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GENERAL STUDIES (TEST CODE : 844)

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Medium Hindi/Eng.	ENGLISH	Registration Number	29481
Center	MUKHERJEE NAGAR	Date	24-3-17

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	12.5	
2	12.5	
3	12.5	
4	12.5	
5	12.5	
6	12.5	
7	12.5	
8	12.5	
9	12.5	
10	12.5	
11	12.5	
12	12.5	
13	12.5	
14	12.5	
15	12.5	
16	12.5	
17	12.5	
18	12.5	
19	12.5	
20	12.5	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- 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 HINDI and ENGLISH.
इसमें बीस प्रश्न हैं तथा हिन्दी और अंग्रेजी दोनों 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. It has been assessed that radicalisation is a security threat to India. Explain the basis of such an assessment with examples. What are the key pillars of the counter radicalisation strategy of the government?

प्रायः यह आकलित किया जाता है कि कट्टरता (रेडिकलाइजेशन) भारत के लिए एक सुरक्षा संबंधी खतरा है। इस तरह के आकलन के मूलाधारों की उदाहरण सहित व्याख्या कीजिए। कट्टरता से निपटने के लिए सरकार की रणनीति के प्रमुख आधार स्तंभ क्या हैं?

Radicalisation is a process which based on a set of fundamental beliefs and ideas, where using these beliefs minds of individuals and communities ~~are~~ trained to think in a particular manner. It often leads to extremism and manifests itself in violence and terrorism.

Radicalisation can be called a security threat to India given the participation of segments of youth in certain regions of the country in separatist, naxal and Maoist activities. Moreover, self assertion to ^{the extent} extreme of violence was evident in the Muzafarnagar riots as well.

It poses a security threat not only in terms of law and order but also in terms of our existence as a democratic

republic wedded to the idea of plurality and diversity. Radicalisation in that we bound to harm our national social fabric where each community will begin to see itself as distinct and superior at the cost of other communities and their interests.

The reasons/basis for radicalisation can be

- 1) Educational backwardness of a large segment specifically in the minority community which makes them prone to take the path of radicalisation.
- 2) Sense of suspicion: still prevails between communities, though considerable progress has been made in this direction. The 'Us vs them' mentality still prevails.
- 3) Lack of employment opportunities: makes these youth more prone to ideologically vulnerable where they vent their anger through unscrupulous activities.

- 4) International terrorism: which reaches out to these youth across countries in order to radicalise them. For example; recently 9 Indians were deported to India after their links with ISIS were established.
- 5) Lack of a cyber security framework which means that the government's surveillance is not keeping ~~with~~ pace of the with technological advancements.

~~The key pillars of the counter radicalisation strategy of the government are:~~

- 1) ~~Identify such groups/individuals/organisations and take action against them.~~
- 2) ~~Demobilise through all their links, funding~~

3) ~~The pillars of the governments counter radicalisation strategy are - identification, demobilisation and reintegration.~~

Identification: of individuals and organisations and their links, sources of funding etc.

Demobilisation: through talks or arms action if necessary

Reintegration: into the society as responsible citizens.

2. Arguments on Siachen issue often move around the idea of demilitarisation. Examining the key attributes of the Siachen issue explain the basis of arguments regarding its demilitarisation? Also highlight the arguments against such an idea.

सियाचिन मुद्दे पर प्रस्तुत तर्क अक्सर विसैन्यीकरण के विचार के आस-पास मंडराता रहता है। सियाचिन मुद्दे से जुड़े प्रमुख पहलुओं का परीक्षण करते हुए इसके विसैन्यीकरण संबंधी तर्कों के मूलाधारों की व्याख्या कीजिए? साथ ही इस तरह के विचार के खिलाफ दिए जाने वाले तर्कों पर भी प्रकाश डालिए।

Siachen issue finds its ~~route~~ root in the failure of the Karachi Agreement of 1948 and the subsequent Simla Agreement of 1972 in demarcating the boundaries through the Siachen glacier.

★ India through the success of Operation Meghdoot established control over the greater part of the glacier. However, Pakistan considers such occupation illegal and contends against it.

Arguments for demilitarisation:

- 1) Huge costs: In terms of equipment, special dresses, special rations that are needed by the armed forces. Demilitarisation will free these resources which could be used for some other productive activity.
- 2) Casualties: The severe conditions cause casualties.

to men from both the countries. For example, the avalanche in 2016 caused death of 9 Indian soldiers.

3) Some experts argue that Siachen has no strategic importance for India, hence it's best to demilitarize.

4) Environmental damage and distress among species due to activities of the armed forces. However, there are arguments against demilitarisation as well. These include:

1) Strategic importance: Siachen allows India a small link with Central Asia which is important given India's proximity to two aggressive neighbours - China, Pakistan.

2) Suspicion or lack of clarity: On Pakistan's motive and the suspicion that Pakistan may later refuse to honour mutual demilitarization.

3) Siachen remains a contentious issue.

The best possible alternative to demilitarization could be mutus based on our former Prime Minister Manmohan Singh's idea of converting Siachen into a global research park with both India and Pakistan cooperating on this front. Further surveillance

could be done through the use of
drones, satellites, unmanned vehicles.

This will:

- Preserve an ecologically sensitive area.
- Would help in maintaining peaceful relations with Pakistan.
- Will be a solution to the casualties that take place on both sides of the border.
- Open an area of cooperation for both sides to build upon.

3. Money laundering and terrorism have strong inter linkages. Illustrate. In this context, how far do the steps taken by the government confirm with the international commitments?

मनी लॉन्ड्रिंग और आतंकवाद मजबूती से एक-दूसरे से सम्बद्ध हैं। स्पष्ट कीजिए। इस संदर्भ में, सरकार द्वारा उठाए गए कदम किस हद तक अंतरराष्ट्रीय प्रतिबद्धताओं की पूर्ति करते हैं?

