



VISION IAS

www.visionias.in



GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	Anurag Dwivedi		
Medium Eng./Hindi	English	Registration Number	107820
Center	ORW	Date	03.09.2019

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
11	15	
12	15	
13	15	
14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. 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. 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 कीजिए।

The NK Singh committee on Fiscal Responsibility and Budget Management (FRBM) Act has proposed ~~the~~ ^{an} ~~is~~ Independent Fiscal Council which:-

- ① will audit the fiscal decisions taken by the government
- ② need to be consulted before invoking the escape clause

Need

- ① The fiscal performance of India has not been promising.
- ② FRBM Act has been paused three times since 2003.
- ③ The government resorts to extra budgetary borrowing to keep fiscal deficit down But it increases public debt.

- ④ Excessive government borrowing leads to crowding out affecting private investment
- ⑤ There is not set parameter for fiscal prudence. The government resort to fiscal profligacy during election years.

Fiscal council as an independent body will provide a set framework for fiscal consolidation and increase transparency and accountability in the fiscal process.

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।

India having a large young population and resources has the potential to utilize exports to generate employment.

→ 40% of India's export is from MSME
~~In current scenario, India's export competition~~
sector which is labour intensive

→ India exports textiles and leather products which are labour intensive

→ India being the largest producer of many food items and absorb a lot of jobs in food processing and export segment

Current challenges

- ① space ceded by china in textile taken by Vietnam and Bangladesh.
- ② Poor waterways infrastructure - poor hinterland connectivity, high turnaround time,

no tranship hub, manual process etc.

③ Poor quality products fail to pass SPS norms
and Technical Barriers to trade

④ lots of regulatory challenges

Steps

① Improve connectivity - Being done through
Sagarmala, Bharatmala

② Involve states → Being done through Trade
Infrastructure Improvement Scheme (TIES)

③ Promote people → Trade Mitra scheme

④ Improve quality of Indian products →
APEDA

⑤ Incentive to labour intensive sectors

India has taken various steps to
promote exports. It is needed to
implement them properly.

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।

India has a rich mineral base but they have not been utilized. As per National Mineral Exploration Policy, 2016 of India's obvious Geological Potential only 10% has been explored and 1.5-2% has been mined. Hence, need for mineral policy.

Features

- ① Development of dedicated Mineral Corridor.
- ② Development of mineral areas where clearance of various types would be automatic.
- ③ Focus on inter-generational equity.
- ④ More involvement of private players.
- ⑤ Better utilization of the District Mineral Fund for the welfare of the local communities.

Advantages

- ① Inter-generational equity would take care of the needs of next generation $\Rightarrow$ Sustainable mining
- ② The ~~mining~~ District Mineral Foundation is used to improve the living conditions of native population $\Rightarrow$ Responsible mining

However, there is no mention of how inter-generational equity would be achieved. Also, the Displacement and Rehabilitation of local population has not been addressed. The ~~policy~~

The policy is in the right direction and these issues should be addressed in the various orders under it.

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।

~~PM JI-VAN~~ PM JI-VAN is a comprehensive scheme to aim to tackle the issue of stubble burning along with increasing the income of farmers.

Features

- ① To create a value chain so that stubble left can be used as input feedstock for biofuels
- ② To incentivize setting up biofuel production units in villages through viability gap funding
- ③ Farmers will be remunerated for providing their left over feedstock
- ④ To utilize the biofuel generated as a source of energy for village household

Assisting the National Biofuel Policy

- ① It will increase the generation of 2nd generation (Advanced) Biofuels.
- ② The viability gap funding provided can be used to make PM JI-VAN a success.
- ③ It will increase the income of farmer.
- ④ It will lead to more use of biofuels.
- ⑤ It will utilize new materials for biofuel production.

PM-JIVAN and Biofuel policy are in a symbiotic relationship and can help to reduce pollution, increase farmer income and increase renewable energy sources.

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।

Zero Budget Natural Farming is a innovative method developed by Suhar Palekar (a farmer) that uses no external input. The inputs are all derived from farm, hence zero budget.

