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GENERAL STUDIES (TEST CODE : 1068)

Name of Candidate	ANUR		
Medium Eng./Hindi	ENG	Registration Number	26775
Center	ORM	Date	29/8

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	1. 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)। 2. There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं। 3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं। 4. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं। 5. 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। 6. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए। 7. 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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Total Marks Obtained:			
Remarks:			

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

M-1/4, Plot No-A-12/13, 1st Floor, Ansal Building, Dr. Vidya Sagar Homeopathic Clinic, Mukherjee Nagar, Delhi-110009

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. There are many challenges in sustainably scaling up renewable energy in India. Analyse. Also, discuss what can be done to address these challenges.

(150 words) 10

भारत में नवीकरणीय ऊर्जा को संधारणीय रूप से बढ़ाने में कई चुनौतियां हैं। विश्लेषण कीजिए। साथ ही, चर्चा कीजिए कि इन चुनौतियों से निपटने के लिए क्या किया जा सकता है।

With approx. 7517 of coastline, majority of year in sunshine, India has large scope for sustainably scaling up Renewable Energy

Over the years, Renewable Energy sector has faced many issues ⇒

- ① Access to capital WEF report states that India requires \$786 Bn to achieve it's 175GW target.
- ② Dependence on Coal 68.3% of India's power comes from fossil fuels, A shift to Renewable energy would require large scaling down of coal
- ③ Lack of Grid Connectivity
- ④ AT&C losses in India amount to about 22% which is detrimental to Renewable framework.
- ⑤ Recent Disputes regarding Solar Energy in WTO etc. add to India's woes

- ⑥ Lack of Green Skilling initiatives so far :-
To build a workforce trained in green skills

Solutions

- ① Increasing investments by initiatives like Green Bonds, Use of Pension funds and Insurance bonds to boost Renewable Sector.
- ② Increasing Grid Connectivity Steps like Green Corridor etc. are welcome steps
- ③ Launch of Green Skill development programme to build a workforce of trained personnel.
- ④ Improving health of discoms so that they can fulfill their RPO obligations and boost demand.
- ⑤ Hybrid corridors to ease access of land, and storage
- ⑥ Boosting Energy Storage system development to provide Batteries, Rechargers etc. (NITI Aayog)

These steps can help achieve ideal of Sustainable, Renewable and Inclusive Growth.

2. The policies and indicators introduced by the government, in recent times, to finance urban development in India are key in addressing the existing challenges. Discuss with special reference to municipal bonds.

(150 words) 10

हाल ही में, भारत में शहरी विकास का वित्त पोषण करने के लिए सरकार द्वारा आरंभ की गई नीतियां और संकेतक वर्तमान चुनौतियों से निपटने हेतु महत्वपूर्ण हैं। नगरपालिका बंधपत्रों (म्युनिसिपल बॉण्ड) के विशेष संदर्भ के साथ चर्चा कीजिए।

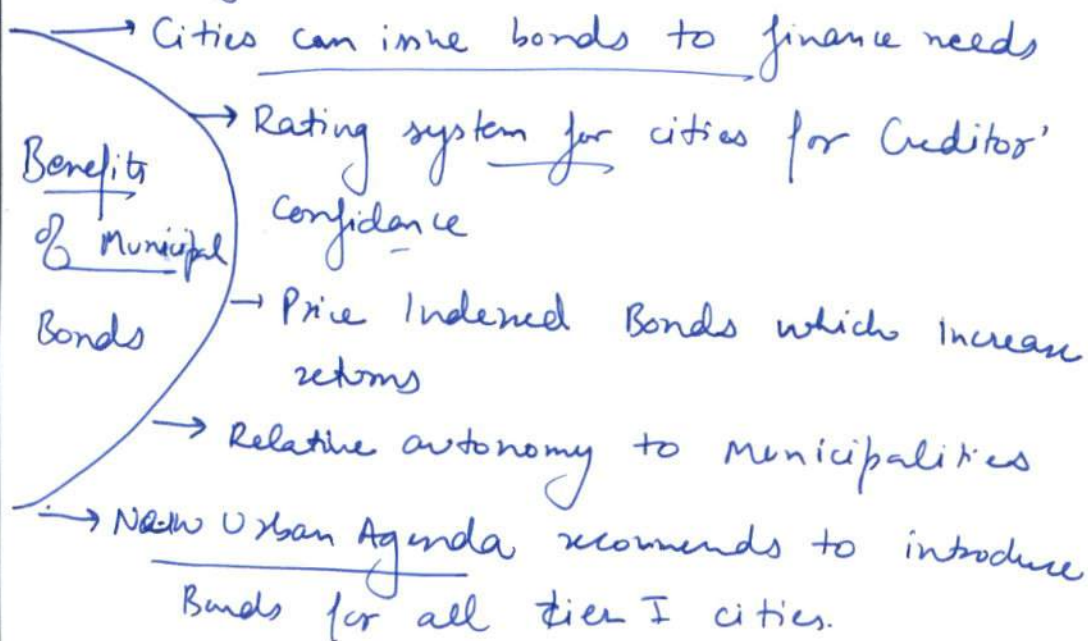
India's 31.1% of population now resides in Urban areas and by 2050 it will touch 50%.
(Isher Judge Ahluwalia). Hence, Financing Urban development takes centre stage.

India is still in need of 59 lakh Crores investment in Urban development to meet demands of Indian Urban Agenda

Recent Policies and Steps

- ① Ease of Living Index to determine credit ratings of cities. → promotes creditors trust and investment
- ② Setting up of ^{Reform} Urban Incentives Fund with corpus of 500 Crores to boost Urban development.
- ③ Municipal Bonds in cities like Thane, Nagpur to finance Urban needs.

According to World Bank, India's Urban growth was Messy and Hidden, lack of finances was major reason behind this messy and hidden growth.



The investment need of 59 lakh crores requires a multi pronged approach by investments from Centre, State as well as Private Investors. Municipal Bonds are a welcome step towards a SPICE → Sustainable, Participative, Inclusive, Comprehensive Urban Growth.

