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GENERAL STUDIES (TEST CODE : 1025)

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Medium Eng./Hindi	ENGLISH	Registration Number	5649
Center	ORIX, NEW DELHI	Date	08/10/17

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	12.5		
2	12.5		
3	12.5		
4	12.5		
5	12.5		
6	12.5		
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17	12.5		
18	12.5		
19	12.5		
20	12.5		
Total Marks Obtained:			
Remarks:			

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are TWENTY questions printed in ENGLISH & HINDI
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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EVALUATION INDICATORS

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure - Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

Answer all the questions in NOT MORE THAN 200 WORDS each. Content of the answers is more important than its length. All questions carry equal marks.

12.5X20=250

1. The dual use nature of space technology enables its utilisation for civilian as well as military purposes. In this context, examine the need for a Space Security Policy in India.

अंतरिक्ष प्रौद्योगिकी के दोहरे उपयोग की प्रकृति नागरिक एवं साथ ही सैन्य प्रयोजनों के लिए इसके उपयोग को सक्षम बनाती है। इस संदर्भ में, भारत में अंतरिक्ष सुरक्षा नीति की आवश्यकता का परीक्षण कीजिए।

Space technology has had
far reaching benefits for mankind
such as earth observation,
weather prediction, increased
collaboration in remote
sensing, positioning services
and the entertainment
industry.

HOWEVER, it also poses a
grave risk in terms of the
arms race reaching space as
the 4th stage of warfare after
land, sea and air. After
launch of SPUTNIK, the outlet

Space Treaty, 1967 was signed on a global scale, which promoted peaceful uses of space. Space is also governed by the UNCLOS (Sea Convention) as a global common for the benefit of mankind.

China, though advocating for a PAROS treaty, is also pursuing making of Anti-Satellite missiles (ASAT's). India, hence, is also producing its own version of ASAT's for deterrence in the neighbourhood.

This gives rise to a need for a Space Security Policy to secure India's interests in terms of its satellites which provide various essential services.

Further, India needs to have a standardised document with enlisting of action plans in case of breach of space by other countries. Such a standard operating procedure will provide deterrence, certainty and predictability to India's security doctrine.

2. What are the issues associated with coastal security in India? In this context, discuss whether a Central Marine Police Force can help in addressing these issues.

भारत में तटीय सुरक्षा से संबंधित मुद्दे क्या हैं? इस संदर्भ में, चर्चा कीजिए कि क्या एक केंद्रीय समुद्री पुलिस बल (सेंट्रल मरीन पुलिस फोर्स) इन समस्याओं को हल करने में सहायता कर सकता है?

India has a long coastline of 7500 kms, which is an avenue for large amount of trading activities, life of coastal communities, and provides for transport and connectivity with the rest of the world. The issues associated with coastal security are:-

- Source of terrorist infiltrations eg. Mumbai 26/11 attackers came by sea.
- Threat of Piracy - India has recently revised longitudinal extent of its "High Risk Area"
- Surveillance by submarines of other countries. - permissibility governed by Indian Maritime

Zones Act, 1976.

- Illegal migration into the country. eg. Bangladeshi migrants and Rohingyas.
- Avenue for human trafficking.
- Incursions by Sri Lanka fishermen and tapping Indian catch.

The proposed CMPF is a welcome step and it will help in addressing issues, as :-

- Dedicated and specialised force on lines of CRPF etc.
- All India cadre, with uniform service conditions.
- specialised training and operational efficiency.
- Will augment the role of Indian Coast Guard, which has not been very effective.

→ Will secure Indian sovereignty
within territorial waters i.e.
within 12 nautical miles.

CMRF is a welcome step
and will go a long way in
securing coastal areas of India.

3. Cyber terrorism holds serious potential to paralyze economic and financial institutions in India. What are the issues and challenges w.r.t. India's cyber security? What initiatives has the Govt taken to address the same?

साइबर आतंकवाद भारत में आर्थिक एवं वित्तीय संस्थाओं को शक्तिहीन करने संबंधी गंभीर क्षमता रखता है। भारत की साइबर सुरक्षा से संबद्ध मुद्दे और चुनौतियाँ क्या हैं? इनका समाधान करने के लिए भारत सरकार ने कौन-सी पहलें की हैं?

Cyber terrorism and warfare
is another front of conflict that
has opened with the proliferation
of technology. Data is the new
oil and cyber terrorism holds
data and information systems
to ransom by techniques such
as hacking, ransomware
(worms, petya), etc. This threatens
economic & financial systems
in India. eg. recent ATM attacks.

Issues and challenges

- governmental warfare can be
carried out eg. stuxnet attack on
Iran's nuclear arsenal.
- over the internet, so very
difficult to establish jurisdiction.

- Anonymity makes it difficult to trace, identify and punish the wrong doer.
- Avenue for radicalisation and recruitment by terror organisations like ISIS.
- spread of fake & crime on social media threatens social fabric of society.
- Recent hacking of all airline computers over the world led to time & cost wastage.

Initiatives taken by GOI :-

- National Critical Information Infrastructure Program (NCIIP) to secure critical information.
- Setting up of CERT-IN (computer emergency response team)
- Encourage reporting by private sector, as mandated in the

Information Technology Act, 2008

- RBI has set up R-SITE to secure financial transactions.
- Maharashtra is the 1st state to have cyber Police stations in all districts.

Therefore, many measures need to be taken further like securing Adrenal data, quantum Cryptography, etc.

4. Critically examine the feasibility of fencing the Indo-Myanmar border as a strategy to contain insurgency given the existing Free Movement Regime (FMR) between the two countries.

उग्रवाद को नियंत्रित करने की रणनीति के रूप में भारत-म्यांमार सीमा पर बाड़ लगाने संबंधी व्यवहार्यता का, दोनों देशों के बीच मौजूदा मुक्त आवागमन व्यवस्था (Free Movement Regime) के परिप्रेक्ष्य में आलोचनात्मक परीक्षण कीजिए।

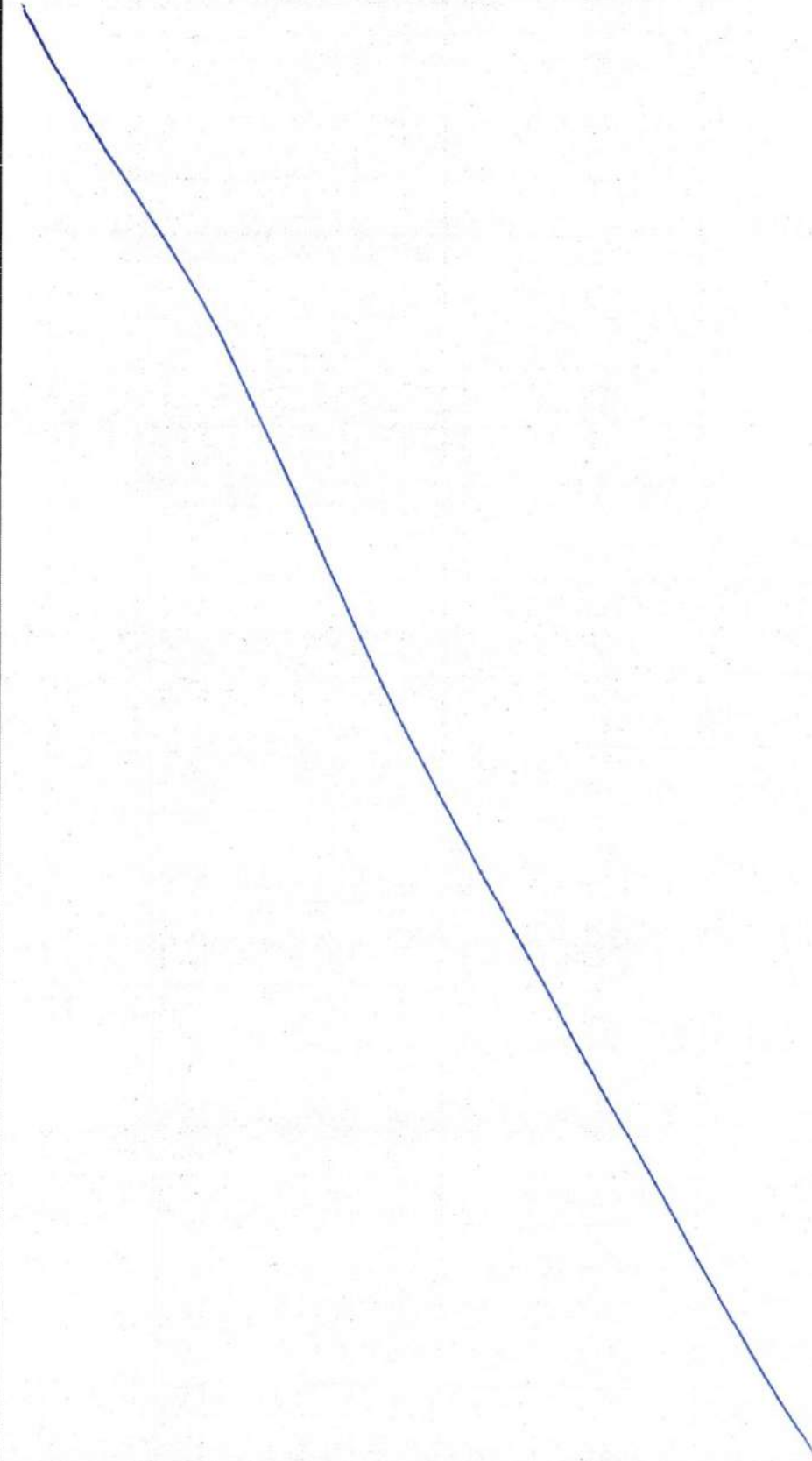
The border Agreement of 1967 governed free movement regime between India and Myanmar. However, Myanmar has recently begun fencing the border. This gains relevance in light of following issues :-

