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GENERAL STUDIES (TEST CODE : 1068)

Name of Candidate	Tushar Kumar		
Medium Eng./Hindi	English	Registration Number	27585
Center	KCB	Date	8/09/18

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		<p>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)।</p> <p>2. There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।</p> <p>3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं।</p> <p>4. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।</p> <p>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।</p> <p>6. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।</p> <p>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।</p>
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20	15		
Total Marks Obtained:			
Remarks:			

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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. 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।

India have taken its role in mitigating impact of climate change by ~~to~~ formulating National Action Plan on climate change (NAPCC) and having an ambitious NDC under COP 21.

Though, there are challenges:-

- large scale dependence on thermal energy i.e., about 56%.
- high poverty and lesser capital availability.
- Support from International agencies is limited.
- Land availability for solar and wind farms is also a problem being land-stress nation, with most on agriculture.
- Availability of required technology

particularly in efficient production.

Steps to be done:-

- Promoting International Solar Alliance, with more meetings and having a uniform voice.
- Start-up India can be incentivised for renewables.
- focussing on R&D, better silicon chips, domestic production.
- harnessing roof-top solar as well as solar pumps (KUSUM) scheme.
- moreover, present plants can be made efficient through critical coal technology.
- Taxes can be increased on traditional fuels to fund renewable projects.

Given, climate change a reality, there shouldn't be any lock in focus towards renewable energy.

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।

Economic Survey 2017-18 pointed towards the low financial capacities of Urban bodies.

Following mechanisms are available:

- Finance Commission recommends for augmenting resources.
- Taxing power have been providing under 74th Constitutional amendment act.
- Under that tax on property, advertising any other means can be taken.
- Municipal bonds to be floated by cities for gathering finances
- Rating of Cities by CRISIL for better status of cities.

Municipal bonds will help:-

- get required investment for cities
- being growth engines, with rising commercial activities, have prospects for raising investment
- helping in funding large scale infrastructures
- being market compliant, will attract discipline and hence lesser leakage and more efficient utilization.

Apart from these, Urban bodies need to increase their own revenues from utilising present means e.g., Bangalore only takes 20% of property tax. Further more powers should be given to these!

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।

Financial inclusion is seen as an important aspect of social security and poverty removal. Despite success, a section of population in rural are 'excluded':

- lack of bank branches in rural areas due to lesser productivity.
- lack of financial literacy among masses.
- complex banking norms and terms, which common may find confusing.
- Easier availability of loans ~~through~~ through ~~no~~ local moneylenders, middlemen et.
- Requirement of collateral, healthy financial score, which isn't there for poor rural peoples.

Government Steps:

- Jan Dhan Yojana have resulted opening of 30 crore bank accounts since 2015.
- JAM Trinity helping banks to come in the phones of people.
- 'Bank Mitra' scheme, whereby bank correspondents are deployed in rural regions.
- Requirement of rural branches under norms set by RBI.
- ~~In 1960s, first bank public~~
- Recently, India Post Payment Bank was launched, as India Post have branches in remote location.

Recently, Andex report suggested that India have the most contribution in financial inclusion of people and hence we are on right track.

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।

Environmental Accounting refers to the process of getting right value assessment of the ecological value particular in case of developmental projects.

Reasons:

- To get the cost of environmental damage which is often neglected.
- As a result, any infrastructure or industry takes these for free, not reflecting in their price.
- Taking environment for granted (free) has resulted in large scale exploitation, whereby corporates takes these and modify to sell to masses, making profit.
- As a result, huge destruction has taken place, that's irreversible.

Govt's provision.

- have a policy of Environment Impact Assessment (EIA), whereby cost of environment is taken.
- Land Acquisition policy also have social cost in place.
- Compensatory Afforestation is taken out or revenue taken under CAMPA fund.
- Environment tax on coal

Though, there is requirement of further improvement and more comprehensive policy, for better assessment of environment cost.

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।

Indian irrigation is mostly dependent on monsoon, 52%. ~~is~~ to be precise. As a result, there is instability in production and better access is required.

Though, efficiency is also important:

→ Indian irrigation is done through flood irrigation technique, that's only 35% efficient.