Money laundering and terrorism may sound to be two exclusive domains but the truth is that there are strong inter linkages between the two and the two often reinforce each other.

For example: a shell company may evade taxes or indulge in other illicit activities to generate black money. All this being done under anonymity or through fake identities. The complex nature of our societies makes it very possible that a part of this money ends up in the hands of a terrorist organisation.

Similarly, a terrorist organisation with links to certain anti social elements will encourage tax evasion and black money generation to provide funding for itself.

Money laundering has been identified across nations as a means to finance terror.

For example, the Golden crescent and golden triangle are infamous for drug trafficking, much of this trade is financed through black money and is sustained through black money. Later this money terrorist organisations have been known to be linked with this trade and benefit from it.

To eliminate terrorism and its funding international community has taken many steps. Some are:

- 1) Convention on illicit Narcotics and Psychotropic drugs, 1988.
- 2) International Convention on Organised Crime.
- 3) Financial Action Task force (FATF), 1989 which works on the three principles - prevention of money laundering, prevention of terrorism, and Increased International cooperation.

Indian government is very vocal against terrorism and related sources. In keeping with the international commitments India has enacted certain laws. These are

- 1.) Income tax Act, 1961
- 2.) Benami Properties Transaction (Prohibition) Act,
~~1988~~ 2016
- 3.) Code of Criminal Procedure
- 4.) Prevention of Money Laundering Act.
- 5.) India became a member to FATF in 2010

Further, the government's recent move towards demonetisation and the push towards digitisation are going to be fundamental in curbing money laundering and will effect the workings of terrorist organisations.

4. Longstanding issue of insurgency in the Northeast highlights the linkage between violence, remoteness, underdevelopment and alienation. Elaborate. Also, suggest some corrective measures for a lasting resolution of the conflicts in this region.

पूर्वोत्तर में लम्बे समय से विद्यमान उग्रवाद का मुद्दा वस्तुतः हिंसा, दूरी, अल्पविकास, और अलगाव की भावना के मध्य के संबंधों पर प्रकाश डालता है। सविस्तार व्याख्या कीजिये। इसके साथ ही इस क्षेत्र में संघर्ष के एक स्थायी समाधान के लिए कुछ सुधारात्मक उपायों का सुझाव भी दीजिए।

The Northeast in India have been a victim to the longstanding issue of insurgency. This issue has only highlighted the problems faced by the Northeast part of India which has aggravated due to the linkages between violence, remoteness, underdevelopment and alienation.

The linkages works as such:

- 1) Northeast is only connected to India through the Siliguri corridor (known as the chicken's neck). This corridor is only 21 km wide and does not allow much leeway to the people of northeast India not to identify with the mainland.
- 2) Such lack of connectivity has not made infrastructural development possible in terms

of schools, hospitals, good POS system, roads, railways links, air connectivity etc.

- 3) Lack of Infrastructure makes the region unfavourable for investment by the private sector which leads to its further alienation.
- 4) Lack of private investment makes the region backward with few to no employment opportunities.
- 5) Lack of good schools and higher level institutions make education out of reach for the majority of the people who find themselves lacking in skills and not fit for good employment opportunities elsewhere.

Moreover, presence of a diverse tribal culture makes the region socially alienated as well.

The lasting resolution of the conflicts in this region is through development.

Development on all fronts, including,

- 1) Education: More schools must be open and higher level institutions should get established.
- 2) Skill training to youth to make them employable.

- 3) Good public infrastructure must be made available in terms of hospitals, PDS, transport linkages.
- 4) Industries must be incentivised to operate there, specially food processing and industry, as organic farming has huge potential in the north-east.
- 5) Connectivity must be established. For example the recent developments with Bangladesh to provide rail routes to the North east. This is important as Northeast shares 90% of its borders with ~~foreign~~ neighbouring nations.
- 6) Leveraging its position by connecting north-east to countries in South East Asia. BIMSTEC and BBIN etc can play a very important role in making North east into a thriving trading gateway.
- 7) Political Participation: must be enlarged for North eastern states in the Parliament, with women representatives as well to give Northeast a platform to raise issues effectively.
North east is our untapped treasure, we must understand its importance.

5. While on the one hand China's One Road One Belt initiative poses security concerns and challenges for India, on the other, it can help improve India's connectivity to major markets and resource supplies. Discuss.

जहाँ एक ओर चीन की 'वन बेल्ट वन रोड' पहल भारत के लिए सुरक्षा संबंधी चिंताएं और चुनौतियां खड़ा करता है, वहीं दूसरी ओर यह संसाधनों की आपूर्ति और प्रमुख बाजारों तक भारत की कनेक्टिविटी (संयोजकता) को बेहतर बनाने में भी मदद कर सकता है। चर्चा कीजिए।

China's One Road One Belt initiative is a vast regional plan of China to emerge as a major player in the regions economy and geopolitics.

It has two components - the Silk road route and the maritime silk route. The former connects China to West Asia, Central Asia to as far as Europe and the latter connects China from the Strait of Malacca to Sri Lanka, North and East Africa to Central Asia.

It poses security concerns and challenges for India as

- 1) String of Pearl theory seems to substantiate with China seemingly trying to circle India on all fronts.

- 2) Guadar port issues: The CPEC which is a part of the OBOR runs through Guadar which is a port of the Pakistan Occupied Kashmir. China's investments in this area not only undermines our sovereignty but also makes China a party in future conflict with Pakistan.

Challenges include:

- 1) India is not as financially robust to make such huge investments like China. This aggravates the risk of China becoming all too regionally powerful.
- 2) China's advances to age old allies of India including Bhutan, Nepal seems to leave out India and hurt these dynamic relations.

