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CURRENT ISSUES WRITING PRACTICE

POST-TEST MATERIAL FOR CIWP – L

1. Hybrid warfare and/ or zone tactics have changed the character of warfare. Do you think it is vital to bring all sources of national power to bear on this problem and not just those of defense? Substantiate your views. Suggest in what ways India needs to re-configure its security strategy.

Hybrid and asymmetric warfare is an everyday war that developing countries are facing in a military and economic competitive environment. It generally refers to "deniable and covert actions, supported by the threat or use of conventional and/or nuclear forces, to influence the domestic politics of target countries". It is difficult to categorise hybrid war as military or quasi military challenge but it has elements of military and non-military domains. In fact, hybrid warfare is not a tactical or strategic challenge; it is a political issue. It threatens political stability of the state and creates fault-lines among the institutions of governance and the people that can be exploited by the adversaries. Therefore, it is not only important to defend physical frontiers but also cyber, cognitive and political frontiers.

How has hybrid warfare changed the character of warfare?

- Pakistan's prosecution of proxy war in Jammu and Kashmir encompasses many components of hybrid warfare. Pakistan has, in fact, followed this model imaginatively; and while not having been able to wrest Kashmir by force of arms or by abetting a successful insurrection, it has definitely succeeded in keeping the pot boiling and focusing attention on the valley.
- It continues to invest in setting up jihadi infrastructure and nurturing terrorists of various nationalities, while building up its conventional military strength.
- It has endeavoured to reduce the nuclear threshold in the sub-continent by threatening the use of tactical nuclear weapons.
- The new persisiting threat may be kinetic, non-kinetic, political, cyber, transnational organised crime, global terrorism, asymmetric conflict, threat to resources, diaspora and key infrastructure.
- There are state and non-state actors that are seen to be colluding with inimical forces to compromise and harm the interests of India globally, regionally and internally.
- With respect to China, it would be realistic to accept that Sino-Indian relations are currently at a delicate stage.
- Given Chinese intransigence on the matter, the border issue will continue to fester. Rising aspirations will spur economic rivalry, which in turn will result in deployment of military force to secure essential lines of communication through which goods and services ply.
- Chinese bases in Djibouti and Maldives as well as acquisition of port facilities on long-term lease in Sri Lanka are some of the actions taken by that nation in the recent past, providing a strategic dimension to its Maritime Silk Route and Belt and Road project. A deep sea port in Kyaukpyu in Myanmar is under development, and the Chinese support for Myanmar in the Rohingya crisis is seen to be aimed at freeing Rohingya land in Rakhine state for Chinese projects, which can be a potential threat for India's security.
- Chinese chequebook diplomacy, something India cannot match, is the new proven mantra for gaining influence in India's neighbourhood. China has also amassed a

sizable trade surplus with India of over 51 billion dollars, and has captured 51 percent of India's smartphone market, an extremely sensitive area for obvious reasons.

- China also remains steadfast in its support for Pakistan, and with commencement of work on the China–Pakistan Economic Corridor (CPEC), it has shown disregard for India's sovereignty.
- China's recent military modernisation and moving on to the next phase of informatised warfare (including space) has obvious implications for India.
- In addition to confronting navies of other nations in the South China Sea, the Chinese Navy now makes regular forays in the Indian Ocean and the Bay of Bengal, the new arena of potential conflict.
- The hybrid conflicts in Eastern Europe and West Asia, also have an impact on India. As per newspaper reports of February 2017, the National Investigation Agency (NIA) had carried out arrests pertaining to cases of terrorism by ISIS, while the case of entire families from Kerala moving to Afghanistan to support the Taliban is well.
- Transborder movement of radicalised youth, some posing as refugees who can be activated later for fomenting jihad, is another threat.
- Sabotaging India's growth through smuggling, dumping of goods, protectionism, circulating of fake currency and other unfriendly activities by our neighbours posing another dynamics of security challenge

Preparing for the Future

We need to prepare ourselves to counter and fight with any kind of threat. The preparations have to be matrix based, with strong vertical and 'cross cultural' linkages, encompassing administrative, law enforcement and intelligence agencies at the national, state and district levels. These have to be interfaced with different organizations and industries of different sectors running in the country. Information and intelligence would have to be shared seamlessly so that everyone is sensitized on emerging threats, with authorities being empowered to decide when and how to act.

