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GENERAL STUDIES (TEST CODE : 1244)

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Center	ORN	Date	30/08/2019

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	- 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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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. Discuss the need of an Independent Fiscal Council (IFC) in bringing about transparency and accountability in fiscal processes in India. (150 words) 10

भारत में राजकोषीय प्रक्रियाओं में पारदर्शिता और जवाबदेही का समावेश करने हेतु एक स्वतंत्र राजकोषीय परिषद (IFC) की आवश्यकता की चर्चा की जाए।

Ans:- The recent concern about "Growth rate" of Indian economy and "GDP Calculation method" raises the idea of "Independent Fiscal Council (IFC)" in India.

"15th Finance Commission"

has also recommended for "IFC".

Need of IFC :-

- ① Differences in figures of "revenue generation" of govt.
- ② Diversion of funds from "one projects" to "another".
- ③ Mismatch in "Revenue-expenditure" statement of govt.
- ④ Fulfilment of expenditures from different sources of revenue which are not mentioned in "revenue statement".

- ⑤ Different and inflated figure of "GDP Growth" as stated by "ex-Chief Economic Advisor".
- ⑥ To stick with fiscal consolidation goals under "FRBM-Act".

So, the idea of "IFC" is relevant. It will help in improvement of "transparency" and "accountability" in following way:-

- ① All revenue resources will be disclosed in advance.
- ② Prior fixation of targets to be achieved.
- ③ Proper datasheet of every expenditure & revenue.
- ④ Timely audit

So, it will bring more transparency and accountability in fiscal arena.

2. Recognizing the potential of exports in generating employment, a number of steps need to be taken to address India's weakening export competitiveness. Analyze. (150 words) 10

रोजगार सृजन हेतु निर्यात क्षेत्र की क्षमताओं की पहचान करते हुए, भारत की कमजोर होती निर्यात प्रतिस्पर्धा को संबोधित करने हेतु कई कदम उठाए जाने की आवश्यकता है। विश्लेषण कीजिए।

Ans: Export sector can play a major role in employment generation. The present unemployment rate is "6.1% (2017)" as per "NSSO data." Export promotion in "manufacturing" and "Agriculture" sector has huge potential to deal this problem.

However, in last few years, the India's export sector has experienced negative growth.

Reasons :-

- ① Less growth in manufacturing sector.
- ② Less productivity of Indian industries.
- ③ High dependency on import for capital goods.
- ④ Poor Agricultural growth of country.
- ⑤ Slow down in demand at global level.
- ⑥ Rise in fuel prices.

- ⑦ Low skilled workforce.
- ⑧ Less Investment rate in manufacturing sector.

Steps required

- ① Investment in manufacturing sector.
- ② Implementation of "National manufacturing Policy" → "100 million jobs by 2022".
- ③ Implementation of provisions of "Foreign Trade policy - 2015-20".
- ④ Skill Development of population.
- ⑤ Infrastructure development.

• Govt. Initiative :-

- ① Agriculture Export Policy - 2018.
- ② "MEIS" & "SEIS" scheme for promotion of exports.
- ③ "Sagarmala" initiative.
- ④ "Export promotion Council" established.

3. Highlighting the main features of National Mineral Policy, 2019, discuss how it can help in ensuring sustainable and responsible mining.

(150 words) 10

राष्ट्रीय खनिज नीति, 2019 की मुख्य विशेषताओं पर प्रकाश डालते हुए, चर्चा कीजिए कि यह संधारणीय और उत्तरदायित्वपूर्ण खनन सुनिश्चित करने में कैसे सहायता कर सकती है।

Ans: To regulate the mineral exploration in the country, Govt. of India has brought "National Mineral Policy, 2019".

~~Salient~~ Salient Features :-

- ① Establishment of "Mineral Exploration Zone" like SEZ.
- ② Transparent allocation of "Mineral zones" for mining.
- ③ Promotion of export of "minerals".
- ④ Division of Nation into "Various mineral Zones" and regional approaches to formulate policy.
- ⑤ PPP model to be used in "Mineral exploration".

Sustainable and Responsible mining ensured through:-

- ① The environmental assessment of each mining project will ensure sustainability.
 - ② Establishment of separate "mining exploration zones" will help in mitigating the ill impact on environment.
 - ③ Use of ~~the~~ latest and updated technology for mineral exploration will ensure sustainability.
 - ④ Concept of utilization of C.S.R for development of region.
- //

4. Highlighting the salient features of the PM JI-VAN Yojana, analyze how it can assist in achieving the vision and goals of the National Policy on Biofuels, 2018. (150 words) 10

"प्रधानमंत्री जी-वन योजना" की मुख्य विशेषताओं पर प्रकाश डालते हुए, विश्लेषण कीजिए कि यह जैव ईंधन राष्ट्रीय नीति, 2018 की दृष्टि और लक्ष्यों को प्राप्त करने में किस प्रकार सहायक हो सकती है।

Ans:→ "PM JI-VAN" yojana is to generate biofuels from agricultural produces and to achieve the vision and goals of "National policy on Biofuels - 2018".

Salient features of "PM JI-VAN":

- ① Promotion of 2nd Generation of Biofuels from "non-food crops".
- ② "financial supports" to Installations of 2nd Generation Biofuels.
- ③ Use of Agriculture products like Starch containing crops - sugarbeet, cassava etc. in Bioethanol generation.
- ④ Use of Agricultural waste and "bio-wastes" in Biofuel generation.

Mission and goal of NBP-2018

- ① To increase biofuel production in the country.
- ② To achieve blending of "10% biofuel" in petrol. by 2022.
- ③ Increase "2nd Generation" ethanol production.

So, the ~~for~~

PM JI-VAN has great potential to meet the vision and goals of "NBP-2018".