3) However, if India decides to join the initiative, it ~~can~~ may bring certain benefits including:

- 1) Access to markets: as far as Europe through Central and West Asia. This is much needed given the move towards protectionism and deglobalisation in international trade.
- 2) Boost to Make in India: as exports are expected to increase, this will give a golden opportunity to India's manufacturing to thrive.
- 3) Infrastructure investments: will be made available to India specifically in the regions that are close to road initiative. Kashmir and North East may come out as winners.
- 4) Energy resources: like oil, natural gas, coal

etc will be more readily available, given the increased access to energy rich areas.

Before any step is taken India must weigh out all pros and cons, further it must fast track its own commitments in the Chabahar port and along with strengthening the Sagarmala project.

6. NATGRID was an ambitious step involving intelligence reforms, however, it remained a non-starter. Explain. In the context of recent initiatives to revive the NATGRID and the challenges it faced previously what steps are required to make it effective?

नेटग्रिड (NATGRID) इंटेलिजेंस सुधारों से सम्बंधित एक महत्वाकांक्षी कदम था, हालांकि यह शुरू नहीं हो पाया। व्याख्या कीजिए। नेटग्रिड को पुनर्जीवित करने की हाल की पहल और पूर्व में इसके द्वारा सामना की गयी चुनौतियों के संदर्भ में, इसे प्रभावी बनाने के लिए कौन-से कदम उठाए जाने की आवश्यकता है?

NATGRID came into existence after the 26/11 Mumbai attacks when the need of an all encompassing intelligence data hub was felt.

It was an ambitious step as it aimed to link

- 1) link data from sources such as banks, credit cards, travel details, visa details among others and create one big and comprehensive database.
- 2) Eleven Central investigation and intelligence agencies will have access to this data base for investigation purposes.

NATGRID aimed to strengthen the security framework of the country. However it failed to take off due to the following reasons:

- 1) Non clarity about the head/CEO of NATGRID, and who will choose him/her and what will be the procedure of selection.

- 2) Privacy issues: That Right to Privacy will be compromised given such tantamount powers to the intelligence agencies over the personal details of the individuals.
- 3) State Police and other agencies: were not included which is a big lacuna in the scheme.
- 4) Coordination and cooperation between the various agencies lacked a comprehensive plan.

Steps required:

- 1) A clear chain of command must be established with NATGRID directly reporting to the PMO
- 2) Privacy concerns must be removed by putting in place enough safeguards through legislative and policy measures
- 3) The CEO/head to be appointed must be appointed only after consent from all the existing agencies to ensure that further cooperation and coordination is smooth.
- 4) State level agencies must be made a part of the scheme so that the police may also get empowered and become more efficient

in tackling crime.

The need of NAPGRID is well known given the ~~increasing~~ crime and terrorist activities across the world. NAPGRID must be improved upon to make sure that crime and terrorism are totally eliminated and a ~~see~~ robust security mechanism put in place.

7. India's national security architecture faces a difficult task in detecting digital intrusion in cyberspace. What are the challenges India faces w.r.t. Digital Intrusion? How can these challenges be overcome?

भारत की राष्ट्रीय सुरक्षा अवसंरचना, साइबर स्पेस में डिजिटल घुसपैठ का पता लगाने में मुश्किलों का सामना कर रही है। डिजिटल घुसपैठ के सन्दर्भ में भारत किन चुनौतियों का सामना कर रहा है? इन चुनौतियों को कैसे दूर किया जा सकता है?

Digital intrusion refers to when privacy rights are compromised in the virtual world. This intrusion may take the form of hacking, deep oversight, wrongful access to networks or otherwise tampering with essential information online.

The recent fiasco where close to 3.2 million bank cards were compromised and the earlier tampering of important information hacking of Indian Navy Submarine data are evident of ~~the~~ fact India's vulnerability to digital intrusion across sectors.

Challenges India face:

- 1) Policy support is lacking. National Cyber Security policy is not keeping up with the present needs.

- 2) Robust Lack of a robust security framework
NATGRID in its present form lacks employability.
- 3) Technological and technical systems knowledge
is lacking
- 4) Trained manpower to combat cyber
~~few~~ attacks are not there.

Further lack of digital literacy,
awareness on safeguard mechanism
and the susceptibility of common Indian
masses to cyber hacking of their
social media profiles and bank accounts
are other challenges that India faces.

We need a very clear vision on
how we are to resolve these issues
in an ecosystem where everything is
turning digital.
Steps that can be taken

- 1) Create a robust security mechanism and make it into an integrated one so that all law enforcement agencies are equipped with a Plan of Action.
- 2) Policy support: by creating a new National Cyber Security Policy, which is in line with the new challenges that India faces.
- 3) R & D: On cyber security, how to make systems robust, and on ethical hacking.
- 4) Training enough manpower to meet the present day security challenges.
- 5) Digital literacy and Awareness among people on Do's and Don'ts and by putting an effective grievance redressal mechanism in place in case of a breach.

The push towards a cashless economy, digital India, and ever increasing computerisation across all government offices call for a good preventive and combating mechanism.

8. Relations with Iran hold a lot of potential for India's ambitions for West Asia and beyond, however, realising this potential also involves certain global and regional challenges. Examine.

ईरान के साथ संबंध वस्तुतः पश्चिम एशिया और उससे परे भारत की महत्वाकांक्षा के लिए संभावनाओं से परिपूर्ण हैं, तथापि इस संभावना को साकार करने के मार्ग में कुछ वैश्विक तथा क्षेत्रीय चुनौतियां भी हैं। परीक्षण कीजिए।

Iran holds the key or gateway for India to West Asia and further. India had more or less maintained diplomatic relations with Iran during the period of sanctions on the country. This shows the goodwill that exists between the nations.