→ Another means, ground water is 45% efficient.

→ Irrigation in India takes around 80% of water requirement in which more than half of is wasted (poor efficiency).

→ Because of rising population and stagnant water availability, stress

on water resource is rising

→ India is already a water poor nation with only per capita availability $\frac{1}{10}$ th of what European nation gets.

Hence, efficient use should be promoted:

→ focussing on micro irrigation techniques of sprinklers, drip irrigation, water gun etc.

→ Cropping as per agro-climatic needs like oil seeds in Vidarbha

→ Focusing on high value, less water input crops like millets, pulses etc.

→ Moreover, irrigation potential should be matched with availability.

Economic survey had pointed out that we're a water exporting nation, unilaterally and hence, need is for better efficiency.

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।

Today, we have shifted from disaster response to risk reduction as given under Sendai Framework (2015). Such approach requires a holistic vision, including indigenous traditional knowledge as:

- India had rich legacy of traditions of the past, that were used for protection against disasters. e.g., network of canals in bundelkhand for droughts
- Indigenous communities have dwelled in the region for years and have effectively found ways to mitigate risks. e.g., mangrove plantation in Orissa coast.
- Same disasters phenomenons like.

Cyclones, floods etc that happened in the past are have become problematic due to unplanned development.

→ hence, Sensitivity of a region to a particular hazard can be reduced taking in account indigenous knowledge.

~~hence~~ NDMA Law developed plans for each disasters under its guidelines which talks of utilising local knowledge. Though more focus is required for better results.

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 is a technique in nuclear science through which ~~it~~ food can be either sterilised or its nutrients can be altered through radiation.

Unique applications.

- Reducing food wastages, declining food rotting hence preventing disease!
- Increase nutrients, concentrating food with vitamins, minerals
 - ↳ helping targeting malnutrition.
- Food irradiation will also be helpful in increasing exports as it will enhance cereal sanitation.

Relevance:

- developed nuclear as well as biotech industry.

- high food wastage, despite high production.
 - higher malnutrition, particularly stunting and wasting.
 - help in agricultural exports by tackling phytosanitary requirements.
- Hence, technique need to be explored and a right environment for its use can be thought of, taking in mind the required precaution.

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।

Recently, there has been repeated instance of lynching of people, due to fake news spread through WhatsApp platform. It has been seen throughout the country.

technology has abetted:

- mass penetration of social networking sites.
- fast transfer of messages, making it sectional within hours.
- high privacy and anonymity, leading to misuse.
- used by non-social elements for creating menace.

Curbed:-

- Tracing the generation of message through its IP track.
- Big data analytics can be utilised to track the source.

of mischief

→ platforms can be utilised to decrease fake news by ~~the~~ using informed individuals.

e.g., recently facebook tied-up with new agency for fake news check in Karnataka.

→ Cyber cell can be established at police station for dedicated response.

Hence, technology can be boom is utilised effectively.

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?

Defence Planning Committee have following features:

- better utilisation of defense budget through long term plan.
- Prospecting for indigenous defense manufacturing, keeping in mind long term strategy.
- ~~रक्षा बल~~ strengthening our defense forces, by a more sustained planning.
- focussing on synchronisation of three forces.

help in preparedness:

- A more sustainable, pragmatic approach.
- focus on long term strategy, rather than adhocism.

→ presently, will be more proactive,
than reactive.

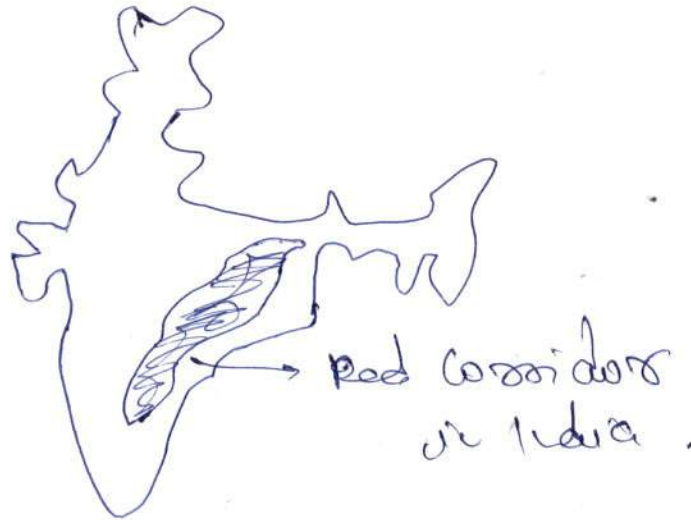
→ ~~It~~

keeping in mind border threats from
both sides, such planning committee
was need of the hour.

