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GENERAL STUDIES (TEST CODE : 1150)

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Medium Eng./Hindi	English	Registration Number	325713
Center	ORN	Date	27/08/18

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
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16	15	
17	15	
18	15	
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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. Technical solutions are necessary to augment the traditional methods of guarding the border. In this context, while mentioning the different components of Comprehensive Integrated Border Management System (CIBMS), discuss how it can help to address the gaps in the present system of border security. (150 words) 10

सीमा चौकसी की पारंपरिक विधियों का संबर्द्धन करने हेतु तकनीकी समाधान आवश्यक हैं। इस संदर्भ में, व्यापक एकीकृत सीमा प्रबंधन प्रणाली (कॉम्प्रिहेंसिव इंटीग्रेटेड बॉर्डर मैनेजमेंट सिस्टम: CIBMS) के विभिन्न घटकों का उल्लेख करते हुए, चर्चा कीजिए कि सीमा सुरक्षा की वर्तमान व्यवस्था में विद्यमान कमियों को दूर करने में यह कैसे सहायता कर सकता है।

CIBMS is a comprehensive policy to supplement traditional method of bordering. Traditional methods like armed forces, infrastructure, border check post are necessary but their augmentation with technological ways is necessary.

Components of CIBMS

- 1) Technical solution: in terms of CCTV, floodlight, infrared rays at border.
- 2) Border communication centre → for quick ~~trans~~ knowledge of real condition at border.
- 3) connectivity to border from the main stations for efficient

communication.

Addressing gap in present system

- Difficult to manage terrain can be guarded with CIBMs. eg. Sir Creek with Pakistan
- ② Quick communication with base station from border area
- ③ Supplement armed forces to check infiltration.
- ④ Can be more helpful in night — as many infiltration happen in night.
- ⑤ Supplement physical infrastructure with digital infrastructure.

Thus CIBMs is a step in right direction to secure India's border and help maintain internal security of country.

2. In comparison to conventional warfare, the possibility of successful deterrence against cyber warfare is both limited and complicated. Discuss. Also, elaborate upon India's preparedness in this regard. (150 words) 10

पारंपरिक युद्ध की तुलना में, साइबर युद्ध के विरुद्ध सफल भयादोहन (निवारण) की संभावना सीमित और जटिल दोनों हैं। चर्चा कीजिए। साथ ही, इस संबंध में भारत की तैयारियों का सविस्तार वर्णन कीजिए।

Cyber warfare is using internet technology to damage, misuse, hack, attack the internet system, computer technology of any country.

conventional war is direct between 2 armies - but cyber warfare is anonymous and present unique challenges:-

- 1) Anonymity → designating the perpetrator is difficult.
- 2) Reporting → less reporting many times makes it difficult.
- 3) over reliance on internet → makes whole situation vulnerable.
- 4) surveillance and intelligence gathering is limited and complicated.
- 5) Nonstate actors involvement - makes it all the more difficult.

6) No international consensus on the issue.

India's preparedness

- ↳ Cyber security policy, 2013 - lays down elaborated structure to fight cyber warfare.
- ② National Technical Research Authority under National Security Advisor.
- ③ CERT-IN → To manage and prevent cyber-attack
- ④ National Cyber Coordination Centre (NCCC) → to manage real time cyber system.
- ⑤ Cyber Surakshit Bharat → initiative by government to prevent cyber warfare.

Thus, cyber-warfare is harmful in many terms, larger global consensus is need of time to prevent any such war.

3. Analyse the impact that the instability in the wider South Asian region has on India's internal security. What steps can be taken to minimise such impact? (150 words) 10

विस्तृत दक्षिण एशियाई क्षेत्र में अस्थिरता का भारत की आंतरिक सुरक्षा पर पड़ने वाले प्रभावों का विश्लेषण कीजिए। ऐसे प्रभावों के अल्पीकरण हेतु क्या कदम उठाए जा सकते हैं?

South Asian region today is under threat due to various reasons, which is impacting India's internal security.

Impact on internal security

1) Rohingya issue → Arakkan Rohingya

Army can be threat to India's security. Also migrant are proving harmful in Northeastern region.