3. With a number of issues continuing to be a roadblock, a large section of India's rural population is still 'financially excluded'. Discuss. [Analyse how these issues can be addressed and the measures taken by the government and RBI recently in this regard.] (150 words) 10

कई मुद्दों के लगातार अवरोध बने रहने से भारत की ग्रामीण जनसंख्या का एक बड़ा हिस्सा अभी भी 'वित्तीय रूप से अपवर्जित' है। चर्चा कीजिए। इन मुद्दों से कैसे निपटा जा सकता है और हाल ही में सरकार तथा RBI द्वारा इस संबंध में उठाए गए कदमों का विश्लेषण कीजिए।

IInd ARC states that only 19.1% of rural population was involved in active Banking which leaves a major chunk of population Financially Included

Reasons of financial Exclusion

- ① Lack of Access: Absence of Banks in remote areas adds to woes of rural unbanked population
- ② Financial Literacy ^{Knowledge &} _{How to} transact, open accounts are still lacking in rural population
- ③ Connectivity With only 26% of population with Mobile Internet, Financial Inclusion is a farcry.
- ④ Recent reports cite that SBI collected 5700 crores as fines for below minimum balance in accounts with deter population from opening Accounts.

Addressing Issues

- ① Financial literacy to the unbanked in Rural Areas should be top priority. Schemes like VISAKA (Vittiya Sakshata Abhiyaan) are welcome step.
- ② Digital literacy to bridge digital divide.
Govt. steps → DISHA, setting up CSC's.
- ③ Banking on models of Jansamudhi Programme in m.pie. ^{small} Urban Banks every 5 km distance
- ④ RBI's EASE agenda which puts Customer responsiveness at centre of Banking the Unbanked
- ⑤ Training and skilling more Banking Correspondents (RBI → BC scheme) _(BC) to reach out to remote areas.
- ⑥ These steps will help Transforming and shortening the Financial Divide between Rural and Urban areas.

4. What do you understand by the term 'Environmental Accounting'?
Discussing the rationale behind introducing environmental accounting,
highlight its status in India. (150 words) 10

'पर्यावरणीय लेखांकन' पद से आप क्या समझते हैं? पर्यावरणीय लेखांकन आरंभ करने के औचित्य की चर्चा करते हुए, भारत में इसकी स्थिति पर प्रकाश डालिए।

Environment Accounting factors in Environmental
loss, degradation or impact on environment
while defining Accounting standards.

e.g. Cost of Building Construction = 200 Crores (Traditional
Accounting)
Loss of forests = 25 Crores (Based on NPV)

Impact on ecosystem = 30 Crores

Total Cost of Construction = 200 + 25 + 30 = 255 Crores

Environmental Accounting has now taken
Centre stage with increasing environmental
deterioration and climate change.

Rationale

- ① Increasing climate change events like
forest fires, heat waves
- ② Recognising rights of forest dwellers,
primitive communities dependent on
environment.

- ③ Environment Accounting factor in Environmental Impact Assessment.
- ④ Global efforts like Green GDP, WAVES programme by WB to factor in Green Accounting.

India over the years has resorted to steps like EIA (2006), Compensatory Afforestation Act (CAMPA), defining Net Present Value under Forest Act 1980, launch of BSE's Green Index and also studies by Institutes like IIT and NITI for moving towards Green GDP. Recent changes to solid waste management Act, e-waste rules also factor in Green Environmental Accounty.

5. While access to irrigation is important, efficiency of water use is equally, if not more, crucial. Examine. (150 words) 10

जहाँ सिंचाई तक पहुँच महत्वपूर्ण है, वहीं जल उपयोग दक्षता भी यदि अधिक नहीं तो उतनी ही महत्वपूर्ण है। परीक्षण कीजिए।

With 34.5 area under Irrigation and 57.5%.

Area still rainfed (State of Environment Report)

Irrigation is of paramount importance as :-

① Increasing Rainfall distortion: NITI Aayog reports that extreme weather events can lead to 20-25% losses in Farmer Income.

② Improving Yields

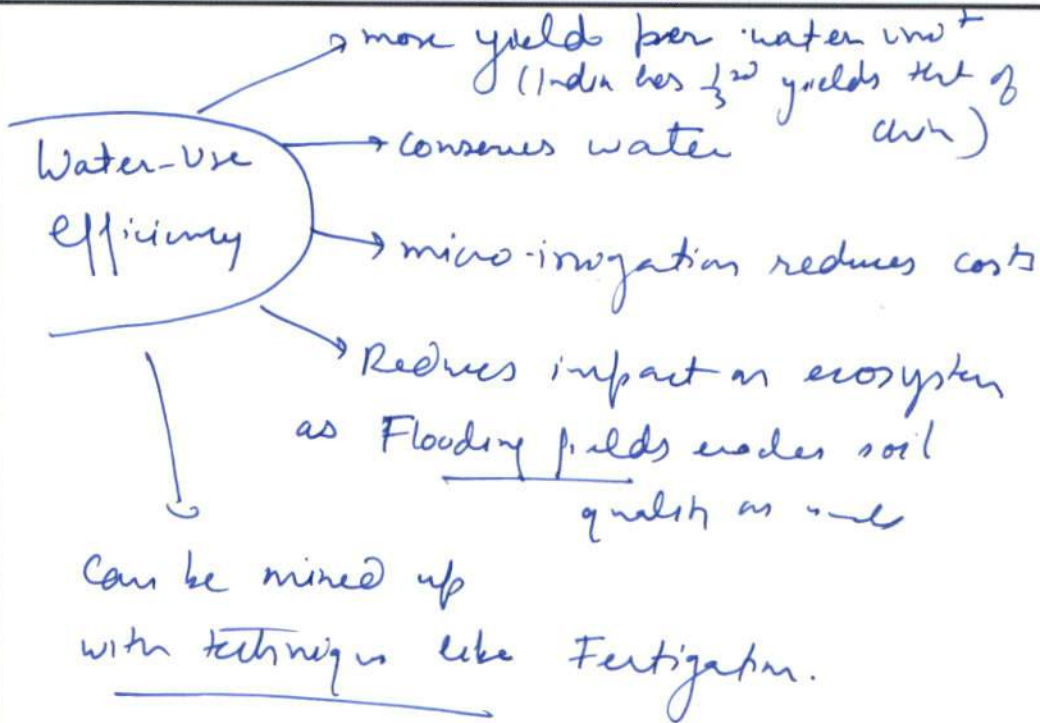
⑤ Irrigation assured reduces farmer

③ Enhancing productivity

distress as well.

④ Techniques like Micro-irrigation etc. help conserve water as well.