India's interests in the region are,

- 1) Energy needs: India imports over 80% of its oil requirements, 55% of which come from West Asia.
- 2) India Diaspora: The region is home to close to 7 billion Indians, NRIs, PIOs who send around \$40 billion as remittances to India.
- 3) Connectivity: Iran and the Persian Gulf region

can provide connectivity to India to regions West of Asia and North Africa.

- 4) Terrorism: India being a victim of terrorism is vocal against all sorts of organised crime and is pushing for the governments in the region to take strict action against terrorist groups.

Keeping in view the interests that India has in the region, India made investments in the Chabahar Port and the SAGC Pipeline. However work is still to gain pace.

India must at all costs also try to balance the global and regional challenges that it faces before making inroads to the West Asian region. These are:

- 1) Balancing acts: ^{Relations with} Iran have to be balanced vis a vis Israel and Saudi Arabia - both are allies of India.
- 2) US sanctions: on Iran pose a challenge to India, once again, where it has to make smart choices again.

3) Pakistan angle: Though Chahbar port allows for an alternative route, India must diversify its routes and in this Pakistan has to be roped in diplomatically.

4) India must tread carefully and balance ~~all the~~ relations with all the regional powers so as to fulfil her own strategic results at the same time maintaining peaceful relations with all parties involved.

9. The internal crisis in Nepal over the past few years has given concrete shape to the fears of China gaining upper hand vis-a-vis a traditionally influential India. Elaborate. What can India do to further strengthen its ties with the Himalayan nation?

पिछले कुछ वर्षों में नेपाल के आंतरिक संकट ने पारंपरिक रूप से प्रभाव रखने वाले भारत पर चीन द्वारा बढ़त लिए जाने के भय को ठोस आकार प्रदान किया है। विस्तारपूर्वक बताईए। इस हिमालयी राष्ट्र के साथ अपने संबंधों को अधिक मजबूत करने हेतु भारत और क्या कर सकता है?

India and Nepal have been age old allies with both sharing an open border and free visas arrangements. Our ties are cultural and historical and go back in centuries. However, in the past one year things are seemingly not as great as they once were with increasing internal crisis in Nepal and China's advances to the country.

The contention of Nepal after the 9 month long unofficial blockade ~~there~~ on the connecting road of India and Nepal which cut down supplies to the landlocked country is that India had interfered in the internal affairs of the country. The blockade had been caused by the Madhesi group who did not

receive adequate respect in the new Nepali Constitution.

India on her part had not endorsed the constitution in toto given some clauses ~~and~~ in the Constitution which were not fully democratic.

This had provided an opportunity to China which provided the necessary supplies to Nepal and has also promised infrastructural investment.

This is a cause of concern for India as China has already gained enough upper hand in the region and ~~it~~ is increasingly concretizing the String of Pearls. Nepal had been a long held ally of India and India must not let Nepal turn into one of China's backyards.

Steps that India can take .

- 1) Peacefully approach : and clearly mention India's peaceful and just intentions .
- 2) Soft Power : India must leverage the immense soft power that it has ~~or~~ and endorse the cultural ties of the two neighbouring nations .
- 3) Bring out more areas of cooperation ~~are~~ between Nepal and India in terms of road infrastructure, hydro power plants
- 4) Fasttrack work on initiative taken up by the BBIN and BIMSTEC.

China has recently signed an arms deal with Nepal , this is a clear sign of ^{correct} China's quick approach to leverage the [^] lacuna between India and Nepal . India must not waste any time either as this would only happen at our strategic interests.

10. The Trans-Pacific Partnership agreement (TPP), touted as the world's biggest trade deal to date, has danger of bending the WTO rules. In this context, discuss the impact TPP can have on India's foreign trade. What are the options that India has to deal with the issues arising out of the TPP?

विश्व के सबसे बड़े व्यापार समझौते के रूप में प्रचारित ट्रांस-पेसिफिक पार्टनरशिप (टी.पी.पी.) समझौते द्वारा डब्ल्यू.टी.ओ. के नियमों को प्रभावित करने की आशंका है। इस परिप्रेक्ष्य में भारत के विदेश व्यापार पर टी.पी.पी. के संभावित प्रभावों की चर्चा कीजिए। टी.पी.पी. से उत्पन्न मुद्दों से निपटने के लिए भारत के पास क्या विकल्प हैं?

Trans-Pacific Partnership Agreement is the result of the ongoing deadlock in the WTO Doha Development Round and the little leeway that developing countries are enjoying under a few of the relaxed rules.

TPP is also

TPP must seen in the light of the move towards bilateralism which is aimed at bending the rules of a multilateral system. This is so as the countries party to this are to have a trade and service agreement based on the framework which sets rules related to Intellectual Property Rights, labour standards, environmental standards and origin criteria.

These developments are of profound importance as the agreement is to control 40% of world's GDP. Concerns for India are also there which is not a party to this agreement.

Concerns:

- 1) Excluded: India will be excluded from 40% of world's GDP.
- 2) Exports to these nations are expected to fall down given the strict regulatory framework under PPP.
- 3) India may also lose on the services front where the labour laws may be much more strict.
- 4) Many goods and services that India currently enjoys an advantage at may be shunted out due to IP norms. Example: Generic medicines.

The issues arising out of PPP may be worked or their impact avoided if India takes up the following steps:

- 1) India must persuade the manufacturing

unite to raise standards of their products so that they may gain in the long term.

- 2e) India must fast track agreements like the EU-India Bilateral Trade and Investment Agreement, Regional Comprehensive Economic Partnership
- 3e) Technological advancements must be made to make India's exports cost-competitive
- 4e) Streamline and convert the 200 odd labour laws into one comprehensive code.
- 5e) Must build pressure to ensure that the countries involved in PPP do not breach rules under the WTO.