2) Insurgency in Pakistan → affecting Kashmir as well as entire India.

3) Doklam problem: Threat to escalate to war between India and China.

4) Riots in Sri Lanka → Sri Lankan riots can be problem to India's s. India

5) Chinese foray in S. Asian countries can be problematic to internal security.

⑥ Border problems with ~~the~~ neighbouring countries → threat to stability.
illegal drug trafficking due to Golden triangle and Golden Crescent

Steps to minimize

- 1) Fencing of border → CIMES technology can be helpful
- 2) strengthen military and increase defence budget → follow DR Shekatkar committee recommendations
- 3) solve border dispute amicably
- 4) Comprehensive law on refugees.
- 5) Intelligence gathering → IB and RAW need to work efficiently.

thus, holistic approach is need of hour to secure India from instable condition in S. Asia.

4. Highlighting its mandate, discuss the significance of International Solar Alliance in positioning India to a key global leadership role. (150 words) 10

अंतर्राष्ट्रीय सौर गठबंधन के अधिदेश पर प्रकाश डालते हुए, भारत को एक प्रमुख वैश्विक नेतृत्वकर्ता की भूमिका में स्थान दिलाने में इसके महत्व पर चर्चा कीजिए।

International Solar Alliance (ISA) is first treaty based international organisation based in India (Gurugram). It is a joint initiative led by India and France.

MANDATE

- 1) Involve countries in tropic of cancer and capricorn for production of 1000GW of solar electricity.
- 2) 5 projects → scaling of ^{affordable} finance
 - scaling demand in agriculture
 - partnership for solar energy
- 3) It envisions larger demands, can bring down cost of technology.
- 4) Bringing down carbon emission with increasing use of solar energy.

Significance

- 1) Foreign relationship → many countries participating are resource rich and economically poor → so India can leverage this for increasing global footprint.
- 2) Employment generation in India.
- 3) Fulfilling goal of 40% renewable energy and INDC targets of Paris treaty.
- 4) Responsible power → tackling climate change.
- 5) Technology improvement and more R&D in the sector.
- 6) can increase India's export in solar equipment.
- 7) decreasing import reliance on oil.
- 8) Increase of soft power of India.

Thus ISA provides an unique opportunity to India to emerge as responsible global super power.

5. Despite a strong case for a Broad-based Trade and Investment Agreement (BTIA) between India and the European Union (EU), negotiations have been stuck for long owing to multiple factors. Analyse. (150 words) 10

भारत और यूरोपीय संघ (EU) के बीच व्यापक आधार वाले व्यापार और निवेश समझौते (ब्रॉडबेस्ड ट्रेड एंड इन्वेस्टमेंट अग्रीमेंट: BTIA) हेतु सुदृढ़ परिस्थितियां होने के बावजूद कई कारकों के चलते वार्ता लम्बे समय से अटकी हुयी है। विश्लेषण कीजिए।

India and EU have started talks for swift passage of BTIA for increasing trade and investment mutually but it is facing some problems.

Problems in BTIA

- 1) Demand for domestic dispute resolution by India:
 - India demands for exhaustion of domestic courts process by investors before going for international resolution → It is perceived as against investor by many.
- 2) Regulation of investment:
 - Investors are demanding free investment mechanism.

③ Trade related dispute:

- India demands greater access to European markets for service sector of India, which is against EU's interest.

④ Personnel movement:

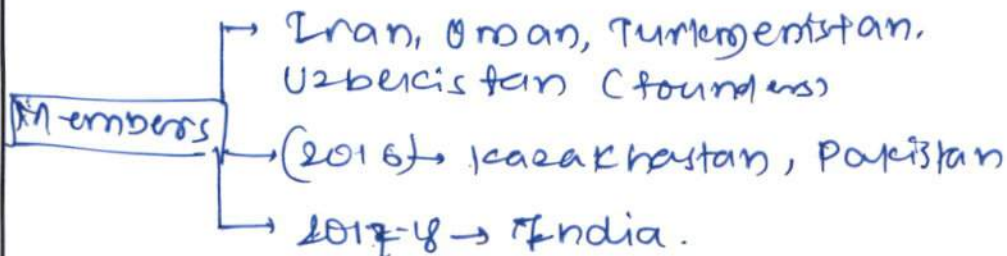
- India demands free movements of professionals for trade related reasons.