NITI Aayog in its 3 year Action agenda recommends for Dual ramping of Irrigation and water use efficiency (Per Drop More Crop) and (Har Khet ko Pani)



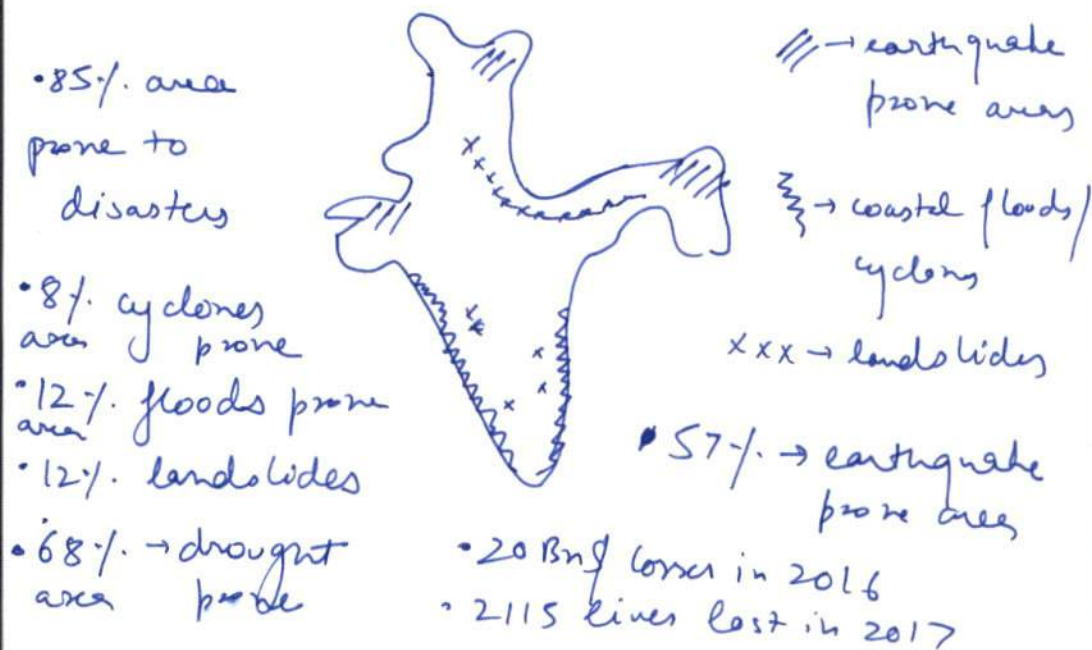
Way Forward

- ① Investing in Micro-irrigations
- ② Boosting cropping of crops like millets that use less water
- ③ Use of GM crops that use less resources but increase crop yields
- ④ Methods like SR1, Raised bed planting (M.P-Soyabean) decrease pressure on water resources.



6. For a holistic approach to disaster risk reduction, there is a need to mainstream indigenous traditional knowledge and link it with modern technologies. Analyse. (150 words) 10

आपदा जोखिम न्यूनीकरण के एक समग्र दृष्टिकोण के लिए, देशज पारंपरिक ज्ञान को मुख्यधारा में लाने और उसे आधुनिक तकनीकों से जोड़ने की आवश्यकता है। विश्लेषण कीजिए।



The above mentioned facts present need for a holistic DRR strategy which incorporates both Traditional and Modern Technologies.

① Traditional techniques of water conservation like Tohads, Badis can help reduce the loss due to droughts.

② Traditional methods of mangroves ecosystem

planting reduces impact of cyclones
in coastal areas.

- ③ Bamboo houses withstand Earthquakes
better in Earthquake prone areas.

These traditional principles can be coupled
with Modern tech of ICT, Facebook,
social media, construction techniques
to build resilient structures.

e.g. Gadchiroli District uses traditional
Johads to conserve water and ICT enable
system to forecast weather to farmers.

Modern techniques built upon Traditional
knowledge has helped Orissa overcome
its cyclone disaster impact in recent
times. PM Modi in his 10 point DRR
Agenda emphasis on use of local
level involvement, traditional systems
to build Disaster Governance.

7. What do you understand by food irradiation? Highlighting some of its unique applications, examine its relevance for India. (150 words) 10

खाद्य विकिरण (food irradiation) से आप क्या समझते हैं? इसके कुछ विशिष्ट अनुप्रयोगों पर प्रकाश डालते हुए, भारत के लिए इसकी प्रासंगिकता का परीक्षण कीजिए।

Food irradiation implies exposing food to radiations like gamma etc. to improve its shelf life, preservation period and nutritional content as well.

Application

- ① Increase shelf life by eradicating harmful bacteria, microbes
- ② Improving nutritional value of certain food
- ③ It will reduce expenditure on cold storage as food will be safe to consume for longer periods
- ④ Artificial and harmful use of pesticides/hormones to ripen fruits will be reduced.

- ⑤ Will reduce farmer's expenditure and losses due to lack of storage and warehousing facilities.

Relevance for India

- ① India annually loses about 1 lakh crore because of food and crop spoilage
- ② Will Boost Indian Horticulture shelf life and ~~also~~ return boost Horticulture farming
- ③ Reduce Indian lacunae of poor procurement and storage.

Food Irradiation benefits Indian food sector at large but setting up testing labs and regulatory measure to ensure radiation doesn't have detrimental effects will help achieving boost to Farmers and Consumers needs.

8. Whereas misuse of technology has abetted the spread of fake news, it is with the aid of technology that this menace can be curbed. Elaborate.

(150 words) 10

जहां प्रौद्योगिकी के दुरुपयोग ने फेक न्यूज़ (झूठे समाचारों) के प्रसार को बढ़ावा दिया है, वहीं प्रौद्योगिकी की सहायता से ही इस खतरे पर अंकुश भी लगाया जा सकता है। सविस्तार वर्णन कीजिए।

Fake News is defined as News based on non-credible info, post-truth and lack of objectivity and rationality

Reasons

- ① Increased mobile penetration to one of 76% increases spread as seen in North East ~~border~~ of Dimaapur lynching.
- ② Whatsapp has highest number of users in India which makes it difficult to regulate and curb news spread.
- ③ Easy and cheap access to Internet connectivity has led to increased incidence of Fake News.
- ④ Anonymity in use of technology / over social media makes it easy to spread fake info.

Technological solutions

- ① Recently issued Guidelines by whatsapp to limit number of forwarded messages
- ② Establishment of mytribuster and fact checking websites like checkit.org and mytribuster.in. helps check veracity of news.
- ③ Linking mobile number and ID card proofs to social media accounts can prevent curb fake accounts.
- ④ Kurnool district DM uses ICT in 150 schools to dismantle fake news and educate children regarding spread of Fake news.

Alvin Gouldner remarked that In this age of speeded Technological change, Technology is both tool and a weapon hence efforts to curb its misuse must be enforced.