Though the U.S.A—the biggest economy under the PPP has withdrawn from the agreement India must take this opportunity to gauge the current global trends towards bilateralism and take the necessary steps to emerge as a winner.

11. Legal proceedings initiated by the Marshall Islands against India, Pakistan and Britain over nuclear weapons in the International Court of Justice highlights the issues of jurisdiction of the court. What is India's position vis-a-vis the jurisdiction of the ICJ? Also differentiate between binding and advisory pronouncements of the court with suitable examples.

अंतर्राष्ट्रीय न्यायालय (आई.सी.जे.) में मार्शल द्वीपसमूह द्वारा भारत, पाकिस्तान तथा ब्रिटेन के खिलाफ परमाणु हथियारों को ले कर आरम्भ की गयी कानूनी कार्यवाहियाँ वस्तुतः इस न्यायालय के क्षेत्राधिकार के मुद्दे को उजागर करती हैं। अंतर्राष्ट्रीय न्यायालय के क्षेत्राधिकार के संदर्भ में भारत का क्या रुख है? साथ ही उचित उदाहरण प्रस्तुत करते हुए न्यायालय के बाध्यकारी तथा सलाहकारी निर्णयों के बीच अंतर स्पष्ट कीजिए।

The Marshall Islands had filed cases against nine nation states for violating the legal obligation to disarm ~~out~~ nuclear tests. India, Pakistan and Britain are three of those nine nations.

- India as a member of United Nations and having made declarations to accept the ICJ's compulsory jurisdiction is obliged to participate in the case. However, among the matters over which India does not accept the jurisdiction of the ICJ are
- disputes with government of any state which is or has been the member of the Commonwealth of Nations.
 - disputes related to armed conflict or collective action for defence.
 - disputes concerning multilateral treaties including the nuclear Non Proliferation Treaty (NPT)

UN member nations are automatic parties to the statute of the ICJ. Nonetheless this does not give the ICJ jurisdiction over disputes resolving them. Further, the Court exercises both compulsory/binding and advisory pronouncements.

In case of compulsory announcements only States can file proceeding before the Court i.e; no other entity or individual or organisation can seek for redressal by the Court. The issues of this nature involve matters related to international waters, continental shelf demarcation and other maritime disputes.

Moreover the Court can only exercise its jurisdiction when the parties concerned recognise its capacity to do so.

On the other hand advisory jurisdiction pertains to that which is ~~also~~ available to organisations only. This means that non-State parties can

seek for jurisdiction by the court.
However such pronouncements are only
advisory in nature and are non-binding.

However, they still carry a lot of
weight due to the moral pressure attached
to it. Hence, they play an equally
important role to contribute towards
development of international law and
strengthen peaceful co-existence.

12. Even though the refugee crisis in Europe does not affect India directly, it presents an opportunity for India to showcase its commitment and capability to take greater responsibility in dealing with global issues. Comment in light of India's strengths, experience and international commitments regarding refugees.

यद्यपि, यूरोपीय शरणार्थी संकट का भारत पर कोई प्रत्यक्ष प्रभाव नहीं है, लेकिन यह भारत के लिए वैश्विक मुद्दों से निपटने हेतु अधिक बड़ी जिम्मेदारी ग्रहण करने संबंधी प्रतिबद्धता तथा क्षमता को प्रदर्शित करने का अवसर प्रदान करता है। शरणार्थी संबंधी भारत के सामर्थ्य, अनुभव तथा अंतर्राष्ट्रीय प्रतिबद्धताओं के आलोक में इस पर टिप्पणी कीजिए।

Climate change, civil wars, regional issues and terrorism have left millions of people homeless. No part of the world is free from the issues that are arising or are expected to arise in relation to the status of these people without citizenship or a country to call home. Though the intensity or the reach of these issues may differ from country to country,

Europe has been specifically affected by the refugee crisis where people from the troubled middle east have been resorting to fleeing to these western nations in search of better opportunities and foremost to save their lives.

Though India is not directly affected by this refugee crisis given its geographical

distance from these areas it is pertinent that India acts as a responsible global power and strengthens its commitment towards ensuring basic human rights to those without a state, of course keeping in mind her own national security considerations.

Though India has not signed the 1951 United Nations ~~Convention~~ Refugee Convention or its 1967 Protocol, India is a signatory to International Convention on Civil and Political Rights 1966, the Universal Declaration of Human Rights, 1948, the Covenant on Economic and Social Rights, 1966 and the Conventions on Racism, Torture, Children, Women and Others.

Further India also permits the UN High Commission for Refugees to operate respecting its certification of Refugees. According to the UNHCR report of 2011, there were more than 2 lakh refugees, asylum seekers and 'persons of concern' in India. Thus, India continues to house a large population of refugees and they are treated humanely.

However, to further raise its stake India as a responsible global and regional power in a multipolar world, India can -

- 1) Share her experience on refugee resettlement and rehabilitation with Europe.
- 2) Provide financial aid to the war torn countries in order to assist them to rebuild themselves. For example, the way India is helping Afghanistan.
- 3) Help other fellow nations in curbing all the causes of such refugee crisis whether it is climate change or terrorism.

India must act and showcase to the world all that it has to offer as a plural, democratic society not only to her own citizens but to those of the world as well. After all we are the land of those who believe in 'The World is a Family'.

13. India is endowed with an amazing variety and wealth of soft power resources. Providing examples, illustrate the utilisation of soft power in diplomatic initiatives of the recent past. What are the limitations of the soft power approach in diplomacy in case of a developing country such as India?

