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GENERAL STUDIES (TEST CODE : 1436)

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Medium Eng./Hindi	ENGLISH	Registration Number	315262
Center	ORN	Date	17/08/19

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
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20	15	

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 **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. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Given the growing ecological and geopolitical significance, Arctic region offers immense opportunities for serving India's long-term interests. Discuss. (150 words) 10

बढ़ते पारिस्थितिक और भू-राजनीतिक महत्व के आलोक में, आर्कटिक क्षेत्र भारत के दीर्घकालिक हितों की पूर्ति हेतु व्यापक अवसर प्रस्तुत करता है। चर्चा कीजिए।

Arctic Region refers to the topmost part of the globe bound by countries like USA, Russia, Denmark, Norway, Sweden, Finland etc.

Growing ecological & geopolitical significance

① Ice sheet is fast receding. Thus

a) New sealanes are being opened.

b) Vast Resources - oil, natural gas, methane hydrates are being identified to be mined.

② China - under its flagship

Belt and Road initiative recently came up with Arctic Road White paper.

③ Arctic Council - informal grouping of

Northern most countries are gaining
significance

Opportunities for India

① Vast resources like oil and natural gas
can be exploited

② INSTC, Ashgabat Agreement which are
today limited to Baltic Sea can be
further expanded to cross the Arctic

③ It can be effectively used to counter
China's growing influence - Pearl of
String Strategy - Arctic White Paper

Arctic region is a manifestation
of changing ecology resulting into
dynamic geopolitics. Active diplomacy &
military ties with US, Russia, Denmark
would prove helpful to India for
containing the Dragon i.e. China

2. Discuss the challenges that India may face in the eventuality of withdrawal of US troops from Afghanistan. What options does India have to safeguard its interests in the context of the changing situation? (150 words) 10

अफगानिस्तान से अमेरिकी सैनिकों की वापसी की स्थिति में भारत के समक्ष आ सकने वाली चुनौतियों पर चर्चा कीजिए। परिवर्तित होती परिस्थितियों के संदर्भ में भारत के पास अपने हितों की रक्षा करने के लिए कौन-से विकल्प हैं?

Changing the previous stance of Af Pak
policy of USA, marked by continued fight
till win. The new Afghan policy relates to
de trooping upto 50% of total American
books in Afghanistan.

Challenges that may be faced by India:

- i) Rise of Taliban : Taliban still holds a
considerable territory and political
stake in the region. Withdrawal of troops
can aggressively harm Indian Interests
- ii) Harm to Infrastructure - like
Salma Dam, Afghan-Parliament,
Zaranj-Delaram Highway can be
& targetted as Taliban is anti Afghan

Government.

iii) Strengthening of State backed terror.

RAW reports intense ties between
ISI (Pakistan's Deep State) and Taliban
leadership

iv) Trade ties - Air Trade (Heart of
Asia Summit '2016), APTTA can be
severely effected.

Options with India

① Indulge in talks with Taliban leadership
via Moscow Talks. We can further
take it to official level as only
ex-diplomats were sent in unofficial capacity.

② Coordinate with Russia which is playing
a major role in bringing normalcy

③ Goodwill gestures like Developmental Aid,
more infrastructure development

India believes in Afghan led,
Afghan owned strategy which has become
redundant due to rising clout of Taliban

3. The BRICS as a grouping seems to have internal contradictions, which makes it difficult for it to emerge as an effective forum in a dynamic multi-polar international order. Critically discuss. (150 words) 10

एक समूह के रूप में ब्रिक्स (BRICS) में आंतरिक विरोधाभास विद्यमान प्रतीत होते हैं, जो गतिशील बहु-ध्रुवीय अंतर्राष्ट्रीय व्यवस्था में इसके एक प्रभावी मंच के रूप में उभरने को कठिन बनाता है। समालोचनात्मक चर्चा कीजिए।

BRICS is a grouping of 5 major economies of the world - Brazil, Russia, India, China and South Africa. The acronym was coined by a Goldman-Sachs analyst⁺.

Internal Contradictions that are present in BRICS.

- ① India - China relationship is marked by continuous strains which affect the grouping. For eg.
 - a) BRI (Belt and Road Initiative) not endorsed by India.
 - b) Boundary Disputes in Jammu & Kashmir and Arunachal Pradesh.
- ② The countries are vastly separated by distance to have profitable trade and coordination - For eg. South America,

Europe, Asia and Africa. 4 Continents in
5 country grouping.

