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MTS IGP Batch 2023

GENERAL INSTRUCTIONS

This Question-cum Answer (QCA) Booklet contains 56 pages. Immediately on receipt of the booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.

Candidates must read the instructions on this page and the following pages carefully before attempting the paper.

Candidates should attempt the questions strictly in accordance with the instructions specified in the question paper and in the space prescribed under each question in the booklet. Any answer written outside the space allotted may not be given credit.

Question paper will be provided separately and can be taken by the candidates after conclusion of the exam.

SUBJECT/PAPER
GENERAL STUDIES

Invigilator's Sign. :

(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.

Ans. Balance of payment defines the sum total of international transactions conducted in a fiscal year.

Capital Account	Current Account
→ Includes <u>foreign investment</u> in form of <u>FDI</u>, <u>FPP</u> → ~~Leads to creation of tangible asset~~ → It affects <u>current or financial account</u> → It reflects net change in ownership of <u>national assets</u>	→ Includes trade in <u>goods and services</u>, <u>transfer payments</u> → It affects net income of the country → It shows <u>disbursement of receipts</u> of cash & non capital items

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Measure to balance BOP deficit of India

I. Promoting Exports by:

- ① Improving infrastructure to reduce logistics cost
- ② Developing manufacturing sector
- ③ Reducing governance uncertainty for ease of doing business
- ④ Incentivise investment.

II. Reducing ~~cost of~~ imports by:

- ① Schemes like PLI
- ② Rupee internationalisation
- ③ Diversify imports to reduce cost.
- ④ Domestic exploration of resources, sea bed mining for minerals.

Further RoDTEP

single window clearance are good steps to incentivise exports & reduce BOP ~~cost~~ deficit.

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2.

Ans. India's logistic cost is around 14% as compared to US's 10%, China's 8%. Logistics include packaging, storing and transport, distribution of goods.

Logistics Sector importance for Manufacturing

- ① Bridge the ~~on~~ upward backward and forward linkage cost efficiency
- ② Helps in promoting exports by reducing product cost
- ③ Development of logistics in backward regions allow diversification of manufacturing sector
- ④ Leads to ease of doing business

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if in good shape → promotes investments

Components of Logistic Policy 2022

- ① Promoting investment of private sector in logistics
- ② Integrating digital systems in logistic
- ③ Unified logistics ^{interface} platform
- ④ skilling of workforce involved

Thus to ensure India's Manufacturing sector achieves 25% of GDP and India's share in global export increase to \$2Tr by 2030, NLP 2022 should be followed.

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3.

Ans. WTO on 9th ~~12th~~ 2022 summit agreed on New Agreement on Fisheries Subsidies to manage state's expenditure on FF.

India's stand on fisheries WTO agreement

↳ Found it discriminatory against developing countries as they lack in technology and subsidies important to help fishermen; thus we negotiated it to give exemption till next meet for developing countries

Fisheries sector significance for India

- ① 7500 km long coastline
- ② 25% contribution to agri GDP
- ③ India 2nd largest producer

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- ④ Means of livelihood for millions
- ⑤ Important for food security

Steps by government to develop fisheries

- ① Subsidies in form of power, cheap trawler availability
- ② PM Matsya Sampada Yojna to develop infrastructure for storage, processing of fish products
(increased funds in Budget 23)
- ③ Promotion of Aquaculture
- ④ Further the vision of 'Blue Economy' of government has fisheries as core component to help India achieve \$10 Trillion by 2032.

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4.

Ans. As per Agriculture Census 2015-16,
85% of farmers are small &
marginal highlighting failure of
land reforms in India.

Constraints on land reforms success

I. Systemic

- dominance of big landlords
- Caste based dominance making
it difficult to distribute land
- Patriarchal structure of society
- ⇒ (Women 14% land owners)

II. Institutional

- Lack of land records management
- 'Vote bank politics'
- Aparting of bureaucracy & lack
of political will

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→ High number of pending land disputes.

Pragmatic solutions for equitable distribution

- ① Proper land records management
→ SVAMITVA Scheme
- ② Redistribution of surplus land
- ③ Plugging loopholes in laws.
- ④ Benami's properties to be confiscated
- ⑤ Good & Bad Alternate dispute resolution mechanism for land disputes
- ⑥ Reducing corruption in land records & departments.

Thus to make farming profitable, land consolidation, promoting cooperative is required to achieve just & equitable society.

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6.