- Myanmar has camps of many insurgent groups like NSCN-IM.
- India conducted surgical strikes on such camps in 2015, which probably caused resentment with Myanmar.
- Myanmar recently signed a classified agreement with NSCN-IM.

Feasibility and implications:-

- Resentment among people as free movement gave an impetus to trade and cultural links.
- Will affect commerce within the area.
- Against spirit of setting up of Border Haats.
- Protests, specially at places like Morh.
- difficult terrain will increase costs, give birth to illegal activities once fencing done.

Border fencing will divide people who share cultural & historical links. A FMR with integrated border posts is a potential viable alternate solution.



5. What do you understand by 'lone wolf attacks'? In the wake of increasing lone wolf attacks across the globe, assess India's vulnerability to such attacks. Also, suggest measures that can prevent such attacks.

'लोन वुल्फ हमलों' से आप क्या समझते हैं? विश्व भर में बढ़ते लोन वुल्फ हमलों को देखते हुए इस प्रकार के हमलों के प्रति भारत की सुभेद्यता का आकलन कीजिए। साथ ही, इस प्रकार के हमलों के रोकथाम हेतु उपाय सुझाइए।

Lone-wolf attacks are isolated, non-aligned attacks by self-radicalized individuals due to various reasons like spreading of hate online, following ideologies of groups like ISIS in a remote manner etc. Recent attacks in Florida and Las Vegas show the intensity and potential threat that these pose.

Apart from loss of human life, they spread fear in society, along with distrust and lack of faith in humanity. They are fueled by easy gun procurement

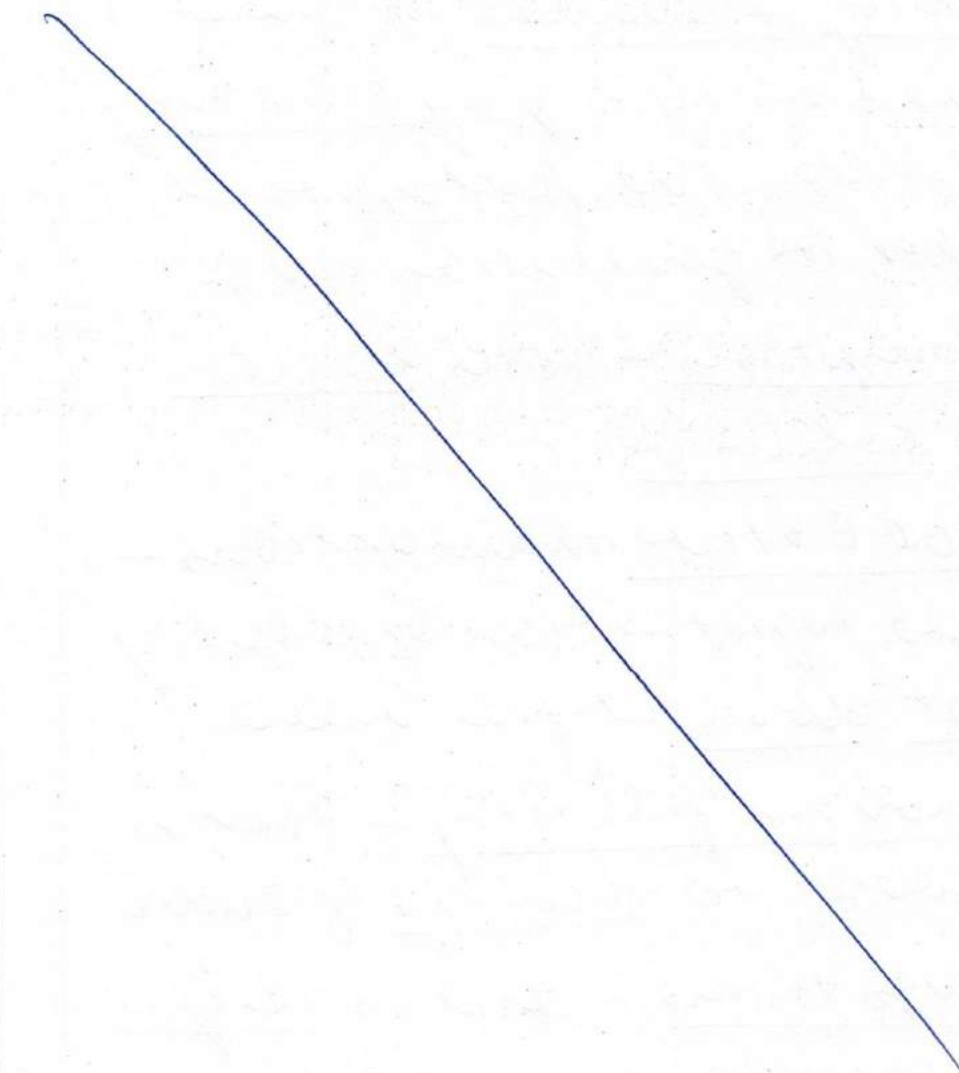
rules in countries like USA.

Recently, ISS called for such lone wolf attacks in India. disappearance of 21 youth in Kerala and arrest of 2 in Gujarat show growing risk of radicalization in India. These, along with sleeper cells, need to be addressed and eliminated.

Steps taken by GOI:-

- Radicalization Helpline, which has been launched as a welcome move.
- Academic Instruction in madrasahs.
- Following secularism in true spirit.
- Operation 'Chakravarty' like operations by the IB.

Sensitization, education
and partnership in economic
development are the key
to dealing with such attacks
from the root upwards.



6. What are the factors that lead to generation of black money in India? Discuss the role played by India both domestically and internationally to neutralise the menace of money laundering and black money.

भारत में काले धन के सृजन की परिस्थितियों को उत्पन्न करने वाले कारक क्या हैं? घरेलू और अंतरराष्ट्रीय दोनों स्तरों पर मनी लॉन्ड्रिंग तथा काले धन के खतरे को निष्प्रभावी करने में भारत की भूमिका की चर्चा कीजिए।

Black money is the money that exists outside the formal banking channels in what is termed as the 'grey economy' in India. The factors that enable its generation are:-

- corruption - both coercive and collusive.
- Real Estate transactions - where registration of property is not done at full value.
- Terrorism financing - that is a threat to security of India.
- Drugs trade - that is illegal otherwise.
- Benami transactions.

→ Money laundering through Hawala transactions.

Role by India :-

→ Domestically :-

- (i) Demonetisation - to bring back majority of cash into the system.
- (ii) Surge of strikes to stop terrorism.
- (iii) Security features on currency.
- (iv) Regulation of P-Notes.
- (v) Attempts to regulate the gold market.
- (vi) Real Estate reforms & revision of circle rates.

→ Internationally :-

- (i) BEPS agreement - OECD.
- (ii) America & TAA's.
- (iii) Information sharing
- (iv) Advocate adoption of CCIT.

to plug terror financing.

(v) support security council
Resolution 2322 on judicial
cooperation in terror financing.

The above steps, along
with concerted political will
will go a long way in curbing
the menace of black money.

