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(To be filled by candidate)

Name of Candidate :

SHODIAS

Roll No. :

PTTP 221500

Registration Number :

NIAS 2350018756

Date of Examination :

15th AugustExam Centre : Old Rajinder Nagar ☒Bhopal ☐Online ☐**Test - 7****Code : TC077****MTS IGP Batch 2023****GENERAL INSTRUCTIONS**

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SUBJECT/PAPER
GENERAL STUDIES

Invigilator's Sign. :

[To be filled by the STUDENT]

Student's Queries for the Evaluator (if any write them below)

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Evaluator's response

(For filling by Examiners only)

Evaluator Code :

Q.No	Pg No.	Maximum Marks	Marks	Total
1	1			
2	3			
3	5			
4	7			
5	9			
6	11			
7	13			
8	15			
9	17			
10	19			
11	21			
12	24			
13	27			
14	30			
15	33			
16	36			
17	39			
18	42			
19	45			
20	48			
Grand Total				

Signature

MACRO COMMENTS

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1. भुगतान संतुलन (बीओपी) के घटकों के रूप में पूँजी खाते और चालू खाते के बीच अंतर का सविस्तार वर्णन कीजिए। भारत के बीओपी घाटे को संतुलित करने के लिए कुछ उपाय सुझाएँ। (150 शब्दों में उत्तर दीजिए) 10 अंक
Elaborate on the difference between Capital Account and Current Account as components of Balance of Payment (BOP). Suggest a few measures to balance the BOP deficit of India.

(Answer in 150 words) 10 Marks

The ~~budget~~ ^{Economy} is divided into capital and current account to measure the impact of Balance of Payments situation.

Current Account

- The account which doesn't create any asset or liabilities in the future.
↳ e.g. Goods export and Import
- It shows short term issues and trends
- It shows the financial health of current year

Capital Account

- The account which create future liabilities or assets in the future.
↳ e.g. - Investment in Economy.
- shows ~~short~~ ^{long} term issues & trends.
- It shows the impact over long term.

Measures to Control BoP Deficit

- Current Account Deficit

(i) Reduce Import of oil & Gas

↳ e.g. Hydrogen as alternative

↳ energy efficient - ethanol blending 100-6 norms.

(ii) Promote export of goods & services.

↳ current trade deficit of \$122 bn should be reduced.

↳ e.g. Toy products sales in last year.

Capital Account

(1) Attract Investment [current \$92 bn].

(2) Build assets & reduce loans
↳ with budget both current & capital accounts

(3) Capex Investment - multiplier effect & crowding in.
↳ e.g. 10 lakh [Budget 2022-23].

⇒ BoP issues can be tackled through
Fiscal Prudence

2. लॉजिस्टिक्स (रसद) क्षेत्र, विनिर्माण उद्योग के विकास के महत्वपूर्ण घटकों में से एक है। चर्चा कीजिए। साथ ही, हाल ही में घोषित राष्ट्रीय लॉजिस्टिक्स नीति, 2022 के विभिन्न घटकों का भी उल्लेख कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

The logistics sector is one of the important components of the growth of the manufacturing industry. Discuss. Also, mention various components of the recently announced National Logistics Policy 2022.

(Answer in 150 words) 10 Marks

currently logistics cost is around
13-16% in the economy. This
makes manufacturing more redundant.

Logistics cost impact on manufacturing

- Supply side ~~Demand~~ → It makes raw material costly.
→ It increases the cost of production.
- Supply side → It makes the delivery cost more high.
→ making product uncompetitive in market.
- Further, logistics cost makes product product ~~comp~~ market competition e.g. walmart has 6% logistics cost.

National Logistics Policy 2022

- ① Reducing cost of logistics
 { from current 13-16% to global
 competitive level. (i.e. 6-8%).
- ② Make top country an efficient delivery
 of products.
- ③ Support manufacturing growth through
 efficient logistics.
- ④ Establish database for logistic service.
- ⑤ Sustainable practices
- ⑥ Increase Railway to 45% [from 26%].

⇒ Logistics policy needs to efficiently
 implemented to make manufacturing
 sector's share from current 17%
 to 25% as National Manufacturing
Policy.

3. डब्ल्यूटीओ के तहत मत्स्य पालन सब्सिडी पर नए समझौते पर भारत का क्या रुख है? भारत के लिए मत्स्यपालन क्षेत्र किस प्रकार महत्वपूर्ण है? इस क्षेत्र के विकास के लिए सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

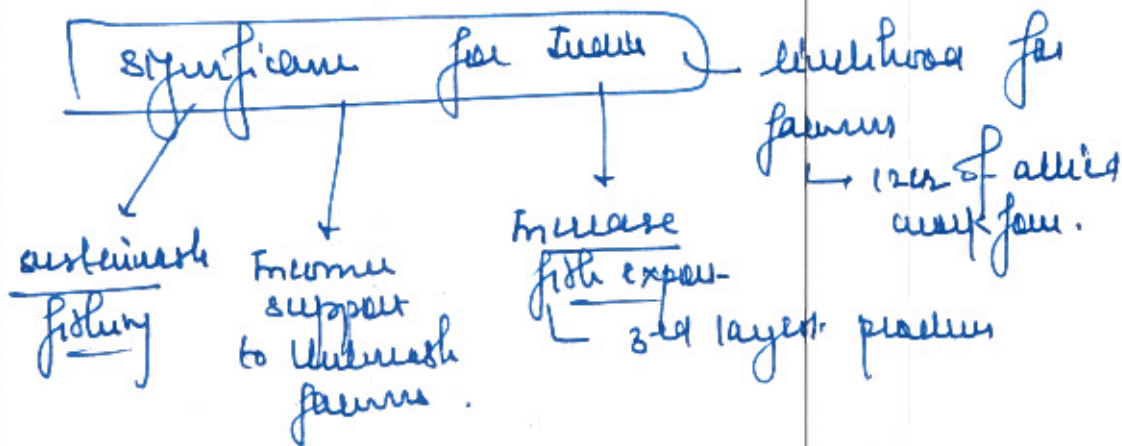
What is India's stand on the New Agreement on Fisheries Subsidies under WTO? How is the Fisheries sector significant for India? Enumerate the steps taken by the Government to develop this sector.

(Answer in 150 words) 10 Marks

Fisheries sector contribute ~7.1% of agriculture GDP. Government provide various subsidies so WTO's new agreement becomes critical.

New Agreement on Fisheries in WTO

- Remove subsidies in unustainable places
 ↳ e.g. Bottom Trawling
- No subsidies in International Waters
 ↳ e.g. in high seas no subsidies allowed.
- Reduce effort subsidies in Fisheries
 ↳ establishing global supply chain.
- Full sovereignty in subsidies in territorial waters



Steps by Government to Develop Sector

- various schemes by government
 - PM Matsya Sampada Yojana 6000 cr [Budget 2023].
 - Nation Mission on Fisheries (2016).
- Credit Schemes
 - Interest subvention Scheme - 3%.
 - 2% for timely repayment
- Infrastructure Development
 - Focus in budget for fisheries Infrastructure.
- Extension of schemes from Agriculture
 - like PSL loans.
- Blue Bonds by GOI, aquaculture development
- ⇒ Blue revolution plan of Niti Aayog made holistic development of Fisheries.