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।

Maoism in the country is on decline
with incidents declining below 100
last year.



Though there has been reports of huge wealth. So, probing of funding network is required:-

- help in tackling the menace of illegal fund in economy.
- It can be used for creating destability in the society and damping the development work.

→ most of these funding is from illegal network and hence helps in feeding those.

→ Black money is money laundered which will not only tax honest citizen but will be used against country.

Comprehensive Convention on Terrorism (CCIT) developed by India, focuses on ~~cutting~~ cutting economic means, to tackle terrorism. If not probed, it will again cause Marxist activities in the country.

— X —

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?

Services Sector in the Country contributes more than half of the GDP, providing high skilled, good pay jobs, helping developing our 'knowledge economy'.

This sector is particularly propelled by MSMEs e.g., BPOs in India controls almost a third of ~~World~~ World BPO sector.

Impact on local economy:-

- Providing jobs to skilled youth of the country, helping in harnessing demographic dividends.
- Penetrating in Tier-2 and Tier-3 cities, hence availability in

local economies.

- Cities like Jaipur, Bhopal, Indore etc. are becoming engines and attracting local youths.
- These Services MSMEs are helping in generating new economies activities in small towns and hence having spill over effect.

Problem faced:

- Tighter labour laws, too much documentation etc.
- Teething problems of GST ~~tax~~ implementation have also made their businesses bit complex.
- Services attracts higher tax of 18% and needs rationalisation.
- Competition are increasing particularly from South-East Asia like Vietnam, Philippines etc.

→ Globally, there is rising protectionism particularly in lithium markets of US and Europe, impacting exports e.g. H7-B Visa issue with United States.

Being a growing industry, government can take:-

- Easier compliance through draft labour code
- decreasing / rationalising tax under GST.
- Promoting services in cheap labour centres with skills like North-East e.g. North-East BPO promotion scheme
- focussing on Free Trade Agreements on services ~~in~~ bilaterally as well as in blocs e.g. RCEP

Required focus and apt policies will help in optimum utilization of our knowledge economy and harnessing of demographic

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। सविस्तार 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।

Farming in India is becoming non-remunerative due to higher input cost, lack of price realisation, volatility in market etc.

In this light, Contract farming is ~~an~~ advantageous as:-

→ Fixed terms initial helps in making informed choices and secured returns in the end.

→ Contractors like big food chains also provides the required technology and expertise to gain the maximum productivity.

→ Hence, the farmers are insured from the price volatility, and decreased productivity.

Though there are problems seen:

- It leads to single market for farmers and hence let them on the whims of the contractors, after the yield.
- Market demand may change till the time the crops are harvested, or the price may decline, creating a problem.
- It leads to focus on fixed crops and not on diversity, resulting in higher supply and market failure.
- Moreover the market is quality sensitive in this particular segment.

Steps to be taken by government:

- Securing farmers through social security like Pradhan Mantri Aardra Mission.
- formulating a policy for formalisation of contract farming

having detailed ~~reg~~ rights of contractees
as well as contractors.

→ It should also take into account
the possible pitfalls like single
buyers and ~~large~~ diversity like Coops.

On this regard Model Contract Farming
Act, 2018 is a step in right direction

as it:-

→ focus on developing contract farming
ecosystem in the country.

→ have provisions for protection of
the contractees as well as terms
for contractors.

Contract farming is a step
one of the step to increase per hectare
price of farmers and 'doubling
their 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 (डिस्ट्रिप्टिव 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।

World Economic Forum recently ~~talked~~ coined the idea of the 'fourth industrial revolution', whereby technologies like Internet of Things, automation, Big data analytics, blockchain etc. will make manual labour redundant and there will be significant job loss.