It requires proper implementation of this scheme and infrastructure development.

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5. Zero Budget Natural Farming (ZBNF) provides an alternative to capital and chemical intensive agriculture currently being practiced in India. Analyze.

(150 words) 10

जीरो बजट प्राकृतिक कृषि (ZBNF), भारत में वर्तमान समय में प्रचलित पूंजी और रसायन गहन कृषि का एक विकल्प प्रदान करती है। विश्लेषण कीजिए।

Ans: Concept of "Zero Budget Natural Farming" was given by "Padm Shree awardee" of Maharashtra - "Subhash Palekar".

Concept & principle :-

- ① Organic Farming - Seeds and pesticides are ^{organic}
- ② Organic Pesticides uses - "Jeevamitra"
- ③ Crop diversity :- horticulture crop.
- ④ Mixed Farming :- horticulture, poultry, bee-keeping.



- ⑤ It emphasizes on efficient irrigation technique like "Waaphsa".
- ⑥ judicious use of fertilizers (mainly organic).

It has potential to provide an alternative to Capital and Chemical Intensive agriculture and to address its challenges :-

Challenges of Chemical & Capital Intensive Farming:-

- ① High Cost of Fertilization
- ② Land degradation due to overuse of fertilizers.
- ③ Ground water Contamination.
- ④ Low profit to farmers
- ⑤ Salinization of soil
- ⑥ Health hazards due to high use of pesticides.

So, ZBNF has potential to deal with these challenges if applied properly.

6. Marine life is facing 'irreparable damage' from the millions of tonnes of plastic waste which ends up in the oceans each year. In this context, examine the implications of plastic pollution on marine ecosystem and suggest some measures for addressing this problem. (150 words) 10

समुद्री जीवन, प्रति वर्ष समुद्र में पहुँचने वाले लाखों टन प्लास्टिक कचरे के कारण 'अपूरणीय क्षति' का सामना कर रहा है। इस संदर्भ में, समुद्री पारिस्थितिकी तंत्र पर प्लास्टिक प्रदूषण के प्रभाव का परीक्षण कीजिए और इस समस्या के समाधान हेतु कुछ उपाय सुझाइये।

As per WEF report, world ocean will have more plastic than fishes by 2050. Industries in India generates about daily "6000 Tonnes plastic" ~~annually~~ ~~daily~~ and around 60 cities of India produces $\approx$ 9000 Tonnes plastic ~~annually~~ daily.

Implications on marine Ecosystem

- ① "Loss of biodiversity" ~~to~~ due to plastic pollution.
- ② ~~Loss~~ Loss of fishes due to harmful release of chemicals.
- ③ Entry into food chain which can create health hazards mainly in coastal regions.
- ④ "Microbeads" are more dangerous because it can be consumed by small fishes.

- ⑤ Rise in "chemical oxygen demand" of oceans.
- ⑥ Loss of marine ecosystem ~~and~~ due to reduced oxygen supply.
- ⑦ It cuts off oxygen supply and raises hypoxia conditions.
- ⑧ It leads to "Dead zones" ~~and~~.
Eg: In "Bay of Bengal";

Measures to Address :-

- ① Global cooperation to reduce plastic waste generation.
- ② Plastic waste management rules - 2018
- ③ Recycle the plastic to enhance its life cycle.
- ④ "Clean up Ocean" Campaign at global level.
- ⑤ Enhancement of technology to recycle and effective disposal of plastic wastes.

So, a holistic approach is required to deal with this problem.

7. Write a short note on the evolution of Bharat Stage norms in India. Also discuss the significance and challenges posed by the planned introduction of BS-VI norms in India from the year 2020. (150 words) 10

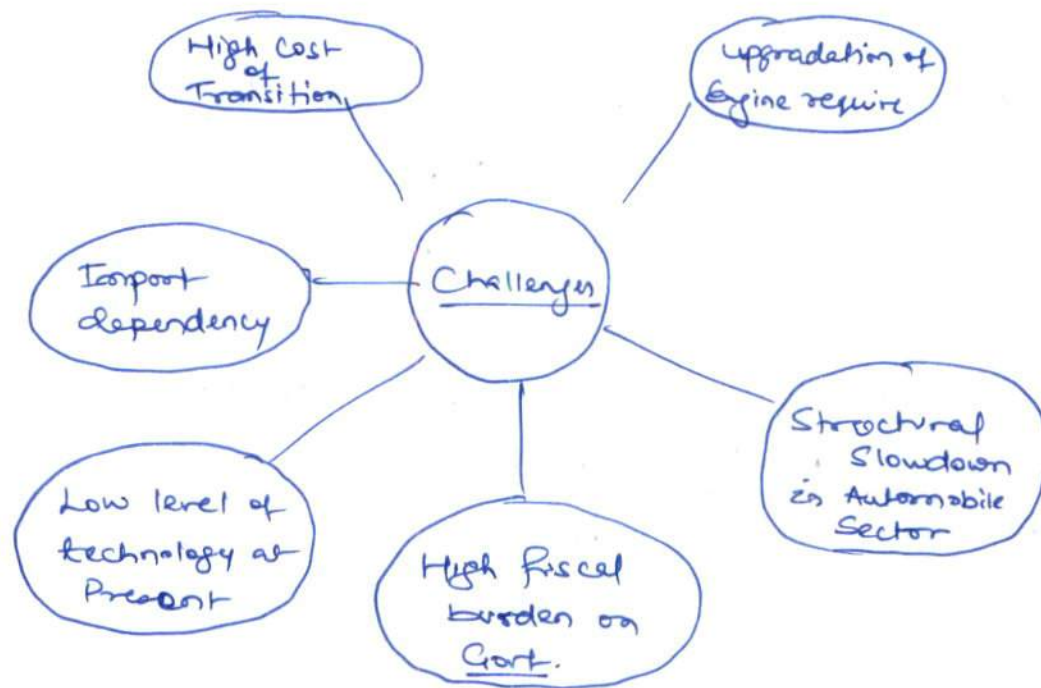
भारत में भारत स्टेज मानकों के विकास पर एक संक्षिप्त टिप्पणी लिखिए। साथ ही, वर्ष 2020 से भारत में BS-VI मानकों को योजनाबद्ध रूप से लागू किए जाने के महत्व और उसमें आने वाली चुनौतियों की भी चर्चा कीजिए।

Ans:- At present India is using "BS-IV" fuels and target is set to ~~use~~ use "BS-VI" fuels from 2020 onwards.