4. उन प्रणालीगत और संस्थागत बाधाओं का विश्लेषण कीजिए जो भारत में भूमि सुधार प्रयासों में बाधा बनी हुई हैं और भूमि के न्यायसंगत वितरण को सुनिश्चित करने के लिए व्यावहारिक समाधान प्रस्तावित कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

Analyze the systemic and institutional constraints that continue to hinder land reform efforts in India and propose pragmatic solutions to ensure equitable distribution of land.

(Answer in 150 words) 10 Marks

Land Reforms - The exercise of changing ownership, control and mode of production

over agricultural land.

→ e.g. Land Reforms after Independence.

Abolition of Zamindari Tenancy Reforms Land Ceiling Reorganization of land distribution

Constraints in Land Reform efforts

- Systematic - (i) High level corruption
Land reforms didn't materialize.

(ii) Land Hitting Issue

Resources are not available

- Institutional Issues - No institution for land regularization

→ Productivity of land is very low.

Solutions to Ensure Equitable Distribution of Land

- ① Fulfill the Land Reforms
 ↳ ms examination: Incomplete land reforms.
 - ② Land Digitization
 ↳ through satellite scheme.
 ↳ Issuing blue-sheets for the same.
 - ③ Before titling ~~land~~
 ↳ clear ownership of land.
 - ④ Increase productivity of land
 ↳ recommended by Ashok Dalwai committee
 - ⑤ Corporatization and PPOs
 ↳ land should be pooled and use private investment for development.
 ↳ China Model: Cooperation & Private Investment.
- ⇒ Ashok Dalwai: To double farmer's income completion of land Reforms is necessary.

5. ब्रह्मोस सुपरसोनिक क्रूज मिसाइल की अद्वितीय विशेषताएँ और क्षमताएँ क्या हैं, और इसने भारत की रक्षा क्षमताओं और सामरिक स्थिति के क्षेत्र में किस प्रकार योगदान दिया है? (150 शब्दों में उत्तर दीजिए) 10 अंक
- What are the unique features and capabilities of the BrahMos supersonic cruise missile, and how has it contributed to India's defence capabilities and strategic position in the region? (Answer in 150 words) 10 Marks

BrahMos missile was developed by partnership between Russia & India.
Derives its name from Brahmaputra & Moscow River.

Unique Features & Capabilities

- ① Supersonic Speed i.e. it has speed of above 5 mach [speed of sound].
- ② Cruise mode i.e. it has a clear line of sight while attacks.
- ③ Long range Targets - It targets for Intercontinental Distances.
- ④ It is state-of-art technology that can impact & destroy targets at anytime.

Contribution to Defense Capability & Strategy

- ① It gives Indigenization of manufacturing
 - ↳ Technology Transfer.
 - ↳ Development of industrial capabilities
(Part of Defense Production Policy 2019)
- ② Give economic boost to protect from possible neighbourhood threat.
- ③ Long range capability gives security in the Indian Ocean Region.
- ④ It provides opportunity for Defense Corporation
 - ↳ Defense Partnership.
 - ↳ e.g. like alternative to BARAK from Israel.
- ⑤ Future Explorations of generation 5 fighters

⇒ Defense Manufacturing & Indigenization are part of key ingredients of Atmanirbhar Bharat @ 75.

6. समुद्र की गहराई का पता लगाने और उसमें मौजूद संसाधनों का दोहन करने के देश के प्रयासों के अनुरूप, भारत सरकार ने गहरे समुद्र में अन्वेषण मिशन 'समुद्रयान' का प्रस्ताव रखा है। यह मिशन देश में समुद्र विज्ञान और प्रौद्योगिकी की प्रगति में किस प्रकार योगदान दे सकता है? (150 शब्दों में उत्तर दीजिए) 10 अंक

In line with the country's efforts to explore the depths of the ocean and harness the resources it holds, the Indian government has proposed a deep-sea exploration mission Samudrayaan. How can this mission contribute to the advancement of ocean science and technology in the country?

(Answer in 150 words) 10 Marks

India has coastline of 7517 km and 717 lakh sq km of ocean area. Therefore the opportunity for ocean exploration is paramount.

Country's Effort to Harness Resources

- ① Earlier Missions
- O-SMART mission for harnessing ocean

- ② Fulfilling Needs of Resources

↳ especially rare earth minerals.
↳ sea bed floor have ample resources.

- ③ Fiscal Benefit - such resources will reduce the dependence on imports.

- ④ Stimulating Industrial growth
↳ from current 4% to 10% (Target).

- ⑤ Disruption in Supply
↳ due to deglobalization & SC disruptions

mission Samudraayan is holistic mission to send exploration mission to search for uranium.

Its contribution to Ocean Science & Technology

- ① Sea Floor Mapping
↳ can be done using sonar & lasers.
- ② Information on biodiversity & waste in the ocean.
- ③ Give holistic approach to Blue Revolution understanding various aspects.
- ④ Future Deep Ocean Travelling & Tourism
↳ development in technology will provide such opportunity.
- ⑤ Map Resources & efficient Exploration
↳ in most efficient manner.

⇒ Samudraayan Mission shows our scientific capability and economic exploration need for a developed India by 2047.

7. वैश्विक मीथेन प्रतिज्ञा क्या है? क्या आपको लगता है कि वैश्विक मीथेन प्रतिज्ञा मीथेन उत्सर्जन को कम करने की दिशा में एक सकारात्मक कदम है? इस मुद्दे पर भारत का रुख स्पष्ट कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

What is Global Methane Pledge? Do you think the Global Methane Pledge is a positive step toward mitigating methane emissions? Explain India's stance on this issue. (Answer in 150 words) 10 Marks

Global Methane Pledge is a global
Initiative to reduce the methane
emissions by 30% by 2030.

It set targets for countries & signification
with result into National Plans.

Global methane Pledge is positive step

① High methane pollution

150%. according to IPCC AR6
from pre-industrial levels.

② Achieving SDGs by reducing methane
emissions.

③ methane emissions cause health hazards

④ Global Guidelines necessary for Efficient shift
to Green Technology.

But It raises concerns

Frequency in
Emission [developed
mode]

its finance with
developing countries

No direct
technology
transfer
without
CBDR
principle.

India's stance on Metham Pledge

- ① Though India committed to climate change mitigation but such obligation is not equitable
 - ↳ e.g. Developed vs. Developing nation not comparable.
- ② It doesn't give financial support for adaptation
- ③ India already taken steps
 - ↳ NCDs at COP27 revised.
Panelhouse
- ④ CBDR principle not followed
 - ↳ as equal responsibility for both developed and developing
- ⑤ Development compromise such drastic action may compromise Energy security and developmental needs

⇒ Climate change shouldn't become false alarm, rather prudent technologies are needed to tackle it with CBDR principle intact

8. कोविड-19 महामारी ने सार्वजनिक स्वास्थ्य में आपदा प्रबंधन के महत्व पर प्रकाश डाला है। महामारी और अन्य संक्रामक रोग के प्रकोप के प्रबंधन के लिए प्रमुख रणनीतियों और चुनौतियों पर चर्चा कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

The COVID-19 pandemic has highlighted the importance of disaster management in public health. Discuss the key strategies and challenges for managing pandemics and other infectious disease outbreaks.