A **National Security Strategy** would be incomplete if it only defines our vision and the path that we should follow, without the means to achieve our objectives. We need to strengthen our capabilities to protect our citizens and deter any adversary from threatening India's sovereignty or interfering with our strategic interests. We must take a realistic look at the weaknesses in our current structures and also gaze into the future to visualise emerging threats that will need to be countered. So in order to counter the weaknesses and build our capabilities it is vital to bring all sources of national power to bear on this problem and not just those of defense.

That comprehensive strategy would be:

- **Securing our Land and Maritime Borders:** The requirement of a **'smart fence'** that combines technology with a physical barrier is essential to check infiltration and smuggling. The **Comprehensive Integrated Border Management System (CIBMS)** is planned to be set up along the IB with Pakistan and Bangladesh. This must also be extended to the Indo-Myanmar border. The army's fence along the LC suffers extensive

damage each year due to heavy snowfall. This should be replaced with a more robust, smart and all-weather solution.

- **Strengthening Military Capability:** Our current budgetary allocations for defence, tardy procurement procedures, existing force composition, and decision-making structures pose a serious challenge to force modernisation. The following measures need to be taken:
    1. Decision making structure can be revamped
    2. The three services should undertake a comprehensive review of their current and future force structures to transform the army, navy and air force into an integrated warfighting force.
    3. The current system of ad-hoc budgetary allocation must be replaced by one where budgets are based on a capability development plan that has been approved by the government.
- **Indigenisation of Defence Production:** India cannot be a strong military power unless it develops a strong, indigenous defence production capability. This will require the government to accept responsibility for financially supporting the design and development of indigenous defence platforms.
- **Transforming the Police:** The primary role of any nation state is to ensure the safety of all its citizens.
    1. By revamping the police recruitment as well as training process
    2. By revamping the present criminal justice system
    3. Technological application- there is a need to explore the application of cutting-edge developments in neuro and behavioural sciences, big data analytics, modelling, and robotics.
    4. Capacity building of police forces.
    5. There is an acknowledged need for greater public engagement, with the police required to be seen more as a provider of services related to the rule of law and public safety.
- **Intelligence:** Intelligence is a very critical imperative in the safeguarding of national security. Personnel with a tested acumen for intelligence work should be drawn from the broadest spectrum of society including civil services, armed forces, technology experts, and economists. The over-dependence on technical intelligence and the inadequacies in human intelligence should be corrected.
- **Cyber Warfare -**The cyber threats to our critical infrastructure and to our way of life are apparent. In order to secure the nation from cyber attacks, particularly those emanating from hostile countries, the following priority actions need to be taken:
    1. We must have a clearly stated policy that a malicious cyber attack is considered as a hostile act against our national sovereignty
    2. Creation of cyber command
    3. Indigenous technology for critical infrastructure: The government should promote and support Indian companies through funding assistance and give them preference in the purchase of equipment for critical infrastructure. Indigenisation must take place in the following areas: Operating systems and software, Microelectronics, Networking equipment, Cryptographic algorithms, Navigation systems.

- **Nuclear Forces:T**o ensure deterrence against nuclear threats, India should continue to build up its triad of land, air, and sea-based missiles, while modernising its older land missile systems.
- **Space** :Today, India is hugely dependent on space for communications, commerce, navigation, and intelligence. In this dependence, we are no different from most countries around the world. However, while space is considered one of the global commons, there is no global acceptance of the rules that should apply in regulating behaviour in space. In the absence of any rulebook, India must develop capabilities to defend itself and develop deterrent capabilities in case a conflict transcends to the space dimension.
- **Strategic Communications:** With the proliferation of media, and the social media serving as a medium of enormous amounts of fake news, it is imperative that the government is able to convey the accurate picture to its citizens. This is particularly important during a crisis when an absence of information or miscommunication could trigger rumours that erode faith and trust in the government.