Evolution of Bharat-Stage norms can be traced back to "European Fuel Standards" adopted in 1990's after the "UNFCCC" convention.

Significance :-

- ① It can reduce the "GHG emission" effectively.
- ② Can reduce "NO_x" and "SO_x" level in atmosphere.
- ③ Less content of Sulphur ~~PM~~ in BS-VI fuel × 10 PPM.
- ④ Can significantly reduce the emission of particulate matters PM-2.5 & PM-10.
- ⑤ Can help India achieve its INDC.

ChallengesFig 1: Challenges of BS-VI fuel implementationWay Forward :-

- ① Promote "Electric Vehicles" in India.
- ② Invest in "R&D" to invent new technologies.
- ③ Give Support (financial) to automobile sector for smooth transition

8. What are black holes? Highlight the challenges in imaging a black hole? How were these challenges overcome by the Event Horizon Telescope project? (150 words) 10

ब्लैक होल क्या हैं? ब्लैक होल के चित्रण (इमेजिंग) में आने वाली चुनौतियों पर प्रकाश डालिए। इवेंट होराइज़न टेलीस्कोप प्रोजेक्ट द्वारा इन चुनौतियों को कैसे दूर किया गया?

Ans. "Black holes" are very small region having "negligible volume" and "infinite mass". The density of Black holes are near to infinite and the gravitational forces are so strong that nothing can come out of it.

Challenges in Imaging Black holes :-

- ① It doesn't emit any radiation.
- ② Even light can't escape from it.
- ③ Very high gravitational force.
- ④ Very difficult to measure as it can not be detected by any telescope.

Success of Event Horizon Telescope

Recently, the Event Horizon Telescope has captured a photograph of "shadow of Black hole". It measured and detected

the area surrounding the blackhole known as "Event horizon". In

Event Horizon; particles move at very high speed in circular direction.

"Event horizon telescope" measured the radiation around the black hole and captured a photograph.

How They Detected?

→ Event Horizon radiates energy in all wavelengths.



Captured by "Event horizon Telescope"



Central area was very dark



identification of black hole.

Future Impact :-

It will help in further study about black hole and to know about evolution of planets and earth.

9. While mentioning the objectives of the Arms Trade Treaty (ATT), discuss the challenges which are hindering the utilization of the ATT to its full potential. (150 words) 10

शस्त्र व्यापार संधि (ATT) के उद्देश्यों का उल्लेख करते हुए, उन चुनौतियों की चर्चा कीजिए जो ATT को इसकी पूर्ण क्षमता से उपयोगित किये जाने में बाधक हैं।

Ans: "Arms trade Treaty" is a global treaty which regulates the trade and movement of conventional weapons.

Objectives :-

- ① Regulation of trade in Arms.
- ② Prevention of "misuse of Arms" by Non-state actors for negative/harmful purposes.
- ③ International Collaboration in "Arm Trade" and "technology transfer".

Challenges :-

- ① Emergence of "multiple Arms producers" nations at global level.
Ex:- USA, Russia, France etc.

- ② Complications in finalizing "Arms deal" provisions.
- ③ Lack of mechanism to ensure safe transportation of Arms.
- ④ Fear of "access to Non-State Actors" and "terrorist org".

So, these are hindrances in the achievement of full potential of "ATT". India is 2nd largest buyer of Arms & Ammunition in the world.

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10. Threats to internal security of India may be posed both through the communication networks and also to the networks. Discuss. Also, highlight the steps taken by the government in making the networks more secure.

(150 words) 10

भारत की आंतरिक सुरक्षा को खतरा संचार नेटवर्कों के माध्यम से एवं स्वयं संचार नेटवर्कों को खतरा होने, दोनों ही प्रकार से हो सकता है। चर्चा कीजिए। साथ ही, नेटवर्कों को अधिक सुरक्षित बनाने हेतु सरकार द्वारा उठाए गए कदमों पर प्रकाश डालिए।

Ans. "Cyber security" has become a threat to both "Internal security" of India as well as "external security".

Threats

① Through Communication Networks:-

- ↳ organized Crime
- ↳ Radicalization. (eg:- in Kerala)
- ↳ Communalism (fake messages)
- ↳ Terror Financing
- ↳ Cyber Frauds (Financial, Sexual)
- ↳ Breach to privacy.

② "to Networks"

- ↳ Data theft
- ↳ Hijacking of "Critical Infrastructure"
(eg:- Stuxnet attack on Iran)
- ↳ misuse of Data.