(Answer in 150 words) 10 Marks

COVID-19 Pandemic brought public health emergency and effective measures are required to deal with it.

Importance of DM in Public Health

- Risk of Health Emergencies
 - ↳ e.g. Ebola outbreak, SARS, COVID-19.
- Vulnerability addressed through effective cooperation and welfare schemes
 - ↳ e.g. PM Jan Aardhan Yojana.
- Widescale spread - due to urbanisation & globalisation.
 - ↳ e.g. spread with > 2 times spread.
- Shortage in Healthcare
 - ↳ Doctor per person (~1:800 in India)
 - ↳ Health Infrastructure.

key strategies for Public Health Emergency

- Public Hygiene

epidemic in 1897
MOMA 2005.

- Decentralised approach - regulation & relaxations at local level. e.g. Singapore Model.

- Movement Restriction & Economic growth

need to be balanced.

e.g. - China didn't lead to cases after opening up.

- Vaccine development & medical facilities

e.g. >2000 cases

e.g. Temporary COVID centres

Challenges faced

new of hygiene

epidemic in 1897

Role of WHO questioned

e.g. origin from

Ineffective centralization

e.g. National lockdown

Healthcare infrastructure

not optimum.

⇒ At national level we have to focus healthcare facilities and at global stage new cooperation like Pandemic Treaty

9. "पूर्वी और मध्य भारत का संसाधन अभिशाप वामपंथी उग्रवाद का एक महत्वपूर्ण चालक रहा है"। इन क्षेत्रों के सतत और समावेशी विकास के लिए उपायों को विस्तार से बताइए और सुझाव दीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

"The resource curse of Eastern and Central India has been a crucial driver of LWE". Elaborate and suggest measures for sustainable and inclusive development of the region.

(Answer in 150 words) 10 Marks

LWE - It is a form of armed insurgency against the state motivated by leftist ideologies.
It has risen in Marxalbari in 1967 and afterwards.

Resource Curse of Eastern & Central India

- Resulted in Development Deficit in the area due to lack of proper mining and resource use.
↳ e.g. districts with mining next to HDI parameters.
- Polluted Environment → Polluted air
→ water scarcity
- Underdevelopment i.e. inefficient use of resources.
- Corruption & Malpractices e.g. Chhattisgarh, Rajasthan, Orissa, etc all are in RED MAP category

Measures for Inclusive Development

- Focus on Good Human Development i.e. improve skill & livelihood.
- work through CSR and ESG models.
- Participation from all sections of society
esp. vulnerable like SC/ST.
↳ e.g. STS, SAE schemes.
- confidence building measures
↳ e.g. Himayat & Pehel Initiatives
- Innovative solutions e.g. D.R. Chaudhary's work on vaccination.

Measures for Environment

Focus on
Clean Technologies
e.g. coal washing,
recyclers of exhaust

SDG through
aspirational
district programs
↓
all LWE in
ADP

Community
Participation
&
Traditional
conservation
e.g. Mangroves
Biodiversity
conservation

⇒ (PM) - "Development can reflect any form of violence".
That development should be Inclusive & Sustainable

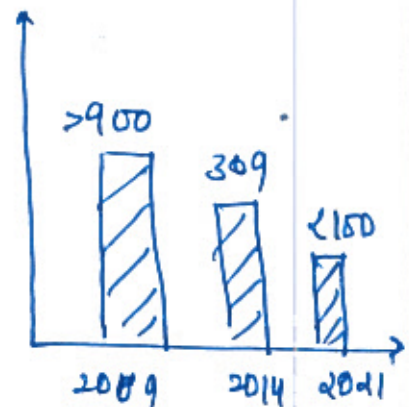
10. उत्तर पूर्व और जम्मू-कश्मीर क्षेत्र में हिंसा की घटती प्रवृत्ति के आलोक में क्या आपको लगता है कि एफएसपीए (अपरसा) अपनी उपयोगिता बरकरार रख पाया है? टिप्पणी कीजिए (150 शब्दों में उत्तर दीजिए) 10 अंक
In light of the declining trend of violence in the North East and J&K region do you think that AFSPA has lived its utility? Comment. (Answer in 150 words) 10 Marks

AFSPA - Armed forces special powers act was first brought to control the guilt India Movement later post Independence. It has been used to curb violence in North-East, Kashmir, Bangladesh.

Declining Trends of violence

In North-East

The no of deaths have been reduced.
Peace across with different communities.
e.g. Mizo, Bodo, etc.
Displacement Regions - SIS, SRE, Roohini, etc.

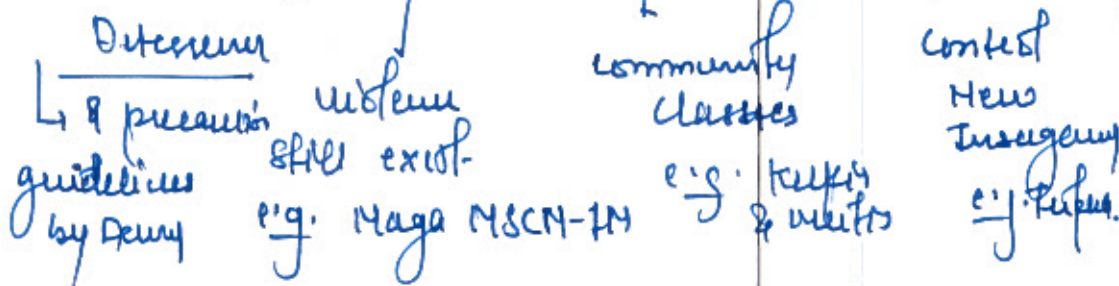


In J&K - MHA data → 70% declining in Incidents & 78% decline in deaths of army personnel.
Reasons → Removal of Article 370 Displacement.

Need To analyse AFSPA

- Declining trends - shows need to focus on disarmament.
- It questioned the efficacy of AFSPA
- Allegation of Human Rights violation
- AFSPA can convert rebels into mass insurgency.

But still needed because



+ Jewan Reddy Committee has said to have not met AFSPA can be deleted or repealed with transfer of provision to UAPA.

- 2nd ARC have also recommended to control escape and violence under AFSPA. There there is need to reanalyse the provisions.

11. अंतर्राष्ट्रीय व्यापार प्रमुख मुद्रा प्रतिमान (डीसीएम) पर केंद्रित है। अंतर्राष्ट्रीय व्यापार में हार्ड करेंसी (दुर्लभ मुद्रा) के महत्त्व का आलोचनात्मक विश्लेषण कीजिए और डॉलर साम्राज्यवाद के विकल्प के रूप में वैश्विक व्यापार में रुपये की स्वीकार्यता की संभावना पर चर्चा कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

International trade is centred on the dominant currency paradigm (DCM). Critically Analyze the importance of Hard currency in International trade and Discuss the potential of rupee acceptance in global trade as an alternative to dollar imperialism.