③ Inter country trade (except China) is
minimal

④ Due to distance, geopolitical situation is
does not adversely affect other countries
- Brazil's own problems does not affect

⑤ China or India. China is a behemoth (vs Brazil, South Africa)
Vast difference. However, it has various achievements.

① New Development Bank (NDB) set up.

Highly successful, India is the largest borrower.

② Contingent Reserve Agreement (CRA) to
decrease dependency on Western Institution
like IMF.

③ Strategic Partnerships are being
endorsed

④ Annual Summits take place which are
largely successful.

BRICS, though challenged by
severe contradictions. Remains one of the
most successful and stable groupings.

4. Despite India having immense soft power potential, it alone will not be sufficient to achieve India's foreign policy objectives. Examine.

(150 words) 10

भारत के पास अत्यधिक मृदु शक्ति (सॉफ्ट पावर) क्षमता होने के बावजूद, केवल यह भारत की विदेश नीति के उद्देश्यों की प्राप्ति हेतु पर्याप्त नहीं होगी। परीक्षण कीजिए।

Soft Power is defined as a tool of diplomacy which tends to promote coordination between countries through cultural, religious, traditional, non military ties.

Immense Indian soft power

- i) Yoga being celebrated worldwide.
- ii) Hindi is used in many countries
- iii) largest diaspora (World Migration Report - UN)
- iv) Buddhism → SE Asia, Japan
- v) Hinduism - in Nepal etc.
- vi) ethnicity - with Sri Lanka (Tamilian)

How it alone can not be sufficient

- ① China gaining access to countries like

Nepal, Sri Lanka (Hambantota), Mauritius
(GMR Contract cancelled)

② Africa - neo colonialism - heavy
investment and corruption by various
countries. India keeps showering good-will
gestures. Eg. Girinka program in Rwanda.

③ Bur Diplomacy with Pakistan resulted in
Terrorist attacks. Same with
Aman Ki Asha gesture.

Many political scientists
are of the view that soft power works
but it works only when the real
power (real politik) is in place. Thus,
India is maintaining such actions

- i) Dugm port in Oman.
- ii) Changi Air base in Singapore
- iii) Malabar exercise, Matri exercise.
- iv) Competitive bidding & aid is supplied
to under developed countries

Both Soft Power & Realism have to work
in tandem to provide inertia to Indian
elephant.

5. Highlighting the role of space technology in border management, enumerate the steps taken so far in this regard. (150 words) 10

सीमा प्रबंधन में अंतरिक्ष प्रौद्योगिकी की भूमिका पर प्रकाश डालते हुए, इस संबंध में अब तक उठाए गए कदमों को सूचीबद्ध कीजिए।

Space Technology has various uses in various sectors of a nation. Border management is one such sector

How Space Technology helps:-

- ① It can be used to clearly delineate boundaries, establishing international borders.
- ② It can be used to target drug trafficking, arms trafficking using hyper spectral satellites, thermal cameras.
- ③ It works as an 'eye in the sky' to keep an active check on movement of troops, geography, mines etc

Steps that have been taken.

- ① CARTOSAT-1, CARTOSAT-2 - launched by ISRO (PSLVs) - High resolution satellites ($< 1\text{m}$, $< 0.8\text{m}$ respectively) can ~~be~~ help in demarkation.
- ② EMISAT: recently launched through PSLV C45 - first military intelligence satellite.
- ③ HySIS - PSLV C43 - can help in finding any mines, tunnel openings.
- ④ IRNSS - NavIC - range extends beyond our neighbors - 'works as eye in the ~~eye~~ sky'
- ⑤ Other satellites like RISAT, GSAT 7, 7A help in coordination, communication between armed forces

After being denied the usage of GPS by US in Kargil War.
In our Space Programme has come a long way in self sufficiency.

6. Despite allegations of human rights violations under the AFSPA, it is a functional requirement for the army in disturbed areas. Critically discuss.

(150 words) 10

AFSPA के अंतर्गत मानवाधिकारों के उल्लंघन के आरोपों के बावजूद, यह अशांत क्षेत्रों में सेना के लिए एक कार्यात्मक आवश्यकता है। समालोचनात्मक चर्चा कीजिए।

Armed Forces Special Powers Act
(1958) gives the members of the
Armed Forces and Police extraordinary
powers to search without warrant,
kill after due warning, arrest without
warrant etc.