Steps taken by Govt :-

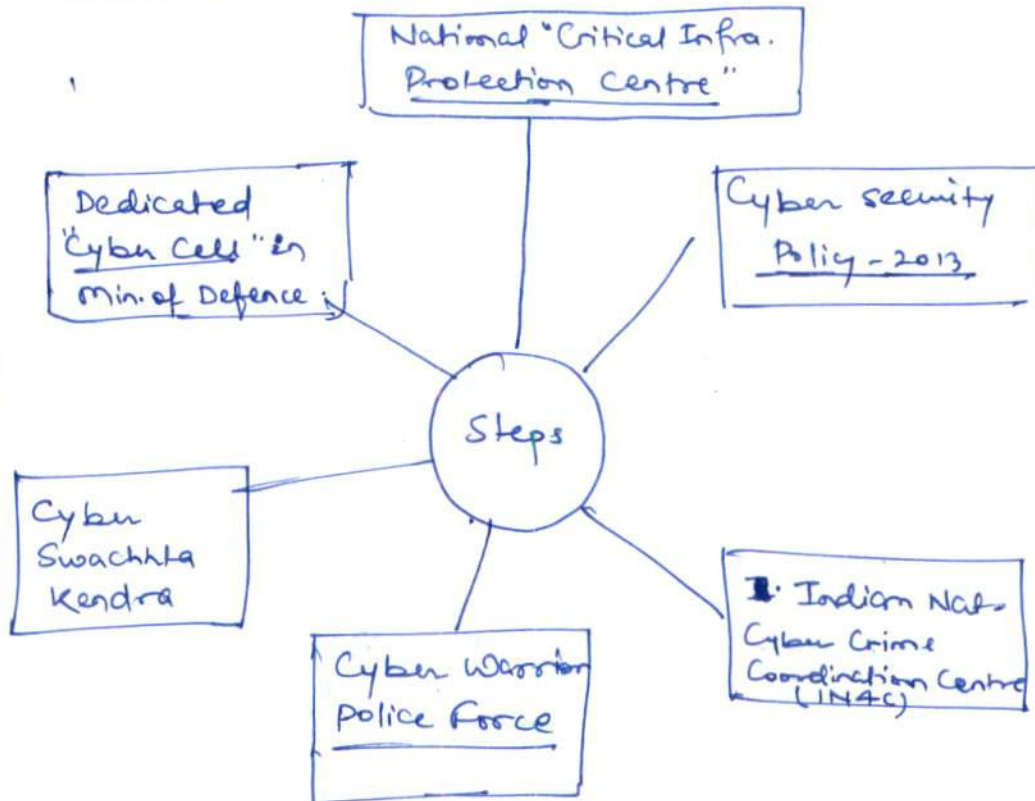


Fig:- Steps taken by Government-

So, due to increasing threat of cyber security, a holistic and multipronged strategy is required.

11. Highlight the importance and challenges related to integration of Variable Renewable Energy (VRE) in India. Mention some steps that can be taken for its smooth integration with the synchronized Indian grid. (250 words) 15

भारत में परिवर्तनीय नवीकरणीय ऊर्जा (VRE) के एकीकरण के महत्व और इससे संबंधित चुनौतियों पर प्रकाश डालिए। ऐसे कुछ कदमों का उल्लेख कीजिए जो समक्रमिक (सिंक्रनाइज्ड) भारतीय ग्रिड के साथ इसके सहज एकीकरण के लिए उठाए जा सकते हैं।

Ans:- Renewable Energy contributes to approx 22% of total energy mix of India. The rising installed capacity and demand of renewable energy needs proper storage and connectivity to grids.

Importance of R.E :- Integration

- ① It is a "Green source of energy" and reduces carbon emission intensity.
- ② Sustainable in long term.
- ③ Less dependency on fossil fuel.
- ④ It is nearly non-exhaustible. eg: Solar energy, Wind energy etc.
- ⑤ It can help India to achieve its INDC by 2030.
- ⑥ Positive impact on "health" of population.
- ⑦ Better utilization due to connectivity to grid and reduce loss of energy.

Challenges related to Integration:-

① "Non-Continuous generation" of R.E.

Eg:- Solar - only day time, clear weather.

② Spatial Variation in generation of R.E.

③ Lack of Infrastructure and power grids in interior areas of country.

④ Cost of Connectivity to Grid is very high.

⑤ AT&C Loss in transmission of renewable energies.

Steps to smooth Integration

① Smart Grid:- to connect V.R.E. with more efficiency and less loss of energy during transmission.

② Small local Grids:- at block level which can be connected to large grids.

③ PPP model:- Involve private

partners in development of smart grids.

- ④ "Connectivity of ~~Isolated~~ Individual power generators" to nearest grid.
- ⑤ Use of technology :- like "5-G Internet" in future to connect all grids.
- ⑥ Inter state exchange :- of "Extra R.E." in lean period to other states.

So, Integration of R.E to Indian grid is utmost necessity of time and it ~~is~~ is important for sustainable development of India.

Govt. Initiatives

- ① Net metering Initiative
- ② "KUSUM" for Agriculture sector.
- ③ "Solar parks" and "Solar Grids" establishment.

These are steps in right direction to promote connectivity.

12. There have been arguments that India could fall into a 'middle income trap'. Explaining the phenomenon, highlight the reasons behind such arguments. How can India avoid it? (250 words) 15

ऐसे तर्क दिए गए हैं कि भारत 'मध्यम आय पाश' में फंस सकता है। इस परिघटना की व्याख्या करते हुए, ऐसे तर्कों के लिए उत्तरदायी कारणों पर प्रकाश डालिए। भारत इससे किस प्रकार बच सकता है?

Ans:- "Middle Income trap" is a phenomenon in which a "low income country" develops very fast and enter to the "middle income level" and after that due to various internal and external reasons, it finds difficult to enter into "high income group" and continue to be in the middle income group.

This is a trap and country falls into this cyclical trap due to stagnant condition of economy.

Reason behind such Arguments related to India:-

- ① The "decrease in growth rate" of Indian GDP is last fiscal year to 6.8%.
- ② The slowdown in various sector of economy.
Eg:- Automobile sector, Telecom sector etc.