(Answer in 250 words) 15 Marks

Dominant Currency Paradigm - The phenomena which suggest that most trade occurs in ~~the~~ dominant currency.

E.g. > 70% in Dollar [American].

Currency Influencing Trade

- ① Dominant currency decides Inflation and Trading balance
- ② Trade Manipulation - alleged by countries on dominant currency. E.g. - alleged US in 1997.
- ③ Unilateral restrictions
E.g. One Russia during Russia-Ukraine war.
- ④ Global Impact - USA 2008 crisis caused global slowdown.
- ⑤ Regional Ties can be established through regional currency trade.

Importance of Hard Currency in International Trade

① Create Global Trade

- ↳ Imports - will be leading to trade deficit if currency weak.
- ↳ Exports - will become easy in strong currency [difficult in weak currency].
 ↳ e.g. Currency Manipulation allegation on China.

② Hard Currency - is used as medium of exchange making domestic ~~and~~ country important player.

③ Regional Trade - can be enhanced by hard currency. ↳ e.g. Chinese Yuan's strong position lead to use in trade.

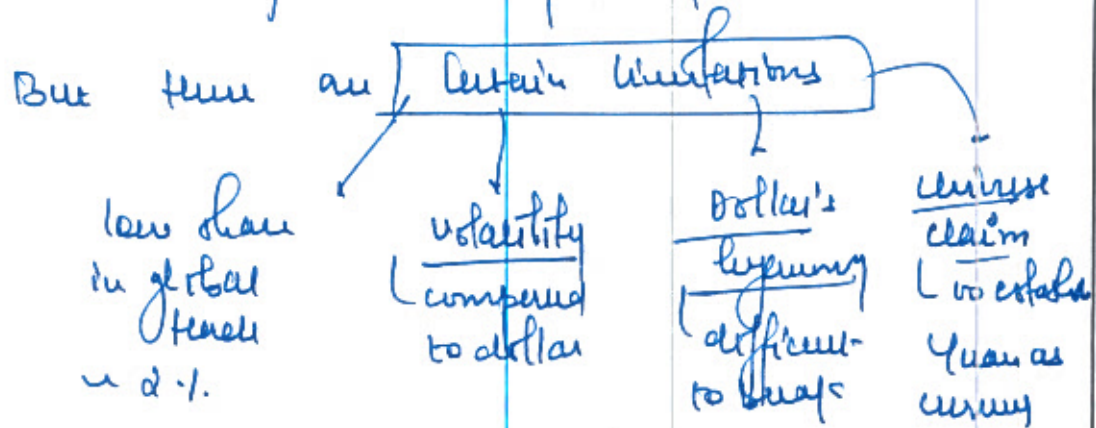
④ Create Global Demand ↳ due to demand of strong currency.

⇒ Therefore hard currency can create trade barrier factors

- ↳ export competitiveness
- ↳ supply side cost factors
- ↳ technology absorption.
- ↳ logistics cost.

Rupee alternative to global Dollar Implications

- Strong Position
 - ↳ even during Russia-Ukraine war & covid-19 disruption.
- 5th largest economy
 - ↳ shows significance of Rs.
- Bright star in world (IMF) & high growth
 - ↳ fastest growing major economy.
- Increasing Regional Ties & Currency Ties
 - ↳ e.g. currency swap with Russia.



⇒ To establish Rupee as International
currency there is need for Diplomatic,
Economic and Competitive negotiations
on World Trade Order.

12. जनसांख्यिकीय लाभांश संवृद्धि सुनिश्चित नहीं करता है; यह केवल सामर्थ्य उत्पन्न करता है। जनसांख्यिकीय परिवर्तन से उत्पन्न अवसरों का लाभ उठाने के लिए सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

A demographic Dividend does not ensure growth; it only generates potential. Discuss the steps made by the government to take advantage of the opportunities presented by the demographic transition.

(Answer in 250 words) 15 Marks

Demographic Dividend - The opportunity to capture advantage of high working age population as a stimulus for growth.

→ e.g. India supposedly entered dividend phase of 37 years from 2018.

Potential of Demographic Dividend

- ① High labour force participation
→ 41.6% in India.
- ② Less dependent population
→ reduce fiscal burden.
- ③ Growth in production and export.
→ e.g. China reaped benefit of low cost labour for economic rise.
- ④ High employment in manufacturing
lead to share in world trade.

but not always potential lead to growth.

- ① Participation - without participation will result in high unemployment
- ② Productivity of labour force
 ↳ e.g. only 50% graduates employable.
- ③ Skilling during & lack of Training
 ↳ e.g. 55% formally skilled in India (most skill export).
- ④ Lack of Inclusive growth
 ↳ lead to inequality in population.
 ↳ e.g. Oxfam Report top 1% hold 40% wealth.
 ↳ lack of vulnerable section participation
- ⑤ Gender Exclusionness
 ↳ only 25% LPPR currently.
- ⑥ Technology adoption - Technology adoption can determine high rate growth.
- ⑦ Sustainable growth - need green growth.

Steps by Government

① Spelling provisions

- PM Kausal Vikas Yojana.
- IT SPMS - Skill PMs plan.

② Inclusion & Participation of all

- Informal sector - Vishwakarma Scheme (13K crore outlay)
 - e-Shram Portal
 - linked with National Census scheme.
- SC/STs / women
 - Stemcup India scheme → cheap credit
 - mauli samra bank.
 - Kapirani bank

③ Sustainable growth / Green growth

- National Green Hydrogen Mission
- e-waste
- MINIT
- oban & wind energy thrust.

④ Technology adoption

- National Supercomputing Mission
- National Centre on IR 4.0 [Mhaay]

⇒ Demographic dividend may turn to demographic disaster if such actions are not taken.

13. 'जीनोम एडिटिंग (जीनोम संपादन) में फसल सुधार की अपार संभावनाएँ हैं, लेकिन यह नैतिक और सुरक्षा संबंधी चिंताओं को भी जन्म देती है।' भारत में जीनोम-संपादित पादपों के सुरक्षा मूल्यांकन के लिए नए दिशानिर्देश आनुवंशिक रूप से संशोधित फसलों की सुरक्षा को कितना सुनिश्चित करते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक
- 'Genome editing holds immense potential for crop improvement, but it also raises ethical and safety concerns'. How far do the new guidelines for the safety assessment of genome-edited plants in India, ensure the safety of genetically modified crops? (Answer in 250 words) 15 Marks

Genome Editing - The process ~~is not~~ adding
deleting a gene to modify the
DNA or genome structure of the
species.
e.g. - LAMMA & MANA.

Genome editing for crop Improvement

- ① GM crops has pest resistance
↳ may lower the use of
pesticide
- ② It can produce climatically
sustainable & extreme weather
surviving crops.
- ③ High productivity from GM crops
↳ e.g. BT cotton yield is
higher.