7. The national security of the country cannot be strengthened until we focus on intelligence sharing and ensure greater coordination among agencies. Elaborate. Also, highlight the steps being taken by the government to strengthen its intelligence network.

जब तक हम विभिन्न एजेंसियों के मध्य आसूचना साझाकरण (इंटेलिजेंस शेयरिंग) एवं बेहतर समन्वय पर ध्यान केंद्रित नहीं करेंगे, देश की राष्ट्रीय सुरक्षा को सुदृढ़ नहीं किया जा सकता। विस्तारपूर्वक बताइए। साथ ही, सरकार द्वारा अपने आसूचना नेटवर्क को मजबूत बनाने के लिए उठाए गए कदमों पर भी प्रकाश डालिए।

Intelligence sharing and inter-agency coordination is the key to strengthening national security in India on a war footing. The benefits of the same are :-

- Avoid duplication of efforts by investigation agencies.
- Integrated and concerted fighting against threats posed.
- Effective tracking and monitoring of crime and criminals.
- sharing of information and evidence in a centralised

database.

- All India coordination, negating Distance, Language barriers.
- cooperative federalism
- Coordination among agencies.
- Operational efficiencies.
- Time and cost savings.

Steps taken by GOI :-

- NATGRID - to link 21 investigative agencies like Ran, IB, CBI, DAI, ED etc. for intelligence sharing and fighting security threats in a comprehensive manner.
- CCTNS - crime & criminal trailing network - between police stations across India to share evidence, send alerts etc.

→ POLIXET - online network
using very small aperture
radars (VSAT) to track criminals
and share information.

The above steps go a long
way in information sharing
and promise an effective
solution to national security
issues in India,

8. In what ways is the approach of "Act East" Policy different from "Look East" Policy? Suggest certain priority areas on which India should focus upon to fulfill its ambitious geostrategic and economic goals in the region.

"लुक-ईस्ट" नीति की तुलना में "एक्ट ईस्ट" नीति का दृष्टिकोण किस प्रकार भिन्न है? इस क्षेत्र में अपने महत्वाकांक्षी भू-रणनीतिक और आर्थिक लक्ष्यों को पूरा करने के लिए कुछ ऐसे प्राथमिकता क्षेत्रों का सुझाव दीजिए जिन पर भारत को अपना ध्यान केन्द्रित करना चाहिए।

The Look-East policy was introduced post the 1991 reforms, which envisioned enhanced diplomacy and engagement with South and South-East Asia at multiple levels of economy, geostrategy and leadership.

The 'Act-East' policy, as introduced in 2014 at the ASEAN and East Asia Summit involves concerted action in engaging with South-East and South Asian states in terms of sustainable development, security provision, economic acceleration and projecting India as a soft power and a "net security provider" in Asia-Pacific region.

Priority areas and concerted actions:-(1) Economic thrust

- India-ASEAN Free Trade Agreement will give a boost to Indian exports and the service sector, apart from investments.
- Regional Comprehensive Economic Programme (RCEP) will reduce barriers to trade.

(2) Transport and connectivity

- Kaladan multimodal network with Myanmar, connecting Mizoram.
- Indo-Myanmar-Thailand Trilateral Highway - will improve movement of goods and people.
- BCIM Motor Vehicles Agreement.

(3) Development of North-East India

- Penetration and collateral focus on hitherto ignored north-east states.

(4) Combating Insurgency - many

insurgent camps in Myanmar and Bangladesh can be dealt with, with cooperation.

(5) cooperation in multilateral organisations like ASEAN, EAS, BIMSTEC, ZORA, etc for gathering support to India's ambition for UNSC and NSG seats.

(6) giving impetus to Indo-Japanese initiative - African Asian Growth Corridor, as a counter to China's OBOR, and reducing China's influence in the region.

The Act East Policy is a welcome step of concerted action and would require a multipronged, committed approach to present India as a strong force in the community of nations.

9. In recent years there has been an increasing convergence between Russia and China on several global issues. What are its implications for India? What steps should be taken by India to protect its national interests?

हाल के वर्षों में रूस और चीन के बीच कई वैश्विक मुद्दों पर समाभिरूपता (कन्वर्जेंस) में निरंतर बढ़ोतरी देखी गयी है। भारत के लिए इसके क्या निहितार्थ हैं? भारत द्वारा अपने राष्ट्रीय हितों की रक्षा करने के लिए कौन-से कदम उठाए जाने चाहिए?

Russia and China share a common interest in driving the world away from a US-dominated unipolar system, to a multipolar system. The historical vicissitudes in their relationship have given way to an economic and deep strategic partnership, which is evident through the following spheres:-

- China buying Russian oil and resources post US-backed sanctions post its annexation of Crimea.
- Strategic and political partnership in organisations like SCO, Heart of Asia Conference etc.
- Similar stand on Syria and backing the Assad regime.
- Similar stand on engaging with the Taliban in Afghanistan.

→ Russia promoting China's OBOR project.

Implications for India:-

→ Emergence of a Russia-China-Pakistan Axis is a threat to India's security in the subcontinent.

→ Reshaping of Russian priorities risks losing an old trusted friend. This is depend on India's closeness to USA.

→ China has backed Pakistan on its stand on Terrorism and Masood Azhar.

Russia joining this will be a setback.

→ may threaten India's move towards a seat at VIXSC, VSQ if Russia supports the Chinese stand.

→ May see diversion of Russian arms purchases and imports towards Pakistan.

→ May strengthen opposition to India's stand on border disputes like Aksai Chin and Gilgit-Baltistan.

→ Threatens workability of SCO.

Steps India should take:-

- confidence Building measures with both Russia and China.
- Strengthen its fight against terrorism and seek more support for adoption of CCIT (convention).
- Assure Russia that its engagement with USA is in no way, a threat to our old friendship.
- Comprehensive talks with China to prevent dohlam-like situations by jointly working on it.
- Soft skills in display through culture, arts, films, Yoga etc.

Russia is a trusted ally and China, a growing superpower. India should engage with both at all levels to further its geopolitical standing and path of economic development.

10. After remaining peripheral to India's foreign policy priorities, the Indian Ocean has received some attention in recent years. Nonetheless, given the significance it holds, involvement of actors with diverse interests and existing challenges, it is imperative that India redoubles its efforts in shaping the future of the region. Discuss.

दीर्घकाल तक भारत की विदेश नीति की प्राथमिकताओं में हाशिये पर रहने के उपरान्त, हिंद महासागर ने हाल के वर्षों में कुछ ध्यान आकर्षित किया है। इसके अंतर्निहित महत्व, विभिन्न हितों वाले देशों के शामिल होने और मौजूदा चुनौतियों को दृष्टिगत रखते हुए, यह आवश्यक है कि भारत इस क्षेत्र के भविष्य को आकार प्रदान करने में अपने प्रयासों को और अधिक बढ़ाए। चर्चा कीजिए।

Around 90% of India's trade by volume and 90% of its oil imports pass through the Indian Ocean.

The region also has the major choke points in terms of trade in the form of the straits of Malacca, Hormuz, Bab-el-Mandeb, etc. Hence the need for security and leadership.

Significance of IOR :-

- securing trade routes.
- strengthening India's role in geopolitics as a net security provider.
- combating piracy.
- studying & understanding disasters.
- environmental concerns and

supporting Island States' fight against climate change and sea level rise.

→ upholding freedom of navigation under UNCLOS.

→ Equitable and just exploitation of natural resources and hard latter minerals.

Competing interests and challenges:-

→ China's 'String of Pearls' and India's partnership with USA on its "Asia Pivot" to counter it.

→ China's OBOR which includes its maritime silk road and Indo-Japanese counter in terms of Africa-Asia growth corridor.

India's initiatives:-

→ Project Mausam - to revive cultural links and display soft diplomacy.

→ Impetus to Indian Ocean Rim Association (IORA) and BIMSTEC to further its economic and strategic interests.

→ INCOIS and weather forecasting, navigation through South-Asia satellite.

→ Acting as a security provider to Islands like Maldives, recent stand on Diego Garcia, etc.

The Indian Ocean region has gained paramount importance specially with rising Chinese influence. India must step up its efforts and engagement with various players to achieve a position of dominance.

11. What are the objectives and key achievements of the United Nations Commission on International Trade Law (UNCITRAL)? Also, highlighting India's association with the Commission, identify its influence on various domestic legal regimes.