It involves

- ① Treating the seeds using farm products like cow dung.
- ② Treating the land with a mixture of cow dung and cow urine
- ③ Preserving the moisture of the land
- ④ Natural herbicides can be used derived from neem
- ⑤ There is no need for any external input in the form of fertilizers and

pesticides.

Hence, it can provide an alternative to capital and chemical intensive agriculture.

However, there are some challenges:-

- ① The farm inputs required are not available to small and marginal farmers.
- ② It pre-supposes that the farmer has cows.
- ③ The yield is low.

With proper government support and research and development, Zero Budget Natural Farming can be an effective means to sustainable agriculture. Andhra Pradesh government is already promoting it on a large scale.

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।

last year, the theme of the World Environment day was "Stop Plastic Pollution".

Plastic is not only degrading land by ending in landfills but the most disastrous consequence is on oceans.

Implications

- ① It is estimated that by 2050, there would be more plastics in ocean than organisms
- ② Microplastics (in mm) ~~do~~ enter the organism and make them feel satiated
- ③ Large plastics can block organism feeding pathway leaving them die due to hunger
- ④ Plastic straws have been a reason for death of many organisms

- ⑤ The waste associated with plastic is degrading water quality $\Rightarrow$ more Biological oxygen Demand $\Rightarrow$ dead zones.

Measures

- ① Ban on plastics specially single-use plastics
- ② Incentive to plastic replacement such as wood spoon etc
- ③ R&D to develop cost effective packaging solution without using plastics
- ④ Not dumping ^{solid} waste in water bodies and liquid waste must be treated first
- ⑤ Enforcing Extended Producer Responsibility
India is committed to ban single use plastic in all its states by 2022 and some states like Maharashtra, Himachal Pradesh have already taken the lead.

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।

Bharat Stage Norms are a set of guidelines based on Europe's Euro Norms which state the permissible limit of different exhaust gases from vehicles.

The gases ^{included} ~~involved~~ are SO₂, NO_x, Hydro-Carbons..

The evolution started with BS-I norms which was followed till BS-IV norms linearly. BS-IV norms became applicable from April 1, 2017. India decided to skip BS-V norms and will implement BS-VI norms from April 1, 2020.

Significance

- ① Reduce air pollution. 14 out of top 15 most polluted cities are in India.

- ② will make diesel cars more costly. This will reduce pollution as diesel is more polluting than petrol.
- ③ Bring India at par with global practices

Challenges

- ① Automobile industry is not ready for the transition.
- ② Large stock of old vehicles still remaining
- ③ Automobile industry is going through a crisis.

The government would need to walk alongside the automobile industry and handhold it, so that the competitive advantage India has in automobile sector is not lost because of these changes.

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?

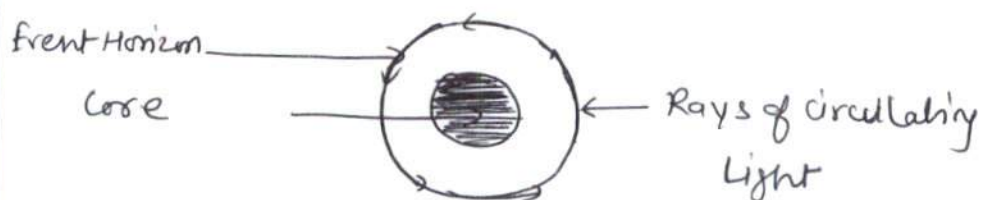
Black holes are structures in space-time which are very dense and have ~~but~~ very high gravitational pull so such that ~~event~~ light cannot escape it.

They were predicted by Einstein's theory and are assumed to have infinite density (in theory)

challenges in imaging.

- ① A black hole cannot be seen as any light coming towards it is absorbed and not reflected.
- ② Black hole is surrounded by event horizon beyond which no scope can go
- ③ Black hole by its very definition is dark

and only its gravitational force can
use field...