- ④ It can improve resistance against weeds & weedicides
 ↳ e.g. GM mustard weed Toler
- ⑤ Non nutritional crops & health security
 ↳ achieve target of 50% 42.

Concerns Regarding GM crops

- Ethical Concerns
- ① Consumer may not be aware.
 - ② Some stated they capture market & alternatives not available
 - ③ would shifting towards Organic & Manual Farming.

Security Concerns

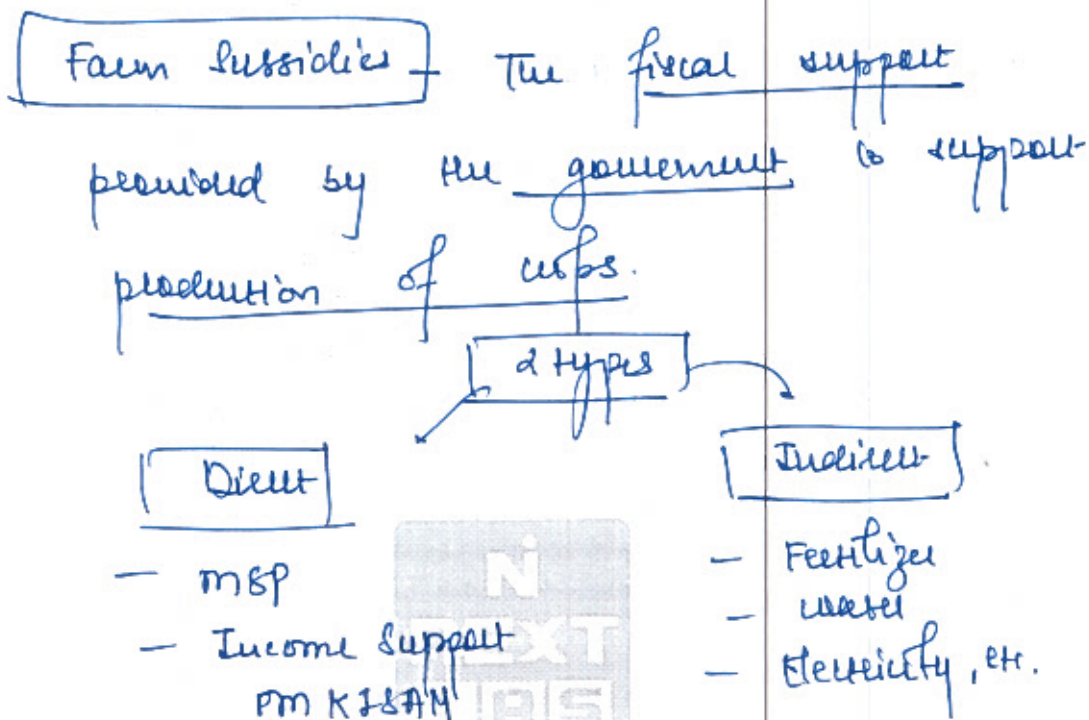
- ① Health Impacts on consumption
 - digestive quality
 - poisonous or toxicity.
- ② May act as Invasive species.
- ③ May cause harm to Environment & sustainability.

To highlight of the concerns, the
government has released guidelines
for the same :-

- ① Restriction on Import of GM crops.
↳ thought extent of crops allowed
eg. soya residue allowed.
- ② Percentage limit for GM product in Import
eg. 2-1. max limit.
& FSSAI approval
- ③ Extended Trials for implementing GM
crop in a phased manner.
- ④ Consumer must be aware, so mark
on GM crop products.

⇒ GM crops have the potential to
help deal with climate Issues and
food security but the potential challenges
should be solved.

14. भारत में कृषि क्षेत्र पर प्रत्यक्ष और अप्रत्यक्ष कृषि सब्सिडी के प्रभाव की चर्चा कीजिए। न्यूनतम समर्थन मूल्य (एमएसपी) ने कृषि अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (250 शब्दों में उत्तर दीजिए) 15 अंक
- Discuss the impact of direct and indirect farm subsidies on the agriculture sector in India. How have Minimum Support Prices (MSP) affected the agricultural economy? (Answer in 250 words) 15 Marks



Impacts of Direct & Indirect Farm Subsidies

- ① Food Security :- It has ensure food security for country
315mn tonn crop production (security 2022)
- ② It also provide Income support to farmers [~45% population in Agriculture]
- ③ skewed the production to Rice & wheat economy.

- ④ crop productivity stagnant
 ↳ No private investment
- ⑤ large farmers benefited, while smaller didn't
 ↳ only 12% farmers sell crops
 under MSP regime.
- ⑥ stagnant agriculture & allied sector
 ↳ only ~4.6% average growth in
 last 5 years.

MSP regime & its Impact on Agri-Economy

- The minimum support price is
guaranteed price for crops by government
 for few crops.
 ↳ announced for 22 crops.

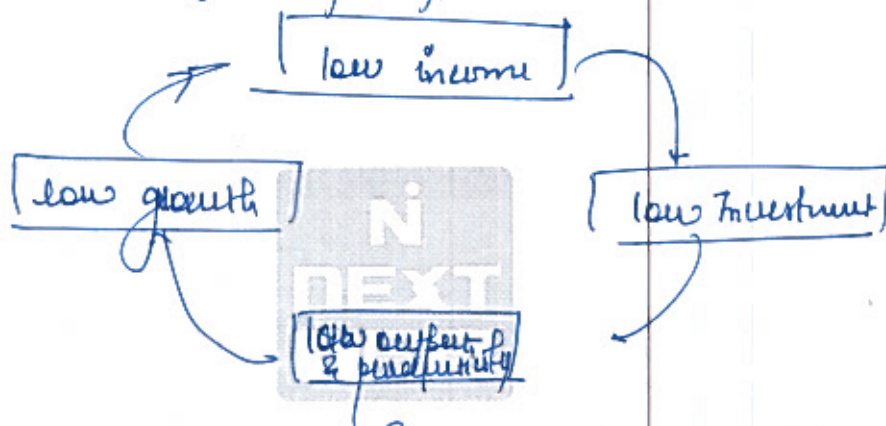
Impact

- ① Grain Dominant Economy
 ↳ e.g. wheat & rice due to
 open procurement.

(2) Economy is more stagnant
 ↳ less growth compared to other countries (4.1% in 2022-23).

