best practices in space sustainability.

Addressing the Growing Challenge:

- **Mitigating Risks of Space Debris:** By incorporating controlled de-orbiting and passivation, ISRO is leading by example in debris reduction.
- **Supporting International Guidelines:** ISRO's efforts align with the Inter-Agency Space Debris Coordination Committee (IADC) and UN-endorsed debris mitigation protocols.
- **Advancing Technological Innovation:** Through POEM-3 and similar missions, ISRO is pioneering reusable and sustainable space technology.

Conclusion

The PSLV-C58/XPoSat mission represents a landmark achievement in space debris mitigation, reinforcing ISRO's commitment to sustainable space exploration. By developing innovative strategies like POEM-3, ISRO has set a precedent for responsible space mission planning, aligning with global efforts to achieve a **zero debris target**. As space activities continue to grow, such proactive measures are crucial in ensuring a safer and more sustainable orbital environment for future generations.