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(To be filled by candidate)

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Roll No. : ID - PTTP220196

Registration Number : NIAS230002016O **Date of Examination :** 30 Aug.

Exam Centre : Old Rajinder Nagar ☑ Bhopal ☐ Online ☐

Test - 7 **Code : TC077**

MTS IGP Batch 2023

GENERAL INSTRUCTIONS

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.....

SUBJECT/PAPER
GENERAL STUDIES

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Evaluator's response

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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

balance of account represent the import and export of goods & services along with the inflow & outflow of capital.

Current account	Capital account
(i) It record transaction of trade in goods and services eg agricultural produce trade	• It records the inflow and outflow of capital eg FDI & FPI.
ii) It include the :- • unilateral transfers as grants • Income receipt on investments made in foreign	ii) It also include the borrowing and lending such as external commercial borrowing (ECB)
iii) It is a flow concept because it is measured over time	iii) It is a stock concept because it is measured at a point of time

Candidates must not write on this margin

measures to balance BoP deficit in India :-

(i) Increase merchandise export by :-

(a) Diversify export market to Africa etc

b) Integrate Make in India with "Assemble in India for the world"

c) Promote agricultural export of organic & ethnic products.

ii) Increase service export by

a) Sign FTAs with service components. eg - CEPA with UAE.

b) Promote champion sectors as tourism, BPO etc.

iii) Promote FDI through → labor law reform

a) Ease of doing business → contract enforcement

iv) Incentivise MSME through credit guarantee scheme (Uday Kotak committee)

To become $5 trillion economic survey suggest to increase India's share in global trade at 8% from 1.8% now.

Candidates must write on this

2. लॉजिस्टिक्स (रसद) क्षेत्र, विनिर्माण उद्योग के विकास के महत्त्वपूर्ण 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

Logistic sector include the supply chain starting from aggregation, handling, storage, transport, whole sale, retail & to export.

Logistic sector's contribution to the manufacturing :-

(i) Increasing competitiveness of products
↳ Eg In India logistics is 14% of GDP while us it is 4%.

ii) Resilience of the supply chain
↳ Eg during COVID movement of essential products.

iii) Promoting export
↳ Eg turn around time at Indian port is 72 hours vs Singapore - 6 hours

iv) Securing supply of inputs in industry
↳ Eg supply of lithium for battery

v) Reduce post harvest losses (now 25%)
↳ boost agro based industry

vi) Reduce price spread
↳ greater demand of manufactured products.

NATIONAL LOGISTICS POLICY

(i) Unified logistics interface platform - 3 tier structure to bring all digital services related to transportation on one portal.

ii) Integration of digital system - 30 diff systems of 7 departments integrated related to → road
→ railway, custom

iii) Ease of logistics → grievance redressal of industries & interface service

iv) System improvement group
↳ monitor all logistics projects.

v) State engagement (vi) Human resource development.

Target of reducing logistics cost to 10% of GDP is possible through new logistics policy

3. डब्ल्यूटीओ के तहत मत्स्य पालन सब्सिडी पर नए समझौते पर भारत का क्या रुख है? भारत के लिए मत्स्यपालन क्षेत्र किस प्रकार महत्त्वपूर्ण 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

WTO has called to phase-out Unregulated, unsustainable and Illegal (IUU) fishing.

New Agreement on fisheries
- ban IUU fishing
- Two year transition time for developing country
- No fishing in unregulated high seas
- Fund to support developing countries

INDIA'S STAND :-

(i) Longer transition period
- 25 years needed

ii) Per capita subsidy is a fraction of as provided by developed nations.

iii) 4 million fishermen depend for their livelihood.

iv) India is already proactively taking steps.

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SIGNIFICANCE OF FISHERY SECTOR :

(i) Employment intensive - 4 million jobs directly

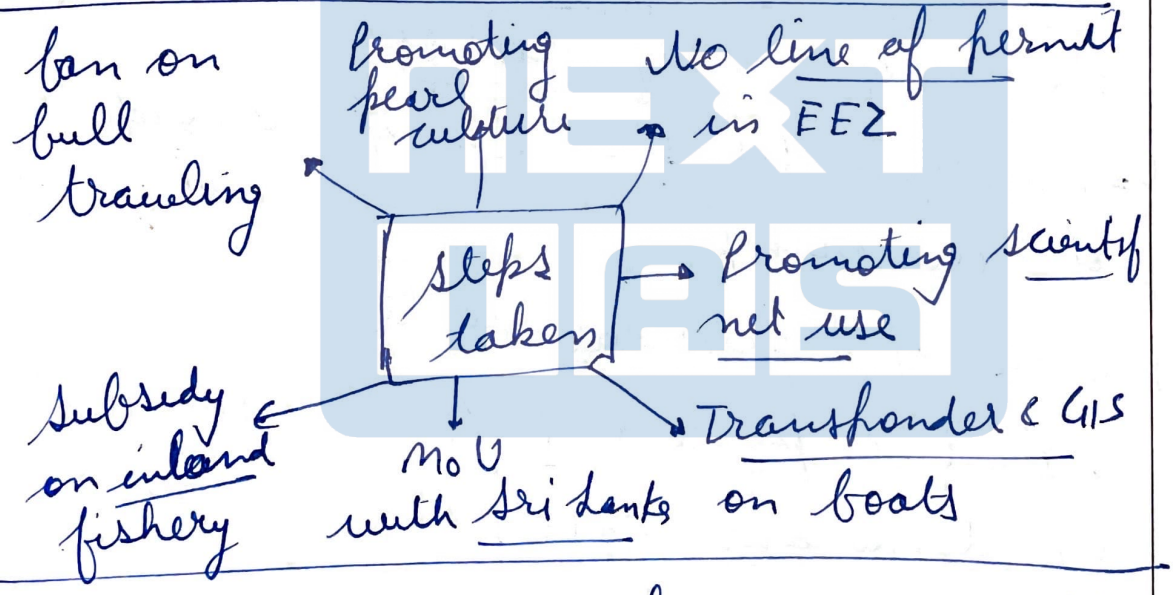
(ii) Huge potential - 7516 km long coast.

iii) Export potential - diverse species.

iv) Inclusive growth - mainly small farmers / fishermen

v) Rising demand - due to rising middle class.

v.) Food security - to remove the hidden hunger.