भारत सॉफ्ट पावर (मृदु शक्ति) संसाधनों की आश्चर्यजनक विविधता एवं बहुलता से संपन्न है। उदाहरण प्रस्तुत करते हुए, हाल के कूटनीतिक पहलों में सॉफ्ट पावर के उपयोग का वर्णन कीजिए। भारत जैसे किसी विकासशील देश के लिए कूटनीति में सॉफ्ट पावर एप्रोच (मृदु शक्ति उपागम) की क्या सीमाएं हैं?

Our rich and ancient historical tradition, tendency to assimilate all those who came to our land throughout centuries as our own, and the strong trade relation and cultural ties that we had with both the east and the west of land our land has been the basis of our current wealth of soft power resources.

Soft power has increasingly been coming to use in diplomatic circles world wide and India is no exception to it - given that we have much leverage in this field.

For example:

- a) Pakistan : 1) The coming back to India of Geeta Behi.
- a) Prime Minister Modi's surprise visit to Pakistan's Prime Minister Nawaz Sharif.

30) Increased
31) Pakistani artists working in Indian cinema and music field, and our films having a huge audience in Pakistan.

4) Cricket diplomacy.

5) China, Japan and other South East Asian Region :

- 1) Rebuilding the Nalanda Buddhist University in partnership with the above mentioned nations.
- 2) Buddhist conclaves held with invitation to these countries.
- 3) North Eastern trade shows from time to time which reflect the cultural proximity of North East to Thailand, Myanmar, Bangladesh.

In general India has shown its soft power by

- 1) Providing humanitarian and relief aid to the countries in need. (Africa, Asian countries)
- 2) Yoga as a soft power.
- 3) Showcasing presence of huge diaspora through events like Prawai Bhartiya Divas

4.) Soft power between U.S.A and India as the former being world's 1st democracy and the latter being the largest democracy.

5.) Indian Council for Cultural Relation (ICCR) operating 22 cultural centres across 19 countries.

6.) However soft power cannot be the sole method of gaining foothold in the world space, specially for a developing country like India.

For example, even though relations were ameliorating between Pakistan and India, the subsequent terrorist attacks brought us again to square one.

Secondly, soft power does not bear much fruit if the cause of contention is the activities of non-state actors.

Thirdly, considerable finances are required to realise full potential of soft power. This is not much feasible in case of India.

Nevertheless soft power as a diplomatic tool has its own advantages and India being blessed with such a huge pool must make full use of it.

14. Highlight the features of NAVIC and bring out its significance for India. How is it different from GAGAN? Examine whether NAVIC can be a replacement of GPS for India.

नाविक (NAVIC) की विशेषताओं पर प्रकाश डालिए तथा भारत के लिए इसके महत्व को उजागर कीजिए। यह गगन (GAGAN) से किस प्रकार भिन्न है? परीक्षण कीजिए कि क्या नाविक भारत के लिए जी.पी.एस. को प्रतिस्थापित कर सकता है।

Navigation with Indian Constellation (NAVIC) is a satellite and ground controller based system that is being used to provide accurate real time positioning and timing services across India and regions extending to 1500 km.

Some features of NAVIC are:

- 1) It consists of 9 satellites in total : 3 in the GEO orbit, 4 in the GSO orbit and two on ground as stand by.
- 2) It is to provide services in two fields :
 - a) Standard Positioning Service for civilian use
 - b) Restricted service (an encrypted one) for authorized use.
- 3) The system is intended to provide accuracy in positioning of better than 10m through Indian landmass, better than 20m in the Indian Ocean as well as region extending approximate 1500km around India. The accuracy for authorized use is deemed to be 0.1m.

With NAVIC India has joined a club of global powers - the US, EU, China and Russia - who control their own navigation satellite systems.

The significance of the project lies in the fact that it will reduce India's dependence on foreign navigation systems such as the US' GPS, which ~~was~~ always run the risk of being ~~unavailable~~ unavailable during hostile situations; example as happened to the Indian military during the Kargil war. This ~~is~~ is a move towards self-reliance. Further, it carries profound implications and opportunities for the South Asian region ~~at~~ - as NAVIC has its use in agriculture (land area mapping, yield monitoring) to being an instrument for environmental and meteorological monitoring, as well as climate research.

Sharing the benefits of NAVIC would bolster India's credentials as a collaborative partner in the region and turn India into a 'Net security Provider'. It is also in line with our 'Neighbourhood First' Policy.

NAVIC is different from GAGAN in terms of functionality and dependence on GPS.

While both use satellites in geosynchronous orbit, NAVIC is a standalone navigational system, GAGAN is an implementation of Satellite Based Augmented System (SBAS). GAGAN improves the GPS signal by adding information

from Indian satellites and ground monitoring stations. Its main use is to help in Air traffic control. It has an accuracy of less than 3m.

NAVIC though a feat for Indian research and technology cannot be a full time replacement of GPS until more advancements are made in the field. This is so because GPS provides global coverage while NAVIC is still regional in reach. Secondly, most of the applications already use GPS and may not find it profitable to switch to NAVIC.

For the time being NAVIC can be used interoperably with GPS to ensure minimisation of technical snags and we can further develop the system to reach global coverage in the coming years.

15. What are Carbon Nanotubes (CNTs) and how are they an improvement over carbon fibres? Highlight the various unique properties of CNTs which makes them suitable to the manufacturing industry.

कार्बन नैनोट्यूब (सी.एन.टी.) क्या होते हैं तथा वे किस प्रकार कार्बन फाइबर से श्रेष्ठ हैं। सी.एन.टी. के उन विशिष्ट गुणधर्मों पर प्रकाश डालिए जो इसे विनिर्माण उद्योग हेतु उपयुक्त बनाते हैं।

Carbon nanotubes are an allotrope of carbon. They are cylindrical hollow tubes, composed of a single sheet of pure graphite having a diameter of 0.7 to 50 nanometers and length in the range of 10's of microns.