- ③ The less growth of mining ~~and~~ sector
 $\approx 1.1\%$ (2018-19)
- ④ High unemployment rate :- 6.1% as
per latest L.F.P.R. survey.
- ⑤ The quantum of "NPA" in financial
sector. ($\approx 10.1\%$)
- ⑥ Stagnant per Capita Income of
India.
- ⑦ High "current account deficit" ($\approx 2.6\%$)
of GDP
- ⑧ High population and poor Health
Conditions.
- ⑨ Low level of skills in population.

So, these are some reasons why there is arguments that India could fall into this trap. **BUT**; Some economists are saying that this is a just a temporary stagnation and still India is on correct path of development.

Reasons :-

- ① India is still "fastest growing" Nation.
- ② Large "Demographic dividend".
- ③ Huge potential in "Service" and "manufacturing" sector.

How India can Avoid it? :-

- ① Skill Development of young population.
- ② "Investment" on human capital generation.
- ③ "Large private and public investment" in manufacturing sector.
- ④ "promotion of exports" to reduce
Current Account deficit.
- ⑤ Focus on production and Increase
in domestic consumption.
- ⑥ Exploration of markets outside India.
Eg: Africa, South America etc.
- ⑦ Focus on "MSMEs" — Engines of Growth.
- ⑧ Implementation of "National Manufacturing Policy" for employment generation.

Govt. Initiatives :-

- ① "Make in India"
- ② "Skill India mission"
- ③ Digital India mission
- ④ "Foreign Trade Policy 2015-20"
- ⑤ START-UP India

So, these are some steps to avoid this trap.

13. Highlighting its importance, discuss the major issues that plague effective monetary policy transmission in India. Also, mention the steps taken by RBI to improve it. (250 words) 15

भारत में मौद्रिक नीति संचरण के महत्व पर प्रकाश डालते हुए, उन प्रमुख मुद्दों पर चर्चा कीजिए जो इसकी प्रभाविता को बाधित करते हैं। साथ ही, इसमें सुधार के लिए RBI द्वारा उठाए गए कदमों का उल्लेख कीजिए।

Ans:- Effective monetary policy transmission is necessary to boost investment in the economy and attract foreign investors.

Importance of Effective monetary Policy transmission :-

- ① It shows the efficient functioning of financial system.
- ② It builds trust in the mind of investors.
- ③ It gives immediate result of monetary policy of R.B.I.
- ④ It helps in controlling present financial situation in short time.

Major Issues :-

- ① Banks are not transmitting monetary policies effectively. It is seen that

R.B.I has reduced the repo rate by "110 basis points" but banks has decreased lending rates only by "40bps".

② Banks are "not merely dependend on R.B.I" for finance. They have extra source of assets.

Eg:- Large public deposits in "assets" and "cash"

③ "Cost of running bank branches" and other functional costs are very high.

④ Effective monetary policy transmission may reduce profitability of banks.

Recently, R.B.I governor has directed banks to align their lending rate in line with Repo rate for effective transmission.

Steps taken by R.B.I :-

① Constitution of "Monetary Policy Committee" and "Bank Board Bureau" for effective functioning of banks.

- ② Fixing of "Uniform condition" of deciding "Marginal cost of lending rates" (MCLR).
- ③ Alignment of major part of MCLR with repo rate for effective transmission.
- ④ "Consolidation of Banks" ~~and~~ and their mergers. Eg:- State bank of India with its subsidiaries.
- ⑤ Establishment of "Small banks" and "Payments banks".

So, R.B.I has taken these steps to transmit monetary policy effectively and attract investment in economy. Investment is the major driver of economic growth of India as mentioned by "Economic Survey- 2018-19".

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14. Highlight the constraints faced by rainfed agriculture in India. Discuss some agronomic practices that can be adopted for stabilizing agricultural production in rainfed areas. (250 words) 15

भारत में वर्षा सिंचित कृषि में आने वाली बाधाओं पर प्रकाश डालिए। वर्षा सिंचित क्षेत्रों में कृषि उत्पादन को स्थायित्व प्रदान करने हेतु अपनाई जा सकने वाली कुछ कृषि-वैज्ञानिक पद्धतियों की चर्चा कीजिए।

Ans: As per "Agriculture Census" - 65% of area in Agriculture sector is rainfed and around 2/3rd of farmers in India are dependent on rainfed agriculture.

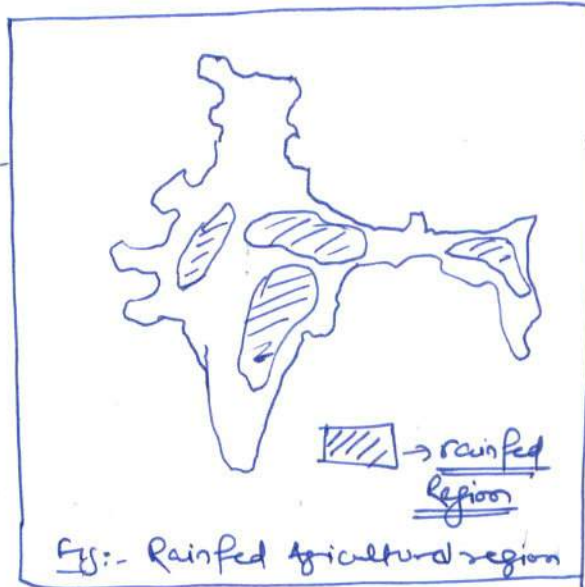
Constraints faced by rainfed Agriculture :-

- ① Dependence on Monsoon :- due to low intensity of Irrigation.
- ② Low productivity due to irregular Irrigation.
- ③ "High level of uncertainty" in outputs i.e. agriculture produce.
- ④ "High level of poverty" due to low income of farmers.
- ⑤ ~~Less~~ "Monotonous crop pattern" and "less crop diversity".
- ⑥ Degradation of land and frequent droughts.