Ans. Samudrayaan Missions aims to ~~observe~~ ^{explore} the ocean floor basin and gives us knowledge of resources found in Indian Ocean region by sending 1 member team.

[Samudrayaan contributing to:

I. Ocean Science

→ Develop knowledge of sea animals, plants present in the deep ocean

→ explore the deep unexplored regions

→ Will understand the pressure variations, water density, etc. at deep sea levels.

→ Mineral resources will be explored

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II. Technology

→ Test the capacity of our submarine vehicle

→ India may emerge as new leader in deep sea mission

→ will help in developing mineral extraction technologies by studying funding of Samudrayan.

Thus to fulfill the vision of 'Blue economy', Samudrayan remains a core mission & will lay base for future missions.

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7.
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Ans. Global Methane pledge is to ensure reduction in methane emission by 30% by 2030. by countries most responsible for methane emission.

Analysis of Global Methane pledge

- ① Good step as will help in reducing methane (16 times more global warming potential than CO_2)
- ② Will raise awareness & focus on methane emission
- ③ Countries will have moral responsibility to initiate steps to prevent emissions
- ④ voluntary pledge & shows a

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positive outlook for future

- * India's stance has been ~~to~~ not become party of it as India not a global leader in emission in per capital terms.

India still needs to grow & can't be bound by it. However this ~~pledge~~ has been appreciated.

Further India's NDC targets, Panchamrit goal, at 'Life' campaign will help in reducing methane emission of nation.

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8.

Ans. The COVID-19 pandemic showed how epidemics or infectious outbreak forms ~~are~~ major aspect of disaster management

Challenges for managing pandemics

- ① Low public awareness of precautions
- ② Managing the spread of disease
- ③ The rate of infection of new virus remains unknown.
- ④ ~~The doctor~~ Protecting the frontline worker from themselves getting impacted
- ⑤ Ensuring availability of essential items
- ⑥ Implementing lockdown to prevent spread of disease

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- ⑦ Lack of knowledge among disaster management team of new disease

Measures / strategies for managing pandemic

- ① Proper information dissemination system to be established govt portal
- ② Training of workforce
- ③ Awareness generation among masses and regular mock drills
- ④ Governance structure has to be streamlined for proper implementation of plan.
- ⑤ Imposing gradual lockdowns to prevent spread of disease

Thus in today's globalised world with increasing viral outbreaks greater focus is needed on pandemic management.

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119.

Ans. 'Left Wing Extremism' refers to ideology of Marxism inspired by Marxist methods and aim at overthrow of government, hamper governance by violent methods.

~~Cause of LWE in India.~~

[Resource curse as cause of LWE]

① Eastern India + Central India:

- ↳ Spread through poor areas of 24 paraganas, West Bengal.
- ↳ Areas like Jharkhand, Chhattisgarh rich in natural resources
- ↳ Overexploitation by state, contractors to earn huge profit
- ↳ Minor benefits not passed to tribals, local community

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↳ This led to huge poverty, backwardness in region → led to recruitment by LWE as low awareness, anger against state.

Measures for sustainable development of region

- ① Implementing PESA, FRA in letter and spirit
- ② Using DMF fund to develop region
- ③ Strengthening local self government
- ④ Implementation of welfare schemes in timely manner.
- ⑤ Basic education, health infrastructure to be upgraded.
- ⑥ Surveillance & vigil of RRGs, Urban Naxals
- ⑦ Creating counter narrative

Thus schemes like 'Aspirational Block programmes' is need of the hour along with 'SAMADHAN' approach.

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10.

Am. AFSPA, Armed forces special provision Act was enacted to empower army to take actions without warrant, seize property, shoot potential terrorist without any fear of backlash.

With Ministry of Home Affairs highlighting the reduction in extremism in J&K; less clashes in North East, the demand for AFSPA removal has gained prominence.

AFSPA eroding its utility because

- ① Declining trends of violence
- ② Supreme Court, Law Commission in earlier reports advocated its repeal.

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- ③ Human Rights violation in name of AFSPA (eg) Mizoram rape of women allegedly
- ④ Already alternate provisions to take actions exist
- ⑤ Need to create trust among public for intelligence gathering & thus remove AFSPA
- ⑥ Remained a core agenda of mobilisation by extremist groups

However, the recent Manipur crisis highlights the need of AFSPA in some areas.

Accordingly government has aimed at gradual removal of AFSPA and recent removal from some areas of Mizoram, Arunachal was a good step.