They are extremely light weight and have potentially have a wide variety of applications in the field of nanotechnology, electronics etc.

Carbon fibres are fibres about 5-10 micrometres in diameter and composed mostly of carbon atoms. Some important properties of carbon fibres are high stiffness, high tensile strength, high chemical and temperature resistance, low weight etc. They find their use in a variety of fields from aerospace to civil engineering, military and sports.

Carbon nanotubes being extremely tiny and made of graphite have enhanced all these properties of carbon fibre. This makes them even more useful in all the above

mentioned fields.

CNTs can be useful to the manufacturing industry given the following unique properties they have:

- 1) High stiffness.
- 2) Have extremely excellent electrical properties and can be used as a reinforcement to metals in order to enhance their electrical properties.
- 3) Their extremely high thermal conductivity make them useful in thermal management.

16. Explain the significance of gravitational waves recently detected by LIGO. What are the objectives of the recently envisaged LIGO-India project and what benefits will India accrue from it?

हाल ही में एल.आई.जी.ओ. (लिगो) द्वारा खोजे गए गुरुत्वीय तरंगों के महत्व की व्याख्या कीजिए। हाल ही में परिकल्पित एल.आई.जी.ओ.-इंडिया प्रोजेक्ट (लिगो-भारत परियोजना) के क्या उद्देश्य हैं, तथा भारत को इससे क्या लाभ होंगे?

Gravitational waves are "ripples" in the fabric of space-time caused by some of the most violent and energetic events in the universe. They are extremely weak and hence are difficult to detect, but they are expected to carry "pure information" about the objects and events that created them as they go undistorted while travelling through space.

The discovery of gravitational waves is of much significance in the study of the universe as:

- 1) They are the most convincing evidence to Einstein's theory of nature's black holes being objects.
- 2) They represent the first detection of a binary black hole system.
- 3) Since they carry pure information, they hold some of the fundamental keys to

understand the universe in a new light.

The objectives of the LIGO-India projects are :

- 1) To move one Advanced LIGO detector from Hanford to India, under the IndIGO initiative (Indian Initiative in Gravitational-wave Observations)
- 2) To inspire frontier research and development projects in India,
- 3) Cooperative in science and technology across borders.

The benefits of LIGO-India are :

- 1) It will increase the chances of detection of gravitational waves in the future.
- 2) Will give a boost to India's R&D and inspire young minds to contribute through research in space sciences.
- 3) Will inspire major industry-academic research partnerships given the high-end requirements of the project.

17. What are the criteria employed for a pandemic to be declared a Public Health Emergency of International Concern (PHEIC) by the WHO? In the wake of recent Ebola and Zika virus outbreaks examine the efficacy of the prevalent architecture of global health governance. Also, assess India's preparedness in handling such global epidemics.

डब्ल्यू.एच.ओ. द्वारा किसी महामारी को पब्लिक हेल्थ इमरजेंसी ऑफ इंटरनेशनल कंसर्न (PHEIC) के रूप में घोषित करने के लिए क्या मानदंड अपनाए जाते हैं? हाल ही में इबोला तथा जीका विषाणु के प्रसार के सन्दर्भ में वैश्विक स्वास्थ्य प्रबंधन की प्रभावोत्पादकता की जाँच कीजिए। ऐसी वैश्विक महामारियों से निपटने के लिए भारत की तैयारियों का मूल्यांकन कीजिए।

As per the International Health Regulations 2005, the term PHEIC is defined as an extraordinary event which

- 1) constitutes a public health risk to other states through which the international spread of disease,
- 2) Potentially requires a coordinated international response.

The architecture of global health governance in such epidemics include the WHO Director General and a convened committee of experts called the IHR committee. The committee recommends to the Director General measures to be promulgated on an emergency basis by states experiencing the PHEIC, or by other states which are at a risk to the PHEIC. This is done to prevent or reduce the international

spread of the disease.

However, the recent Ebola and Zika virus ~~break~~ outbreak brought certain issues with the current governance methods and architecture to the fore. For example.

- 1) The definition of PHEIC - that it "constitutes public health risk to other states" requires the ~~end~~ outbreak to first spread across national borders to trigger an international response. This ~~big~~ leads to delay in declaration and action.
- 2) Huge economic toll experienced by affected countries in terms of travel ban, border closures etc disincentivises them to sound the alarm when the outbreak flares up.
- 3) Thus a reform is needed which must aim at
 - 1) incentivising states to rapid PHEIC declaration.
 - 2) Provide more comprehensive framework through modifications of IHR.
 - 3) Provide a just environment and international cooperation to regulate health services and provide relief in case of a PHEIC.

India is on the path to develop a robust health governance system, specially in case of a PHEIC. For example, during the Ebola outbreak we had Rapid Response Team at both the central and the state level in place. Further we had a mechanism for strict surveillance at all and screening at all ~~the~~ international gateways to India.

- National Centre for Disease control is the nodal agency for immunization.
- Other mechanism include - risk communication, vector control, travel advisory and coordination with international agencies.

However, there is lack of infrastructure and appropriately trained public health care workers. Weak and strained medical facilities, poverty and lack of awareness must be mended in order to strengthen our response mechanism.

18. Give a brief explanation of CRISPR - gene editing technology. Also discuss its significance in modern biology and agriculture.

जीन एडिटिंग प्रौद्योगिकी - सी.आर.आई.एस.पी.आर. (CRISPR) की संक्षिप्त व्याख्या प्रस्तुत कीजिए। आधुनिक जीव-विज्ञान तथा कृषि में इसके महत्व पर भी चर्चा कीजिए।

CRISPR is a new gene editing technology ~~is~~ using which the genes of any living organism could be edited at a faster and cheaper rate.