It is undeniable that the hybrid threat is here to stay, and it will become more lethal in the ensuing future. India is already delayed in building capabilities to fight and counter hybrid war. It is high time a formal structure in the form of Hybrid Warfare Division is put in place to counter hybrid and asymmetric threat from China and Pakistan. The urgency is to formalise strategy, doctrine, structure, training needs and human resource from the three services and experts from the fields of space, cyber and intelligence agencies. Experts from strategic communications and counter-propaganda should also be part of this organisation, both at strategic and at tactical level. This vital war waging capability cannot be delayed or deferred further. It will have serious consequences if such a capability is not put in place by India in the immediate future.

2) India is making great strides when it comes to taking initiatives and implementing policies for harnessing renewable energy sources. In light of the statement examine key initiatives of the government that focus on the development/expansion of conventional renewable energy in India. Also, discuss the ecological concerns with renewable power generation.

Sustainable and renewable energy sources are a crucial strategic national resource. Renewable energy sources contribute to a nation's sustainable growth trajectory, protects the environment, promotes investment and conserves ecology.

Harnessing sustainable energy resources becomes important for meeting the nation's energy requirements. Realizing this India has taken key initiatives for harnessing sustainable energy:
1) Expanding capacity
- A capacity of 89.22 GW has been set up by September 2020 constituting more than 23 percent of the total installed capacity. India has 4th and 5th global positions in the wind and solar power deployment respectively.

- National Solar Mission (NSM) was operationalized to establish India as a global leader in solar energy, by creating the policy conditions for solar technology diffusion across the country as quickly as possible.
- Recent IEA analysis shows that in 2018, India's investment in solar PV was greater than in all fossil fuel sources of electricity generation together.
- Large-scale auctions have contributed to swift renewable energy development at rapidly decreasing prices.

2) Policy Initiatives

- The revised tariff policy requires all States to reach eight percent solar RPO by the year 2022.
- Solar water heaters and rooftop systems have been promoted in certain government, commercial and residential areas through regulatory intervention such as mandates under building by-laws and its incorporation in the National Building Code.
- Guidelines for procurement of solar and wind power through tariff-based competitive bidding process, quality standards for deployment of Solar Photovoltaic systems and devices, infrastructure status for solar projects, raising tax-free solar bonds, providing long tenor loans, incorporating measures in Integrated Power Development Scheme (IPDS) for encouraging distribution companies and introducing net-metering.
- Allowing Foreign Direct Investment (FDI) of up to 100% through the automatic route. Moreover, Inter State Transmission System (ISTS) charges and losses for inter-state sale of solar and wind power shall also be waived for renewable projects commissioned by December 2022.
- India's offshore wind potential has been recognized under the National Offshore Wind Policy under which NIWE has been authorized to allocate offshore wind blocks to developers based on open international competitive bidding

3) Technology and R&D

- Through 'Make in India" initiative, the government is working to attract global companies to produce solar PV, lithium batteries, solar charging infrastructure and other advanced technologies in India.
- The government is strengthening its innovation efforts in a broad range of energy technology areas, including cooling, electric mobility, smart grids and advanced biofuels.
- International Solar Alliance to undertake innovative and concerted efforts to reduce the cost of finance and technology for deployment of solar generation assets and pave the way for future solar generation, storage and technologies for Member countries' needs by mobilising over USD 1000 billion by 2030.

4) Schemes and Programmes

- The Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) Scheme, consisting of three components namely Component-A: Setting up of 10,000 MW of Decentralized Grid Connected Solar or other Renewable Energy Power Plants on barren / fallow land; Component-B: Installation of 17.50 Lakh stand-alone solar agriculture pumps; and Component-C: Solarization of 10 Lakh Grid Connected Agriculture Pumps.
- More than 40,000 Suryamitras have been trained in the last five years to cater to the growing needs of the solar energy sector and its service industry.