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11.

Ans. In the post II World War era,
international trade has been dominated
 by Dollar as most globally accepted
currency. It remains a hard currency
 and mostly preferred.

Importance of hard currency in interna-
 -tional trade

- ① Ensures financial stability as low
 level of fluctuations
- ② Allows nations to settle bilateral
ties in ~~the~~ mutually accepted
currency
- ③ easy to trade via ^{major} financial
markets of world

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- ④ Dollar dominate as hard currency because
- 4.1 Strong financial market
 - 4.2 Allowed full capital account convertibility
 - 4.3 Major part of IMF's SDR quota
 - 4.4 Most countries forex reserve are filled with dollars.

In recent time India's has attempted to internationalise Rupees as seen in recent UAE-India pact to use Rupees to settle trade

Acceptance of India as alternative to Dollar imperialism

2. Potential

- ① Strong macroeconomic indicators
(IMF: 'Bright spot')
- ② 3rd largest economy by 2030.

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③ India among top 10 trading partners of major countries.

④ Emerging financial market with 5th largest FDI in 2022.

II. Constraints

① India doesn't allow full capital account convertibility

② Share in exports globally only 2%

③ Challenge by countries like China
(Yuan as alternate to dollar)

④ No long term policy focusing on this aspect

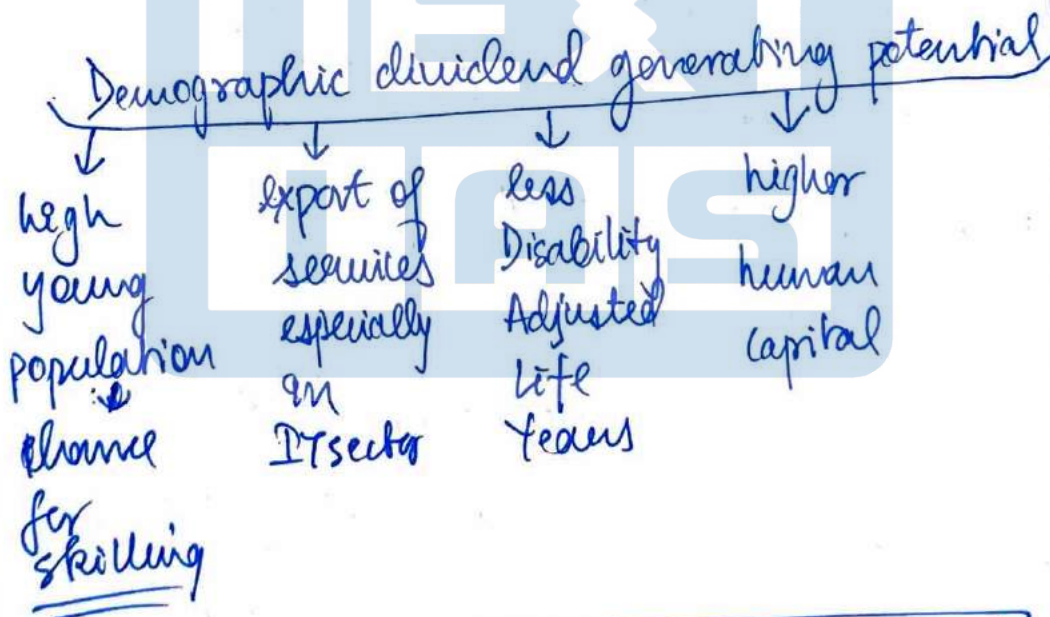
However if India has to become major power, rupee internationalisation by promoting bilateral settlement like with Russia, VAE is the need of the hour.

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12.

Ans. Demographic Dividend is defined as the working age population being the majority of a nation's population (15-65yr)

India's
demographic
dividend



thus government has taken several steps like

① skilling the youth

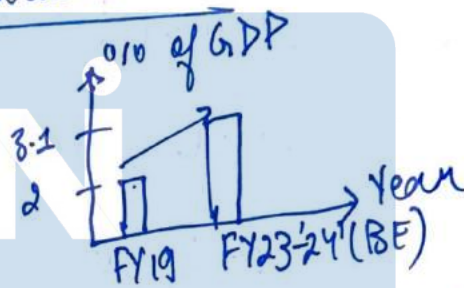
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1.1. PM Kaushal Vikas Yojna for skilling young generation

1.2 In Budget '23' focus on PMKVY 4.0 for new age technologies like AI, Robotics

② Education Improvement

2.1 Increase in expenditure on Education



2.2 Creating Institute of excellence, national higher education authority, New Education policy 2020

③ Health Improvement

↳ To ensure maximum productivity via Ayushman Bharat, etc.