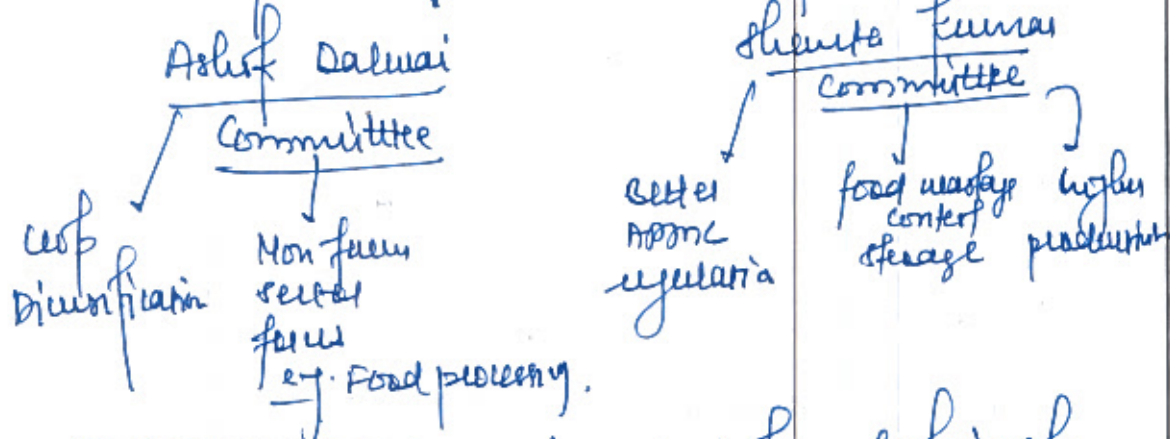
(3) Low production of cash crops

(4) Vicious cycle for farmers



(5) Low crop diversification & allied sector development [where growth higher 7-8%]

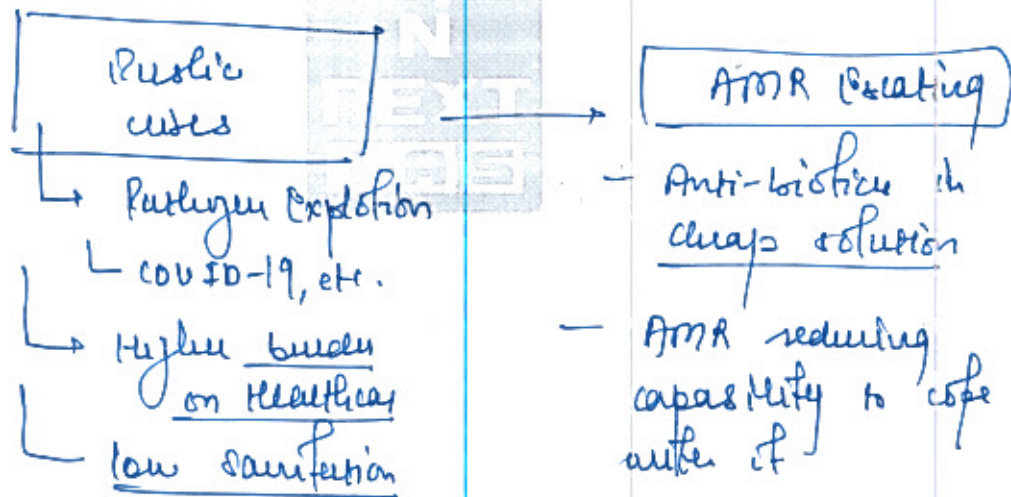
To deal with Issues we must
 Implement Recommendations of



- Agriculture is key to both Sustainable Development & Food Security.

15. रोगाणुरोधी प्रतिरोध (एएमआर) एक तेजी से बढ़ता संकट है जो दुनिया भर में सार्वजनिक स्वास्थ्य के लिए एक गंभीर खतरा है। रोगाणुरोधी प्रतिरोध की बढ़ती समस्या में योगदान देने वाले प्रमुख कारक क्या हैं, और इस वैश्विक स्वास्थ्य खतरे से निपटने के लिए कौन से कदम उठाए जा सकते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक
- Antimicrobial resistance (AMR) is a rapidly escalating crisis that poses a grave threat to public health worldwide. What are the major contributing factors to the growing problem of antimicrobial resistance, and what steps can be taken to address this global health threat? (Answer in 250 words) 15 Marks

AMR - The resistance developed in the pathogens due to adaptability to the various anti-microbial or anti-biotics medicines.



⇒ AMR crisis has occurred due to following factors

① Improper use of medicines

Taking medicine without consultation

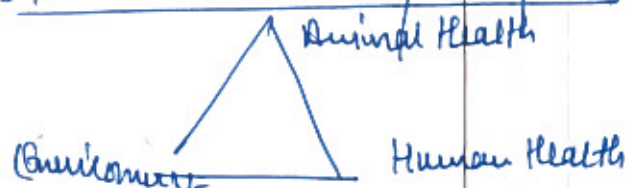
Overdose of Anti-biotics

Proper Treatment not followed [skipped in between]

- (2) spread through animals - animals are also given antibiotics, which transfers to animal food products.
- (3) medical & Pharma Residues
 - ↳ anti-biotic residues are mixed with diseases without treatment.
- (4) Unhealthy lifestyle & growing demands
 - ↳ lower Immune capabilities
 - ↳ due to explosion of Pathogens.
- (5) Viral Impact also - virus infections also cause bacterial diseases.
 - ↳ e.g. COVID-19 reduced Immune & throat infections were common.

Steps that can be Taken

- (1) Focus on One Health principle



- (2) Regulation of Pharma Production and residue control

③ Government action to control Improper usage
 ↳ e.g. Schedule H1 drugs
 ↳ Red mark on medicines not
 permitted w/o prescription.

④ Global cooperation
 ↳ e.g. AWARIS tool by WHO.
 ↳ guidelines to control AMR by WHO.

⑤ Awareness among people
 ↳ campaigns
 ↳ healthcare messaging, etc.

⑥ Initiative to minimise shift [ATMs Disease]
 ↳ we should focus on preventive
healthcare.

⑦ Pathogen exploration modern
 ↳ e.g. WHO's notification on sea food
 & other animal food markets.

⇒ The idea is to balance the consumption,
proper regulation and proper health care
 for future. [SDG-3].

16. विघटनकारी नवाचारों से आप क्या समझते हैं? हाल के दिनों में विघटनकारी नवाचार के कुछ उदाहरण बताइए और यह भी बताइए कि इन नवाचारों ने उद्योगों के संचालन के तरीके को किस प्रकार परिवर्तित किया है?

(250 शब्दों में उत्तर दीजिए) 15 अंक

What do you understand by Disruptive innovations? What are some examples of disruptive innovation in recent times, and how have they changed the way industries operate?

(Answer in 250 words) 15 Marks

Disruptive Innovations — The innovations which tend to reengineer a product to cater the needs of the society.
 E.g. Genomes editing → BT cotton.

Features of Disruptive Technology

- Usually based on latest Technology
 (e.g. ChatGPT — on AI (Neural Networks).
- Impact & cater to Needs of large section of society.
 E.g. genome editing → production & consumption of crops
 E.g. crops in USA.
- can solve larger issues
 (e.g. Defense, food security, Case of Doing Business and Case of living).

Examples of Disruptive Technology

- ① ChatGPT based on Generative AI
 - ↳ The capability to answer to multiple themed question.
 - ↳ intended to provide at large
- ② Gene Editing - in crops like BT cotton, mustard, soy, etc.
- ③ Cryptography - it is way to secure communication and Innovations.
e.g. used in crypto currency.
- ④ Blockchain - distributed ledger which ~~stores~~ chronologically arranges Information
e.g. Trade Chain - proposed architecture for all services.
- ⑤ Digital Media / Social Media
 - ↳ Information shared but also challenges of trust open & Security.