1st IR → Cotton ginny, steam engine.
↳ mechanisation, lead to labour's work

2nd IR → Pharma, Oil & gas.
↳ science → knowledge/skill

3rd IR → Computer and IT.

4th IR → automation, Robotics
↳ huge loss in jobs

Hence, following changes will be seen:

→ Routed, ~~done~~ monotonous work be easily done by robots and machines

→ big data analytics, machine learning etc. will help in developing 'artificial intelligence' which will lead to replacements in higher skill works
to reduce human loss.

→ As a result, most of factories will be entirely automated, with much higher efficiencies in production.

Measures needed:

→ gradually skilling the economy's workforce to a higher level

→ AI, IoT's etc. are still in development and we can become the powerhouse of such technologies.

→ It will help in managing these technologies, development in niche areas etc. providing better jobs.

→ New wave of employment will come from handling these technology and being a 'knowledge economy', government should focus on that.

keeping in mind the disruptive impact, NITI Aayog has already started discussion and policy formulation to get an early advantage. Government should work with private sector particularly IT firms to take harness the benefits.

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।

Agriculture is one of the important sectors that has trade surplus, i.e., higher exports. Though the surplus is always fluctuating due to problems with trade policies :-

- Minimum Export Price, to cater domestic requirement, before preference to export. To seign in inflation and price sensitivity.
- No proper policy for exports leads to poor quality and non adherence to global standards, failing in phytosanitary measures
- legislations like Essential Commodities Act lead to domestic stockings and

impacting constant export flow.

Effectively, it has led to minimum exports of commodities like cereals, pulses etc. failing to provide right price to farmers.

ways to improve:

→ Ministry of Commerce came out with Draft Agricultural export policy for promotion of such exports

↳ will lead to increase in export earnings, having sound agricultural base

↳ increases the price realisation for farmers, making farming profitable

↳ helps in investment in agriculture, further increasing productivity and hence exports.

→ Export related bulletins, training to farmers, extension etc. should

be focussed on -

- Micro-irrigation should be developed and promoted, and focus should be on high-value, low input crops like oilseeds, pulses etc.
- For quality concerns, focus should be on organic farming (through Paramparagat Krishi Utkar Yojana), which may also fetch higher values.
- Niche markets particularly for GI Crops should be focussed on, further easier processes for granting such tags should be placed e.g. Basmati.

Hence, right policy will not only help remuneration for farmers but also increase exports and hence trade surplus.

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 इकॉनॉमिक फंडामेंटल्स (समष्टि-आर्थिक आधारों) में सुधार के बावजूद, भारत में व्यापार घाटा निरंतर बढ़ा है। इस स्थिति के लिए उत्तरदायी कारकों को प्रस्तुत कीजिए।

Currency exchange rate in open economies like India depends on the market that is demand and supply.

↳ It may represent the ~~real~~ relative value of a currency in the market with respect to other economies e.g., a strong rupee shows trust of investors hence higher investment leading to strong economy.

→ But the performance mainly depends on the type of trade a country follows.

↳ e.g., China with high exports and manufacturing will generally have stronger Renminbi, due to demand.

→ Countries like India, depending on high imports particularly of

oil, may see decline due to external geopolitics

↳ rising oil prices due to factors like sanctions on Iran, poor performance of OPEC etc., may lead to decline in rupee value due to high import bills

⇒ hence, currency exchange rate is not a suitable measure, though it may indicate the economic performance.

Budha had done well in macro economic indicators:-

- high forex reserves (≈ \$400 billion)
- improvement in fiscal deficit (3.5% in 2017-18)
- Average growth of > 7%, and fastest growing large economy.

Though trade deficit widens:-

- Rising oil prices, India imports around 90% of its oil requirement

→ Impact of policy measures led to short term spike e.g., initial problems in GST led to decline in exports.

→ Demonetisation also led to rising imports from China due to impact on MNCs.

→ High trade deficit with low cost manufacturing and doubtful practices by china (deficit of \$54 billion)

→ declining exports in services due to rising protectionism.