अंतरराष्ट्रीय व्यापार कानून पर संयुक्त राष्ट्र आयोग (यूनाइटेड नेशन कमीशन ऑन इंटरनेशनल ट्रेड लॉ: UNCITRAL) के उद्देश्य और प्रमुख उपलब्धियां क्या हैं? साथ ही, इस आयोग के साथ भारत की संबद्धता पर प्रकाश डालते हुए विभिन्न घरेलू विधिक व्यवस्थाओं पर इसके प्रभाव की पहचान कीजिए।

UNCITRAL is the primary organ of the UN in the sphere of International Trade Law. Its objectives include the promotion of free and ^{less} regulated trade, enforcement of contracts, a market and business oriented regime and enhanced commerce.

The key achievements of UNCITRAL include:-

- UN convention on Recognition and Enforcement of Arbitral Awards.
- Model Law on Arbitration Agreements and their enforcement.
- Convention on sale of goods.
- Effective enforcement and bringing

together majority States to accede
to and follow the above
conventions.

India's association with UNCITRAL:-

→ UNCITRAL conventions and
model laws have been largely
incorporated into the following
Indian laws:-

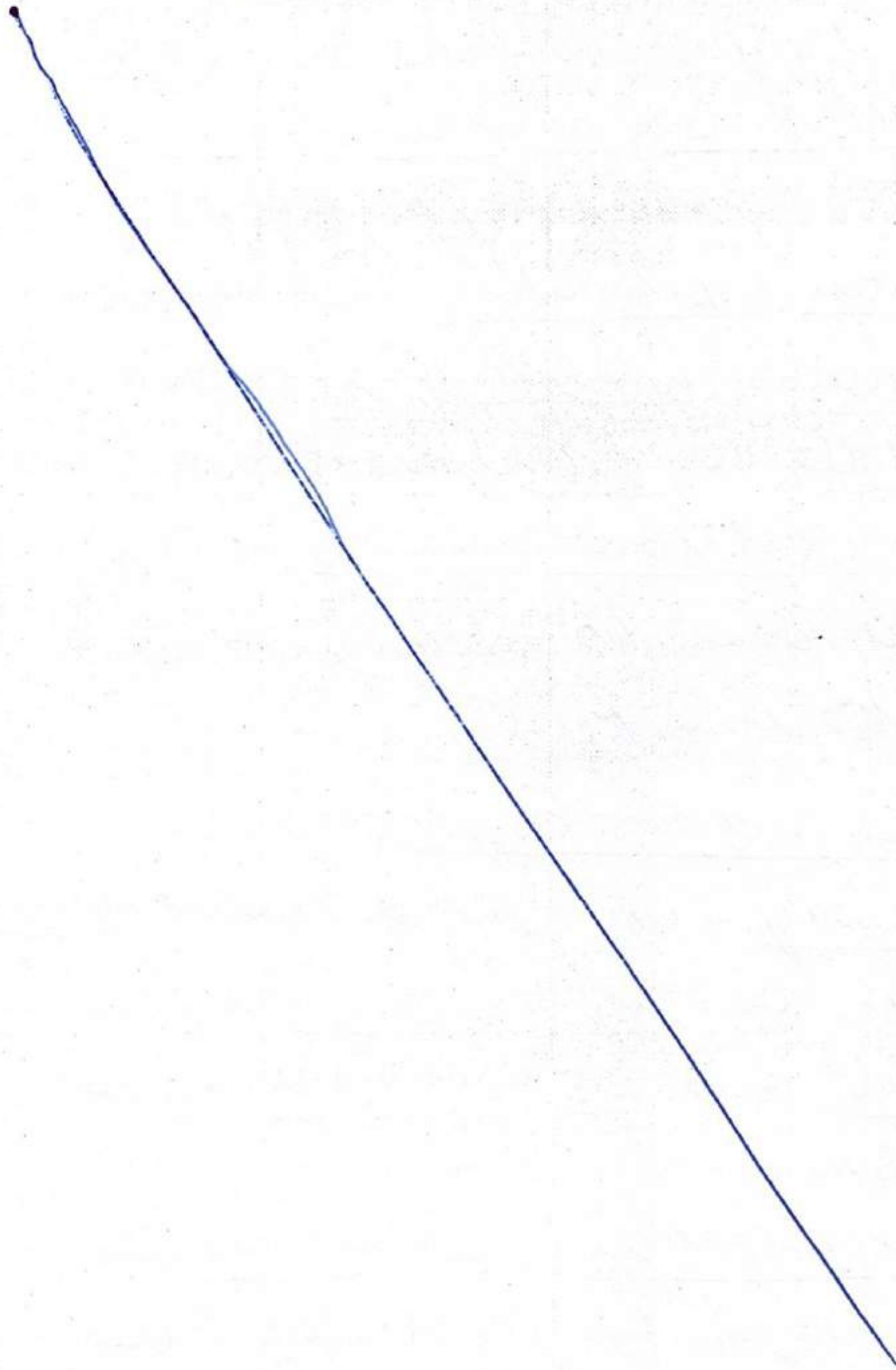
- (i) Arbitration & Conciliation Act, 1996.
- (ii) SARFAESI Act, 2002.
- (iii) Information Technology Act, 2008.

→ Parts II and III of Arbitration &
Conciliation Act, 1996 are based on
UNCITRAL's law on international
enforcement and conciliation
regime.

→ New Model BIT has been drafted
relying on UNCITRAL laws.

Therefore India shares a deep
and meaningful relationship

with UNCTAD, and should
further cooperation to promote
free and fair trade & commerce.



12. What are the issues and challenges faced by Indian migrants in the Gulf countries? Enumerate the steps taken by the Indian government to address these.

खाड़ी देशों में भारतीय प्रवासियों द्वारा सामना किए जाने वाले मुद्दे एवं चुनौतियाँ क्या हैं? इनसे निपटने के लिए भारत सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए।

The Gulf countries like Qatar, Saudi Arabia, Bahrain, UAE etc have very large communities of Indian expatriates. These include labourers, workforce, rich and middle tier merchants and traders, etc. They contribute heavily to remittances sent back to India, particularly states like Kerala.

Issues and challenges :-

→ security - in light of recent Qatar Crisis, the long standing Sri-Lanka divide, and ISIS threat to the region.

→ Exploitation of workforce through low wages, long working hours, deplorable conditions of work etc.

→ No / lack of social security for the workers.

→ They are caught in a debt trap, almost to a point of no return.

Steps by Indian government :-

→ Evacuation efforts like Operation Rahat and Saukhat Mochan.

→ Programs like Pravasi Kambhal Yojana for skill development.

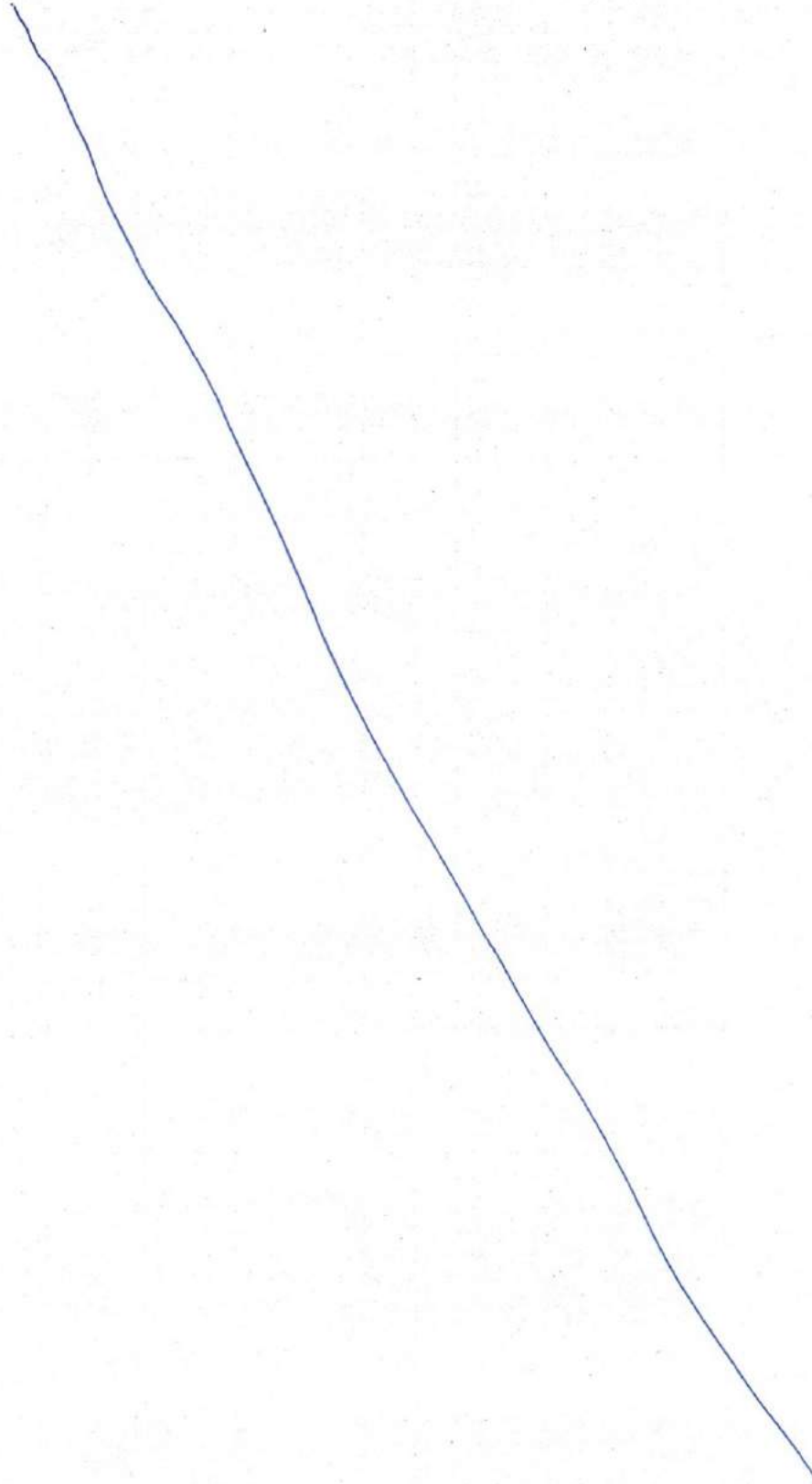
→ Engaging with countries diplomatically to ensure better work conditions.