(6) Space Technologies e.g. Chandrayaan-3.

(7) Optical fibre e.g. High speed Internet.

They don't only impact people but also
changed the way Industries operate

(1) Shift to digital world

↳ account of companies, functioning
of various functions

(2) Demand of products

↳ digital goods required.

(3) Companies starting to use Descriptive Technology

↳ e.g. Digital Media Marketing.

(4) Threat to companies

↳ e.g. Zomato Data breach.

(5) Asset for building security

But we ~~can~~ have to take innovative steps
to control these "Creative Disruptions" and
generate Rishabh Gang Committee on digital
economy to all such sectors.

17. हानि और क्षति (L&D) कोष के क्रमिक विकास को चिह्नित कीजिए। COP27 में हानि और क्षति कोष से संबंधित कौन-से प्रमुख घटनाक्रम हुए हैं? इस सम्मेलन में भारत ने क्या प्रतिबद्धताएँ व्यक्त की हैं?

(250 शब्दों में उत्तर दीजिए) 15 अंक

Trace the evolution of the Loss and Damage fund. What are the major development related to loss and damage funds in COP 27? What are the commitments made by India in this conference?

(Answer in 250 words) 15 Marks

Loss & Damage Fund - It is based on the principle of common-but-differentiated responsibilities, which establishes funds for damage in developing countries.

Evolution of Fund - The idea was first mooted in Paris Agreement in COP 19 [2013].

↳ Later through different COPs, idea materialised.

↳ It was included in Paris Agreement but in delayed form.

↳ COP 27, also recognized the CBDR principle and loss & damage fund.

Loss & Damage Fund in COP 27

- The fund got recognition and established under the Paris treaty.
- Warsaw agreement & CBD's principle was agreed.
- Development of concrete fund was not finalized.
- Agreement on Finance
 - ↳ Some of funding wouldn't be finalized in the agreement.
- The developed countries are not willing to contribute significantly to the fund.
- While developing countries must \$ 100 bn every year to tackle the challenges.

India's Stand on the Fund

① Developing country's demand & CBDR principle
 ↳ formulated by India.

② India's Stand was aligned with
disasters due to climate in developing
country.

↳ (i) most pollution caused by developed
country.

ex. 14.1. contribution in pollution from 1901-2011
[Economic Survey].

↳ (ii) Developing countries are unable to
adapt to green technologies
esp. global south.

↳ (iii) Transfer developed countries should
fund developing countries.

⇒ Transfer like Carbon Trading (under
article-6), CERs, etc can be used
for technology transfer and funding of
climate issues

18. आपदा प्रबंधन सिर्फ आपात स्थिति से निपटने के बारे में नहीं है, बल्कि लचीले समुदायों के निर्माण के बारे में भी है। उन प्रमुख रणनीतियों पर चर्चा कीजिए जिनका उपयोग सामुदायिक लचीलापन बनाने और आपदाओं के प्रभाव को कम करने के लिए किया जा सकता है। (250 शब्दों में उत्तर दीजिए) 15 अंक

Disaster management is not just about responding to emergencies but also about building resilient communities. Discuss the key strategies that can be used to build community resilience and reduce the impact of disasters. (Answer in 250 words) 15 Marks

Disaster Management - The ability to establish systems or routines against impacts of disaster.
e.g. Early warnings to prepare for upcoming disaster.

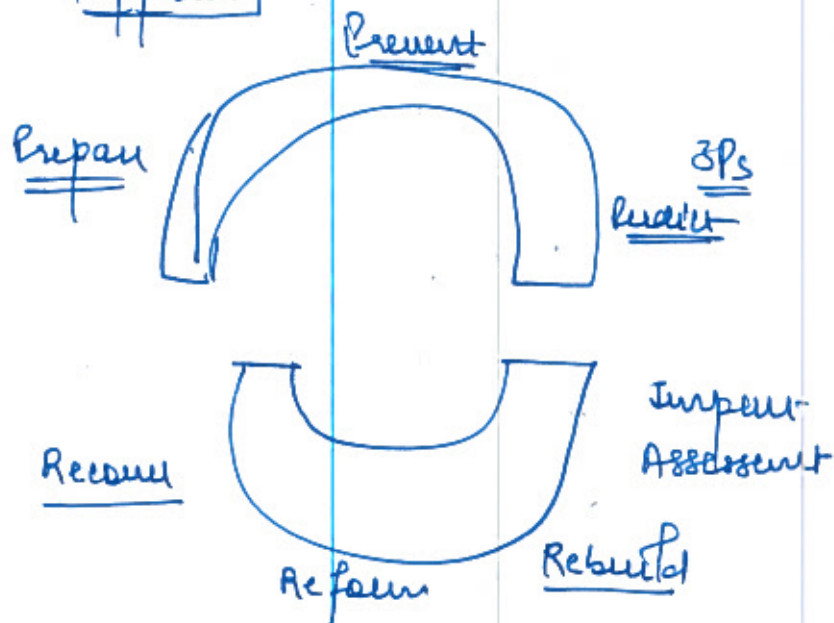
Disaster management for responding to emergencies

- ① Early warning system
e.g. SWAM systems.
- ② Regular information to tackle regular challenges.
- ③ Buffering times through non-formal measures e.g. NDMR Plan 2016.
- ④ Supply of emergency needs → food, water, medicines
- ⑤ Immediate Rehabilitation
e.g. shelter homes, etc.

Room as for Building Resilience

- ① creating disaster Resilient Infrastructure
L.e.g. CDRI Initiative.
- ② Making Plan and guidelines
L.e.g. National Disaster Management Plan gives 5 key guidelines.
- ③ Making strategies to tackle
 - Reducing shelter homes before.
 - Mapping of unhabitable areas.
- ④ Community participation & involving all stakeholders.

Disaster management is two fold
approach



Strategies to build Community Resilience

- Early warning and color coding
 ↳ like SWAN systems and color coding for cyclones [orange, Red, green, etc].
- Inter-Ministerial Coordination for effective response and multi-pronged action.
- Structural Measures
 - ↳ Resilient Infrastructure
 - ↳ Better city development plans
 - ↳ e.g. SMART etc.
 - ↳ Shelter homes with protection
- Non-Structural Measures
 - ↳ Disaster awareness & participation
 - ↳ e.g. Through curriculum
 - ↳ Strengthening of disaster response
 - ↳ Stakeholder responsibility

⇒ Disaster management is about vulnerability and resilience. If resilience can reduce vulnerability it will reduce its impacts.

19. मेटावर्स और वर्चुअल एसेट्स जैसी नई और उभरती प्रौद्योगिकियों के उपयोग के माध्यम से आतंकवाद का परिवर्तन चिंता का विषय है। हम आतंकवादी उद्देश्यों के लिए नई और उभरती प्रौद्योगिकियों के उपयोग का मुकाबला किस प्रकार कर सकते हैं? इस संबंध में "दिल्ली घोषणा पत्र" के महत्व को स्पष्ट कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

The transformation of terrorism through the use of new and emerging technologies like metaverse and virtual assets is a matter of concern. How can we counter the Use of New and Emerging Technologies for Terrorist Purposes and Elucidate the importance of the "Delhi declaration" in this regard?