BTAA need to be swiftly and quickly concluded as EU is India's largest export destination and largest investor.

6. Accession to the Ashgabat agreement is valuable for connecting India to its extended neighbourhood. What is the Ashgabat Agreement? Assess its significance for India. (150 words) 10

अश्गाबात समझौते में शामिल होना वस्तुतः भारत के लिए अपने विस्तारित पड़ोस से जुड़ने की दृष्टि से मूल्यवान है। अश्गाबात समझौता क्या है? भारत के लिए इसके महत्व का मूल्यांकन कीजिए।

Ashgabat agreement is multimodal connectivity project connecting Persian Gulf to Caspian Sea.



This agreement is essential to link India to central Asian region. Work for the project is already started.

Significance for India

- 1) Connectivity to resource rich central Asia. eg. Turkmenistan have world's 4 largest oil reserve.
- 2) Complement India's already programs like Chabahar port and International North-South.

Transport corridor.

③ Stability of Afghanistan: by promoting trade and commerce with Afghanistan through this route.

④ Counter chinese BRI:

→ It will help counter chinese project, and enhance better connectivity to India.

⑤ Early completion of TAPI gas pipeline as 3 partners are in same group.

⑥ Improving India-Pakistan relationship.

Agreement is essential for energy security of country, but cautious approach needed to prevent India-Pak rivalry in group.

7. The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a natural choice for India to fulfill key foreign policy priorities. In this context, discuss the issues behind hitherto slow progress and the reasons for reinvigorated optimism regarding BIMSTEC.

(150 words) 10

बहु-क्षेत्रीय तकनीकी एवं आर्थिक सहयोग के लिए बंगाल की खाड़ी पहल (BIMSTEC), भारत के लिए अपनी विदेश नीति संबंधी प्रमुख प्राथमिकताओं की पूर्ति हेतु एक स्वाभाविक चयन है। इस संदर्भ में, अब तक हुई धीमी प्रगति के पीछे निहित मुद्दों और BIMSTEC के संबंध में पुनर्जीवित होते आशावाद की चर्चा कीजिए।

BIMSTEC is block of countries in south Asia and south-east Asia driven by India and forged in 2004.

All the countries being neighbour of India, with cultural similarity → group is natural choice for India

Issues behind non functioning



fig.: BIMSTEC members.

① Meetings:

→ BIMSTEC members meet less frequently → so no coherent dialogue

② Smaller countries → are less ready to open their economies for trade
eg. Bangladesh.

③ Instability:

- In nepal and military region in myanmar limited scope of engagement.

④ connectivity:

- minimal, so impacting goods and people movement.

Optimism for BIMSTEC

- ① India's larger zeal for BIMSTEC rather than SAPRC.
- ② connectivity improving through projects like BBIN, Kaladan project.
- ③ India is better suited to investing in these countries.
- ④ Chinese influence in the region forced India to engage with the group.

Thus BIMSTEC provides an opportunity to engage with neighbours. India should follow QUJRAL DOCTRINE to build better relationship with these countries.

8. What do you understand by Free Space Optical Communication (FSOC) Technology? Critically explain its potential in connecting rural and remote areas in India. (150 words) 10

फ्री स्पेस ऑप्टिकल कम्युनिकेशन (FSOC) प्रौद्योगिकी से आप क्या समझते हैं? भारत में ग्रामीण और दूरस्थ क्षेत्रों को जोड़ने में इसकी क्षमताओं की आलोचनात्मक व्याख्या कीजिए।

Free space optical communication (FSOC) technology uses light as a medium to transfer data and use of internet services.

It is developed by Google's associate company and deployed in Andhra Pradesh. It uses these lights to give internet connectivity to users.

Potential for remote and rural areas:-

- 1) FSOC doesn't require spectrum allocation, so companies will be interested to invest in it.
- 2) It doesn't require setting up of large towers → so beneficial for remote area.

③ It is low cost technique — so rural area and remote area can be connected easily.

④ Infrastructure needed is very less, and connections like optical fibre, not required, making it more lucrative.