⑦ ~~Less~~

Disguised Employment-
in Agricultural
Sector.

So, these are some
Constraints faced
by farmers.



Agronomic practices to ~~avoid~~ stabilize
the Agriculture production :-

- ① Crop diversity :- less production of
water intensive crops like paddy and
sugarcane.
- ② Micro Irrigation Practices :-
 - Drip Irrigation System.
 - Sprinkler Irrigation.
- ③ Mixed Farming :- Poultry, fishing, bee keeping
etc.
- ④ Horticulture production :- eg. Zaid Crops
in less rain time.

- ⑤ judicious use of micronutrients and fertilizers.
- ⑥ Assessment of ~~3~~ soil by "Soil Health Card" scheme.
- ⑦ Organic Farming :- to improve production
- ⑧ "Zero budget Natural Farming"

Govt Initiatives :-

- ① P.m. Krishi Sinchai Yojana.
- ② P.m - KISAN scheme.
- ③ P.m. Fasal Bima Yojana.
- ④ Mission of Integrated dept. of Horticulture.

So, stabilizing production in rainfed region is necessary to achieve the goal of "doubling the farmer's income by 2022".

15. Despite the steps taken by the government in recent years, a number of problems continue to persist in the urea sector in India. Discuss. What reforms should be taken to address the persisting problems?

(250 words) 15

हाल के वर्षों में सरकार द्वारा उठाए गए कदमों के बावजूद, भारत में यूरिया क्षेत्र में कई समस्याएं निरंतर बनी हुई हैं। चर्चा कीजिए। मौजूदा समस्याओं के समाधान हेतु क्या सुधार किए जाने चाहिए?

Ans:- As per economic survey (2016-17); the utilization of Urea in the country has exceeded the required limits (N:P:K $\rightarrow$ 1:2:4) by multiple folds (N:P:K $\rightarrow$ 1:4:8). It has led to degradation of a large amount of Land ~~per~~ each year.

Problems in Urea Sector :-

- ① Overutilization of Urea in farm sector.
- ② Diversion of Urea for Non-farm Use.
- ③ "High prices" of Urea fertilizers.
- ④ "Black marketing and hoarding"
- ⑤ Large subsidy to those "Urea" producing companies who are less efficient.

Steps taken by Govt:-

- ① Nutrient based Subsidy scheme
- ② "Neem Coated Urea" to prevent diversification for Non-farm use.
- ③ "Reduction in Subsidies" to those Industries who are less efficient.
- ④ Promotion to "organic farming"

~~Despite~~ Despite all these efforts urea sector is facing above mentioned problems. To solve these problems, some more steps required to be taken.

Way forward to address persisting Problems:-

- ① Decanalization of Exports of Urea
:- Allow more private players to export urea.
- ② Use of Technology (ICT) to track the movement of Urea.

- ③ Give Incentives to farmers for less use of chemical fertilizers
- ④ Promote "Horticulture" and "Organic Farming".
- ⑤ Promote "Paramparagat Krishi Vikas Yojana".
- ⑥ "Soil Health Card" to be issued to each farmer to use urea judiciously.

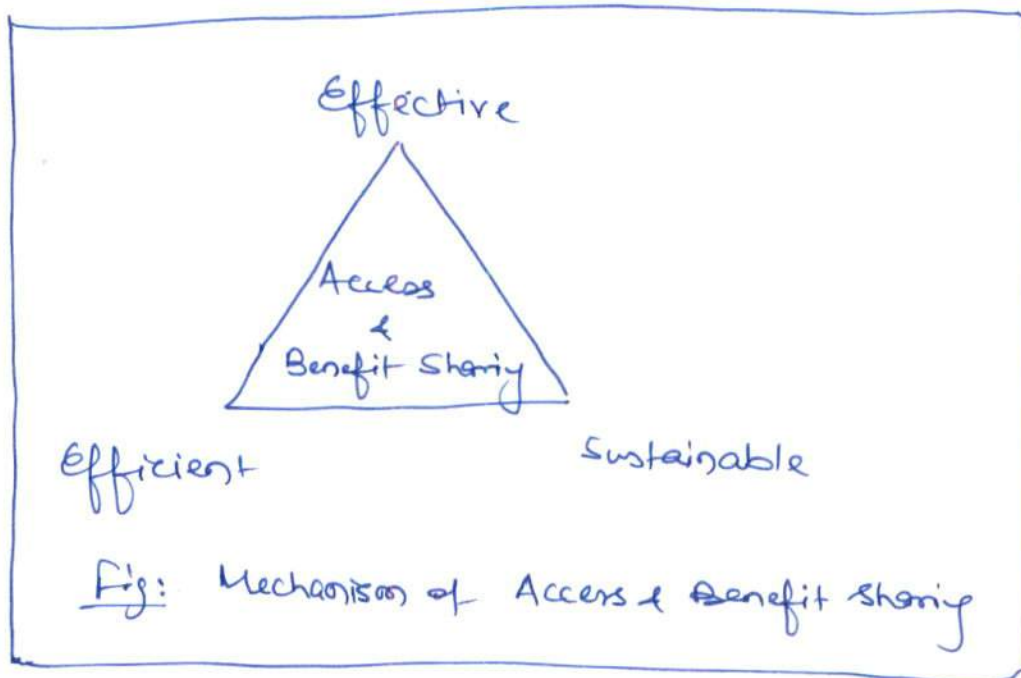
So, by these steps, the problems of Urea sector may be addressed.