(Answer in 250 words) 15 Marks

Terrorism - A form of organised
violence to bring change or pursue
sub-political goal in society.
e.g. Osama, ISIS, etc.

Transformation Through Modern Technology

- New platform of Cyber space
 - used for radicalization
 - Threat to critical cyber infrastructure
- Metaverse use for planning attack
- Drones - used for surveillance
e.g. attacks in Iran.
used for smuggling
e.g. drug & weapons supply
from across Pakistan border.

- Artificial Intelligence - can be used to develop state-of-art defence systems, morphed videos, fake news, etc.
- money laundering & fundraising
 - ↳ with organised crime, etc.
 - ↳ crypto
 - ↳ money laundering

But They can also be use to counter.

Technology as Defence & Deterrence

- Protective Measures
 - ↳ like Drone Disruption Technology (BYORDD)
 - ↳ cyber security Policies
 - ↳ better critical Infrastructure (NCII PC).
- To attacks terrorist groups
 - ↳ e.g. - drone attacks used by Israel on HAMAS.
- use digital space for positive speech & Democratisation

- neural simulation
e.g. neurase simulation by Interpol recently.

significance of Delhi Declaration

- It was recently adopted to counter the Cyber Terrorism & impacts on the global peace.

Key Issues Raised & adopted

Global Cybersecurity Architecture like CCIT proposed by India.

Inter-country collaboration & data sharing.

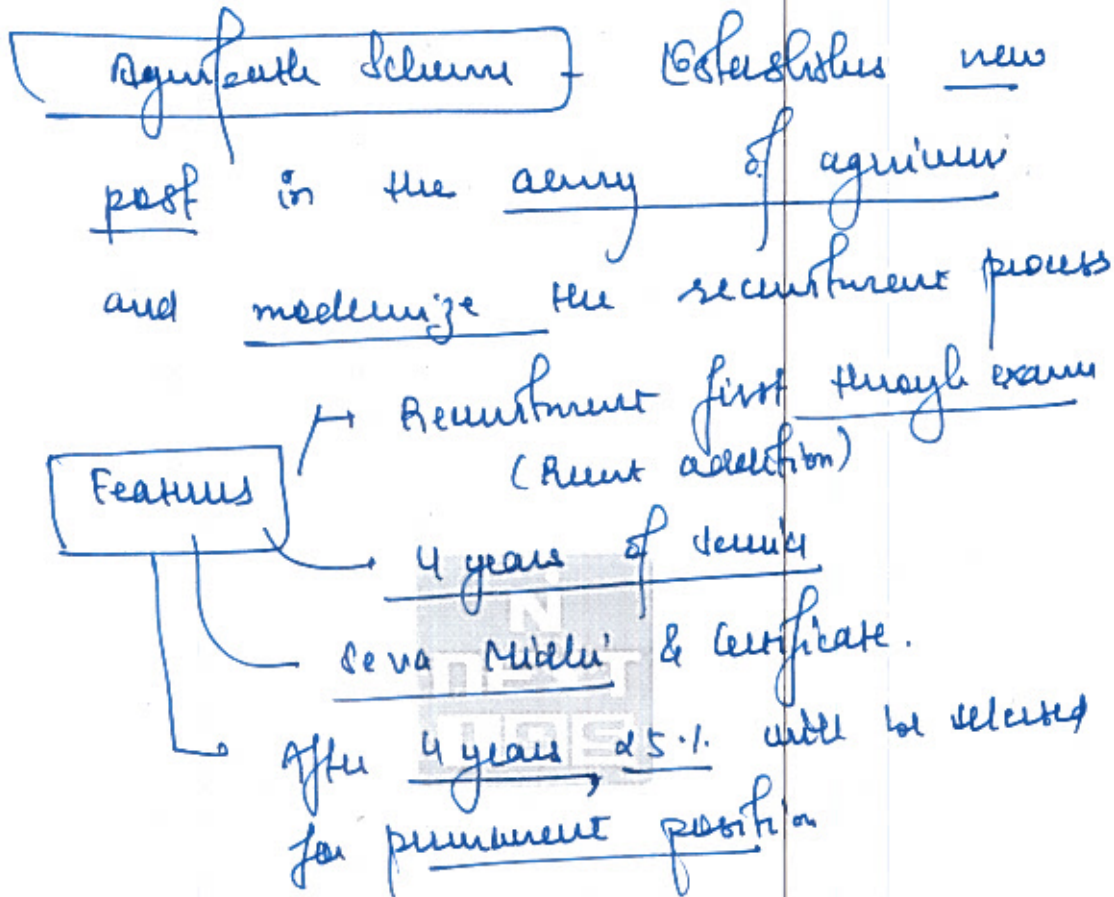
Define Terrorism and cyber etc every ~~year~~ year

can digital space & its use in terrorism.

⇒ Technology is a double edged sword which can both aid

& harm terrorist activities. we must take early steps.

20. "अग्निपथ योजना हमारे सशस्त्र बलों के लचीलेपन और प्रभावकारिता के लिए आवश्यक एक कड़वी गोली है।" प्रासंगिक तर्कों के साथ कथन का आलोचनात्मक विश्लेषण कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक
 "The Agnipath scheme is a bitter pill needed for the resilience and efficacy of our armed forces." Critically Analyze the statement with relevant arguments. (Answer in 250 words) 15 Marks



Other Bill : Agnipath Scheme

- ① Reduce training period of army officers
 ↳ can be negative like Russian force ineffective during recent war.
- ② No permanent position ↳ may not suit best talent
 ↳ more as soldier than senior
- ③ No pension & other benefits for the officers.

- ④ Reduce uptake in army
 ↳ earlier 65000 in a year, 1st year of
 agniveer only ~ 21000
- ⑤ all pending recruitment
 ↳ government scrapped the earlier recruitment
 of previous year [selected candidates]
 suffered

agniveer : As Resilient & efficient change

- ① It will modernize the army force.
 ↳ eg. new skilled participants.
- ② Make profile younger
 ↳ PIB → reduce age profile by 5 years.
- ③ Reduce employment among youth
 ↳ recruitment in Army
 & skill certificates.
- ④ Hire the best talent to army force
 ↳ 25% are chosen for agniveer.
- ⑤ It create substantive ethos in the
 country

⑥ will give sewa mitti & skill certificates and also they will be preferred in central & state universities.

⑦ most accepted services
 L.e.g. Israel - 2 year military service for everyone.
Russia

⑧ Reserved force for emergency
 L for any future possible war.
 (e.g.) - Russia faced deficiency of soldiers, hired private (WAGNER group).

⇒ As Lt. Col. Raj Shukla, who was the key architect of scheme, that military service is about National Interest security and having best talent rather than mere job opportunity

Space for Rough Work

Candidates must not
write on this margin