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- Three solar parks Kurnool (1000 MW) in Andhra Pradesh and Bhadla-II (680 MW) in Rajasthan and Pavagada (2000 MW) in Karnataka are fully operational.
- National Wind-Solar Hybrid Policy, 2018 to provide a framework for promotion of large grid connected wind-solar PV hybrid system for optimal and efficient utilization of wind and solar resources, transmission infrastructure and land.
- Under the Green Energy Corridor project, approx. Rs.2000 crore has been disbursed to the States to cover green energy projects.
- National Biofuel policy

Issues with the policies and initiatives:
1) Inadequate financing, especially low-cost long term finance.
2) High initial cost of installation.
3) Lack of proper system planning and integration. Most RE systems are weather dependent; thus, factors like number of sunny days, wind condition, monsoon, tide level, supply of biomass, etc play an important role in feasibility of the system.
4) Social acceptance of renewable-based energy system is still not very encouraging in urban India.
5) Lack of trained manpower

All energy sources have some impact on our environment. However, renewable sources such as wind, solar, geothermal, biomass, and hydropower also have environmental impacts, some of which are significant:
1) The potential environmental impacts associated with solar power— larger utility-scale solar facilities can raise concerns about land degradation and habitat loss, water use, and the use of hazardous materials in manufacturing—can vary greatly depending on the technology, which includes two broad categories: photovoltaic (PV) solar cells or concentrating solar thermal plants (CSP).
2) Geothermal power plants can have impacts on both water quality and consumption. Hot water pumped from underground reservoirs often contains high levels of sulfur, salt, and other minerals leading to water contamination. Some geothermal plants also produce small amounts of mercury emissions, which must be mitigated using mercury filter technology.
3) While there are no direct global warming emissions associated with operating renewable energy projects, there are emissions associated with other stages of a wind turbine's life-cycle, including materials production, materials transportation, on-site construction and assembly, operation and maintenance, and decommissioning and dismantlement.
4) After hydropower, whose impacts have been fairly well documented (e.g., ORNL, 1993), impacts on wildlife have been a particular concern for wind energy. Collisions with wind turbines have killed birds and bats.
5) Flooding land for a hydroelectric reservoir has an extreme environmental impact: it destroys forest, wildlife habitat, agricultural land, and scenic lands. In many instances, such as the Three Gorges Dam in China, entire communities have also had to be relocated to make way for reservoirs.
6) Hydroelectric facilities can still have a major impact on aquatic ecosystems. For example, fish and other organisms can be injured and killed by turbine blades.
7) Apart from direct contact, there can also be wildlife impacts both within the dammed reservoirs and downstream from the facility. Reservoir water is usually more stagnant than normal river

water. As a result, the reservoir will have higher than normal amounts of sediments and nutrients, which can cultivate an excess of algae and other aquatic weeds. These weeds can crowd out other river animal and plant-life.

In sum, renewable energy installations are critical to keeping global warming under 2°C, and their environmental impacts should be studied as rigorously as we evaluate non-renewables to realize their maximum potential.

3) While Globalization is interconnecting societies and creating networks of mutual interdependence, the adaption of political order to such revolutionary changes lags. Comment. Do you think India's non-alignment and strategic autonomy is serving self-interest in the emerging global scenario?

Globalization refers to the integration of local and international economies into a globally unified political, economic and cultural order, and is not a singular phenomenon, but a term to describe the forces that transform an economy into one characterized by the embracement of the free movement of trade, technology, investment, labor and capital.

Global hyper-interdependence of countries and societies due to interconnectedness of global supply chains, dependence on foreign markets, access to cheap labor, development of mass communication etc has created environment for the rise of a Multipolar world order.