Meena kumari committee has suggested to provide insurance cover, conduct census and to provide short credit to farmers for blue economy.

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 reform was agenda during the national movement. It was based on socialistic philosophy of the redistribution of resources to minimise inequality (DPSP)

SYSTEMIC & INSTITUTIONAL FACTORS HINDERING LAND REFORMS

(i) Absence of land records
↳ multiple titles & lack of record of ownership

ii) Lack of political will
↳ govt is perceived to be hijacked by dominant castes.

iii) Small size of land
↳ already 0.8 ha is per capita size of ban farm.

iv) Failure of cooperatives
↳ due to political capture of cooperatives & rising NPAs.

Candidates must not write on this margin

v) Federal issues - Land is the state subject & require cooperative federalism.

PRAGMATIC SOLUTIONS -

(i) Digitalisation of land records
↳ (Eg) District land record modernisation program.

ii) Enact land leasing law (T Haque committe
↳ no adverse possession of land etc.

iii) Practice of land pooling
↳ (Eg) NAINA airport of Mumbai

iv) Consultation with — farmer group
— civil society
to bring land reform

v) Redistribute land under Forest Right Act.

Steps taken → SVAMITVA - land record construction
→ Land acquisition act has provision of rehab
→ Land banks. Eg Orissa

To ensure the effecent land use govt need to utilise Inter-State council to build federal trust.

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 supersonic cruise missile is developed by joint Indo-Russian venture. It comes is jointly produced in India.

Unique features and capabilities

(i) Supersonic → Speed is between 1 Mach to 5 mach.

ii) Cruise → the trajectory of the missile can be controlled after launch

iii) Inter-~~cont~~ Nuclear capable - part of nuclear triad

iv) Can be launched from the air, land and surface.

v) Long range - come under the Missile ~~to~~ Trade control Regime. as > 300 Km range.

Candidates must not write on this margin

Add to defense capabilities
- better stealth capability
- Nuclear deterrence
- Precision is high
- domestic production → self reliance in security
- Launch from mobile launches

CONTRIBUTE TO STRATEGIC POSITION :-

i) Create balance of power against China & Pakistan.

ii) Net security provider in the region

iii) Indo - Russian collaboration
- Technology transfer, 48% defense imports from Russia (SIPRI)

iv) Export of missile to Bangladesh etc
- generate forex, defense relation.

v) Domestic production → employment generation.

Naresh Chandra Shekhar comm- ittee has recommended to develop domestic - industrial complex.

Candidate write on th

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

~~Govt~~ UN Sea bed Authority has allocated India vast stretches of ocean in Indian ocean to exploit poly metallic nodules. Govt started Samudrayan mission in this pursuit

Samudrayaan mission
- carrying 2-3 people
- depth of 5-7 km
- carry research on the flora, fauna etc
- Promote scientific cooperation & diplomacy.

CONTRIBUTION TO OCEAN SCIENCE RESEARCH:-

i) Exploring biodiversity → Rare & endangered ocean flora and fauna.

ii) Capability development
↳ (Eg) on the undersea research

iii) Research on the biological impact on human body under such

Candidates must not write on this margin

heavy pressure

iv) Exploiting the rare metals and the poly metallic nodules → magnesium, Aluminium

v) Understanding geo-physical phenomena
↳ (Eg) earthquake - plate movements & Tsunami.

vi) Impact on defense research
↳ (Eg) Air Independent propulsion system of submarines.

vii) Scientific cooperation with — IORA, IONS

challenges
- Capital intensive
- Lack of human training
- Underdeveloped tech. for the Samudrayaan
- Limited earlier experience

Q. To emerge as the Ocean power, India need to invest more in maritime research.

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 launched in CoP26 of UNFCCC is US & EU led initiative to reduce carbon emission by 30% by 2030 over 2020 level.