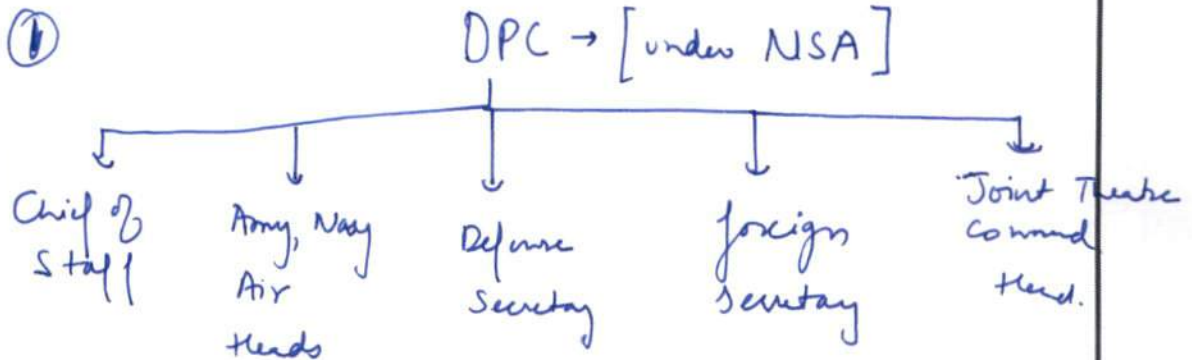
9. Explain the salient features of the recently established Defence Planning Committee. How can it help in credible defence preparedness?

(150 words) 10

हाल ही में गठित रक्षा नियोजन समिति (डिफेंस प्लानिंग कमेटी) की प्रमुख विशेषताओं की व्याख्या कीजिए। यह विश्वसनीय रक्षा तैयारी में कैसे सहायता कर सकता है?

Recently Established Defence Planning Committee provides impetus to Indian Defence Strategy.

Features



- ② Involves both Civilian - Defence cooperation
- ③ Will formulate National Security Strategy
- ④ Formulating Defence Engagement Strategy, Defence Manufacturing Strategy
- ⑤ 15 year long term Defence Plan to be prepared by DPC
- ⑥ Comprises of 4 sub-committees on Procurement, Planning, Manufacturing etc.

Role in Credible Preparedness

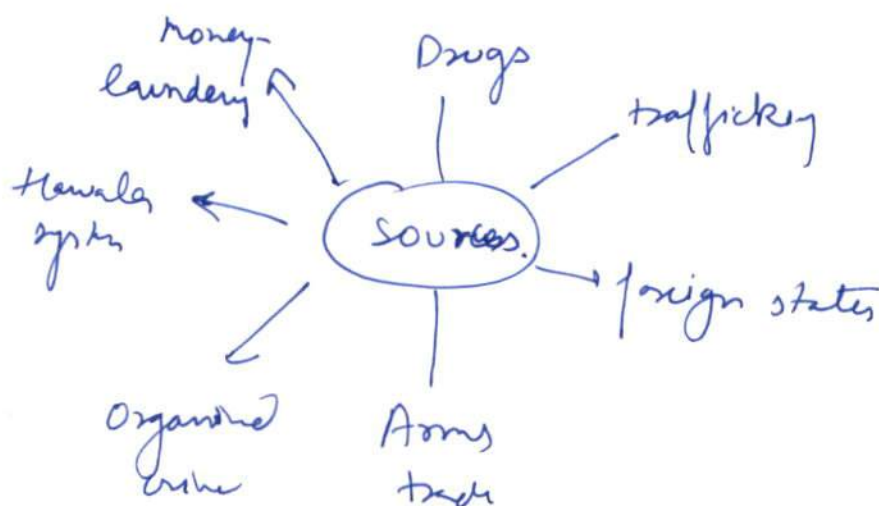
- ① With increased civilian wing and military wing cooperation, it will provide resolution to conflicts and well debated strategy.
- ② India is one of the few nations with no national security strategy DPC overcoming this.
- ③ It will help boost Private Investment in Indian defence sectors.
- ④ Revamping of Ordinance Factory Boards, liberalising industrial licensing for Defence sector will help boost Defence Preparedness.
- ⑤ Swift Decision-making can be assured under the guidance of NSA.

10. Recent reports of Maoist leaders having amassed huge assets in property and cash underlines the significance of probing the funding network as part of counter-terrorism efforts. Discuss. (150 words) 10

संपत्ति और नकदी के रूप में विशाल परिसंपत्तियां एकत्रित करने वाले माओवादी नेताओं की हालिया रिपोर्टों ने आतंकवाद-रोधी प्रयासों के भाग के रूप में वित्त पोषण नेटवर्क की जाँच करने का महत्व रेखांकित किया है। चर्चा कीजिए।

Left wing Extremist leaders in recent reports are known to have amassed huge assets via Hawala systems, Drug trading, trafficking, Organized crime and also funds from foreign countries.

Hence, Terror-funding that forms core of Terrorist activities needs to be curtailed.



Terror financing forms backbone of Terror activities hence there can be curbed by following measures :->

- ① Regulating money-laundering by strict regulation e.g. PMLA 2002 act expands offences to counterfeit currency, drugs etc.
- ② Specialised cells in home ministry like Anti Terror financing cells in India.
- ③ Use of online currency like Bitcoins must be brought under PMLA 2002
- ④ International agreement like FATF must be adhered to.
- ⑤ Setting up of Integrated Check posts which keep a check on customs clearances, immigration documents etc.
- India recently set up 13 ICP's in north-east border areas.
- ⑥ Stricter punishment ~~for~~ under heinous category for "Hawala" system.

11. Not only do services MSMEs contribute mightily to the overall GDP growth, they have a powerful, multiplier impact on the local economies as well. Elaborating on the statement, highlight the problems faced by service sector MSMEs. How can the government make it easier for MSMEs to start and grow a business? (250 words) 15

MSMEs से संबद्ध सेवा उद्यम न केवल समग्र GDP संवृद्धि में बहुत अधिक योगदान देती हैं, बल्कि उनका स्थानीय अर्थव्यवस्थाओं पर भी एक सशक्त और गुणक प्रभाव है। इस कथन का सविस्तार वर्णन करते हुए, MSMEs सेवा क्षेत्रक द्वारा सामना की जा रही समस्याओं पर प्रकाश डालिए। सरकार MSMEs के लिए किसी व्यवसाय को आरंभ करने और उसके विकास को कैसे आसान बना सकती है?

MSME's contribute to about 30% of GDP and employ about 11 crore of labour force (NSIC survey).

Contribution of MSME's

- ① Provide employment to unskilled labour force with skilled labour force comprising of 2.3% only. MSME's sustain the largely unskilled labour force
- ② MSME's contribute to about 42% of India's Exports
- ③ Provide Intermediary Goods to about 36% of Indian Industries.
- ④ MSME's with their reach to remotest

areas, Increased presence in non-skilled workforce boost the rural economies as well.