④ Developing Manufacturing Sector

4.1 Schemes like Make In India, PLI to focus on sectors like Apparel, Leather which have high labor demand

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⑤ Developing Entrepreneurship

- ↳ Promoting incubation centres, ~~tax~~ exemption for startups to promote new unicorns

⑥ International Diplomacy

- ↳ To provide greater opportunities

eg) USA → Indians most dominated in IT sector

- ↳ Agreement with nations to ~~increase~~ ease access to visas

eg) Mobility agreement with USA

→ low skilled workforce

Challenges

→ 'brain drain'

↳ lagging manufacturing sector

Thus with one of Sapthishi Target being 'Unleashing Youth potential', we need to fully utilise demographic dividend to achieve \$5 Tr by 2025.

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12.

Ans. Genome editing is one of most dominant biotechnology used to modify genes in organisms. eg CRISPR-Cas9

Genome editing potential for Crop Improvement

↓
making them
drought
resistant

↓
increasing
nutritional
value

↓
herbicide or
pesticide
protection

eg Golden
Rice

eg BT-Cotton

Ethical & safety concern of Genome editing

→ Extinction of plant species

→ Lack of cross pollination

→ Becoming immune to certain
pesticide in long run which
was not intended

→ May harm human health

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New guidelines for safety assessment of genome-edited plants in India

- It allows exemption to researchers for genome editing practice prior approval from GEAC or MoAgriculture.
- It provides guidelines for sustainable practice of genome editing.
- Allows foreign collaboration & using alien genes for bringing new changes.

Guidelines impact on safety of crops

- ① Greater freedom for researchers to delve into modern problems requiring more experiments.
- ② Greater collaboration will allow

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flow of best practices to be used

③ Final approval is by GEAC and thus safety will be ensured as GEAC will look into impacts of the GM Crops

* Issues:

→ Ethical issue as no check on researchers on experiments

→ The final findings are not mandatory to be disclosed after GEAC approval to public, thus less scrutiny.

However considering

challenges of climate change, epidemics, pest attacks; GM Crops are the future and approval of crops like MDN-11 is required to double farmers income.

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14.

Ans. Agriculture sector gives employment to 45% population & provide 16-18% to GDP (Economic Survey), highlighting its importance.

Impact of Direct & Indirect subsidies on Agriculture:

1. Positive impact

① price assurance in form of MSP, PM Aasha

② easy access to inputs

2.1 seeds through seed banks

2.2 Fertilizer subsidies

eg) Nearm coating of urea, DRT

2.3 Machine required at

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concessional rates.

- ③ Preventing vicious low income trap by giving cash transfer

eg PM Kisan

- ④ Dominant indirect subsidies
4.1 Irrigation in form of PMKSY helped in precision farming
4.2 Power subsidy in form of PMKUSUM, GO BARDHAN, etc. helped in low electricity cost

* MSP is the most dominant indirect subsidy promoting agriculture sector

Impact of MSP

1. Positive

- ① helped farmers in making choices for production

- ② Increase bargaining power of farmers

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- ③ Prevented distress sale of farmers
- ④ Made India major producer of rice and wheat
- ⑤ Double agriculture income of Punjab, Haryana farmers (50% MSP spent here)

II. Negative Impact

- ① Concentrated on North India
- ② Lead to dominance of rice-wheat economy → virtual water export
- ③ Food diversity and nutrition value reduced
- ④ Became Maximum selling price as politics - action made government keep MSP high

Thus reforms in MSP

as per Suaminathan committee report, increasing MSP for millets should be way forward for doubling farmers income by 2024.

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Ans. Antimicrobial Resistance refers to body's immune system becoming non responsive to external drugs for ~~attenuating~~ ^{eliminating} any microbial disease.

As per WHO, it will lead to 1% GDP loss every year, 20% population at risk by 2050.