- Benefits →
- bridging digital divide
 - promote digital India
 - efficient delivery of services.
 - increasing digital literacy
 - Information delivery to local.

Thus FSOc can be a potential tool to achieve well connected India for inclusive growth of rural and remote areas.

9. What are Orphan Drugs? Examine the significance of putting in place a policy framework for such drugs in a developing country such as India.

(150 words) 10

ऑर्फन ड्रग्स क्या हैं? भारत जैसे एक विकासशील देश में ऐसी दवाओं हेतु एक नीतिगत ढांचा स्थापित करने के महत्व का परीक्षण कीजिए।

Orphan drugs are the ones who are needed to treat rare diseases and hence produced very less, so not get support of drug manufacturers.

e.g. drug for genetic disease or disease like Lymphoma cancer.

Significance for India

1) Designating drug as orphan drug will lead to —

- Greater loan availability to drugs
- Greater R&D for finding medicine.
- Greater awareness in scientific community.

2) Due to all this these drugs get attention and manufactured on larger scale.

- ③ India being pharmacy of world, such designation will lead to growth of pharmaceutical industry of country.
- ④ Such drugs will help reduce out of pocket expenditure of Indians → as less price and more availability.

Thus, Orphan drug designation is important for Indian health as well as pharmaceutical sector. Recently USA given some drugs as orphan drug status, which needs to be harnessed by India.

10. Discuss the obstacles in women's access to science education in India and also suggest remedial measures to overcome these obstacles.

(150 words) 10

भारत में विज्ञान की शिक्षा तक महिलाओं की पहुंच के मार्ग में आने वाली बाधाओं पर चर्चा कीजिए और इन बाधाओं को दूर करने के लिए उपचारात्मक उपाय भी सुझाइए।

Economic survey highlighted that women are less represented in STEM (science, Technology, Engineering, Math) fields.

obstacles in science education:

1) Traditional roles:

Society does not view science as sector for women and traditional roles assigned to women.

2) Literacy: only 65.1% as compared to 82% of male.

3) Science sector is more oriented leaving out women.

4) Women attitude: Due to long working hours women don't see it as lucrative sector.

5) Double responsibility: of home and work doesn't allow women to participate in science education.

Remedial measures

- 1) Role model: Promote role model from women for larger participation.
- 2) Remove gender bias in scientific institutes.
- 3) Overhaul working place → so that women encouraged to participate.
- 4) Social attitude → change in favour of science education to women.

Thus, while some reforms are needed to remove gender bias from science education to achieve India's larger goals.

11. Giving examples, elaborate how India's approach to becoming a net security provider in the Indian Ocean Region is taking shape. What are the challenges and opportunities associated with this approach?

(250 words) 15

उदाहरण देते हुए, सविस्तार वर्णन कीजिए कि किस प्रकार हिंद महासागर क्षेत्र में वास्तविक सुरक्षा प्रदाता (नेट सिक्यूरिटी प्रोवाइडर) बनने का भारत का दृष्टिकोण आकार ले रहा है। इस दृष्टिकोण से संबद्ध चुनौतियां एवं अवसर क्या हैं?

Indian ocean region ^(TOR) today is becoming arena for global powers and India is playing proactive role for ensuring net security of region.

India's approach — as net security provider —

- 1) Development of Agalega Island in Mauritius for managing TOR
- 2) Assumption Island: Developing naval base
- 3) Changi naval base (Singapore) for better access to Indian ships.
- 4) Logistic Memorandum of Exchange with USA and same agreement with France to enhance capability.

- 5) Dugm port of Oman for dual use of trade and military use.
- 6) Quad Group: to provide net security
- 7) Indian Ocean Naval Symposium and Indian Ocean Rim Asso. → to tackle piracy and terrorism
- Through all these examples it is clearly seen as larger role of India as net security provider.

Challenges

- Antagonising china by engaging with quad
- Recently Seychelles parliament refused India's demand for Assumption Island naval base
- string of pearl policy of china
- Deteriorating relationship with Maldives
- Funding to Indian navy and coast guard is limited.

- growing piracy in the region.