2-D representation of Black Hole

Event Horizon Telescope Project

- ① It comprises of a network of telescopes spread over the globe.
- ② They focused on a black hole at the centre of Milky Way galaxy
- ③ The data was recorded of "When the black hole was forming and was not fully formed". As the black hole is millions of ^{light} years ~~of~~ far, the light
- ④ ~~The data is~~ rays of its formative stage will reach earth only now.
- ⑤ This data was compiled to form a tentative image of black hole.

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।

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।

Both communication and ~~communicati~~ networks and networks are a threat to internal security as:-

① Network

- ① cyber attacks to disuse the system (DDos) or to steal information (Phishing)
- ② Damage to critical infrastructure like mobile communication, health network can destabilize the system.
- ③ Various malware like WannaCry can be introduced in the system
For eg:- Stuxnet attack on Iran by USA and Israel
Communication Network
- ④ Social media network can be used to spread terror propaganda, and recruit individuals. For eg used by ISIS

- ② Whatsapp has been used to spread rumours this had lead to public lynching and mob violence
- ③ Terror groups use offline communication networks like ~~Amateur~~ Cognitive Radio

measures

- ① keeping the social media intermediaries in loop and having the power to remove disturbing content
- ② strengthening cyber security through measures like - cyber policy, cyber security coordinator, cyber information officer, cyber coordination center.

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।

Variable Renewable Energy are energy sources whose output is not constant. It includes solar energy, wind energy, tidal energy among others.

Need/Importance

- ① India has to achieve 40% renewable energy mix by 2030.
- ② Renewable energy will reduce dependence on crude oil → reduction in import bill
- ③ It is a sustainable and clean energy source
- ④ Renewable energy is the energy source of the future
- ⑤ without integration, proper utilisation of renewable energy cannot be done

Challenges

- ① The output of unrenewable energy is fluctuating whereas grid works at constant voltage
- ② India doesnot have enough storage capacity (battery) ~~to~~ for renewable energy.
- ③ ~~Ren~~ Variable renewable energy ^(VRE) is not a reliable source.
- ④ Need to bring both VRE and The grid at the same voltage.

Steps

- ① Need to develop capacity to store VRE so that it can be easily integrated.
→ India has signed first LOU for Li-Ion battery production
- ② Green Corridor has been developed to

evacuate variable renewable energy.

③ India has already achieved 'one nation, one grid'

④ The variability in VRE needs to be to be smoothened out before it can be integrated.

Grid connected renewable energy in the future for India to reduce pollution, reduce import bill and provide sustainable development.

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 फँस सकता है। इस परिघटना की व्याख्या करते हुए, ऐसे तर्कों के लिए उत्तरदायी कारणों पर प्रकाश डालिए। भारत इससे किस प्रकार बच सकता है?

Middle Income trap is a phenomenon experienced by countries in the middle income region where they cannot further advance to high income region. This is because

- ① The labour cost are high so they cannot compete with low income countries in export competitiveness
- ② The technological skills are still low so they cannot compete with high income countries in high skill jobs.

They are stuck in this middle income region. for eg:- Brazil, South Africa.

Reasons

- ① Global headwinds: There is a sentiment

against globalization and towards protectionism. This is risk for India's export

② Geo-political risks: Rising tension between US-Iran and in middle east can increase ~~at~~ crude oil's price. This will increase India's current Account deficit

③ Domestic Slowdown: The automobile industry is in a crisis, Banks and NBFC have NPA and unemployment is at 6.1%

④ Human Capital Regression: The difference between what an average student in India has learned and what he/she should have been learned is increasing.

⑤ Low investment and saving rates: In the last decade investment rate has come down from 34.5% to 27% and savings rate has also seen downside affecting growth.

Avoiding middle income Trap

- ① Boost private investment: Incentives such as tax exemption, liberalized FDI etc should be given to increase investment and thus growth.
- ② Employment Generation: Incentives to labour intensive sectors such as leather, apparel, textile.
- ③ Skill development: To prepare Indian for the jobs of the future due to disruption caused by Industry 4.0.
- ④ Social Capital Development: Improve the learning outcomes in school to reduce the human capital repression.