→ Strengthening consular access and hotlines for redressal.

→ Merge of OCI and PIO cards.

→ Proxy voting in elections to empower them.

Hence, these along with further proposed measures will go a long way in safeguarding our diaspora.



13. The recent breakthrough in the Civil Nuclear field is a sign of India-Japan relations moving beyond the calculations of complementarities and cooperation. Analyse in view of the multiple factors shaping India-Japan relations.

नागरिक परमाणु क्षेत्र में हाल ही में प्राप्त सफलता भारत-जापान संबंधों का अन्योन्याश्रितताओं (अनुपूरक) और सहयोग से परे जाने का चिह्न है। भारत-जापान संबंधों को आकार प्रदान करने वाले विविध कारकों का विश्लेषण कीजिए।

The Civil Nuclear Agreement has transcended the Indo-Japanese relationship from one of skepticism post the Pokhran test to one of strategic engagement and cooperation. Japan was till now skeptical of India's potential diversion of civil nuclear energy to military uses.

However, post India's opening of reactors to inspection by IAEA, abstinance on multilateral platforms, passing of Insurence laws and changing geo-political situation, Japan has begun to support India's nuclear energy program with full force.

This gains further importance in light of following factors:-

- common interest to counter Chinese influence.
- commitment to environment, as nuclear energy is clean energy.
- It will propel the Indo-US Civil Nuclear Agreement also, as the most integral part in US reactors is made by Japanese companies.
- Part of larger growth dominance perspective of India and Japan in Asia-Africa region.
- To boost trade and investment in an otherwise slow economy, globally.

Indo-Japan relations have reached a higher level of engagement in other sectors like freight corridors,

industrial parks, bullet train etc.
This will further strengthen ties
and give an impetus to trade and
economic development, apart from
having geopolitical and strategic
connotations.

14. The Commonwealth grouping has been accused of talking about ideals that it does not uphold and wasting the resources of governments. Critically analyse the statement and comment on the relevance of the Commonwealth grouping in present times.

राष्ट्रमंडल समूह पर उन आदर्शों के संबंध में चर्चा करने जिनका स्वयं इसके द्वारा अनुसमर्थन नहीं किया जाता एवं सरकारों के संसाधनों का अपव्यय करने के आरोप लगते रहे हैं। इस कथन का आलोचनात्मक विश्लेषण कीजिए एवं वर्तमान समय में राष्ट्रमंडल समूह की प्रासंगिकता पर टिप्पणी कीजिए।

The commonwealth grouping continued post decolonisation to enhance shared "historical values", culture, and to fuel Britain's standing globally in terms of military and civilian alliances. Above all, it promotes the ideals of democracy and liberalism.

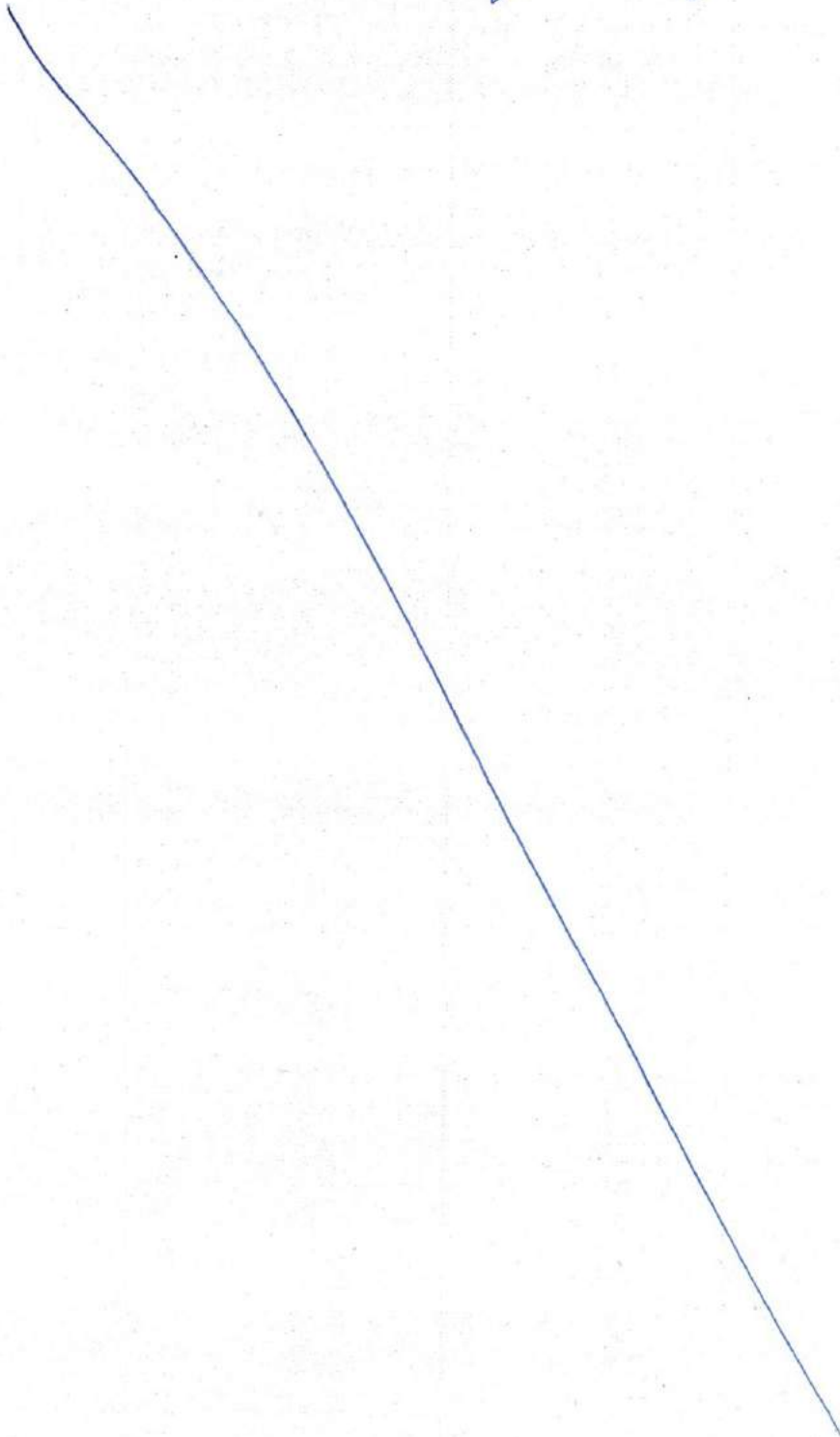
HOWEVER, in the present times, the grouping has lost its relevance due to the following reasons:-

→ India and Australia, the two biggest countries in the grouping existed soon after their respective independence.