It is accused of severe Human Rights
Violation

① Justice Verma Committee (post 2016 Delhi
Rape Case), Jeevan Reddy Committee
pointed out how it is used to molest,
rape and argued for dilution
if not removal.

② Supreme Court in one of its judgement
also highlighted the misuse and ruled
that all arrests, killings to be deeply
enquired into.

③ Various movements against the act-

- a) T Manorama rape and killing in Marip Maripur.
- b) Protests by Naga women in nude against Rapes and molestation
- c) Resent in Kachhori Youth lead to alienation

However, it is needed for the reasons

① They are severely affected areas infected by terrorists and not petty criminals

Thus, quick action is required

② Several army generals have defended its wage - presence of heavy mines, assault rifles, require instant reaction

Way Forward

i) Army should be sensitised - Differentiate between enemy and family (Indians).

ii) Strict punishment in molestation, undue torture, Indiscriminate killing in line with Supreme Court judgement and Verma Committee recommendation

7. The use of Internet creates both challenges and opportunities in the fight against terrorism. Discuss. (150 words) 10

आतंकवाद के विरुद्ध लड़ाई में इंटरनेट का उपयोग चुनौतियां और अवसर दोनों सृजित करता है। चर्चा कीजिए।

Internet is a web of computer and mobile devices across the globe marked by a free flow of information and connectivity.

Challenges in dealing with Terrorism

- ① Intelligence Bureau reports how Internet & Social Media Facebook etc being used for radicalisation of youth, recruitment in terrorist organisation like ISIS etc.
- ② Lone Wolf attacks are being popularised as terrorist handlers give directions to radicalised youth via social media (Deep net)
- ③ Emergence of black market - The Silk Route - a site on black internet

- extensively used for Arms Trade etc.

④ Internet phones are used for giving cross country directions to terrorist

⑤ Over the Top internet based applications

- WhatsApp, Telegram → encrypted chats
- Intelligence Nightmare.

Opportunities

① Inter agency coordination and intelligence dissemination has become much easier with Internet.

② Terrorists or radicalised youth can be effectively tracked through Internet connection.

Internet, thus presents a unique condition wherein it helps propagate as well as control terrorism.

8. Explain the concept of Chandrasekhar Limit and highlight its significance in the field of astronomy. (150 words) 10

चंद्रशेखर सीमा की अवधारणा की व्याख्या कीजिए और खगोल विज्ञान के क्षेत्र में इसके महत्व पर प्रकाश डालिए।

Chandrasekhar limit is the limit of the mass of the white Dwarf star beyond which it cannot sustain and would become a Blackhole. Mathematically, it is described as $1.4 M$, where M is the mass of the Sun.

Significance in the field of Astronomy

- ① It serves as the starting point for the researchers to be able to observe - a blackhole, which is marked by ~~is~~ event horizon - boundary of blackhole. Recently, Event Horizon Telescope observed a blackhole using Chandrasekhar limit.

② The future holds for time space warping as a means for transportation wherein light years can be traversed by humans. The Chandrasekhar limit helps us identify the limit of warping of Space-Time Fabric.

③ It is useful for observing Pulsar Stars, Neutron Stars, White Dwarfs.

④ Gravitational waves (LIGO) are a unique phenomena linked to Neutron Stars and Blackhole. The Chandrasekhar limit helps us identify the source of such Gravitational waves.

The contribution of Dr. Chandrasekhar in field of Astronomy is unparalleled.

9. Examining the risk posed by space debris, suggest some measures which can be taken for its mitigation and removal. (150 words) 10

अंतरिक्ष में मलबे द्वारा उत्पन्न जोखिम का परीक्षण करते हुए, इनके शमन एवं हटाने हेतु कुछ उपायों का सुझाव दीजिए।

Space Debris is defined as wrecks
matter both natural (meteors)
as well as artificial (destroyed or
dysfunctional satellite) that orbits
the Earth (especially Low Earth Orbit)

Risks posed by Space Debris

① Hypothesised Kessler's Syndrome
marked by a chain reaction of
Space Debris colliding with one
another resulting into destruction
of all Satellites.

② It can severely harm
communication systems, internet,
financial system, disaster management
activity etc.