India has taken steps like Make in India, incentive to MSME, Skill India, Digital India & need is to implement them to get outcomes.

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।

Monetary policy highlights the steps taken to regulate the supply of money. It is within the domain of RBI.

Monetary policy transmission is the efficiency with which the policy changes by RBI and further transmitted to the customer through the Banks.

Importance :

- ① Rate cuts if transmitted enhances liquidity in the market
- ② RBI can better control the money supply and thus inflation.
- ③ The policy of banks would be in tandem with the policy of RBI
- ④ The liquidity in market can lead to investment and growth.

Major Issues

- ① Most of the deposits in the banks come from Public.
- ② Banks are facing NPA's so they do not transmit rate cut to improve their balance sheet.
- ③ The monetary policy transmission is not mandatory.
- ④ Banks are facing double financial repression:
 - on the asset ~~side~~ side they have to put aside money in SLR, A-sec or lost due to NPA → low profit
 - on the liability side, corporates are turning to market borrowing instead of banks.

Steps taken by RBI

- ① Brought Benchmark Prime Lending Rate in 2003.

② Introduced Base rate in 2010

③ Introduced Marginal Cost of ~~fund~~ Lending Rate (MCLR) in 2006.

→ It explicitly added the Repo rate in the calculation of MCLR.

→ The banks have to mandatorily revise and ^{publish} ~~publish~~ MCLR every month

But, Janak Raj Committee has said that MCLR is also ineffective

RBI is not planning to fix lending rates to external benchmark such as its repo rate, yield on 91 day govt Treasury bond etc. The plan is currently under consideration and deliberation.

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।

Rainfed agriculture is the process where majority of the water is provided through rain. Currently about 60% of the gross cropped area is rainfed. It comprises more than 80% of pulses production and more than 10% of livestock

Constraints

- ① No proper moisture present to the soil
- ② They face more risk of detriment and desubification
- ③ Most often cropped by small and margin farmer who do not have money for input

④ Low input → low productivity
 ↓
 low income
 ↑
cycle of poverty.

⑤ Rainfed Atlas of India said there is a policy bias against rainfed agriculture.
 → most policies are made taking irrigated agriculture in ~~the~~ mind
 → some policies have even adverse effect for rainfed agriculture
 → crops grown there no proper MSP support

Measures to stabilize production

- ① Growing crops according to the agro-climatic condition of the region
- ② Provide specific policy support to the rainfed areas.
- ③ Increasingly irrigation cover in the rainfed areas.
- ④ Deciding the amount and variety of fertilizers to be used. Water intensive

fertilizers can burn the productivity
of the soil

- ⑤ Soil health cards should be specially
designed for rainfed areas keeping the
water availability in mind.

The government had initiated Rainfed
Area development under National Mission
for Sustainable Agriculture. There should
be more such missions and the
previous missions should be implemented
expeditiously. The farmers who sustain
on rainfed agriculture are the most
vulnerable.

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?

Fertilizer is the most important component of agricultural production in India. And urea is the most common fertilizer used.

To reduce the fertilizer subsidy burden and improve efficiency, govt has taken many steps:-

① Meem Coated urea

→ It improved absorption of Nitrogen => less fertilizer used

→ It reduced diversion of subsidized urea to non-agricultural sectors.

② Nutrient based Subsidy

→ The cost of fertilizer was fixed as per the amount of different nutrients (N, P, K) in it.

→ But, urea was kept out of it

- ③ Incentive to domestic Urea production to reduce import bill.

→ Govt is reviving fertilizer plants in sindri, Barauni through Urja Ganga mission

- ④ Deciding the price of natural gas through Gas pooling mechanism (average of international and domestic price)

Persisting Issues

- ① Subsidized urea is sold in black market and trafficked to Nepal and Bangladesh
- ② ES 16-17 says only 30% of the subsidy reaches the intended beneficiary - small and marginal farmers.
- ③ Canalization (on 3 public sector units are allowed) to import ~~tax~~ fertilizers
- ④ Keeping Urea out of NBS ⇒ overuse ⇒ land nutrient content is skewed.