→ Imports of high tech machinery and from Germany and South Korea.

keeping in mind, the oil sensitivity, we need to focus on alternative sources, increasing our energy efficiency, in addition to diversifying our oil sources. On export front trade deals like RCEP should be expediated, including.

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।

Sugar industry in India is facing issues of high debts, non-payment to sugarcane farmers, old technologies etc.



~~Sugar~~ To revive the sector, government has announced relief packages, though they've not been able to revive.

Rising suicides of farmers is particularly seen in sugarcane regions and hence the issue become of utmost importance.

hence, measures required:-

- Realisation of true value of sugarcane products e.g., sugar technology can help producing bagasse, manure, ethanol etc. from sugarcane apart from sugar.
- will require modernisation of the sector
 - ↳ Insolvency of the factories can be proceeded.
- Cooperatives should be invited by providing sugar incentives.
- help in increasing the efficiency of such mills.
- Focus should be on development of ethanol economy, with blending. Brazil have developed E100 fuels (100% ethanol), hence, have a booming sugarcane industry.

→ Priority should be on to clear the present arrears, which is contributing in agricultural NPAs.

The Biofuel Policy, 2018 law focused on blending and with creation of 12 plants for ethanol processing, a new market is being created, helping in better productivity.

— x —

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 (NAPCC) was formulated to tackle challenges on climate change. It further got boost after COP21 @ under UNFCCC and India's NDCs

Though it may not be best:-

- It was highly ambitious and lofty goals.
- Proper policies and steps for achieving such goals were not provided
- India is a developing economy with 1/3rd population in poverty and hence, development and growth is more prioritised.
- India's per capita footprint is much less than global counterparts, almost 1/10th of United States.

→ Energy sources for renewables have not yet been as cheap as thermal and can't replace our thermal dependence.

→ we still have high infrastructure deficit as well as technical absence of for such high targets.

→ western nations have done little in terms of funding requirements of \$100 billion as envisaged.

Though limitation, India has taken this as a blessing, as we can focus on clean development:-

→ NITI Aayog has launched 'MOVE', whereby focus is on electric mobility.

'FAST' programme further envisages, faster adoption of electric mobility.

→ As a founder of 'International Solar Alliance', we have taken a

path of solar, which will foster global cooperation. World Bank have already pledged a billion dollar aid.

→ we're well in target to achieve our NDCs as pointed out by UN climate report.

→ Government have taken massive investment in solar parks, with pricing becoming as competitive as of thermal power.

→ with an increase in forest cover, as pointed by Forest report (ISFR'17), we are creating Carbon Sinks.

Though, it may seem that NAPCC have not served, but we're gradually picking up the pace, taking innovative solution, with NAPCC being the framework.

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।

Comprehensive Test Ban Treaty was signed for tackling threat to humanity due to deadly threats of weapons of mass destruction (WMD).

NPT signed in 1996, is a part which targets nuclear weapons. Though it limited use and permission to only then member, though is not followed:-

→ India, Pakistan, Israel & North Korea are believed to carry the nuclear weapons apart from erstwhile five nations.

→ Some rogue nations have repeatedly sold their technology to other nations for their short term gain.

- despotic regimes like North Korea, with no accountability to people may use technology for nefarious motives.
 - ~~to~~ Nuclear technology to nations in middle-east may be disastrous, as organisation like ISIS may use it for terror strikes anywhere ~~with~~.
 - ~~to~~ There are instances of near fiasco of nuclear powered nations in past, which may lead to wipeout of humanity e.g., Cuban missile crisis.
 - Iran and North Korean episodes gives the inefficiency of present regime.
- India being a responsible power have a policy in place:-
- 'No first use', unless struck by. Similar to chemical, Nuclear or biological warfare.
 - Responsibility to public authority

i.e. Prime Minister for strike
→ Apt Security of the establishment
with no sharing of technology.

problems with NPT:-

- As a biased treaty, supporting only a few nation (P5 of UNSC).
- Talks of only horizontal limit and no vertical limit i.e., reduction of existing stockpile.
- India, itself have declared a policy of no further ban that is passed by Parliament.
- India is of more favour of more equitable access and responsibility.