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16. What is Access and Benefit Sharing? Explain how it aids in sustainable use of biodiversity. Also, mention the different global and national level mechanisms for ensuring Access and Benefit Sharing. (250 words) 15

पहुंच और लाभ साझाकरण (एक्सेस एंड बेनिफिट शेयरिंग) क्या है? यह जैव विविधता के संधारणीय उपयोग में किस प्रकार सहायक है, स्पष्ट कीजिए। साथ ही, पहुंच और लाभ साझाकरण सुनिश्चित करने हेतु वैश्विक और राष्ट्रीय स्तर की विभिन्न प्रणालियों का उल्लेख कीजिए।

As: "Access and Benefit Sharing" is a formula to use the biological and natural resources effectively and efficiently and to share the benefits arising out of it in different stakeholders.



Aids in Sustainable use of biodiversity :-

- ① It "Increases cooperation" between

different stakeholders.

- ② It helps in transmission of effective technologies and resources between different stakeholders to harness the potential of biodiversity.
- ③ It helps in judicious use of biodiversity for developmental purpose and to share the fruits with less developed or developing nations.
- ④ It also acts as a check and balance system.

The Concept of
"Access and Benefits Sharing" was first
evolved in "Convention on Biodiversity
-1992" in "Rio - Earth Summit".

Thereafter, many national and International mechanism are established on the basis of this mechanism :-

- ① Nagoya Protocol
- ② Cartagena Protocol
- ③ National Biodiversity Act -2002

④ Int. Convention on Biodiversity (CBD)

All these global and national level mechanism ensures the judicious and sustainable use of biodiversity.

[Benefits] :-

- ① Sustainable use of Biodiversity.
 - ② Protection of Biodiversity.
 - ③ Control of Illegal trade of "Living modified organisms".
 - ④ Prevention of misuse of biological and natural resources.
- 

17. Stating the significance, discuss the challenges in achieving disaster resilience of infrastructure. Suggest some ways for mainstreaming it in the development paradigm. (250 words) 15

अवसंरचनाओं का आपदाओं के प्रति सुनम्य (रेजिलिएंट) होने के महत्व को स्पष्ट करते हुए, इससे संबंधित चुनौतियों की चर्चा कीजिए। इसे विकास प्रतिमान की मुख्यधारा में लाने हेतु कुछ उपाय सुझाइये।

Ans. Almost Every part of India is exposed to some kind of threat of disasters like - earthquake, flood, cyclones etc.

So, in this backdrop a disaster resilient infrastructure is the need of the hour for the development of the nation.



Significance :-

- ① Less loss of Lives and properties.
- ② Sustainable development.
- ③ Effective disaster management and response.
- ④ Utilization of saved resources for developmental purpose.

Challenges :-

- ① "High cost" of disaster-resilient Infrastructure.
- ② "High level of technology" require.
- ③ Different type of disaster threat in different part of country.
- ④ Low level of awareness among people.
- ⑤ High population density in disaster prone areas.
- ⑥ Lack of resources

However disaster resilient Infrastructure is necessary to achieve a "Sustainable development" and it is important to bring it into mainstream in the development paradigm.

Ways to bring it in development Paradigm :-

- ① PPP model of Infrastructure development :- use "Hybrid-annuity"

model to attract private players.

- ② International Collaboration to attain technologies.

Eg:- Japan for "Earthquake" & "Cyclone" resilient infrastructure.

- ③ Improve awareness among masses and impart knowledge about disasters.

- ④ "Strict construction plan and regulations" for new buildings.

- ⑤ Investment in "R&D" for disaster resilient infrastructure technologies.

- ⑥ "Early warning system" for better management of disasters.

So, a holistic approach is required to bring it into mainstream.

18. Highlighting the significance of data localization for India, discuss various challenges associated with data localization. (250 words) 15

भारत के लिए डेटा के स्थानीयकरण के महत्व पर प्रकाश डालते हुए, डेटा के स्थानीयकरण से जुड़ी विभिन्न चुनौतियों की चर्चा कीजिए।

Ans:- "Digital Economy" and "e-commerce" are growing very fast in India and at present "Digital Economy" is value adding around "\$65 billion" in Economy. With this, the amount of data generation is also increasing in exponential manner.

Significance of Data Localization :-

- ① It ensures the "privacy of citizens".
- ② It reduces the chances of "misuse of data".

Eg:- As done by "Cambridge Analytica".

- ③ Ensures safety and efficient utilization of data of citizens.
- ④ Use of data for other beneficial and welfare purpose by Govt.
- ⑤ Commercial use of data by Govt. by selling it to private player for judicious use.

Due to growing importance of data, the Economic - Survey (2018-19) has stressed a lot on data management and localization.

The "Draft e-commerce policy" and "Data protection Bill" (on suggestion of B.N. Srikrishna Committee) has also stressed on data localization.

Challenges :-

- ① Infrastructure for data storage
- ② "Negative impact on e-commerce" as large players in e-commerce are foreigners.
- ③ Violation of W.T.O provisions of "Free and Fair Trade".
- ④ Extra burden on companies and financial constraints.
- ⑤ Protection from misuse of data will be a huge challenge.

- ⑥ management of large amount of data by govt.

Way Forward :-

- ① Data should be categorized in 2 sections :-

① <u>Vital data</u>	② <u>General data</u>
↓	↓
to be localized in India	can be used by private players.

- ② Infrastructural development for storage of data.
- ③ effective management of data to make benefit out of it.
- ④ Strengthen cyber security measures.