Opportunities

- secure trade of India through TOR (90% by value)
- Tackle marine terrorism
- Global superpower.
- enhanced relation with ASEAN, Africa and W.Asia
- Tackling china's rising hegemony.
- Rising soft power of India.

Thus, greater role in TOR is way forward to realise global superpower and curtail china's hegemonic tendencies being a net security provider.

12. The UNODC (United Nations Office on Drugs and Crime) has pitched for the need of an integrated approach in order to address the difficulties in preventing, detecting, investigating and prosecuting Transnational Organised Crimes (TOC). Elaborating on these difficulties, discuss how an integrated approach can help in tackling TOCs. **(250 words) 15**

पार-राष्ट्रीय संगठित अपराधों (ट्रान्सनेशनल ऑर्गनाइज्ड क्राइम्स: TOCs) को रोकने, पता लगाने, जाँच करने और अभियोजित करने में आने वाली कठिनाइयों से निपटने के लिए UNODC (यूनाइटेड नेशंस ऑफिस ऑन ड्रग एंड क्राइम्स) ने एक एकीकृत दृष्टिकोण की आवश्यकता पर बल दिया है। इन कठिनाइयों का सविस्तार वर्णन करते हुए, चर्चा कीजिए कि किस तरह एक एकीकृत दृष्टिकोण से TOCs से निपटने में सहायता मिल सकती है।

Transnational organised crime (TOC) is the criminal activity which surpasses national boundaries and highly dangerous for national security.

e.g. Money laundering, drug trafficking, hawala operation, arms trade.

Difficulties in integrated approach

A) Prevention:

- These crimes performed by highly sophisticated groups and maintain anonymity, → difficult to identify.
- These are transnational so, lack of communication between different countries is problem.

⑧ Detection:

- mostly performed through internet → difficult to trace
- Funding through Bitcoin → so difficult to detect
- Organised crimes are using loopholes in law, so difficult to identify.

⑨ Investigating:

- Lack of cooperation between countries.
- Different laws in each country.
- higher echelons never caught

⑩ Prosecuting:

- often not prosecuted as no international law.

Benefit of Integrated approach

- common platform for all countries, as these crimes are transnational

- can be used to create a common legal mechanism to prosecute.
- sources and intelligence sharing possible.
- criminals can be punished easily
- prevention can be more holistic with co-operation
- Illicit channels of funding can be banned.
- harmonisation of laws globally.

Thus, TOC is becoming a global threat which perpetuates through terrorism which needs firm resolve by each country and UNODC is best platform for collaboration

13. Highlighting the need for SMART policing in India, suggest some administrative, legislative and technological reforms in order to realize this vision. (250 words) 15

भारत में SMART पुलिसिंग की आवश्यकता पर प्रकाश डालते हुए, इस दृष्टि को साकार करने के लिए कुछ प्रशासनिक, विधायी और तकनीकी सुधारों का सुझाव दीजिए।

Supreme court in Prakash
Singh judgement and many
other committees highlighted
need for police reforms. Centre
recently announced 25000 cr
package for police reforms.

Need for SMART policing

- S (Smart and stem), M (Mobile and Motivative) A Accountable, R (Responsive) T (Trained) policing is need at today.
- Law Commission 2012 stated that 47% non conviction due to lax investigation.
- 26th Law commission report states 60% unnecessary arrest.
- Burden: India have 137 police per lakh population in many states but UN recommended

- 187 police per lakh population
- Ill trained in organised crime, cyber crime.
- Politicisation of police force.
- Growing crimes against women and minorities need Responsive and Accountable Policing.

Reforms

• Administrative

- setting up of Police Establishment for transfer, promotion (Prakash Singh case).
- streamline recruitment process for better trained and suited officers.
- Appointment of DGP for minimum 2 years.

• Legislative

- Reforms in IPC for better management of crime.
- Comprehensive Model Police Act.

needed to be adopted by states.

→ Define powers of police statutorily.

Technical Reforms

- Setting up of cyber training institute to train police in cyber crime.
- Advanced technology for crime detection.
- Passing of DNA Bill for speedy solving of crimes.

Thus, government need to work on recommendation of Malimath Committee, 2nd ARC and Padmanabhaiah Committee for holistic reforms in police.