GMP is a positive step as:-

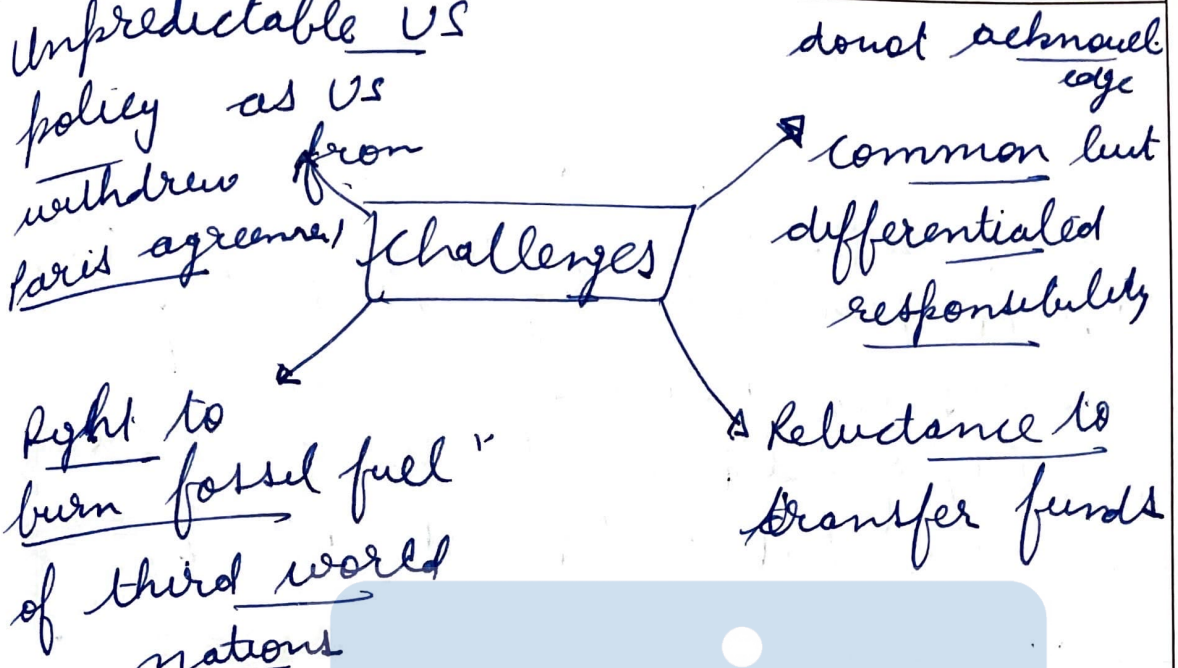
(i) Global cooperation
↳ through knowledge sharing & tech transfer

ii) Targeted approach
↳ also legally bound on the members.

iii) Wide membership
↳ 111 members contributing to 55% methane emission

iv)

Candidates must not write on this margin



INDIA'S STAND :-

(i) India didnot join Global methane pledge because :-

a) India has vast cattle & paddy fields → mostly small farmers will be impacted

b) No recognition of the "historic emission" by developed countries

ii) India has suggested
- → wider consultation
- → grace more time to developing nation for transition

India is 3rd largest
- Principle of "just"

Candidates m
write on this

8. कोविड–19 महामारी ने सार्वजनिक स्वास्थ्य में आपदा प्रबंधन के महत्त्व 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 highlighted the weakness in disaster management capability of India. Pandemic preparedness Index put India at [85] ranks.

Importance of disaster management in public health
- Reducing casualties & infections
- Proactive infection containment
- Vaccine development & delivery
- Containing mis-inform.

KEY STRATEGIES FOR PANDEMIC MANAGEMENT

(i) Enact suitable legislation
- Epidemic Act 1894 is now out-dated

ii) Proactive grassroot surveillance
- Ramping up Integrated disease surveillance program

iii) Human resource development
- ASHA training, protection to doctors

Candidates must not write on this margin

iv) Adequate drug delivery
↳ Eg. Vaccine Intelligence Network (drug logistics.

v) Federal cooperation - Eg maneuvering space to states under disaster management Act.

CHALLENGES IN PANDEMIC MANAGEMENT:-

(i) Legal confusion - Eg no definition of "outbreak", no clarity on citizen rights

(ii) Inadequate health infrastructure
↳ Eg Patient: bed is 1:4 bed for 1000 people
80% spending on curative care

iii) Inadequate research on vaccine development.

iv) Huge population (1.4 billion) with less awareness of WASH

v) Vaccine nationalism

vi) Defunct IDSP

Kartar Singh committee has suggested to put pandemic in seventh schedule and also increase investment to 8% of GDP.

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

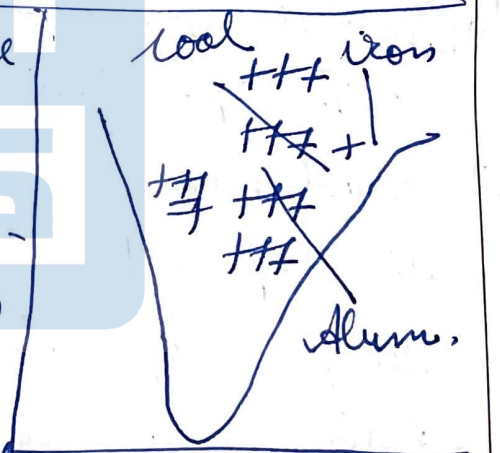
"The resource curse of Eastern and Central India has been a crucial driver of LWE". Elaborate and suggest measures for sustainable and inclusive development of the region.

(Answer in 150 words) 10 Marks

Problem of "resource curse" suggest that the resource rich regions across the world like East India, Ruhr Valley in Germany are most underdeveloped regions.

Resource curse drive LWE in following ways

(i) Displacement of the people → Eg 20 million tribes have been displaced (Bhuria committee)



Left wing corridor

ii) Absence of "downward filtration" of the growth → Eg 47% tribes are BPL.

iii) Snatch away local livelihood sources.

iv) Perceived "neo-colonialism" by the

Candidates must not write on this margin

left ideologues.

v) top down imposition of growth model as against Panchsheel model

vi) Fragmented & degraded land & local environment.

MEASURES FOR SUSTAINABLE AND INCLUSIVE DEVELOPMENT

(i) Adopt Panchsheel → involve tribe in administration
↓
development of human character

ii) local tribal cooperatives be formed to give mining licence (Bhuria committee)

iii) Replace word 'minor mineral' in PESA with minor & major mineral for consultation.

iv) Counter propaganda of crony capitalism using media & intellectuals

MHA report has suggested to make people as agent of transformation through "development of agency

Candidates write on th

10. उत्तर पूर्व और जम्मू–कश्मीर क्षेत्र में हिंसा की घटती प्रवृत्ति के आलोक में क्या आपको लगता है कि एएफएसपीए (अफ्स्पा) 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

Recent MHA report has shown that casualty in J&K has decreased by 42% & 36% less youth are joining terror group now. Similarly LWE effected districts have decreased by 36%.