Problems of Service Sector Economy

- ① Access to Capital
- ② Regulations in labour laws, land acquisition
- ③ India's openness to Global Economy by FTA's etc leads to competition for MSME's.
- ④ Lack of skilled workforce availability.
- ⑤ Restrictions by Foreign countries citing IPR violations, cyber security preparedness hampers Indian Service Sector growth.
- ⑥ To boost MSME Sector Growth Indian Government requires a multi pronged approach :-

- ① Access to capital for MSME's by more interventions like PMEGP, SFURTI,

ASPIRE programmes.

- ② Easing labour laws by amending Industrial Disputes Act, Trade Unions Act etc.
- ③ Implementing Land Acquisition act on models of Andhra Land Reform Act.
- ④ Skilling the Workforce by measures like Skill India, PMKVY, SVSP programme.
- ⑤ India should also implement its National IPR policy 2016, to allay fears of foreign countries.

MSME's need a hand-holding and guiding approach for enhancing contribution towards India's GDP.

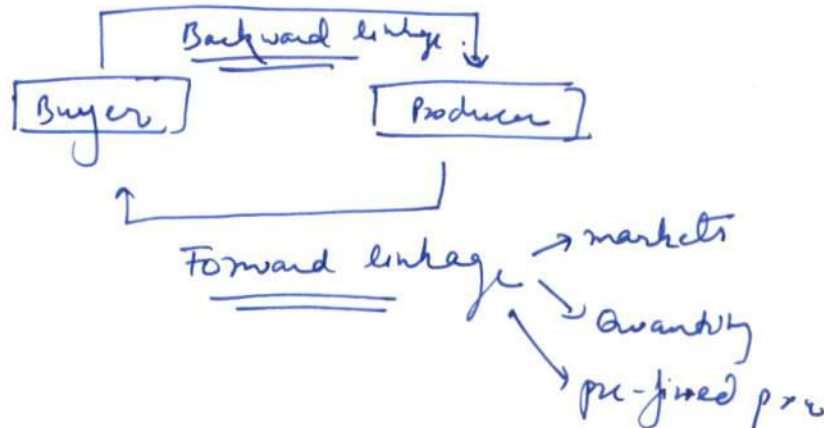
12. Contract Farming has many advantages, however it suffers from market failures. Elaborate. What can the government do to correct problems that lead to contract failures? Also, discuss whether the Model Contract Farming Act, 2018 is a step in the right direction. (250 words) 15

संविदा कृषि (कॉन्ट्रैक्ट फार्मिंग) के कई लाभ हैं, हालांकि यह बाजार की विफलताओं से ग्रस्त है। सविस्तर वर्णन कीजिए। सरकार, संविदा विफलताओं का कारण बनने वाली समस्याओं को ठीक करने हेतु क्या कर सकती है? साथ ही, चर्चा कीजिए कि क्या मॉडल संविदा कृषि अधिनियम, 2018 सही दिशा में उठाया गया एक कदम है।

Contract Farming entails Formal Agreement between Buyers and Producers regarding the type of Produce, Price of Produce and Quantity of Produce.

Advantages

- Testing Labs
- Fertilizers
- Access to seeds



- Producer is assured of pre-set produce and farmer with pre-set prices doesn't suffer from market failure induced stress.

- Hoshiaarpur tomato farmers and PepsiCo alleviated Farmer distress via Contract farming.

Issues

- Sometimes Buyers have refused to buy farmer's produce
- Lack of quality checks on farmer's produce puts buyers at risk
- Mono-cropping cultures leads to loss of agri-productivity and soil health.
- Asymmetry of information with farmer puts them at risk of low prices
- Regional disparity as Contract Farming has majorly benefitted North Indian and Central Indian states.
- Farmers with marginal landholdings are deprived of contract Farming benefits.
- Since Agriculture is a state matter no uniform standards exist.

Model Contract Farming law

- ① Agreements to be signed at local levels
e.g. Gram-Sabha to reduce hassles and
timely procedure
- ② No adverse possession of farmer's land
under any circumstances
- ③ Contract farming is placed outside
APMC's ambit.
- ④ Dispute resolution is also provided at
Gram Sabha level
- ⑤ Cover entire set of agri-products like
horticulture, cereals, etc.

Model Contract Farming law is a right
step as it includes and addresses
issue of both Farmers and Buyers.

But since Agriculture is a state subject,
states must be persuaded to
adopt model laws and Contract Farming
must also be expanded to Eastern
areas to achieve the target of Doubling
Farmers Income by 2022.

13. Suggest the measures needed to improve the employability of labour force as well as increasing number of employment opportunities in light of structural changes being brought by disruptive technologies.

(250 words) 15

विघटनकारी प्रौद्योगिकियों (डिस्रप्टिव टेक्नोलॉजी) द्वारा लाए जा रहे संरचनात्मक परिवर्तनों के प्रकाश में श्रम बल की नियोजनीयता में सुधार लाने के साथ-साथ रोजगार अवसरों की संख्या बढ़ाने के लिए आवश्यक उपायों का सुझाव दीजिए।

CMIE survey reports that only 2.3 % of Indian labour force is skilled and moreover only 31.5% of labour force is still unemployed. This calls for major reforms in boosty employability. In addition to this, recent technological changes like Increased automation, Fourth Industrial Revolution, Use of technology like AI, IoT, Big Data & Increasing Cyber Risks call for major impetus to labour force skilling.

Measures

- ① As Sharda Panel ~~conv~~ Reported : Skill Sector Centres must be revamped to meet modern standards.

- ② NSQF amendments to include technical and digital literacy.
- ③ Setting up of National Skill University to meet modern demands.
- ④ Modernization of IPR regime to increase service sector demand and exports.
- ⑤ Industry linked skilling for labourers.
- ⑥ ~~Using~~
- ⑥ Amending labour laws to decrease contractual labour and impetus to formal labour employment.
- ⑦ Establishing Centre of Excellence centres for new technologies like AI, IoT (NITI Aayog)
- ⑧ National AI mission to skill students at school and college level.

- ⑨ Measures like Vachta Aashirvan Yojana to boost Innovation skills
- ⑩ Increase funding to R&D sector from current 0.6-0.7 % of GDP
- ⑪ Providing Agriculture Extension Services to boost Agriculture Output and in turn demand of labour.

As Alvin Toffler said "Modern Age Nations require Modern Age workforce which is Techsavvy, Alert, Trained and Skilled." hence above mentioned reforms must be incorporated.