Major contributing factor for AMR

- ① Overusage of drugs prescribed by doctors.
- ② Buying of medicines on our own by a person without doctor's prescription
- ③ Increase in non communicable and communicable disease due to worsening pollution, poor water

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1. Good quality
↳ leading to frequently falling ill
↓
overuse of drugs → AMR
- ④ Pharmaceutical companies making poor quality medicines → forced to take again
- ⑤ Low immunity post COVID-19 impact
- ⑥ Lack of focus on alternative medicines with low side effects
- ~~⑦~~ Patanjali products.
- ⑦ Low awareness among people of threat of AMR

Steps that can be taken to tackle AMR

- ① No sale of medicine by pharmacy with prescription
↳ strict actions against violators

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- ② Greater research ~~are~~ on emerging AMR disease to reduce impact in future
- ⑤ Focus on alternative medicine, boosting immunity.
- ④ Control over online apps like 1mg which sell medicines without prior or verification of prescription
- ⑥ Awareness campaign among citizens to raise awareness on it
(WHO: 10Mn may die by 2050 due to AMR)

Thus government steps like Red line campaign, national policy on AMR are good ways & should be used along with WHO's AWARE Tool to take over this issue and achieve SDG#2

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Ans. Disruptive innovations are revolutionary new technologies which changed the way markets, industries operate foreg. innovation of Computer changed the method of conducting work totally.

They are disruptive because

↓
Complete change
in way earlier
process work

↓
They became
impossible to
be discarded

Disruptive technologies in recent times

① Artificial Intelligence

1.1. Generative AI used to create and run simulation models

Ex BMW checked various designs via it for recent model

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1.2. User interface are run totally via AI through Chatbot

~~Q.12~~ 1.3. Machine Learning has helped industries create machineris as per specific needs

② Blockchain Technology

2.1 Usage in storing data by industries and creating contract as it is secure, encrypted

Ex Mahindra using it to rent products

2.2 Crypto currency; NFT brought revolution in financial markets

③ 3D Printing

↳ It allowed companies to create virtual model

↳ Helped industries to innovate

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④ Edge Computing, Quantum Computing
↳ Increasing efficiency of work,
reducing time gap

⑤ Gene Editing

↳ Whole biotechnology industry has
been revolutionised with focus
on developing cure as earlier
considered untreatable disease
↳ production of GM seeds

↳ Thus 21st century is
age of innovation & government
should focus on new age innovation
by setting centre of excellence,
technology parks, etc. to grow
economy.

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17.
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Ans. The COP-27 Summit held in Egypt was known for establishing 'Loss and Damage Fund'. It was the priority of Summit.

(Evolution of Loss and Damage Fund)

→ Based on historical responsibility of developed nations towards developing ones.

→ Idea first floated in Rio Summit

92.

→ However continuous Global North-South debate never let it fully emerged

→ Global North remains reluctant to consider itself responsible

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for climate crisis

→ Finally 30 years later @ COP27, 2022,
idea came into being.

Major development in COP27 on L&D fund

- ① Promise to pay annually \$100 Bn
for L&D fund
- ② Responsibility on Annex-1 countries
- ③ Aimed at developing adaptability
of Small & Developing Island nations
at priority
- ④ Fund to be finalised by next
summit.
- ⑤ Mechanism to collect and distribute
fund is not yet decided

* India in line with
its image as global leader in

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'Climate Action', upgraded its 'NDC' targets and submitted at COP27. These are:

① 50% energy by ^{non-}fossil fuel by 2030.

② 50% reduction in ~~carbon~~ emission intensity by 2030 from 2005 levels

③ 2.5-3 Bn Tn Carbon Sink by 2030

Further India promoted 'Life' campaign, supported L&D fund, 'Mangrove for Alliance' initiative, etc.

To combat climate change, achieving NDCs, 'Pambanmit' target thus are need of the hour to ensure SDG # 13: Climate Action.

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18.

Ans. Disaster management refers to reducing the vulnerability to a hazard to ensure the impact is minimised to human & economic assets.

As Senderi Framework also points out, resilience to disaster also depends on community preparedness. The higher the resilience of community, lesser the impact.

eg) Japan's high community resilience led it to rebuild whole areas & minimise loss during 2011

Tsunamis

* Key strategies that can be used

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to build community resilience are:

- ① Raising knowledge level of community regarding the kind of disasters they are most prone to.
- ② Connecting the community with administration for ensuring early warning system.
recent government attempt to send direct message alert
- ③ Mock Drills by SSMA of locals for making them prepare and able to help themselves during emergency before NDMA/SSMA arrives
- ④ Using Aapda Mitrai to prepare community and increase their numbers in areas prone to disaster

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⑤ Advising communities for restructuring their homes & buildings, etc. as per disaster to increase resilience

eg) Sandai framework: \$1 spent on disaster resilient infrastructure → \$7 gain

⑥ Using civil society in form of

NGOs.

eg) Rapid Response has rescued/helped over 7 lakh people during disasters.