ROLE OF AFSPA IN REDUCING VIOLENCE

(i) Boost morale of the security forces
↳ "asymmetrical warfare"

ii) Create deterrence among the insurgents

iii) Promote civilian - military coop.
↳ military catch criminal & hand over to local police.

iv) To carry terror operation effectively
↳ no permission needed & it facilitate faster operations

Candidates must not write on this margin

v) Within constitutional limits
↳ In Naga people res UoI, Supreme court declared AFSPA legal

HOWEVER IT HAS STARTED A VICIOUS CYCLE

(i) Hegde commission observed

AFSPA version → alienate people → more violence

ii) Impunity is against principle of natural justice (Verma committee)

iii) Indiscipline in forces
↳ Kunan-Poshpura massacre in Kashmir

iv) Failed to restored normalcy in decades (Reddy commission)

v) It has become symbol of the oppression → misused by insurgent to mobilise people.

AFSPA need to be narrowed suitably & accountability is need

Candidate write on th

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 or hard currency is the one which is major source of trade transactions & which is hold as forex reserve. Hard currency has high liquidity & high stability.

IMPORTANCE OF HARD CURRENCY IN INTERNATIONAL TRADE :-

(i) Source of transaction
- dollar used to purchase oil from West Asia

ii) It has the confidence of the investors / traders

iii) It is widely available and has many forex exchange facilites.

iv) WTO & IMF led system has made dollar as major hard currency

v)

Candidates must not write on this margin

POTENTIAL of RUPEE AS ALTERNATE TO DOLLAR :-

(i) Growing size of economy
↳ 4th largest economy (IMF)

(ii) Faster growth - at 4-5% annually

iii) Rising global power with good relation with Russia, US, West Asia
↳ (Eg) local currency trade with Russia

iv) Increasing depth of the rupee in debt market
↳ (Eg) Masala bonds, Green bonds

v) Currency swap agreements
↳ (Eg) with Sri Lanka to counter Renminbi chinese yuan.

vi) Rising resentment against US monetary policy which has undue influence on global economy.

HOWEVER INDIA WILL FACE CHALLENGES

(i) Dollar form 60% of global forex reserve

(ii) 70% global trade is in dollar.

(iii) Current economic world order is

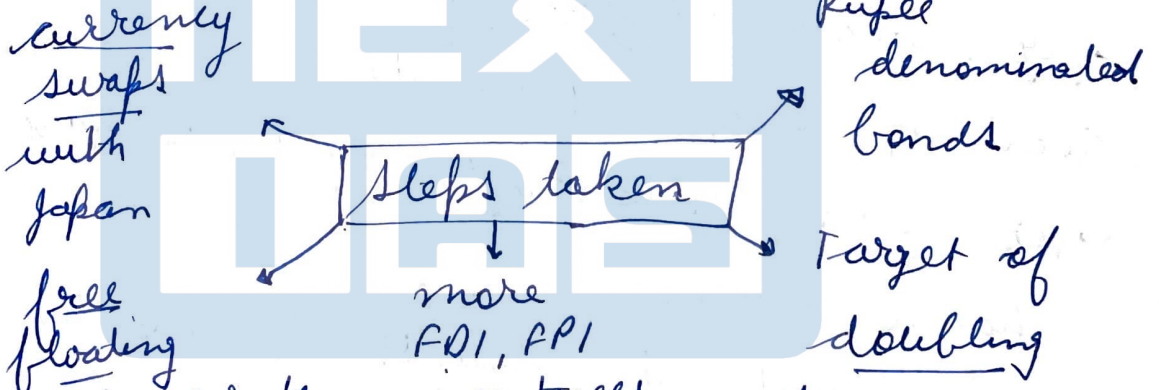
based on the IMF, WB & WTO - all three US led.

iv) Rupee is not stable - as seen in recent depreciation of rupee.

v) India's share in global trade is merely 1.7% vs US - 16%.

vi) Limited depth of Masala bond &

vii) India dont have full capital account convertability



Way forward
- Greater capital account convertability
- Integrate in supply chain to increase trade share
- Push for reform in IMF, WTO

Indian rupee's internationalisation will shield Indian investors from fluctuations in dollars

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

Candidates must not write on this margin

India's mean age is 29 years.
and dependency ratio is .
India's demographic dividend is to last until 2072. (UN).

Demographic dividend ensure potential
- → youth create demand & savings in economy
- → Fluid intelligence - start of cle
- → advantage of cheap & skilled labor.
- → favorable dependency ratio

To take advantage of demographic dividend steps taken are :-

---

i) Human resource building -
- ⇒ Education policy → vocational education
- → special education zones
- → integrate AI
- → allure specific educat
- ⇒ Healthy population → insurance cover under PM Ayushman Bharat

→ Affordable health
↳ preventive, curative, rehabilat universal health care through Health & Wellness centres.