14. India's trade policy in agriculture, marred by ad-hocism and pro-consumer bias, has constrained realization of export potential, and prevented the farmers from reaping the benefits. Examine the statement and discuss ways, including government initiatives, to improve agricultural exports.

(250 words) 15

तदर्थता और उपभोक्ता समर्थक पक्षपात से प्रभावित, कृषि में भारत की व्यापार नीति ने निर्यात सामर्थ्य की प्राप्ति को बाधित किया है तथा किसानों को लाभ उठाने से रोका है। इस कथन का परीक्षण कीजिए और सरकारी पहलों सहित कृषि निर्यात में सुधार लाने के तरीकों पर चर्चा कीजिए।

Indian Agricultural Exports contribute to 13% of total GDP. Indian

Exports face severe lacunae and shortfalls as of now →

- ① Lack of Storage facilities, cold chain houses.
- ② Mono-cropping tendencies because of consumer demands e.g. millets growth suffered due to notion of poor man's food.
- ③ Food processing industries contribute meagrely to 1.6% of Indian GDP.
- ④ Lack of Agriculture Extension services impact Agri-output
- ⑤ No Agriculture export policy has yet

been formulated.

- ⑥ Imposition of Restrictions by Global Institutions like EU (mangoes), FMD on milk products by S. East nation.
- ⑦ Signing of FTA's in goods has impacted negatively on local agriculture markets as well.

Initiatives by Government

- ① Integrated Cold Chain scheme to provide storage facilities
- ② Setting up of modern Abattoirs
- ③ Draft National Export Policy by APEDA
- ④ SAMPADA mission to boost Food processing industry
- ⑤ 1400 crore allocation to Food processing industry.
- ⑥ World Food India summit to increase investment.
- ⑦ Agriculture has been listed under Invest India priority sector.

- ⑧ India-Germany partnership is ANUGA
Food and Beverage export Fair.
- ⑨ Hortinet mission to ease export of
Apples, Pomegranates to European
nations.
- ⑩ Increasing farmland yield per
hectare by improvise seed, water,
fertilizer, pesticide as recommended by
NITI Aayog.
- ⑪ Mera Gaon, mera Gaurav to boost
technology and scientific applicatns
in Farming.
- ⑫ Education of Farmers by modern
instruments like E-Kutir, SatSru

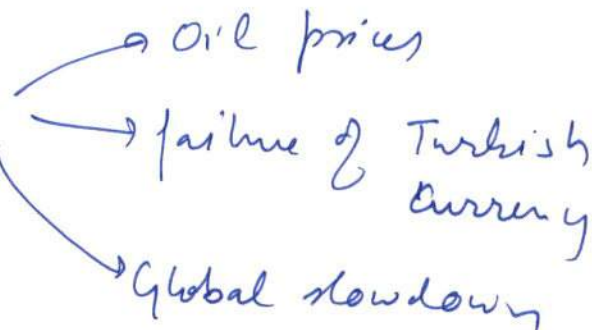
These steps will make India achieve
its dream of World Agriculture leader
and will boost India's trade and
Farmer welfare as well.

15. Is currency exchange rate a suitable measure of relative economic performance of countries? Despite improving macro-economic fundamentals, trade deficit in India continues to widen. Bring out the factors responsible for this situation. **(250 words) 15**

क्या मुद्रा विनिमय दर देशों के सापेक्ष आर्थिक प्रदर्शन की एक उपयुक्त माप है? मैक्रो इकनॉमिक फंडामेंटल्स (समष्टि-आर्थिक आधारों) में सुधार के बावजूद, भारत में व्यापार घाटा निरंतर बढ़ा है। इस स्थिति के लिए उत्तरदायी कारकों को प्रस्तुत कीजिए।

India's trade ~~import~~ has a tilt

India's ~~Imports~~ ^{Imports} amount to 365 Bn\$ while Indian export stand at 240 Bn\$ which widen the trade deficit.

Recent rise in 

added to downfall in Indian currency to about ₹70 against 1 dollar.

Reforms

- Use SDR
- Export Performance Boost

16. It will take much more than relief packages to address the problems being faced by the sugar industry in India. Discuss.

(250 words) 15

भारत में चीनी उद्योग द्वारा सामना की जा रही समस्याओं को दूर करने के लिए राहत पैकेज से आगे और कुछ करने की आवश्यकता है। चर्चा कीजिए।

Indian Sugar Industry faces several problems in modern times :-

- ① Dual pricing system under FRP by centre and state administered Pricing.
- ② Longer crushing season of 7-8 months ~~leaves the~~ permeates mono-cropping culture.
- ③ Bumper crops and sugarcane industry areas adds to woes of Sugar Industry.
- ④ Restrictions on usage of by-products like Molasses, Bagasse.
- ⑤ Sugarcane yield productivity per unit area is lowest among sugarcane producing nations.
- ⑥ Sugarcane is a water intensive crop, hence needs water availability at all times.

Recently government introduced relief package and also put a import duty on sugarcane to boost domestic sugarcane industry but considering the problems it needs a multi-pronged strategy :-

- ① Dual-price control mechanism must be done away with
- ② Implementation of NITI Aayogs focus on improving productivity per unit area
 - precision farming
 - raised bed planting
 - micro-irrigation.
- ③ Agro-forestry in sugarcane fields can provide farmers with additional income
- ④ Per capita consumption of sugar is still low at 10 kg.
- ⑤ Incentivising farmers by providing

income for waste to energy conservation
of by-products

- ⑥ Integrating sugarcane byproducts to initiatives like Methanol Economy etc.
- ⑦ Sugar industry still is based on obsolete technology of crushing and sugar extraction. Hence, providing for new technical inputs is necessary.
- ⑧ Expanding India's export markets for ~~sugarcane~~ by convergence with schemes like Focus Market scheme etc.

These steps will help providing solution for ailing sugar industry.

17. NAPCC, almost 10 years old and formulated with lofty objectives, has not served as the best answer to cope with the impacts of climate change. Critically discuss. (250 words) 15

लगभग 10 वर्ष पुराने और उत्कृष्ट लक्ष्यों के साथ सूत्रबद्ध, NAPCC ने जलवायु परिवर्तन के प्रभावों का सामना करने संबंधी सर्वोत्तम अनुक्रिया के रूप में कार्य नहीं किया है। आलोचनात्मक चर्चा कीजिए।

National Action Plan on Climate Change was formulated to boost India's Climate Change efforts and move towards sustainable Environment practices.