- The "common law" has been replaced by respective domestic legal systems, with reducing importance of the Privy Council.
- Economic and security interests have gained more importance than civil and political engagement.
- Emergence of USA, Russia and China as superpowers diminished Britain's historical position.
- Multilateralism and self interest in economy is the order of the day.

THAT SAID, the importance of the grouping is reviving in the world of today, with rising Nationalism, Protectionism and thought of racial superiority. The Act-Right movement needs to be made with liberal democratic and globalised

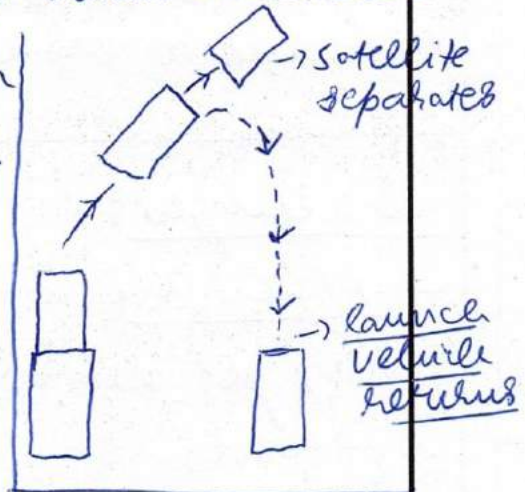
systems, as espoused by the
Commonwealth grouping.



15. ISRO has successfully flight tested the Reusable Launch Vehicle-Technology Demonstrator (RLV-TD). Discuss the significance of RLV and bring out the differences between RLVs and conventional Launch Vehicles (LVs). What are the challenges in successful execution of RLVs?

इसरो (ISRO) ने पुनः प्रयोज्य प्रक्षेपण वाहन-तकनीक प्रदर्शक (रियूजेबल लॉन्च व्हीकल-टेक्नोलॉजी डेमोस्ट्रेटर: RLV-TD) की उड़ान का सफलतापूर्वक परीक्षण किया। RLV के महत्व पर चर्चा कीजिए तथा RLVs एवं पारंपरिक प्रक्षेपण वाहनों (लॉन्च व्हीकल: LVs) के बीच अंतर स्पष्ट कीजिए। RLVs के सफल कार्य-निष्पादन में क्या चुनौतियां हैं?

The latest successful launch of RLV-TD by ISRO adds another feather to its cap in terms of the future of launch vehicle technology.



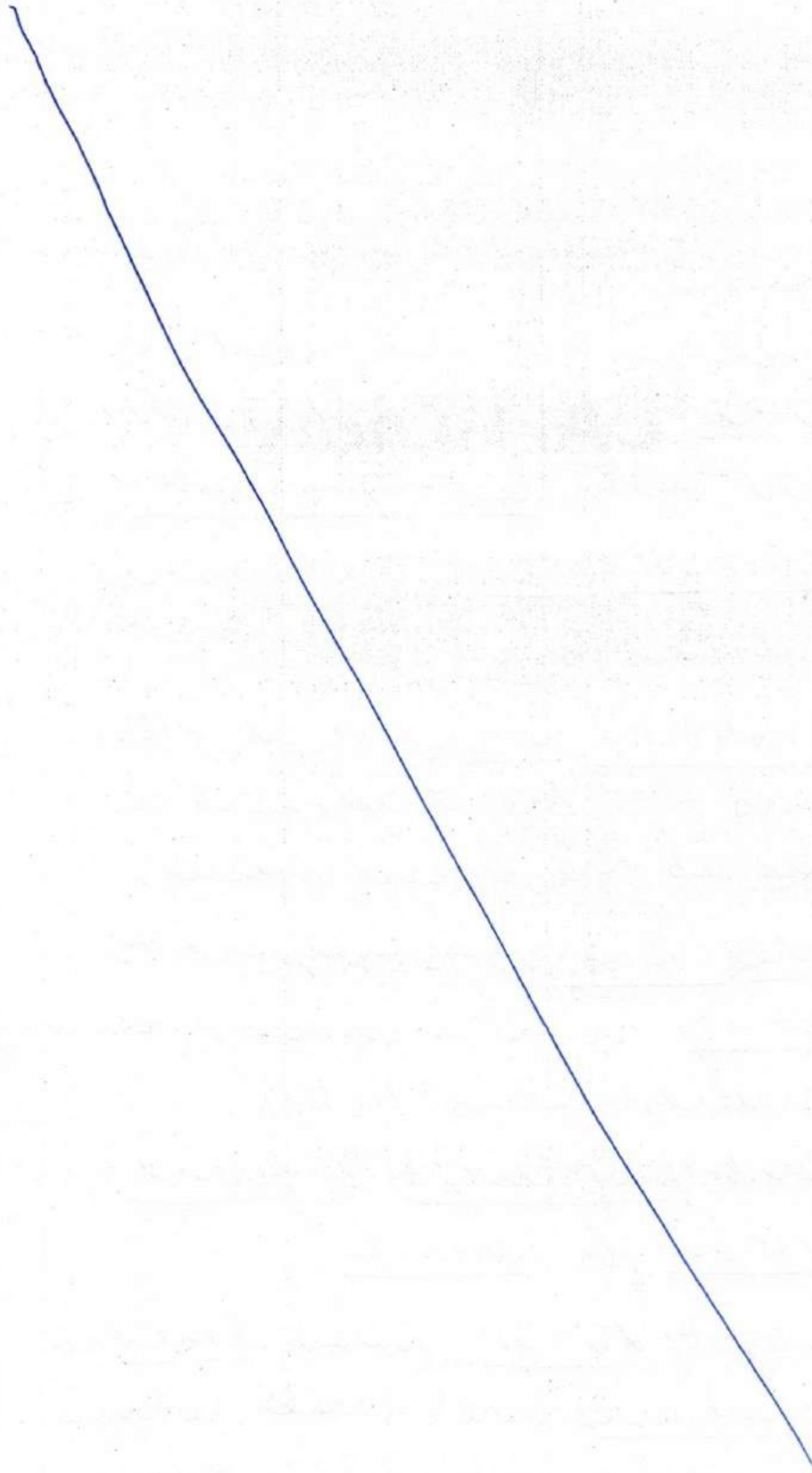
Significance:-

- saves costs of launch vehicles. Time for each launch reduced.
- gives impetus to commercial launches in future.
- Presents India as a world leader in space operations.
- Reduces consumption of fuel by using surrounding oxygen.
- Reduces contribution to space debris.
- Sustainability of space launches.

RLV's	CLV's
→ cost effective	expensive
→ Saves time	time consuming
→ uses <u>less resources</u> and <u>input/low</u> <u>materials</u>	uses more resources.
→ Launch vehicle returns to earth	Launch vehicle doesn't return.

Challenges:-

- Precision in terms of landing may get disturbed due to wind systems.
- Double friction (ascending and landing) may increase wear and tear beyond sustainable levels.
- Technology has still not been perfected to expand on a repetitive/commercial scale.
- very expensive at the starting point.



16. Women constitute just 14% of science researchers in India, though they are no longer a minority within higher education when it comes to STEM. Analyse the reasons for this state of affairs and discuss how it can be addressed.

यद्यपि भारत में विज्ञान शोधकर्ताओं की कुल संख्या में महिलाएं केवल 14% ही हैं, किन्तु STEM के संदर्भ में उच्च शिक्षा के अंतर्गत वे अब अल्पसंख्यक नहीं हैं। इस स्थिति के कारणों का विश्लेषण कीजिए और चर्चा कीजिए कि इसका समाधान किस प्रकार किया जा सकता है?