⇒ Skill imparting - 400 million under PM Kaushal Vikas Yojana

ii) Employment generation :-
- Turning SEZ into Economic & employment Enclave (Bibek Kalyani committee
- Incentivising MSME through public procurement, technological upgradation (Uday Kotak committee

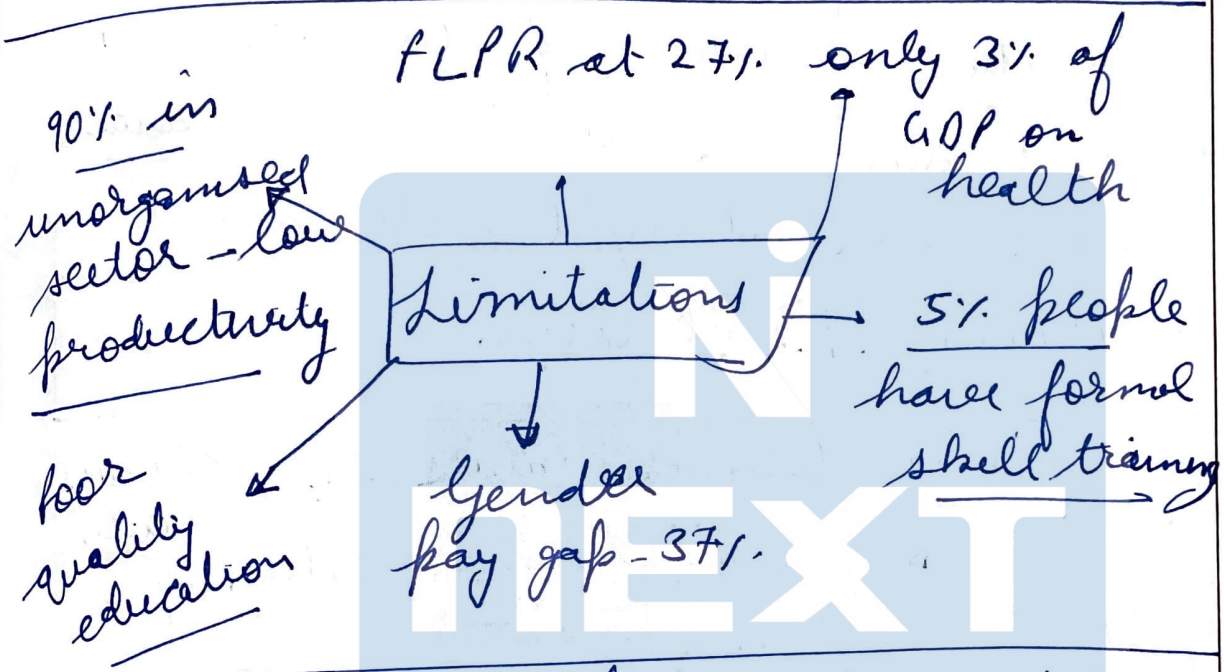
iii) Social empowerment
↳ removing gender gap through 33% jobs in MGNREGA
↳ compulsory 4% jobs to PWDs

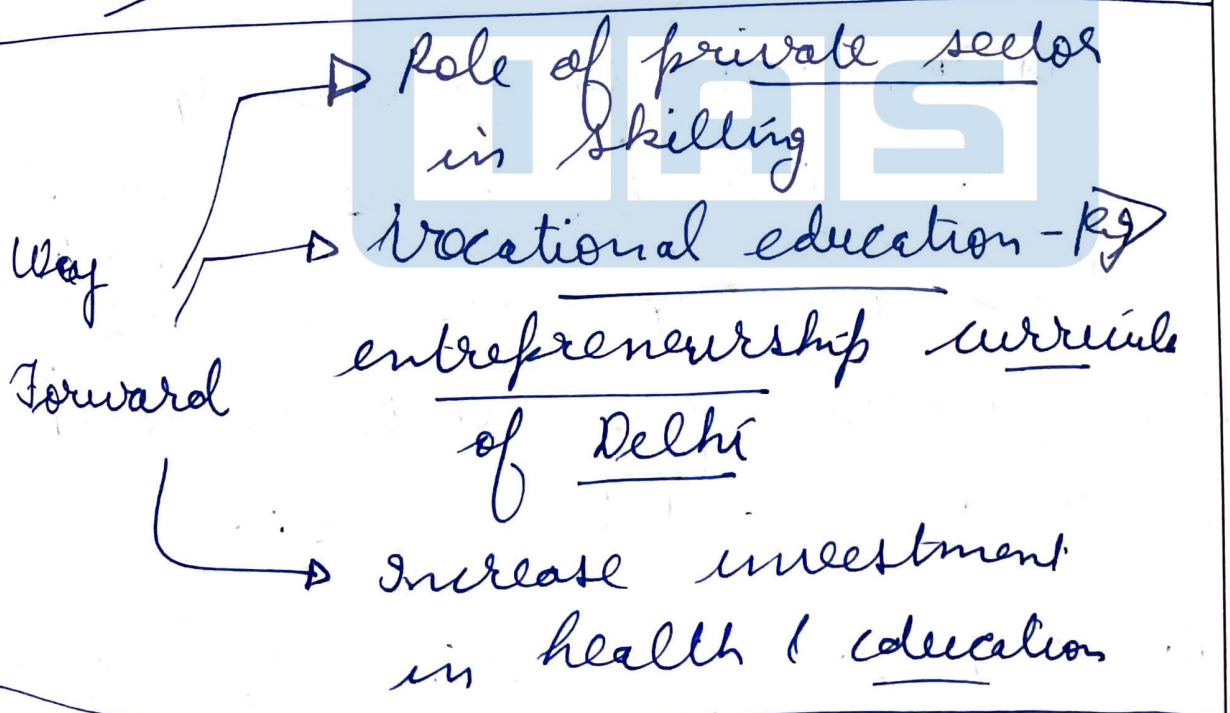
iv) Political empowerment
↳ 33% seats to women in PRI

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v) Technological investment

↳ KIRAN to increase women in STEM courses.