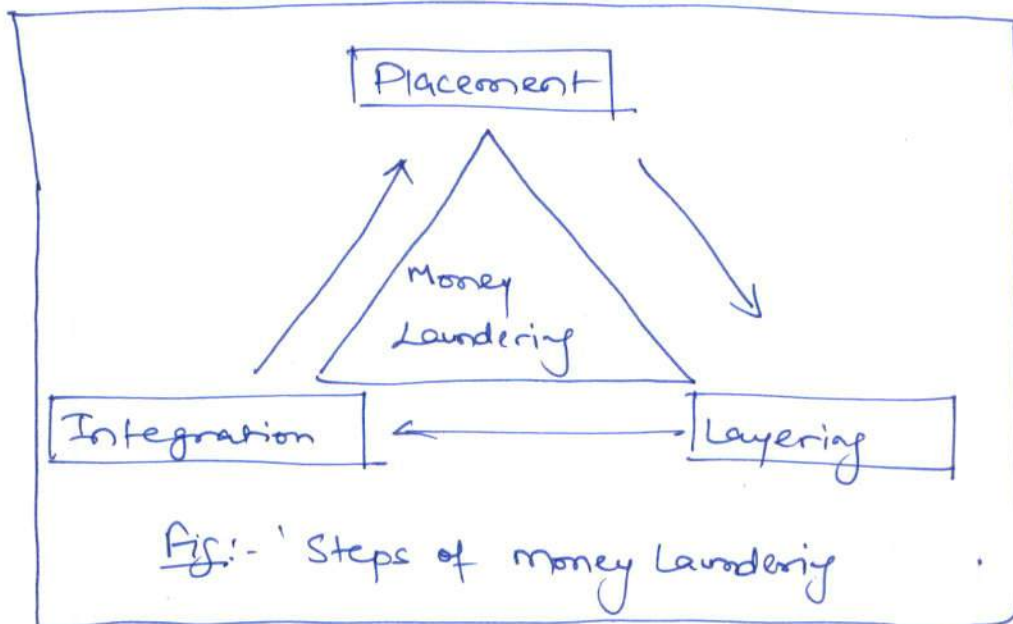
So, a holistic approach is required for data localization and effective management.

19. Money Laundering as a socio economic offence is a menace especially for developing countries like India. Comment. What measures have been taken at the domestic and international levels to deal with this menace?

(250 words) 15

एक सामाजिक आर्थिक अपराध के रूप में धन शोधन विशेषकर भारत जैसे विकासशील देशों के लिए एक खतरा है। टिप्पणी कीजिए। इस खतरे से निपटने हेतु घरेलू और अंतरराष्ट्रीय स्तर पर क्या उपाय किए गए हैं?

Ans: Money Laundering is a process of converting black money (earned through evasion of taxes or through illegal or illegitimate means) into white money. It is a form of "organized crime" and involves following 3 steps:-



→ Money Laundering as a menace :-

- ① It hurts the financial system in negative way.

- ② It leads to socio-economic "inequalities".
- ③ It takes away the limited resources of developing nations like India.
- ④ It leads to further negative consequences like "Drug peddling", "Terror financing", "Left wing extremism" etc.
- ⑤ It creates menace like "poverty", "poor growth of economy".

So, It is necessary to curb this menace and take strong measures against it.

Measures taken at Domestic level

- ① PMLA-2002 → to prevent money laundering.
- ② FCRA → under "Min. of Home Affairs" to regulate "Foreign Funds".
- ③ Fugitive Economic offenders Act - 2018

- ④ "Enforcement Directorate" and "Anti Corruption branch" in C.B.I.

At International Level :-

- ① FATF :- Financial action Task force
- ② Interpol :- to ~~cooperate~~ cooperate at International level.
- ③ UN resolution "1267" :- on "terror financing".
- ⑤ DTAA :- to avoid "tax evasion".

So, Domestic and

International measures have been taken but still a more coordinated and cooperative approach is required to curb this menace.

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20. The primary motive of terrorism differs from that of organised crime but there exists a symbiotic relationship between the two. Discuss.

(250 words) 15

आतंकवाद का प्राथमिक उद्देश्य संगठित अपराध के उद्देश्य से भिन्न होता है, किन्तु दोनों के मध्य एक सहजीवी संबंध पाया जाता है। चर्चा कीजिए।

Ans:- "Organized Crimes" and "Terrorism"

though looks different but are closely related to one other. Both are complementary to each other.

Eg:- Money Laundering is an organized crime. → It leads to "terror financing"

Organized Crime are well structured and established whereas terrorism is just an outcome of it.

Features of Organized Crime

- ↳ well structured
- ↳ proper channel
- ↳ Multiple stakeholders.
- ↳ International and domestic level involvement

Eg:- Money Laundering, Drug Trafficking, Contract Killing etc

Motive of Terrorism :-

- ① To "destabilize any country".
- ② To "create fear" among masses.
- ③ To propagate "ideological messages" and religious feelings.

Symbiotic Relationship :-

- | <u>Terrorism</u> | <u>Org? Crime</u> |
|--|--|
| ① <u>Finance</u> | → <u>Money Laundering</u>
<u>Terror Financing</u> |
| ② <u>Resources</u>
(Arms, manpower) | → <u>Arms Trafficking</u> |
| ③ <u>People</u> (Terrorist) | → <u>Child Trafficking</u> |
| ④ <u>Access to local Area</u> | :- <u>Sleeper cell</u> ,
<u>Drug Trafficking</u> |

So, a symbiotic relationship exists between these two.

Steps Required to curb it :-

- ① International Cooperation
 - ↳ FATF
 - ↳ Global Action on Terrorism.
- ② Effective Border Management
- ③ Education and Literacy
- ④ Elimination of Poverty and Inequality
- ⑤ Strengthening of laws to curb organized crimes.

So, a holistic approach is required to break this relationship.