Hence, the world is undergoing a profound rebalancing in terms of the relative weight key countries and regions carry in the global economy. Globalization – the opening of national markets to trade, international capital and foreign investment, and the resultant global flows of technology – has been the engine of this economic rebalancing. However, the adaption of political order to such revolutionary changes lags:
1) Popular frustration, demands for economic protection and the rise of populist parties and sentiment more broadly in the US, Europe, Japan and Russia. For e.g. America First policy, BREXIT etc.

2) Rather than integrating into mutually supportive structures of the sort developed by EU members over the past 55 years, emerging powers continue to prioritize promoting and defending their sovereign rights. This is manifested by the dramatic rise in global military spending.

3) Institutions of global governance like UN, WTO entrusted with the responsibility of managing the risk arising in a globalized world does not reflects the reality. Openness to reform in order to transform into inclusive and progressive forums is lacking among the countries which have managed to control these institutions so far.

4) P-5 or the advanced economies have paid lip service to the cause of UNSC reforms and growth of multilateralism which is important to ensure that the norms of the new world order are shaped in an inclusive and non-confrontational manner.

5) Weponization of global supply chains, tariff wars, the pillars of globalization in order to gain political leverage to maintain hegemony has hurt the prospects of a mutipolar world

tremendously. Similarly, using membership to multilateral treaties, agreements and organizations like USA's membership of TTP and Paris climate change Accord is about maintaining the status quo rather than changing according to emerging realities.

6) Backlash against multiculturalism, immigration and TNC's (for e.g. against Apple in China) has limited the potential of interconnectedness and emergence of a coherent world economy and society, represented by much more equal distribution of power both within and among nations.

Hence, the interactions, though, increased in frequency and intensity has remained skewed towards the developed nations hindering the birth of a truly multipolar world order, where mutual interdependence results in peace and stability.

The core objectives of Non Alignment, a policy fashioned during the Cold War were to ensure that India did not define its national interest or approach to world politics in terms of ideologies and goals that had been set elsewhere; that India retained maximum strategic autonomy to pursue its own developmental goals; and that India worked to build national power as the foundation for creating a more just and equitable global order.

The context in which India has to practice strategic autonomy has changed considerably. In the emerging global scenario the policy of strategic autonomy and non-alignment has remained relevant:
1) Very different context that informs India's strategic autonomy. Today, it is not about retreating from the world, but of enhancing India's economic contribution to the global economy. Above all, it is about empowering India and the speedy realization of its full national economic potential.
2) India's past emphasis on strategic autonomy was in the context of protecting some of its core national interests from the threats of US intervention. Today, it is inevitably about coping with China's challenge to India's territorial integrity and sovereignty.
3) In the 1990s, the quest for strategic autonomy from the US drove India into a political coalition with Russia and China that sought to limit the dangers of the unipolar moment. Today, the logic of strategic autonomy from China nudges India to look for strong security partnerships with the US, Europe, Japan and Australia.
4) On the economic front, India is exploring various forms of collaboration with a broad group of nations that have a shared interest in developing trustworthy global supply chains that are not totally tied with China.
5) It helps India to cope up with unpredictability of countries like USA, manage national compulsions (like in the case of Palestine-Israel issue) and extremely fluid international relations where few alliances are built and even fewer survive.

Though, relevant the policy of strategic autonomy has become less effective in serving national interest:
1) Regional powers like India are destined to be even less strategically autonomous. While they may express the aspiration to be strategically autonomous, their ability and willingness to practice it are likely to be inconsistent and variable.
2) India, lacking the economic or military power to truly exercise strategic autonomy, would be left in virtually the same situation in which it found itself after 1962 when it aligned itself with the Soviet Union in all but name.

3) International events are racing towards a second Cold War and India will find itself forced to bandwagon on one of the sides.

Strategic autonomy has been the defining value and continuous goal of India's international policy ever since the inception of the Republic. Defined initially in the terminology of Non-Alignment, that value we believe continues to remain at the core of India's global engagements even today, in a world that has changed drastically since the mid-twentieth century. The challenge is to renovate that value and goal for the twenty-first century—thereby enabling the continuous and cumulative pursuit of India's interests in a world at once full of uncertainty and of great opportunity.