14. Discuss the reasons behind private sector playing a merely peripheral role in defence manufacturing in India. Also, explain how the Draft Defence Production Policy, 2018 seeks to augment private sector participation in defence manufacturing in India. (250 words) 15

भारत में रक्षा विनिर्माण के क्षेत्र में निजी क्षेत्रक द्वारा अत्यंत गौण भूमिका निभाने के पीछे उत्तरदायी कारणों की चर्चा कीजिए। साथ ही, व्याख्या कीजिए कि किस प्रकार ड्राफ्ट डिफेंस प्रोडक्शन पॉलिसी, 2018 (रक्षा उत्पादन नीति मसौदा, 2018) भारत में रक्षा विनिर्माण के क्षेत्र में निजी क्षेत्रक की भागीदारी बढ़ाना चाहती है।

Private sector play a minimal role in India's defence sector making country largest importer of arms and exporting forex and jobs outside of country.

Reasons for peripheral role of private sector;

- 1) Skilled manpower → absent in private sector to manufacture state of art equipment.
- 2) Funding → private sector reluctant to invest, growing NPAs added to situation.
- 3) Government support → mainly to government PSUs eg. DRDO, hence private sector left out.

4) Technology:

Absent in India to manufacture required defence machinery.

5) Regulatory mechanism → defence sector is highly regulated, making private sector onerous of the situation.

6) Entrepreneurship promotion in defence sector is very less → impacting less representation of private sector.

Draft Defence Production Policy, 2018

1) IDEX scheme → to help startup to invest and innovate in defence sector.

2) collaboration with private sector for critical defence technology.

3) Allow the usage of ordnance Board factory to manufacture

4) 2 defence corridors → UP and

Tamil Nadu to encourage private sector.

⑤ Governmental help for engaging in joint venture with foreign company.

⑥ support from governmental PSUs for technology

⑦ separate fund for small and medium Enterprises to increase their participation.

This draft policy is a multipronged approach which needs to be harnessed by private sector to emerge as manufacturers of state of art technology,

15. While India and Russia have enjoyed good relations since the Soviet era, relying on the past may not be enough to deal with shift in the relationship in light of the rapidly evolving geopolitical realities. Comment.

(250 words) 15

यद्यपि सोवियत युग से ही भारत और रूस के संबंध मधुर रहे हैं, तथापि अतीत पर निर्भरता तेज़ी से विकसित होती भू-राजनीतिक वास्तविकताओं के प्रकाश में, संबंधों में आये बदलाव से निपटने हेतु पर्याप्त नहीं भी हो सकती हैं। टिप्पणी कीजिए।

Indian - Russian relation started with the independence of India is 1947. Russia is all weather friend of India. Both countries enjoyed unique relationship seen in many engagement between both country.

1) Economic development of nascent India —

→ Russia helped for setting up heavy machineries and successful implementation of Five Year Plan.

② Kashmir issue: Russia supported with the help of veto power in UNSC to India.

③ Treaty of Friendship, 1971

→ In the wake of growing alliance between USA and Pakistan both countries signed treaty which helped India

4) Defence partnership :

→ One of largest exporters of arms to India. eg. Brahmos

5) Nuclear energy partnership :

→ Russia helped to set up nuclear power plants in India.

6) Critical technology - in the field of defence and other to India.

But recently geopolitical changes are changing this relationship -

1) India's closeness to USA : It is seen as threat to Indo-Russia ties.

2) Arms import from Israel and France.

3) Recent engagement with Quadrilateral group with USA, Japan and Australia.

4) But Russia's growing closeness with china and pakistan.

5) CAATSA Act of USA which is forcing India to sever relations with Russia.

These changes are challenges to friendship, but both countries are engaging in South Shanghai Co-operation Agreement, INSTC, Afghanistan stabilisation, BRICS. Which needs to be harnessed for further growth of relations.

16. In what ways has the engagement between India and its diaspora evolved over the years? What role can the Indian diaspora play in furthering and shaping India's foreign policy goals? (250 words) 15

भारत और इसके डायस्पोरा के बीच सहभागिता बीते वर्षों के दौरान किस तरह विकसित हुई हैं? भारत की विदेशी नीति के लक्ष्यों को आगे बढ़ाने और आकार देने में भारतीय डायस्पोरा क्या भूमिका निभा सकते हैं?