⑤ Present era is marked by Space Arms Race. China in its Technology Demonstration (2007 - Anti Satellite) - destroyed one of its own satellite. 1

⑥ Militarisation and weaponisation of Space add to the risk

Steps taken:

① University of Surrey, UK has a flagship programme. [Remove Debris]
marked by ① Harpoon Capture

② Net Fencing ③ Dragging the Satellite eventually burning it in the Thermosphere,

④ India also showcased its ability in net capture and burning the debris in Thermosphere.

Space Debris is a huge risk and there needs to be effective implementation of Prevention of Arms race in Space Treaty (PAROS).

10. Discuss the challenges confronting higher self-reliance and indigenisation of defence industry in India. What steps can be taken to accelerate its pace? (150 words) 10

भारत में रक्षा उद्योग के समक्ष उच्च आत्म-निर्भरता और स्वदेशीकरण से संबद्ध चुनौतियों की विवेचना कीजिए। इसकी गति को तीव्र करने हेतु क्या कदम उठाए जा सकते हैं?

India is the second largest defense importer and 70% of its defense needs are met by imports.

Challenges in self-reliance and indigenisation

- ① Inability to take the advantage of private sector due to:

- Trust Deficit
- Reservation for Public Sector

- ② Lack of Innovation and Research in the country. only 0.7% of the GDP goes in Research.

- ③ Research heavily done solely by public sector. Monopoly of public sector.

- ④ Political will has been absent. Defense Deals - e.g. Bofors marked by high corruption

⑤ Lack of effective policies.

Steps to be taken

① Effective implementation of Defense Procurement Policy (DPP '2016).

Make II procedure - active involvement of private sector

② Diversify the Strategic Partnership Model.

③ Increase FDI through automatic route from 49% to 74%.

④ Defense Corridors (UP & Tamil Nadu) be made functional and effective

⑤ Ignite spirit of Research especially amongst the youth (INSPIRE, Atal Innovation Mission, Defense Expo Visit)

Government is taking active step towards indigenisation which will lower the costs, decrease dollar bill, and kickstart research & provide employment

11. Comment on the role played by the diaspora in India's development process. Also, discuss the challenges in terms of engaging the Indian diaspora and suggest ways to translate these partnerships into benefits.

(250 words) 15

भारत की विकास प्रक्रिया में प्रवासी समुदाय (डायस्पोरा) द्वारा निभाई गई भूमिका पर टिप्पणी कीजिए। साथ ही, भारतीय प्रवासी समुदाय को आकर्षित करने में आने वाली चुनौतियों पर चर्चा कीजिए तथा इन साझेदारियों को लाभों में बदलने हेतु तरीके सुझाइए।

World Migration Report '2018 points out the fact that Indians ~~to~~ form the largest diaspora in the world. They are mainly concentrated in Arab Countries, USA, Canada, UK

Role played by Indian Diaspora in development

- ① India remains the largest recipient of remittances in the world.
- ② Remittance brings the ~~much~~ much needed foreign currency which keeps Rupee depreciation in check.
- ③ Remittances help in increasing the average household income thus

pushing many out of poverty.

⑤ They act as agents of soft power in many countries -

i) They are drivers of growth of the Gulf Countries. India, thus can never be ignored by them.

ii) USA - presence of highly skilled workers. (H1B)

iii) They are drivers of cultural tolerance and diffusion.

Challenges in engaging the diaspora

① Brain Drain takes place. The technically advanced leave India never to engage with the country again.

② Wages in India are much lower than that provided by Western counterparts.

③ Many of the unlinked diaspora is often engaged in anti India protests eg. Khalistani in Canada, Anti-370 protest outside Indian High Commission in Britain.

ways to translate partnership benefit.

① Schemes like VAJRA, GIAN have to be effectively operationalised to gain brain gain the lost skills.

② High Commission in various countries have to play proactive role:

- i) Diwali, Independence Day celebration
- ii) Help them in dire needs

③ Pravasi Bharatya Diwas to be celebrated throughout the world for the diaspora to be proud of their heritage.

④ OCI, PIO benefits and entitlements to be eased for greater participation

The Indian Diaspora is an asset which needs to be further polished via engagement to reap complete benefit.