Women not only contribute very little to the workforce (27%), but are also less represented in STEM sectors. The reasons for this are manifold:-

- Traditional biases that view man as the bread winner and women as the home maker.
- Gender Bias with respect to capability in science and technology, ~~and~~ mathematics fields.
- Adverse preferences in fund allocation for research.
- The age of 20-35, when research predominates one's career, women usually take sabbaticals due to

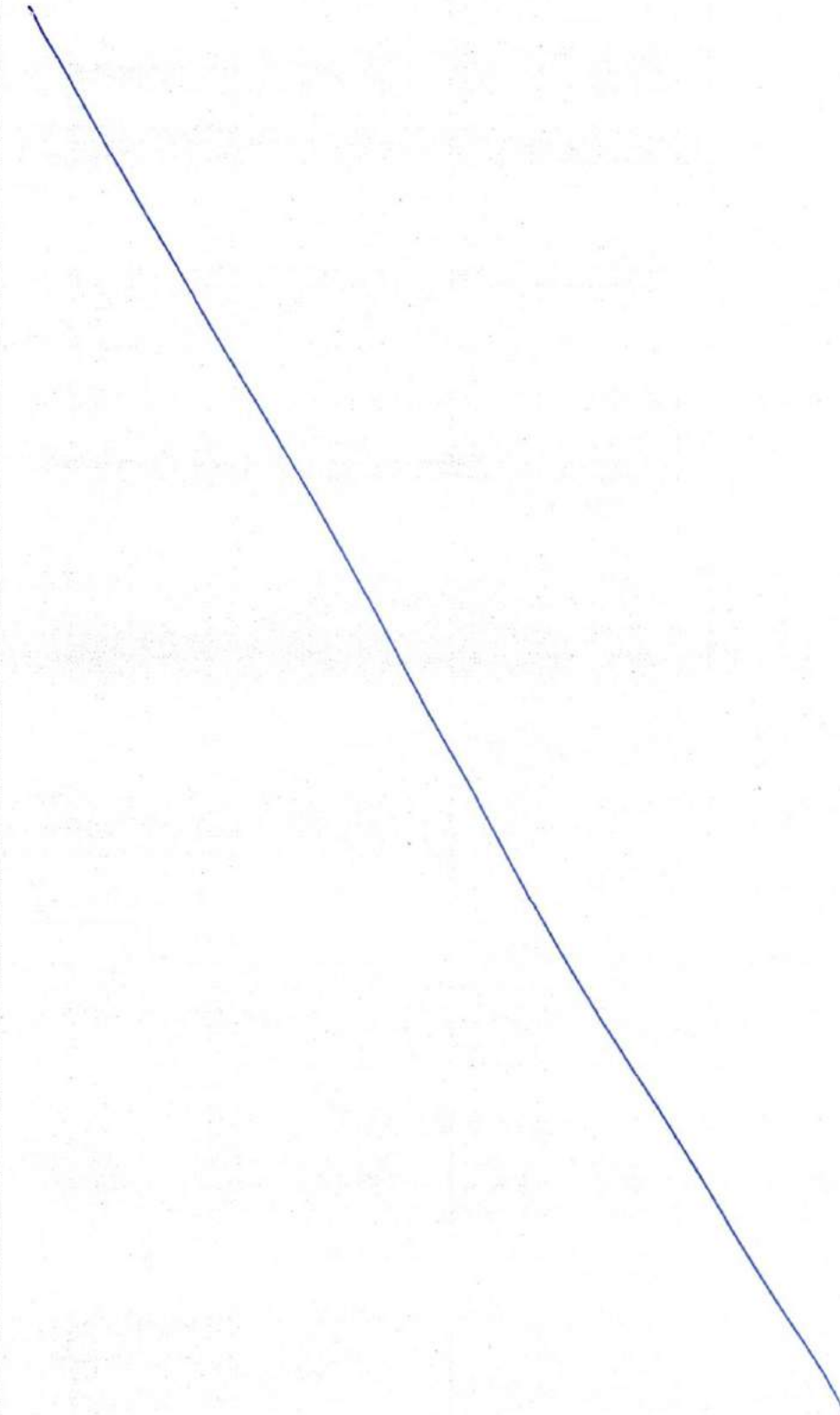
family planning reasons.

→ lack of scope for "work from home" in STEM sectors.

Ways to address this:-

- Encourage women by setting an example in promoting research.
- Provide support functions like crèche facilities etc.
- Education and sensitisation of those in charge of making decisions.
- Schemes like Kiran and CURIE set an example and provide the way forward.

Women are the biggest untapped resource in STEM sectors and the government must hesitate to change this by bringing an attitudinal shift in thinking.



17. What do you understand by Internet Governance? Has the recent development of ICANN becoming free from the US government solved the issues of Internet Governance? What should be the way forward?

इंटरनेट गवर्नेंस से आप क्या समझते हैं? क्या संयुक्त राज्य अमेरिका की सरकार से ICANN के मुक्त होने की हाल ही की घटना ने इंटरनेट गवर्नेंस के मुद्दों का समाधान किया है। आगे की राह क्या होनी चाहिए?

Internet governance is the concept of administering and managing the Internet of Things (IoT) in a free and fair manner, in order to ensure equality of its access and use.

It was governed by ICANN, which had majority control by the US government. However, after the snoopgate scandal, Brazil's Dilma Rousseff spearheaded the campaign to free Internet from US control. Finally, the ICANN is now an independent

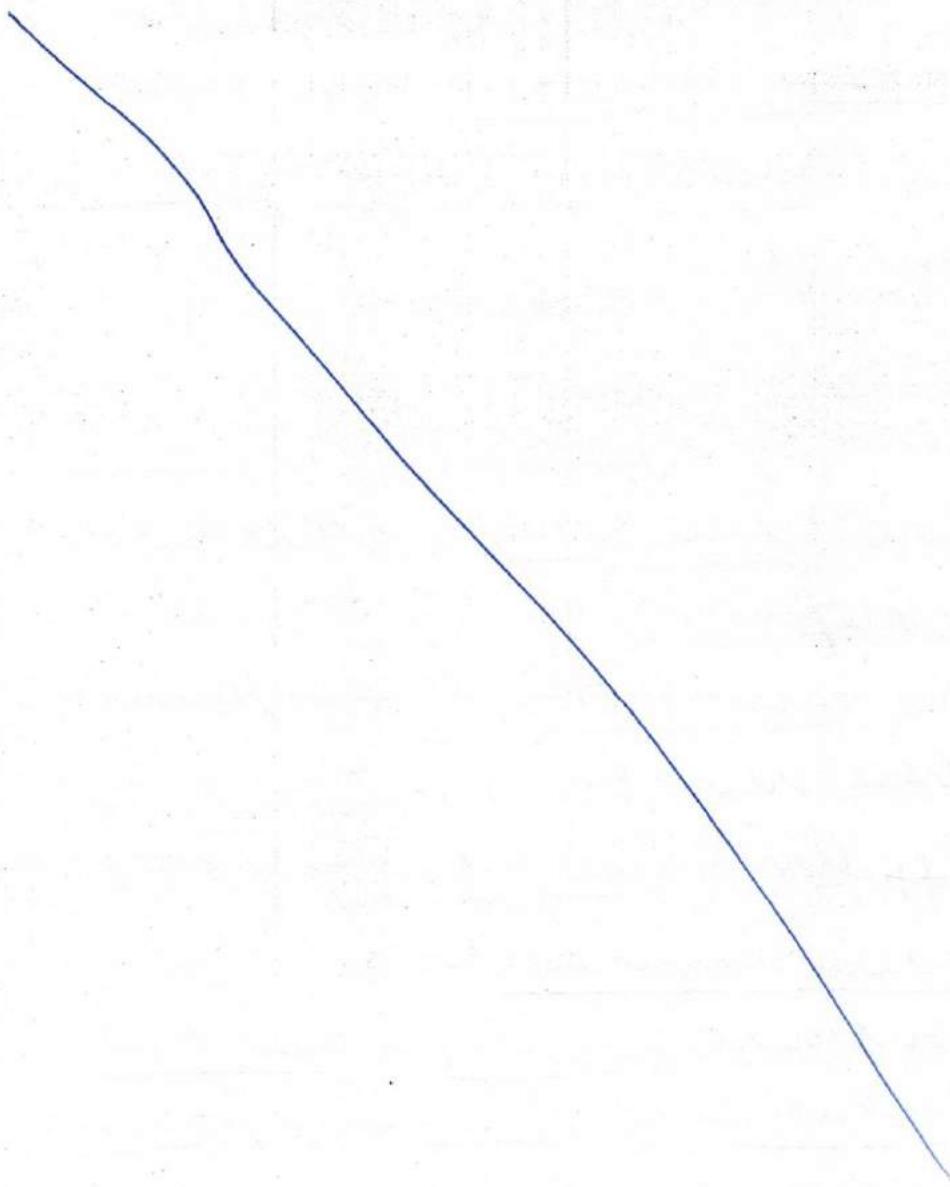
body governing the internet from an arm's length. HOWEVER, the following issues remain:-

- data security and vulnerability to hackers, cyber terrorism.
- Net neutrality and free ^{and equal} access to all in an equal manner.
- Misuse of internet by terrorists and antisocial elements.
- Jurisdictional issues in respect of crime.
- Hosting of servers and host countries' powers.