Indian diaspora today is among one of the largest and spread in the world uniformly which helps India to build foreign relations.

Engagement with diaspora

1) NRI and PIO status → given to Indians outside and they have been given various benefits.

2) Pravasi Bharatiya Diwas
→ on every 9th January so that Indian diaspora engages holistically with India.

3) Summits and conferences:
→ in foreign countries by ministry of External Affairs.

4) Voting rights to NRI → in 2010

(5) Invitation to engage in scientific research in India through schemes like INSPIRE and VATRA.

(6) Today Indian diaspora is playing major role to formulate India's foreign policy with many countries.

Role Indian diaspora can play:

1) ~~Energy~~ Energy security to India - West Asian diaspora is important to ensure this.

2) Affinity with USA:

→ Indian diaspora can play a greater role in increasing relation with USA.

3) Increasing footprint in service sector →

→ diaspora speciality in IT sector is well suited for this.

④ Investment to India:

- diaspora in Europe and USA and West Asia is well suited to increase investment in India

⑤ Africa-outreach:

- diaspora in Africa is interlinked to India → can play greater role for African relations of India

Thus Indian diaspora can play greater role today to increase India's contact with globe and fulfill foreign policy goals.

17. Sluggish progress of the Doha round signals that the WTO is proving to be ineffective in promoting free trade. Identifying the factors behind this, comment on the relevance of WTO in present context. (250 words) 15

दोहा दौर की धीमी प्रगति संकेत करती है कि WTO, मुक्त व्यापार को प्रोत्साहित करने में अप्रभावी सिद्ध हो रहा है। इसके पीछे उत्तरदायी कारकों की पहचान करते हुए, वर्तमान संदर्भ में WTO की प्रासंगिकता पर टिप्पणी कीजिए।

Doha Round started in 2002 is one of largest talks in trade sector and it is proving detrimental to the existence of WTO.

Doha round was mainly trade off between the developed and developing country in their respective demands. Both the groups are at loggornheads and hence WTO today is seen as ineffective body for promoting free trade by many.

Factors behind slow progress:

1) Lack of consensus:

→ between developing and developed countries on these issues.

② Agriculture problems —

Agreement on agriculture is proving detrimental for talks.

③ Violation of agreement by developed countries

→ subsidies are not brought down by many developed countries.

④ Dispute resolution

→ It is viewed as biased and in favour of developed world.

⑤ Inability to act by WTO:

→ body is unable to control western countries.

Relevance of WTO in present:

1) WTO helps any country to engage with other countries on a single platform rather than many bilateral treaties.

② Free trade promotion is need of hour as protectionist tendencies on rise.

③ Protection to developing world against developed countries can be effectively ensured by WTO.
eg. peace clause to India.

④ But WTO proving ineffective to address unilateral trade war by countries like USA.

⑤ Developing countries are feeling alienated in platform.

Thus reforms in representation, functioning and dispute resolution is very much essential for democratic function of WTO.

18. India's engagement with its extended neighbourhood in West Asia has evolved into a 'Look West' approach in recent times. However, multiple faultlines in this volatile region require a balancing act on the part of India. Discuss. (250 words) 15

पश्चिम एशिया में अपने विस्तारित पड़ोस के साथ भारत की सहभागिता हाल के दिनों में 'लुक वेस्ट' दृष्टिकोण के रूप में विकसित हुई है। हालांकि, इस अस्थिर क्षेत्र में उपस्थित कई फॉल्टलाइन्स भारत की ओर से एक संतुलनकारी कार्यवाही की मांग करते हैं। चर्चा कीजिए।

West Asian region and India have historical ties from the time of Harappa. It continued till today and both partners engaging for mutual development.

With engagement at government, business and people level, West Asia became important for India.

LOOK WEST POLICY

1) Secular and Non aligned approach:-

→ India engage with conflict ridden country with secular outlook.

2) More importance to economics:-

→ with import of 90% of oil and gas from region, more importance

given to economy.