12. Highlight the reasons behind proliferation of multilateral preferential trade agreements. Do they violate WTO's MFN principle? Do you think that such trade groupings present an existential threat to WTO? (250 words) 15

बहुपक्षीय अधिमान्य व्यापार समझौतों के तीव्र वृद्धि के पीछे निहित कारणों पर प्रकाश डालिए। क्या वे WTO के MFN सिद्धांत का उल्लंघन करते हैं? क्या आपको ऐसा प्रतीत होता है कि इस प्रकार के व्यापार समूह, WTO के समक्ष अस्तित्वपरक खतरा प्रस्तुत करते हैं?

The recent times have seen a massive proliferation of multilateral preferential trade agreements like RCEP, renewed Trans Pacific Partnership etc.

Reasons behind their proliferation

① Exploitation of Comparative Advantage

principle by Ricardo, wherein ~~both~~ ^{multiple} countries coordinate & exchange services & goods based on their strength & weaknesses.

② Decreasing clout & authority of World Trade Organisation - several failed summits and incomplete trade negotiation rounds.

MFN principle stands for Most Favored Nation principle wherein a country has to provide the same benefit to all other countries as it is providing to one country. It is marked by non discrimination & free and fair trade.

Yes, the multilateral PTA certainly violate WTO's MFN principle as:-

- ① They are discriminatory in nature.
- ② Countries in PTA have a positive list of items (goods & services) which get cheaper access to markets. Whereas, a country without a PTA would face higher custom charges making it uncompetitive.

Is it an existential threat to WTO?

Argument Against

~~Though~~ ① The multicountry agreements are in consonance with the core principals of WTO i.e. free & fair trade and Non Discrimination.

② The grievance redressal often takes place at WTO only

③ Argument For

① Present times are marked by deglobalisation and trade is being done at regional level.

② WTO - Too many failed summits & negotiation rounds.

③ Monopoly of developed countries like US

④ Present trade war between US - China

⑤ ASEAN, EU, RCEP - considerable trade & movement of people.

WTO needs urgent reforms to stay relevant in the multipolar world

13. India needs to balance its growing water needs and larger security concerns with effective hydro-diplomacy. Highlighting the challenges faced with regard to transboundary rivers, analyze this statement in the context of India's riparian relations with its neighbours. (250 words) 15

भारत को अपनी बढ़ती जल आवश्यकताओं और व्यापक सुरक्षा चिंताओं को प्रभावी जल-कूटनीति के माध्यम से संतुलित करने की आवश्यकता है। सीमा पारीय नदियों से संबंधित सामना की जाने वाली चुनौतियों पर प्रकाश डालते हुए, अपने पड़ोसियों के साथ भारत के नदी-जल संबंधों के संदर्भ में इस कथन का विश्लेषण कीजिए।

India is marked by several antecedent rivers which are of Himalayan origin and are often cross country rivers.

Challenges faced in trans boundary river & water needs

① India Pakistan : marked by the very successful Indus Water Treaty, 1960. It has continued in times of war and skirmishes. However, Problems:

① In times of war, popular pressure to not adhere to treaty

② Pakistan has a problem with India constructing dams on Indus's tributaries eg. Kishanganga Dam, Pakal Dul Dam

② India China: Brahmaputra is the main source of water in NE India.

Problems:

- ① Floods - regular floods due to Brahmaputra
- ② Water Data is shared only for monsoon season by China.
- ③ Black Cement like material in Brahmaputra
→ construction of Dam - strategic loss

③ India Nepal: ~~Rivers~~ Rivers like Arun, Kosi, ~~etc~~, Kali etc

Problems:

- ① Floods in Bihar.
- ② Increasing engagement of China, dam building

④ India Bhutan: Hydropower forms the main backbone of economic relations.

Problems ① big brotherly attitude not accepted by Bhutan.

② Increasing role of China.

⑤ India Bangladesh: Teesta River dam building

What needs to be done?

- ① The theory of 'Jal hai to Jeevan hai' needs to be realised & propagated to our neighbors.
- ② Confidence building measures to be taken
- ③ Dams etc should be built only with consensus of lower riparian country (eg. Bangladesh)
- ④ Renegotiate treaties with Bhutan & Nepal to address their issues.
- ⑤ Coordinate with China on platform like SCO, BRICS etc.
- ⑥ Bilateral disputes ~~was~~ with Pakistan regarding Indus Water Treaty should be solved at International level (ICJ etc)

India would need highly active diplomacy to deal with the future crisis of water in the era of Global Warming.