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 involve the modification of genetic structure of the organism to introduce the desirable characteristics like drought & disease resistance : Eg Bt cotton

Ethical & safety concerns →
- designer babies Eg china's case
- Genetic stigmatisation of blacks etc
- Threat to biodiversity
- unintended effects on human health
- Regulatory issues in trials

New guidelines for safety assessment of genome edited plants :-

(i) Exemption from GEAC approval
↳ researchers donot need GEAC prior approval for the research on transgenic crops.

Candidates must not write on this margin

ii) Researchers will include → public institutio
↓
private research companies
individual scientists

iii) Power of GEAC & MoEFCC
↳ to approve cultivation of crops is intact

iv) Applicability exemption to
↳ limited to certain researches inco-
lving ~~SDN~~ SDN - site directed nuclease 1 & 2 genome from EPA

POSITIVE EFFECT ON SAFETY OF GM CROPS

(i) Regulatory ease - to carry out the research → greater innovation on safety assessment of GM crops.

ii) Wide defention of "researchers" in the guidelines.

iii) Power of GEAC & MoEFCC to approve, monitor trials and final approvals for crop cultivation in farms.

HOWEVER IT IS CRITICISED BECAUSE

(i) Diluted power of the govt to regulate researches.

ii) GEAC approval has conflict of interests because private companies fund the trials of crops.

iii) Lack of transparency & in data disclosure of researches on name of information privacy

iv) Inadequate discussion with the farmer groups & state govts & environmentalists.

Way forward → Greater discussion with stakeholders
→ Regular revision of guidelines in light of supreme court guidelines
→ Independent funding of GEAC

To ensure global bourgeoning population of 7 billion, is food security, GM crop are future but double edged sword too

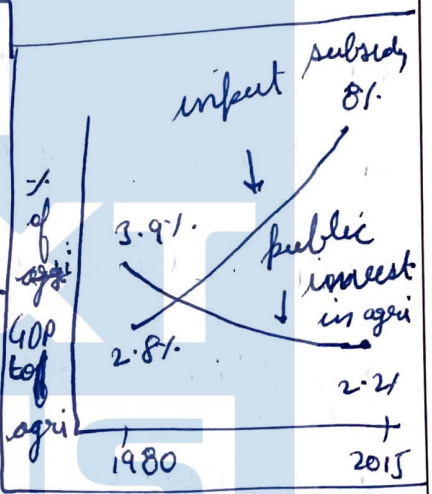
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14. भारत में कृषि क्षेत्र पर प्रत्यक्ष और अप्रत्यक्ष कृषि सब्सिडी के प्रभाव की चर्चा कीजिए। न्यूनतम समर्थन मूल्य (एमएसपी) ने कृषि अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (250 शब्दों में उत्तर दीजिए) 15 अंक

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

In 2023-24 budget, govt has allocated 1,97,350 crore for food subsidy and 1.08 lakh crore for fertiliser subsidy. This has witnessed a rising trend over the years.

IMPACT OF DIRECT AND INDIRECT SUBSIDY ON AGRICULTURE



(i) Incentivising farmers to grow crops

↳ (Eg) MSP for foodgrains → 315 mt of foodgrains in 2023.

ii) Inclusive growth through wealth redistribution

↳ (Eg) power subsidy to small farmers (86% farmers).

iii) Incentivise farmers for capital investment in irrigation etc.

iv) Raising productivity of agriculture
↳ Eg Urea subsidy (70000 cr) → nutrient supply

v) Subsidy can be used to nudge the farmers for crop diversification
↳ Eg higher MSP for millets.

HOWEVER IT HAS NEGATIVE IMPACTS TOO -

(i) Dominance of rice-wheat system
↳ Eg 70% cropped area has cereals.

ii) Unsustainability
↳ Eg NPK ratio is 9:4:1 vs 3:2:1.

iii) Diversion of resources
↳ only 20% of agri budget is on capital investment

iv) Credit subsidy don't benefit the tenants.

v) Not in WTO compliance

vi) Foodgrain procurement is limited to North India

Candidates must not write on this margin

POSITIVE EFFECT OF MSP SUBSIDY -

(i) Increase in foodgrain production

(ii) safety net for farmers through assured prices.

(iii) Food security
↳ now per capita food grain availability is 500 gram.

(iv) Rise of powerful farmer pressure groups → associational policy making in agriculture

→ Low MSP for pulses, millets etc.

→ Fiscal constraints ~~+ 1.98~~ lakh crore subsidy

However issues remains → 70% procurement by the govt (Shanta Kumar committee

Ashok Dalwai committee has suggested to shift to DBT over indirect subsidies. Also comprehensive security package as KALIA are needed

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

Anti microbial resistance is the emergence of "superbugs" i.e the bacterias / microbes which are resistant to the medicines. WHO has put AMR as the biggest security risk.

AMR pose threat because
- threat to lives. Eg ~~to~~ due to AMR TB.
- Continous research in new drugs needed.
- Affordable drugs will become ineffective

CONTRIBUTING FACTORS FOR AMR :-

(i) Use of "over the counter" drugs without prescription.

(ii) Overdose or unscientific regimes of medicines.

(iii) Rising use of ~~&~~ anti

Candidates must not write on this margin

drugs in poultry, livestocks etc.

iv) Rising Zoonotics

↳ Eg) Nipah, Zika etc.

v) Contamination of water due to effluents of pharma industries.

vi) Continous evolution of the microbes - natural process.