③ People to people relation.

- West Asia inhabits largest Indian diaspora, so people to people relation is important pillar of policy.

④ Thrust to trade.

- Both partners engaging in trade.

But problems in the region are —

- 1) Shia-Sunni conflict between Saudi Arabia and Iran
- 2) political instability eg. Libya.
- 3) sanctions by UNSC eg. Iran
- 4) Terrorism and radicalisation are damaging the prospects.
- 5) continuous wars eg. Syria, Yemen
- 6) Rising rivalry between countries eg. Qatar matter

Balancing act is need of
hour from India -

- Engage with all partners on equal footing.
- Better policies for increasing economic prospect.
- Not to indulge in Shia, Sunni conflict.
- Work with global partners for removing terrorism from region.

Thus, to realise energy security, stable West Asia with sustainable relations is need of hour for India.

19. The rapid diffusion of Artificial Intelligence begets unique opportunities and challenges for India. Discuss. What can be done to address these challenges? (250 words) 15

आर्टिफिशियल इंटेलिजेंस (कृत्रिम बुद्धिमत्ता) का तीव्र प्रसार, भारत के लिए विशिष्ट अवसर और चुनौतियां उत्पन्न करता है। चर्चा कीजिए। इन चुनौतियों का समाधान करने के लिए क्या किया जा सकता है?

Artificial Intelligence (AI) is technology which can learn, make decision, perform tasks on its own without human intervention.

AI is increasingly used in India in the field of education, health, science, economy, infrastructure. So it presents opportunities and challenges.

Opportunities with AI

- Efficient, effective and fast performance of tasks.
- Governance: Speedy delivery of services.
- Health care: It is observed that delicate surgeries are performed by AI efficiently.

- Difficult terrain → AI can be deployed if not possible for work to humans.
- Space → ISRO is using AI for multiple application.
- Big data analytics → AI play important role in it.

Challenges with AI

- Skilled manpower → only 4% to handle AI related application.
- collaborative approach is missing in many sectors.
- Adequate funding for R&D is missing
- social attitude → still not in favour of larger use of AI eg. driverless cars
- Education system → not in coherence with increasing use of AI.
- private investment is missing for skilling profession
- threat for employment.

Measures to address challenges

- Curriculum changes → in line with AI technology
- Investment in R&D for AI
- collaboration of industry and academia.
- Skill training under skill India mission
- Use of AI in repetitive tasks
- Increase social awareness for use of AI

Thus multipronged approach is need of hour to harness AI for realising dream of EMPOWERED INDIA

20. Water shortage in India has been sought to be addressed through various policy and technological interventions. Explain. Also, examine the benefits of desalination technology and the costs associated with it. (250 words) 15

भारत में विभिन्न नीतिगत और तकनीकी उपायों के माध्यम से जल की कमी की समस्या का समाधान करने के प्रयास किए जाते रहे हैं। व्याख्या कीजिए। साथ ही, विलवणीकरण प्रौद्योगिकी के लाभों एवं इससे संबद्ध लागतों का परीक्षण कीजिए।

NITI Aayog recently highlighted that India can face severe water shortage in future if inadequate measures taken today.

India is taking various steps to address the problem of water crisis at policy and technological level. →

Policy level

1) Mapping of aquifers → government agencies mapping 14 aquifer basins in India

2) River linking project:

→ various river linking project for addressing perennial water concerns.

3) Ministry panel appointment

→ It suggested setting up of

National water commission to manage water holistically.

④ River rejuvenation program:

→ Government is doing it for individual basin for better water management.

Technological Intervention

→ Use of nanotechnology → for better drinking water.

② Satellite used for mapping of aquifers

③ Technological intervention with the help of Israel eg. Drip water irrigation

Desalination technology

It is the method in which ocean water's salinity is lowered to use it for drinking water or other purpose.

Benefits

- easy availability of ocean water.
- water available in abundance in ocean.
- can be used for growing need of water.

Costs

- Technology is not yet fully demonstrated.
- costs associated with it are large.
- Import of technology → significant loss of forex.

Water problem is increasing day by day, government with the help of citizens and civil society need to engage for sustainable use of water for future.