14. Commenting on the importance of Central Asia for India, highlight the progress made in the relationship in recent past along with the issues that still remain to further cement the ties. (250 words) 15

भारत के लिए मध्य एशिया के महत्व पर टिप्पणी करते हुए, हाल के दिनों में संबंधों में हुई प्रगति पर प्रकाश डालिए, साथ ही साथ ऐसे मुद्दों का उल्लेख कीजिए जिन पर संबंधों को और अधिक सुदृढ़ करने हेतु ध्यान दिया जाना अभी भी शेष है।

Central Asia has gained a lot of importance for India in the recent times. It can be substantiated by:

① Huge presence of Resources in the region

① Kazakhstan - huge reservoir of Uranium - for nuclear ~~and~~ needs.

② Turkmenistan - Presence of Oil, Natural Gas. e.g. TAPI pipeline to supply ~~energy~~ gas to India.

③ Huge reservoirs of Gold in the region.

② Connectivity

INSTC and Ashgabat Agreement have been signed. This would promote trade and transportation.

③ Strategic Importance

Farkhor in Tajikistan. Only foreign air base. Close to Pakistan occupied Kashmir.

④ Gateway to Europe: to promote trade ties.

⑤ huge investment opportunities in under developed Central Asia.

⑥ Anti Terrorist Coordination - RATS under SCO Framework.

Progress made in the relationship

⑦ Astana Summit '2017 of Shanghai Cooperation Organisation - India gained entry to the regional grouping.

② Indian leaders have time & again visited Kazakhstan, ~~to~~ Kyrgyz Republic, Uzbekistan for Uranium Deal, Strategic Partnership.

③ TAPI pipeline, Ashgabat Agreement, SCO, INSTC - increasing trade relations

Issues that still remain

① Trade is still lacking with the Central Asian Countries

② Such countries are marked by political instability and terrorism.
• Resource Curse

③ Increasing presence of China

④ Organisations like SCO seen as a Anti-US Front.

⑤ Lack of NSG Membership - roadblock to nuclear deals

⑥ India is not geographically connected to Central Asian Region

Despite challenges, Central Asian Region will usher as a major asset of India in trade & commerce.

15. Discuss the significance of India's island territories in its quest to become a net security provider in the Indian Ocean region. (250 words) 15

हिंद महासागर क्षेत्र में वास्तविक सुरक्षा प्रदाता बनने की भारत की आकांक्षा के आलोक में, इसके द्वीपीय प्रदेशों के महत्व की चर्चा कीजिए।

India has 2 major island territories which are highly significant in terms of strategic importance.

• Andaman & Nicobar Islands

- It is the only place where Tri Service Command is present.
- It is very close to countries like Indonesia, Malaysia, Singapore.
- Major seelanes - Malacca Strait, are very near.
- South China Sea is also in close proximity.
- 200 Nautical Mile EEZ → counter to string of Pearl policy of China as

we can place our Navy over there

- Various exercises - strategic, HADR etc take place there. eg. Malebar exercise

Lakshwadeep Islands

- ① Can effectively counter China's String of Pearl Policy
- ② Lies in close proximity to African Subcontinent and Middle East

iii) The presence of the Island territories has helped India propagate various grouping like IONS (Indian Ocean Naval Symposium) and IORA (Indian Ocean Rim Association)

wherein several countries actively coordinate on a strategic front.

IV Several small islands like Sriharikota in Andhra Pradesh and Wheeler Island in Odisha serves as a launchpad for ISRO and DRDO to improve security.

V Due to Indian Islands, Bay of Bengal is referred to as Indian backyard.

VI Major countries like US, Japan also recognise Indian importance & ~~refer~~ in their policies Asia-Pacific is being replaced by Indo-Pacific.

India has thus due to the island territories, serve as a major net security provider in the region.

16. A fine balance between security and developmental measures needs to be attained for tackling the menace of Left Wing Extremism (LWE) in India. Analyse. (250 words) 15

भारत में वामपंथी उग्रवाद (LWE) के खतरे से निपटने हेतु सुरक्षा और विकासात्मक उपायों के मध्य एक उत्कृष्ट संतुलन स्थापित करने की आवश्यकता है। विश्लेषण कीजिए।

LWE (Left wing Extremism) is present in close to 88 districts in the country marked by 10 states represented by the infamous red corridor.