Features and Targets

- ① National Water Mission According to NITI Aayog's Water Management Index, India's water demand will outdo supply by 2030. 600 mm live in water scarce areas and India found at 120th position in Water Quality Index.
- ② National Solar Mission India is still short of \$786 Bn to achieve its renewable energy targets.
- ③ National Mission on Green India State of Environment 2018 reports that ~~150%~~ of forest degradation increased by 150% in

④ India has emerged as worst 'Offender' on Environment performance Index (177th position)

⑤ National Mission on Sustainable Habitat

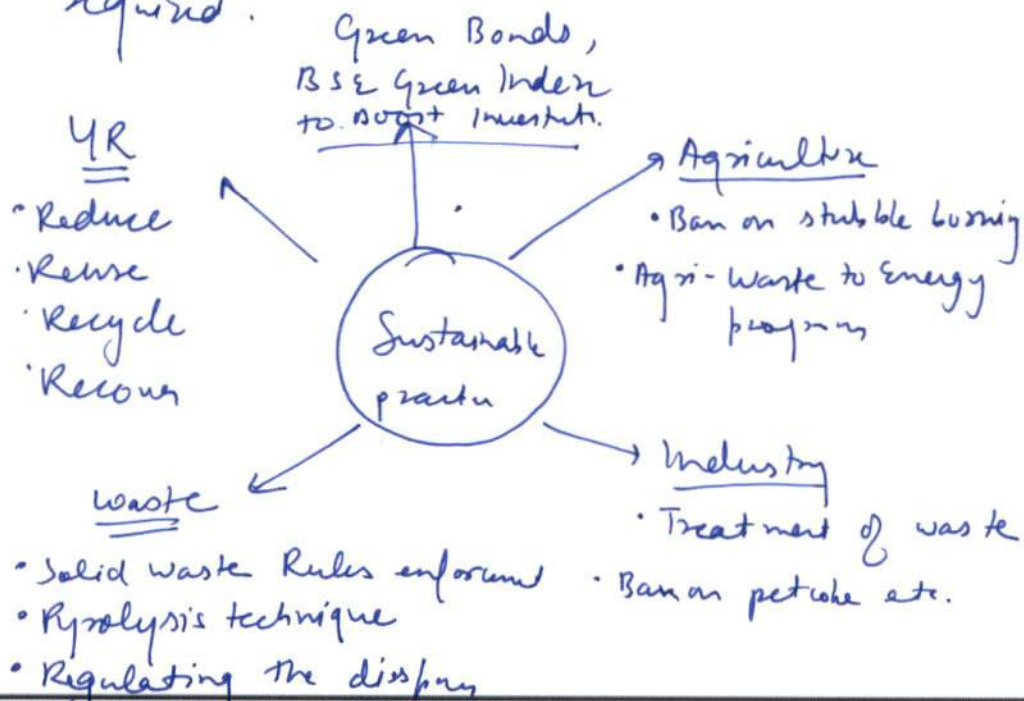
Primitive Agricultural practices, Increasing waste generation, has led to unsustainable habitat.

India has performed laggardly on Climate Change because of a number of reasons viz. lack of capital, global economy slowdown, large dependence on fossil fuels, Grid Connectivity, unhealthy waste disposal practices, and regulation of pollution. But overtime it has achieved certain milestones as well.

Successes

① India has been founder of International Solar agreement and raised funds to tune of 100 Bn \$.

- ② PAT scheme under (National Mission on Enhanced Efficiency) no covers over 116 units and 36 sectors.
- ③ Afforestation has increased to 22.4% from earlier 19.4%.
- ④ Steps like Clean Energy Cess, BSIV → BSVI fuels, ban on petcoke and furnace oil have boosted NAPCC efforts.
- ⑤ Signing up of Paris Climate deal, Kyoto Protocol etc. To ~~fulfill~~ To fulfill NAPCC targets and Indian INDC's a multi-pronged approach that focuses upon sustainable practices is required.



18. Proliferation of nuclear weapons and the threat of their use are key concerns for global security nonetheless existing international arrangements seem to be ineffective. Comment. Also, identify the salient features of India's policy in this context and discuss whether India should join the NPT in the current form. (250 words) 15

परमाणु हथियारों का प्रसार और उनके उपयोग का खतरा वैश्विक सुरक्षा की प्रमुख चिंताएं हैं, इसके बिना वर्तमान अंतर्राष्ट्रीय व्यवस्था अप्रभावी प्रतीत होती है। टिप्पणी कीजिए। साथ ही, इस संदर्भ में भारत की नीति की प्रमुख विशेषताओं को चिन्हित कीजिए तथा चर्चा कीजिए कि क्या भारत को वर्तमान प्रारूप वाले NPT में सम्मिलित होना चाहिए।

Joseph Nye on Global Security remarks that what world needs to fear most in modern times is Nuclear Winter.

Proliferation of Nuclear weapons and Increasing conflicts are key concerns of Global safety.

Recently, North Korea test-fired their Increasing Arsenal of Nuclear weapons which puts states at threat. Proliferation of weapons form Key concern as :-

① Increased conflicts in regions like West Asia among Nuclear states like Israel etc.

② East Asia has seen often conflicts b/w N. Korea - S. Korea, N. Korea - U.S.A.

- ③ Danger of extremist forces getting hold of nuclear weapons in states like Iran etc.
- ④ Policies like NPT, MTCR, CTBT has still not been favoured by many Nuclear weapon states.
- ⑤ Nuclear War is a severe threat as it may lead to Anthropogenic Extinction as well.

India's Nuclear Policy

- ① Credible Minimum Deterrence : To have such stocks that ~~are~~ serve as deterrence.
- ② No first Use policy
- ③ Non-use of nuclear weapons with a non-nuclear state
- ④ In case of Biological and Chemical Attack, nuclear weapons can be used against Non-Nuclear state as well.

⑤ Nuclear Command Authority under PM to be highest Authority for Nuclear affairs and decision.

~~Nuclear~~ NPT was formed as a result of Indian Nuclear tests in 1970's.

It recognises '5' Nuclear weapon states.