The technology through the use of Cas9 enzyme which acts as a "molecular scissors" makes it possible to cut, replace, paste DNA with a high degree of accuracy and flexibility.

It can also be used on organisms previously resistant to genetic engineering.

The technology has opened new fields in both biology and agriculture and holds a high significance, as:

1) Biology :

a) New treatment : rare metabolic and infectious diseases can be tackled by devising more specific antibiotics using CRISPR.

b) Genetic disorders : like sickle-cell anemia can be remedied as CRISPR may provide

new methods of Gene Therapy :

- c) Disease control! by developing malaria resistant mosquitoes.
- d) Immunity can be induced by using the technology to make human cells immune to diseases like HIV, Ebola.
- e) Organ transplantation! by creating human organs in artificial environments using pluripotent stem cells combined with the CRISPR technology.

2) Agriculture :

- a) Combat
- a) Develop those variety of seeds which are resistant to climate change and thus ensure food security.
- b) Make agriculture more productive by developing such variety of seeds which give high yield, more nutrients along with being resistant to weeds, pests, insects etc.
- c) Improve livestock! by developing such varieties which give the most yield.

However, the technology is not without concerns associated. For example :

- 1) Potential negative effects or consequences are not yet known.
- 2) The technology is very inexpensive and can land up in wrong hands which might use it to develop harmful organisms.
- 3) Ethical issues are also involved.

Further research must be done and consequences well understood before introducing the technology on a large scale basis.

19. Even though large infrastructure projects like High Speed Rail (HSR) facilitate greater technological development, they come with their own set of challenges. Examine in the context of proposed HSR projects in India. Suggest some measures on how HSR can truly be 'Made in India'.

यद्यपि हाई स्पीड रेल (एच.एस.आर.) जैसी बड़ी अवसंरचना परियोजनाएं व्यापक स्तर पर प्रौद्योगिकीय विकास में सहायता करती हैं, लेकिन उनकी भी अपनी चुनौतियां होती हैं। भारत में प्रस्तावित एच.एस.आर. परियोजनाओं के परिप्रेक्ष्य में परिक्षण कीजिए। कुछ उपाए बताइये कि कैसे सही मायने में एच.एस.आर. 'मेड इन इंडिया' हो सकता है।

With growing size of population and rising demands for increased mobility High Speed Rail is the next step towards revolutionizing India's transport sector. The HSR system given the unmatched mobility it gives it going to act as a force multiplier for Indian economy.

However, there are certain challenges that need to be addressed before full potential realisation of the project:

- 1) Lack of highly technical and skilled man power.
- 2) Dependence on 'technology transfer' due to lack of technological know how.
- 3) Delays caused due to land acquisition

- litigation and red tapism.
- 4) High costs involved due to the highly capital intensive nature of HSR projects.
 - 5) Topographical challenges in terms of risks involved in laying rail lines through seismic zones etc.
 - 6) Environmental costs involved.
 - 7) Opportunity cost involved in terms of providing of one region with next generation transportation system while villages and remote area still lack in basic infrastructure.

In order to turn HSR into a 'Made in India' phenomenon, we must!

- 1) Enhance our own capabilities in the field.
- 2) Provide linkages for skill development through industry-institute partnership.
- 3) Rope in MSMEs and develop a quality

capital goods industry

4) Increase our expenditure on R & D.

Where technology transfer, as
now is much needed we must
move towards self reliance in terms
of idea generation and its realisation
at all levels to realise the potential
of Make in India.

20. What do you understand by Big-data? Using SDGs as an example, discuss its role in effective implementation of public policy. Also mention challenges faced in using Big-Data and measures to overcome them.

बिग-डेटा से आप क्या समझते हैं? एस.डी.जी. को एक उदाहरण के रूप में प्रस्तुत करते हुए सार्वजनिक नीतियों के प्रभावी कार्यान्वयन में इसके महत्व पर चर्चा कीजिए। इसके अतिरिक्त, बिग-डेटा के प्रयोग में आने वाली चुनौतियों तथा उनके समाधान के उपायों पर भी चर्चा कीजिए।

Big data refers to data sets that are so large and complex that traditional data processing applications are inadequate to process them.

Big data is the possible answer to smart decision making and policy implementation.

Big Data's role in effective implementation of public policy:

Since policy implementation is a cyclic process that constitutes of policy generation, implementation, evaluation, feedback, modifications/improvement, big data can provide policy makers and executioners with the requisite knowledge to take appropriate decisions by providing them with analysed

data sets.

For example, the SDG for health can be achieved by using big data to!

- 1) Collect data from various places - hospitals, doctors, insurance companies.
- 2) Observe the trend of diseases with respect to genders, age, region, social group
- 3) Predicting any potential health outbreak using the above analysis.
- 4) Recommending measures on the basis of the success and effects of government schemes or particular medicines.
- 5) By Comparing international best practices and experiences and hence providing recommendations to modify a policy methods.

This will provide a comprehensive step by step plan using scientific analysis and thus increasing the chances of achieving the goal for health at the earliest.

However, a few of the challenges await the effective use of Big data for policy implementation.

- 1) High level of technology both in terms of software and hardware will be required to carryout the processes.
- 2) Scarcity of personnel trained in ~~com~~ processing data will have to be looked into.
- 3) Available data will have to be digitised.
- 4) The switch will demand capital resources.
- 5) Privacy concerns in view of the lack of a comprehensive cyber security legislation.

Measures, to address the challenges,

- 1) Spirit of Digital India to be tapped to the fullest through computerisation, network availability, data accessibility.
- 2) Personnel to be trained under skill India in Information Technology
- 3) Policy support through appropriate legislation
- 4) Resources mobilised through FDI, R & D, private sector participation.