Tackling LWE.

It requires a fine balance of security & developmental measures:-

⑧ SECURITY

① Operation Greenhunt → to mark, locate and eliminate naxalites ~~area~~ who routinely terrorise people

② Greyhounds, CoBRA & CRPF.

highly specialised anti naxalite
battalions to deal with Naxalites

③ Bastarize Battalion - recruited among
the tribes, better knowledge of
terrain

④ Surrender schemes - for peaceful
surrender and rehabilitation.

DEVELOPMENT

① Schemes like Nai Roshni for
providing employment.

② Universal Service Obligation Fund (USOF)
mobile net towers are being constructed
using the tribal youth.

③ Infrastructure modernization &
development. New Roads, bridges
are increasingly being constructed

- ④ Modernization of Police Force scheme -
for being able to deal with the
youth in a peaceful way.
- ⑤ Recruitment of local youth in the
forces.
- ⑥ Perception change is being promoted

The present Government's
SAMADHAN Strategy is a
amalgamation of developmentals as
well as security measures aimed
at changed perception, active
rehabilitation and strict action
towards anti establishment killers.

It is The SAMADHAN
Strategy is complemented by
SMART police strategy

17. Illustrate the linkages between drug trafficking, organised crime and terrorism. In this regard, mention the steps that have been taken to arrest the availability of drugs in India. (250 words) 15

मादक पदार्थों की तस्करी, संगठित अपराध और आतंकवाद के मध्य संबंधों को उदाहरण प्रस्तुत करते हुए समझाइए। इस संबंध में, भारत में मादक पदार्थों की उपलब्धता पर अंकुश लगाने हेतु उठाए गए कदमों का उल्लेख कीजिए।

The activities of drug trafficking, organised crime and terrorism are highly interwoven and interdependent.

① India is bound by the Golden Crescent (Pakistan, Iran and Afghanistan) on West and Golden Triangle (Myanmar, Thailand, Laos) on East. They are the hotbeds of drug trafficking. India → Moroh in Manipur and Punjab and Kashmir are used as exchange points. These areas are marked by increased terrorism, secessionism and extremism. eg. Khelistan movement,

Kashmir / insurgency, Naga / insurgency.

② Similarly, Pakistan, Nepal are
the hotbed of counterfeit currency

It is used to spread financial
terrorism aimed at toppling the
economy of a country

③ Terrorism and Drugs is also
linked with Child and women traffickers

Children are radicalised, enslaved to
drugs.

Girl children are drugged, hormone
injection → pushed into prostitution

for money.

④ Hawala and Terrorism have
deep ties as hawala money is from
Gulf countries with ISI handlers is
used to fund terrorism in India

Steps taken to arrest availability of Drugs

- ① Narcotic Drugs and Psychotropic Substances Act (NDPS Act) :- regulates and controls the availability of drugs. Strict punishments.
Institutional Mechanism - Anti Narcotics Bureau has been set up.
- ② Border Check Posts have been strengthened - strict searches by sniffer dogs.
- ③ Comprehensive Integrated Border Management System (CIBMS) - use of sensors etc to check underground tunnels used for drug trafficking, arrest peddlery.
- ④ Use of Social Capital - 'eyes and ear campaign' by Delhi Police.
- ⑤ Underground market (Dark Net) being actively monitored by CERT IN.
Drugs are a menace to society & have leg security angle as well.

18. Identify the key threats to national security in the wake of climate change. Also, highlight India's stand and rationale on UN's decision to declare climate change as an international security issue. (250 words) 15

जलवायु परिवर्तन के आलोक में राष्ट्रीय सुरक्षा के सम्मुख प्रमुख खतरों की पहचान कीजिए। साथ ही, जलवायु परिवर्तन को एक अंतर्राष्ट्रीय सुरक्षा मुद्दा घोषित करने के संयुक्त राष्ट्र के निर्णय पर भारत के दृष्टिकोण और औचित्य पर भी प्रकाश डालिए।

Key threats to national security in
wake of climate change:-

① Rivers will run dry by the end of the century by ICIMOD data on Himalayan-Hindu Kush mountain. Upper Riparian countries will construct dams to capture water → security problem.