↳ Eg) HIV virus is evolving

vii) WAY FORWARD

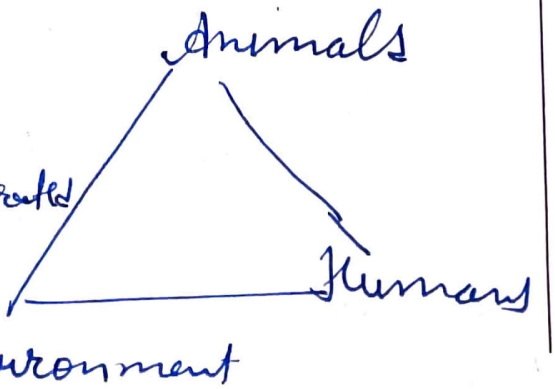
(i) Enforce MIB clause of the Drugs and cosmetics Act.

↳ surveillance, online monitoring

ii) Public awareness

↳ more campaign like "red line campaign"

iii) One health concept - integrated approach - env conservation



iv) Availability of the pure water & food. (BIS standards)

v) International cooperation for the continuous research on new drugs

vi) Enforce WHO guidelines → counter over the sale drug sale

- WASH promotion
- monitor cross border flow of processed food.

vii)

- → drugs/medicines have become cheap
- challenges in countering AMR
  - → capacity/resources of third world are insufficient
  - → Pharma nexus with the doctors
  - → People are unaware

. To counter AMR has to be top priority and Integrated disease surveillance program has to be fine-tuned to take proactive role

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6. 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 are those innovations which bring the new (non-existing) technology with the capacity to effect the all spheres like social, economic, political eg Artificial intelligence.

Also disruptive innovation include newer applications of already existing technologies

EXAMPLES OF DISRUPTIVE INNOVATION

(i) Computer technology → Artificial intelligence to perform cognitive task
→ Quantum computing over analog computing
Block-chain → Edge computing

ii) Nanotechnology → nanotube to store hydrogen
→ nano carbon sheets - Strong than steel

iii) Biotechnology → [Crisp] tech for precise editing
↓
Human genome mapping

iv) Robotics → humanoid robots as Sophia.

v) Space → powerful missiles to send man on Mars.
↓ → innovative satellites as James Webb.
Sun observance through Aditya mission

POSITIVE IMPACT ON INDUSTRIES

i) Industrial revolution 4.0 → automation → Smart manufact.
↓ ↓
Zero effect, Zero defect — continuous upgradation

ii) Innovative marketing
↳ (Eg) use of 'big data' to understand market trends

iii) Innovative payment methods
↳ (Eg) bitcoin payment

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iv) Easy global reach of industries
↳ Eg) supply chain integration & diversification, e-education.

v) Precise intervention
↳ Eg) proton therapy of cancer.

vi) New vistas of industries
↳ Eg) Continously rising demand of semiconductor manufacturing

vii) Blockchain → remove middlemen & reduce price spread.

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challenges due to disruptive innovations → rising inequality & job losses due to automation
→ Ethical concerns such as designer babies.
→ Fear of super intelligence
→ Nano-fog can contaminate environment

To ensure equitable benefit of disruptive innovation WEF principles of access, accountability, sustainability & ethicality be followed

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 and damage refers to the damage of the biodiversity, infrastructure, cultural loss etc due to failure of mitigation and adaptation against the climate change.

EVOLUTION OF LOSS AND DAMAGE FUND

(i) Warsaw Summit → It had the conception of "Warsaw International mechanism"
↳ developed countries agreed to contribute for developing countries

ii) Lima Summit → consultation on the fund constituting

iii) CoP 26 - Developed countries made varying commitments for L&D.

iv) Different sources → insurance
grant, loans, → private fund
were deliberated.

Candidates must write on this

COMMITMENTS MADE BY INDIA IN COP 27

(i) "LiFEstyle campaign" - to motivate 18-23 year old for sustainable lifestyle.

ii) "Leadership for Industry Initiative"
↳ for low carbon transition of hard to decarbonise industries

(iii) "Mangrove Alliance" - in partnership with UAE etc
↳ increase mangrove cover & knowledge sharing.

iv) Reiterated panchamrit - to reduce carbon emission intensity by 45%

v) Emphasised on "common but differentiated responsibility" and "just transition".

India's rank in Climate change performance index is 8th. India is a guiding light for global cooperation to protect "global

Candidates must not write on this margin

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

Sendai framework has argued to share the disaster management responsibility with the private sector and community.

Features of resilient community
- Community understand risk
- Confidence in administration
- Cooperation in disaster response
- proactive capacity building among locals.

KEY STRATETY TO BUILD COMMUNITY RESILIENCE & REDUCE DISASTER IMPACT

(i) Awareness in the community :- using mass media, school curriculum etc.

ii) Capacity building
↳ through mock drills and the 'over the table' exercises.

iii) Leveraging traditional knowledge
↳ Eg the [mud] houses of the Kutch.

iv) Sharing responsibility of disaster management
↳ Eg role of locals in tackling Kerala flood.