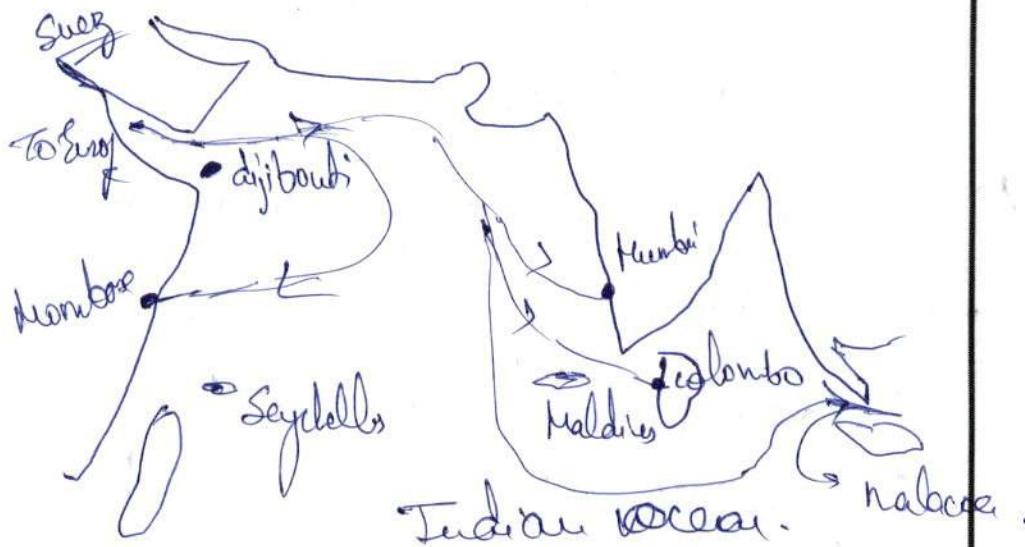
Nuclear weapon in any kind at any place is threat, so a stronger deal which leads to reduction of complete stockpile should be take. TCAN, is advocating for same.

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 जिवूती आचरण संहिता में हालिया संशोधन के संदर्भ में चर्चा कीजिए।

Maritime Security focuses on freedom of navigation and open seas, where trade and movement carries without any fear or threat to humanity.



Indian Ocean is the most important trade route of world, with around 70% trade passing. Malacca Strait and Suez Canal are one of the

busiest.

Recently, western Indian Ocean have become new hotspot of threat, with horn of Africa becoming prone with pirates.

new threat includes:

- Increasing drug menace and transportation of narcotics.
- Smuggling and illegal trades.
- Human trafficking, especially towards South-East Asia.

As a result, India in particular have taken initiatives to reduce this:-

- Indian Navy, to become 'net security provider', providing distress help, relief in disaster as well as patrolling.
- Indian Ocean Rim Countries to have joint policy.
- Quad' initiatives with US, Japan and Australia for seeking threat

- against bullying by countries.
- developing maritime cooperation like Exercise Lamitje and Malabar.
 - strategic ports like Dugni etc. Onam, Sabang in Indonesia and Assumption in Seychelles.

keeping in mind threat to world trade due to non-traditional factors, it's better we remained pro-active. India has a role to play, being at the heart of Indian Ocean and a strong navy.

← x →

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।

Indian Space programme was formulated in mind keeping the 'Outer Space Treaty' (1967) for a peaceful use of space.

Today, we have reached many milestones and achieved quite superiority in space technology.

But today, it can help in strengthening security:-

→ Mapping ~~the~~ of sensitive location through remote sensing. Today satellites have capacity to get high definition image of any place
eg., Resource Sat, Cartosat etc.

→ India's IRNSS (NAVIC) has the capability of giving real time sensing

of places with clarity of 10 metres for military application.

→ help in security collaboration with neighbours, ~~ex~~ e.g., expanding role of 'South Asia' type satellite.

→ A more attacking role can be taken:

↳ anti satellite rockets:- for disturbing enemies communication network. e.g., recently china tested those.

→ space warfare, attacking through space.

→ having an eye on enemy territories through sensing satellite.

Today, satellite (space) tech have increasingly scales, with hitherto untouched.

applications. Having an edge due to our space capabilities, we should focus on that.