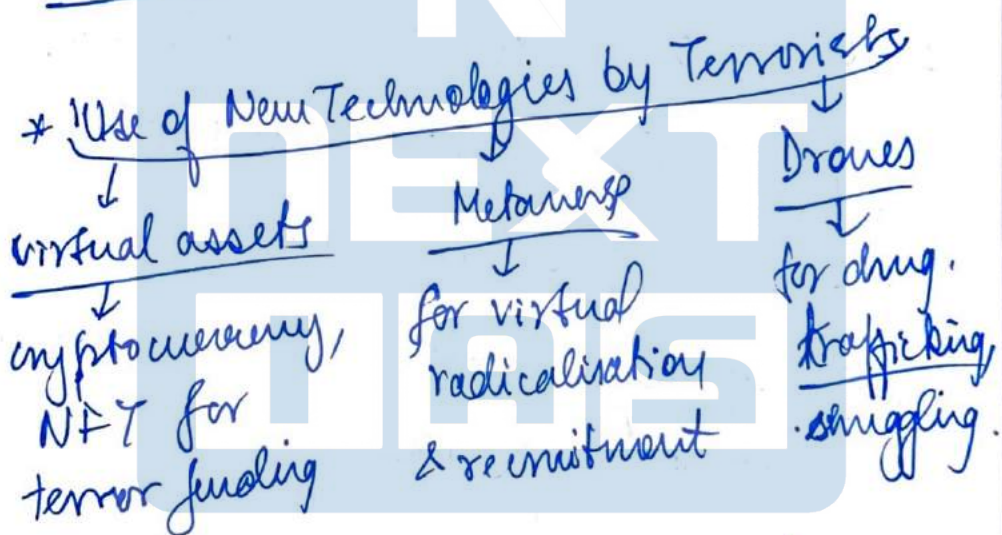
Hence as pointed

in PM's 10 point agenda, promoting community ~~pro~~ resilience using local self government is the key for disaster resilient India.

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19.

Ans. In the world of 4th PR, new and emerging technologies are shaping the world. The non state actors, especially Terrorists are also not untouched by it.



Countering use of New & Emerging technologies by Terrorists

- ① strengthening cyber security infrastr-
ucture to counter attack on
critical infrastructure.
- ② Collaboration with international

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partners as use of NFT, crypto for raising funds is cross border activity,

③ Greater regulation of intermediaries responsible for providing new technologies

eg) PB for metavers

④ Control over sale and distribution of production technologies of these emerging technology

eg) Transfer of nano or mini drone to be regulated

⑤ Raising awareness of masses to make them aware of new methods of radicalisation and recruitment

eg) DSIS via social media by manipulating the algorithm to show hate content

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⑥ * 'Delhi Declaration' held during NSA meet to counter new & emerging technology use aims at 3 spheres:

- ① Use of aerial technologies for terrorist purposes with main focus on drones
- ② Use of Information & Communication technology for terrorism
- ③ Financing methods emerged in new forms like cryptocurrency, NFT, etc.

Thus a comprehensive strategy focusing on New & Emerging technology is required & 'Delhi Declaration' should be followed in letter & spirit.

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20.

Ans. Agnipath scheme was launched for recruitment in Armed forces by government in 2021

* Features of Agnipath Scheme:

→ Candidate should be above 17½ year till 22 year

→ 1/4th selected will be given permanent recruitment

→ Rest 3/4th will be given a one 'Sena Nidhi' package after 4 years and will be retired

* Need of Agnipath Scheme

① Allows more number of youths

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to gain military training, discipline and thus will have higher focus on live in future

② Reduce pension burden on
Armed forces (~~40%~~ budget in salaries & pension)

③ Need young and energetic youth
with increasing challenges

④ Promotes resilience as young
demography & less financial burden

Issues with Agneepathi Scheme

① The future of those retired
after 4 year at risk

1.1 May be recruited by radical
groups

1.2 Their college going age is
utilised in army.

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② Issue of reducing morale of trainees as they know 8/9th will be removed

③ Cannot be solution to India's unemployment crisis

④ Protests by various students group

However as seen in Israel or South Korea where compulsory military service exists, Agnipath will lead to good, disciplined young generation