② Neighbour Island countries like Sri Lanka, Maldives and Mauritius - first to be submerged under water. Issue of
Climate Change Migrant - need

to change in demography & settlement

- ③ Neighboring country refugees from Myanmar (Rohingyas), Bangladeshis would enter India in search of water, food, economic opportunities
- ④ Climate Change would adversely affect crop production. It would lead to decreased food resources and high population. Internal Security Risk.
- ⑤ More extreme events would lead to resource scarcity and movement of people. Thus aggravating security risks

India's stand and rationale to UN's decision to declare Climate Change as an International Security issue

(PTO)

While India thoroughly supports the fight against climate change, it is against the UN decision.

Rationale:

- ① It is not the right platform to discuss the issue. There are institutional mechanism of UNFCCC to discuss it.
- ② UN is hegemonised by developed countries and they would mould the negotiation in their own favour.
- ③ Presence of UNSC and its 5 permanent veto powers would not let a consensus emerge.
- ④ Countries like US having bagged down from Paris Climate Agreement can't be trusted as a powerful member of UNSC negotiating on climate change. Climate Change is certainly a security emergency & needs to be targeted.

19. Explaining the concept of data exclusivity, bring out the arguments for and against incorporating data exclusivity norms in India's IPR regime.

(250 words) 15

डेटा एक्सक्लूसिविटी (डेटा विशिष्टता) की अवधारणा की व्याख्या करते हुए, भारत की IPR व्यवस्था में डेटा एक्सक्लूसिविटी संबंधी मानदंडों को सम्मिलित करने के पक्ष और विपक्ष में तर्क प्रस्तुत कीजिए।

Data exclusivity refers to a regime wherein data related to a particular pharmaceutical preparation ~~company~~ which is being manufactured & used outside a country, when to be introduced in a new country has to undergo reverse ^(new) trials of the drug and the old data of another country can not be used.

Effect on IPR Regime

Arguments against

- ① It will increase the cost of the drug.
- ② It will increase the time to be taken to put the drug in use.
- ③ Issue of clinical trials - people mostly belong to poor socioeconomic conditions.
- ④ India - highly efficient pharmaceutical hub would be severely affected.

Arguments For

- ① It will be in consonance with global practices.
- ② It will increase indigenous innovation inside the country.

- India is infamous for Compulsary Licensing, Jan Aushadhi Drugs which use same Active Pharmaceutical Formule without trial.

③ Increase health of country. Different effect on different nationalities, sales.

Data exclusivity is essentially a Western development to protect the hegemony of behemoths like Bayer etc over expensive drugs

20. Compare and contrast fifth generation (5G) of wireless telecom technology with 4G technology. What challenges need to be overcome for 5G's pan-India rollout? (250 words) 15

4G प्रौद्योगिकी के साथ पांचवी पीढ़ी (5G) की वायरलेस दूरसंचार तकनीक की तुलना कीजिए और उनके मध्य अंतर बताइए। 5G के अखिल भारतीय क्रियान्वयन हेतु किन चुनौतियों से निपटने की आवश्यकता है?

4G	5G
① Latency of the order <u>10ms</u> . (Time taken to send a data packet)	① Latency of the order <u><1ms</u> .
② Bitrate - <u>1Gbps</u> maximum	② Bitrate upto <u>20 Gbps</u>
③ <u>100,000</u> simultaneous connections	③ Upto a million (<u>1,000,000</u>) simultaneous connection
④ Spectrum of just <u>3 GHz</u>	④ Spectrum is of <u>30 GHz</u>

- ⑤ Mostly based on
Radio frequency
backhaul
- ⑥ Packet loss -
relatively large

- ⑤ To be based on
fibre optic backhaul
network
- ⑥ Packet loss - relatively
low

Challenges that need to be overcome

- ① Backhaul network - 5G requires
fibre optic backhaul to support it
which is not fully present in India
- ② Issue of Investment : 5G requires
atleast € 70 Billion Dollars of
Investment.
- ③ Spectrum Price and Allocation .
Spectrum Price in India is among
the highest in the world and is
marked to y high level of corruption

accuration (2G Scam & Case)

④ China Angle: Huawei (banned in US) is a strong contender for backhaul network. Giving access to a company from adversary country can have security issue.

⑤ Issue of Cybersecurity: Symantec Report. India is 3rd most vulnerable country to cyberattack.

5G presents a unique opportunity in the presence of 4th Industrial Revolution marked by Artificial Intelligence, Internet of Things that can further India's status as a knowledge economy.