The WAY FORWARD is international cooperation and addressing the above issues on a war footing by consensus, in a like

manner as the Montreal
Convention & Paris Agreement.

If not resolved, these issues
can threaten our peace and
sovereignty.



18. Increase in the cases of nosocomial infections has emerged as a major concern in India. What are nosocomial infections? What are its causes and why is it a major concern in India? Identify the measures required to combat these infections.

भारत में नोसोकोमियल संक्रमण (nosocomial infections) के मामलों में बढ़ोत्तरी एक प्रमुख चिन्ता के विषय के रूप में उभरी है। नोसोकोमियल संक्रमण क्या हैं? इसके कारण क्या हैं और यह भारत में एक प्रमुख चिन्ता का विषय क्यों है? इन संक्रमणों की रोकथाम करने हेतु उपायों की पहचान कीजिए।

Nosocomial infections are hospital acquired infections like bacteria, fungi, urinary tract etc.

causes:-

- lack of hygiene and sanitation
- Low monitoring & standards upkeep.
- No sanitisation of equipments.
- High number of patients, low staff and low capacity of hospitals.

Measures required:-

- constant cleaning & sanitisation.
- Isolation of areas and patients with such infections.

- Awareness generation among staff and educating them on hygiene upkeep.
- Throw away needles and used disposable instruments.
- culture of cleanliness on a mass scale like Swachh Bharat mission.

19. There is a growing concern that robots, automation and AI will transform the labour markets and lead to massive job loss across the world. Comment. Also mention the steps that can be taken to mitigate the impact of increased automation and AI.

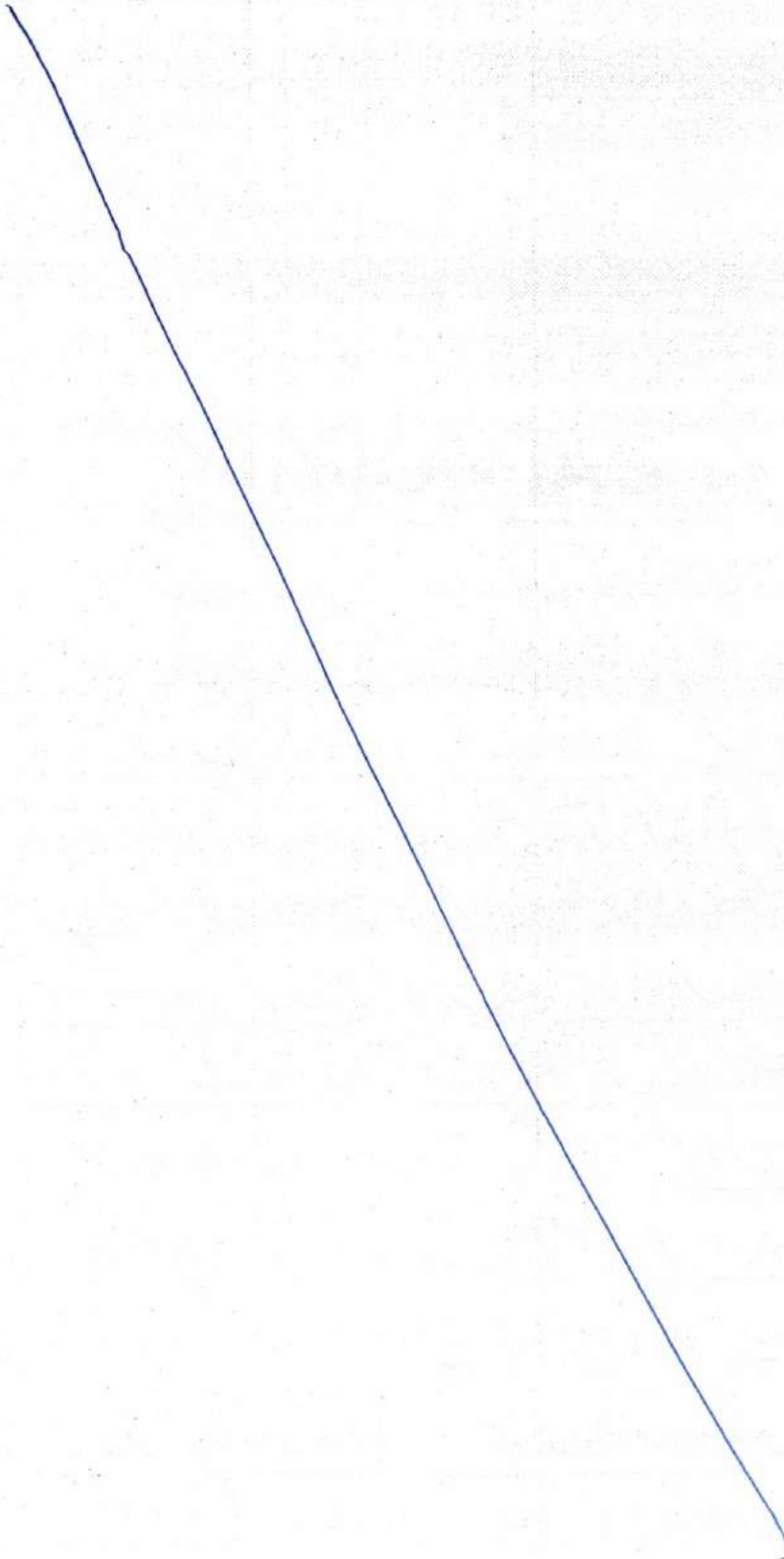
इस विषय में चिंता बढ़ती जा रही है कि रोबोट, ऑटोमेशन (स्वचालन) एवं AI, श्रम बाजार को रूपांतरित कर देंगे और परिणामस्वरूप विश्व भर में बड़े पैमाने पर रोजगारों की हानि होगी। टिप्पणी कीजिए। बढ़ते ऑटोमेशन (स्वचालन) एवं AI के प्रभाव को कम करने हेतु उठाए जा सकने वाले कदमों का भी उल्लेख कीजिए।

Automation and AI are both a boon and a bane to the economy. While they create efficiencies in production and bring economies of scale, they lead to job losses at a large scale due to their precision and capacity to work more than humans.

Therefore, they trick being counter productive as they may lead to poverty and unemployment, deepening the divide between the haves and the have nots.

Steps to mitigate the impact of AI/automation:-

- Large scale skill development to enhance capability enhancement of workforce.
- Structural shift in employment & stratification and moving human focus of jobs on non-labour kinds.
- slow shift towards quaternary and quinary jobs.
- Enhance the use of emotional quotient in jobs.
- Draw the baseline beyond which sectors, humans will necessarily dominate.
- Limit use of automation/AI depending upon cost+feasibility.



20. The importance of IPRs as a marketable financial asset and economic tool needs to be recognised. Elaborate. In this context, analyse how the National Intellectual Property Rights (IPR) Policy intends to lay the future roadmap for intellectual property in India.

विक्री-योग्य (विपणनयोग्य) वित्तीय परिसंपत्ति एवं आर्थिक उपकरण के तौर पर IPRs के महत्व को मान्यता प्रदान किए जाने की आवश्यकता है। विस्तारपूर्वक बताईए। इस संदर्भ में, विश्लेषण कीजिए कि राष्ट्रीय बौद्धिक सम्पदा अधिकार (IPR) नीति भारत में बौद्धिक सम्पदा का भावी रोडमैप किस प्रकार निर्धारित करना चाहती है?

Intellectual Property Rights like Patents, Trademarks, copyright, GI's provide protection and ownership to the creator of a product, design, literary work etc against its use and misuse by others. They provide recognition to inventions, and exclusivity of use or the right to sell those use rights. These act as an incentive for more innovation, creation and R&D.

The National IPR Policy, 2016 endeavours to make India an IPR friendly regime, by

providing the following:-

- Retains Section 3(a) provisions on ~~ever~~ evergreening. For a patent, novelty and innovation need to be coupled with appreciable value addition.
- Retains compulsory licensing under Section 84 of Patents Act, 1970 to promote generic medicines in exceptional cases.
- Ease the process of grant of IPR
- Public Research institutions will mandatorily file for IPR's.

A criticism of the Policy is that it assumes that maximum protection leads to maximum innovation. It goes against the spirit of free flow of information. That said, the Policy is a welcome step & will provide a fillip to the IPR regime in India.