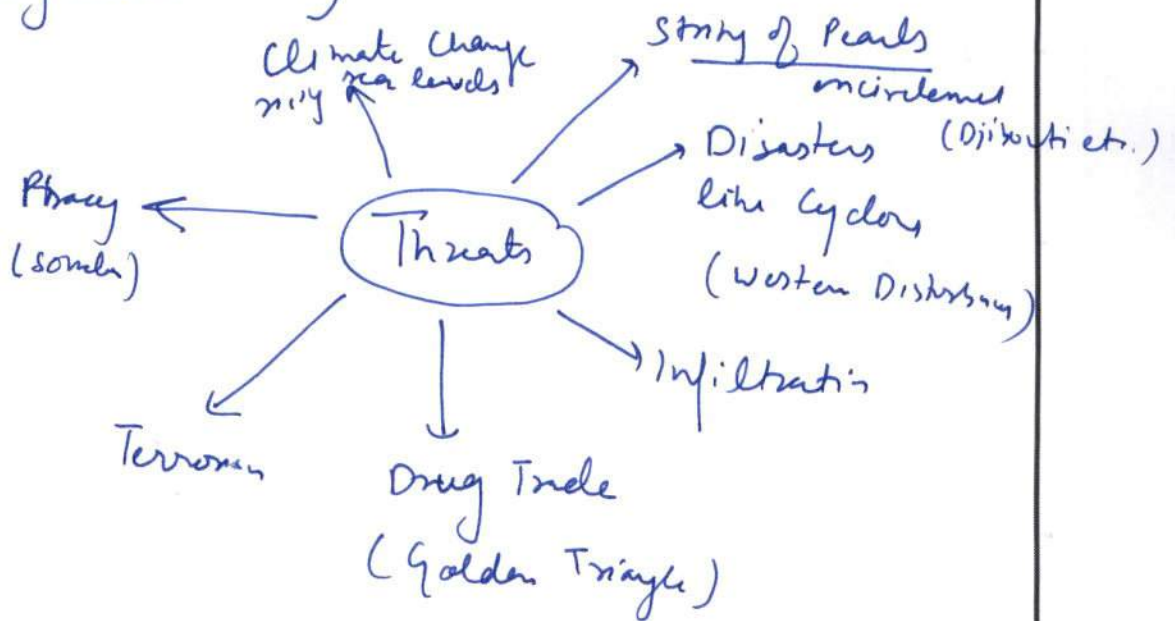
India's accession to NPT may benefit India in terms of Nuclear technology transfer, Enhanced use of Nuclear energy and can boost its stockpile of Nuclear Arsenal. But with major nuclear states like Pakistan, N. Korea, Iran still not included in NPT. India's accession may prove detrimental as it opens up India to stricter IAEA safeguards restrict Nuclear use. Hence, NPT must be adopted to suit modern day interests and conflicts.

19. The maritime security domain requires collective multilateral and regional cooperation to combat non traditional threats. Discuss in the context of threats in the Western Indian Ocean and the recent amendments in the Djibouti Code of Conduct.

(250 words) 15

समुद्री सुरक्षा प्रक्षेत्र (डोमेन) गैर-परंपरागत खतरों का सामना करने हेतु सामूहिक बहुपक्षीय और क्षेत्रीय सहयोग की मांग करता है। पश्चिमी हिंद महासागर में खतरों और जिबूती आचरण संहिता में हालिया संशोधन के संदर्भ में चर्चा कीजिए।

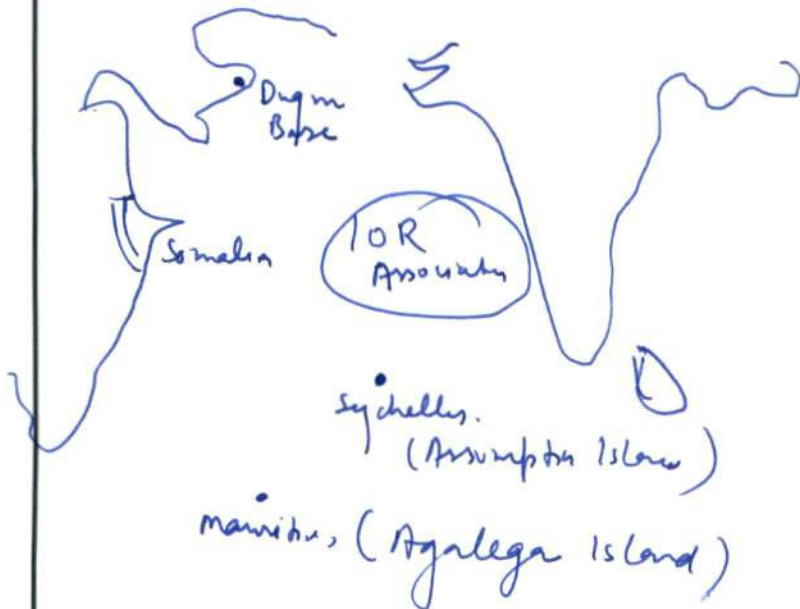
India with coastal Boundary of 7517 Km is prone to maritime threats on a large scale (e.g. 26/11 attacks, Cyclones etc.)



Since, 10K ^{accounts for} ~~forms~~ 95% of Indian trade India needs multi-lateral and regional cooperation to combat threats it faces

Steps

P.



- Setting up bases
- Indian Ocean Naval Symposium
- Marine Police force
- INCOIS and RIMES for early warning systems.
- Djibouti Code of Conduct addressing areas like Piracy, smuggling etc.

20. India's space programme was initiated with the vision of utilising outer space for peaceful purposes, however with changing times it has the potential to play a significant role in strengthening security capabilities of India. Discuss with adequate examples. (250 words) 15

भारत का अंतरिक्ष कार्यक्रम, शांतिपूर्ण उद्देश्यों हेतु बाह्य अंतरिक्ष का उपयोग करने के दृष्टिकोण के साथ आरंभ किया गया था, हालांकि बदलते समय के साथ इसमें भारत की सुरक्षा क्षमताओं को मजबूत बनाने में महत्वपूर्ण भूमिका निभाने की क्षमता है। यथोचित उदाहरणों के साथ चर्चा कीजिए।

Global Space systems are heavily skewed as US owns about 50% of all satellites and recently China sent its Ques (Quantum computing satellite) which can perform multitude of functions.

While India set up its space programme to boost up communication, Resource mapping, scientific research. Space system has now emerged as 4th arena of war (After land, Air, Water)

China, US, Russia have developed their own satellite constellations to provide

precise positioning systems and mapping of countries. Increasingly military satellite constellations in space.

India too has displayed its space competitiveness in recent times e.g.

- ① Ranked 6th in space competitiveness Index by Fulcrum Corporation.
- ② NAVIC constellation i.e. India's indigenous GPS system.
- ③ Development of cryogenic technology facilitates India's space presence
- ④ Development of INSIS, SAARC satellite to provide security against and early warning against Natural disasters.
- ⑤ Operation Vijay to develop India's manned mission to space provides India a dignified space in Global space presence.

Index with magnificent record of ISRO's
performance, has high potential to
~~make~~ use spare tech for enhancing
its security needs.