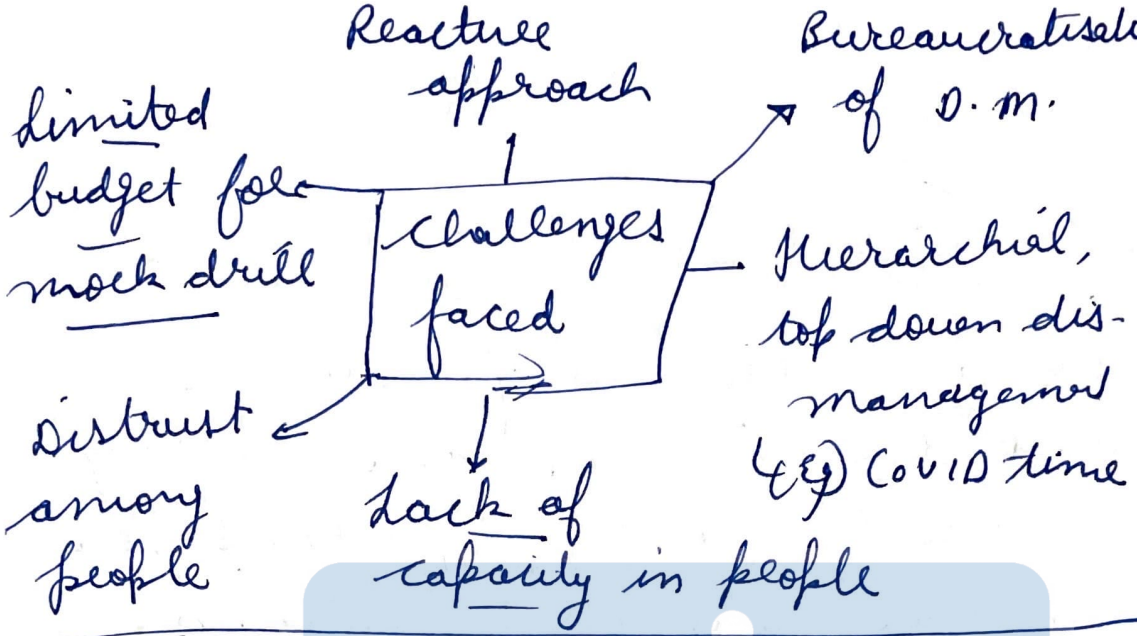
v) Resilient reconstruction
↳ Eg Rebuilding the infrastructure in [Joshimath].

vi) Countering the fake information
↳ through local community radio

vii) Environmental conservation
↳ Eg joint forest management in hilly areas

viii) Building confidence in the administration
↳ Eg through public outreach after disasters

Candidates must not write on this margin



Steps taken
- DM Act, 2005 → role of local panchayati Raj.
- Media guidelines to make people aware
- DM plan - capacity building of locals
- NDMA - in forest fire, involve locals

Way forward
- Mainstream community participation in policy making
- recognise role & challenges with vulnerable sections as women, PWD.

2nd ARC has suggested to put community at centre because they are first responder.

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 is the use of violence against the civilians and military to secure the political purposes. Terrorism has many types - religious, ethno, ideological, state sponsored etc.

use of emerging tech by terrorists
- to recruit people. eg # shami witness written hands
- for propaganda - eg on the deep web.
- for payment using the crypto currency
- carrying out cyber attacks

WAYS TO COUNTER USE OF TECHNOLOGY BY TERRORIST GROUPS :-

(i) Build cyber deterrence through cyber hygiene, + inter-agency coordination & cyber monitoring

ii) Awareness among people to report

Candidates must not write on this margin

incidents.

iii) Constitute cyber dome - having professionals from AI, financial crimes etc. (Eg) Kerala

iv) Fact checking sites like Boom TV.
↳ to counter fake news and the propaganda.

v) Empowering authorities like FIU to monitor crypto-currency transactio

vi) Role of the social media companies
↳ active monitoring of the traffic on network using AI.

vii) Sign budapest convention & integrate cyber aspect in UN CCIT for global cooperation

viii) Social harmony & mainstreaming through de-radicalisation to stop recruitment by terrorists.

ix) (Eg) Monitor & channelise of UK.

IMPORTANCE of DELHI DECLARATION

Delhi declaration:- When India was non-permanent member of UNSC, India proposed delhi declaration:-

i) Call for greater global technological cooperation against terrorists

ii) Strengthening UN global compact on terrorism by including new tech. in it.

iii) Counter financing of terrorism which can be used for development & deployment of such tech.

iv) No distinguishing between good & bad terrorism - comprehensive action

Challenges
- Anonymity on internet
- Increasing access to dark web
- Difficult to counter - poor inter agency coordination

As suggested by the Christ-church call for action, terrorist should be denied of access to dual use technology

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

Candidates must not write on this margin

Agnipath scheme was introduced to make our security forces agile and to ensure domain competence in security forces after recruitment.

AGNIPATH WILL ENSURE RESILIENCE AND EFFICACY AS :-

(i) Recruitment of young - 17 to 21 years

ii) After 4 years 25% of recruits will be appointed for permanent service

↓↓

youth will have experience and energy both

iii) Permanent service will be based on objective assessment & domain competence

iv) Reduced expenditure on personnel

↓

capital investment to improve teeth to tail ratio (Naresh Chandra committee)

Candidates must not write on this margin

v) Diversity in service - recruitment from all regions.

vi) Paramilitary forces like CAPF will give priority to agniveer - better recruits.

vii) Easier 6 months training

HOWEVER IT IS A BITTER PILL AS -

(i) Training is inadequate

↳ (Ex) Russian war experience shows that short training period is inadequate.

ii) Integration of youths in military in four years is very difficult

iii) Short service of 4 years

↳ will not attract the best talent

iv) No regional quotas

↳ north India heavy forces.

v) It can militarise society

↳ youth in 20s without skill

Candidates must not write on this margin

sets but military ethos → crime syndicates will be formed.

Class 12 equivalent certificate

Other advantages of Agnipath

- Discipline among youths
- Loan amount after 4 years → entrepreneurship
- Job creation

WAY FORWARD :-

(i) Innovative training method to train youth fast.

ii) Develop spirit of comprador

iii) Upskilling at regular interval in AI, drones etc.

iv) Maintain regimental ethos & regional balance.

To tackle 21st century threat and emerge as net security provider, Chandrasekhran committee recommend integration among forces