N:P:K in the ratio 8:2:4:3:1 instead of 4:2:1

③ Subsidy in fertilizer is open ended.

Whatever be the cost of production, government will subsidize it. It reduces the incentive for manufacturers to ~~reduce~~ improve efficiency.

Reforms

- ① Re-canalizing of fertilizer import
- ② Urea under NBS
- ③ Limit on fertilizer subsidy given to manufacturers
- ④ Allow exit of inefficient firms
- ⑤ Promote awareness to use urea in moderation

Excessive use of urea not only harms monetarily but it is also against sustainable agricultural practices

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।

Access and Benefit sharing is the principle the benefits arrived from a ^{biological} product should be shared with the original inhabitants of the area from where the biological product is obtained.

It is one of the important ~~principles~~ of the Aid to Sustainable use of biodiversity

- ① will make biodiversity management cooperative
- ② If people realize the monetary benefit of biodiversity conservation, the local community would protect it more
- ③ will make biodiversity conservation more sustainable if local participation is

present.

- ④ Involvement of local people can help utilise their traditional knowledge in protection of biodiversity.
- ⑤ Local people ~~are~~ have symbiotic relationship with the biodiversity and their involvement is necessary.

Global level

① The Nagoya protocol, 2010 on access and benefit sharing under the Convention for Biodiversity

② It mandates that the benefit arising out of exploitation of ~~bio-di~~ natural resources has to be shared with the local people.

National level

① India Enacted Biodiversity Conservation Act, 2005 even before the Nagoya protocol.

- ② It has bodies at National level (National Biodiversity Authority), state and local levels.
- ③ Biodiversity Management Committees at local level has control over the resources that are being used.

India has always recognized the right of local communities over their resource and sustainable management of any resource should necessarily involve local population.

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।

India is home to ~~the~~ vulnerability from different types of disasters - cyclones, Tsunami, earthquake, floods etc.

Significance

- ① Economic benefit: Every Rs. ~~spend~~ ^{spend} in ~~disaster~~ ~~rescue~~ disaster prevention gives back 100x times.
- ② will lead to saving a lot of lives
- ③ The time and cost of re-construction after a disaster would be less.
- ④ Prevention is better than cure.
- ⑤ will prevent damage to the environ-
ment also.
- ⑥ India face many different types of
disaster

Challenges

- ① No mainstreaming of disaster ~~risk~~ resilience infrastructure in development plans.
- ② Lack of financial capacity
- ③ The focus of National Disaster Management Authority is more on rehabilitation than mitigation
- ④ A single area can be at risk from multiple types of disaster
- ⑤ Lack of political will and low awareness about its ^{importance} ~~importance~~

Ways

- ① The ^{houses} ~~infrastructure~~ blueprint must have the disaster resilient methods incorporated
- ② Geological Survey of India should prepare

a map for which areas are prone to which disaster

- ③ The state and national governments must create public ~~infra~~ ^{infrastructure} that are disaster resilient. Such as embankments for flood prone area, safe houses for cyclone prone area
- ④ Disaster resilient infrastructure should be compulsory part of every Municipal Development Plan -
- ⑤ Training and capacity building of local community can also reduce the effect of disasters.

These methods must be streamlined into the development paradigm.

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।

Data is considered a public good. It is of the people, by the people, for the people.

Today, the marginal cost of data collection is decreasing and its marginal utility is increasing. Data has become a resource.

§ Data localization refers to the principle that data generated from the residents of the country would remain within the country.

Significance

- ① Data is a resource which has monetary benefits. MNCs are exploiting and commercializing people's data.
- ② It will ensure the privacy and protection of data more.

- ③ Significant for government agencies as they can demand access to data more easily.
- ④ It is in line with the practices followed in China
- ⑤ Sensitive data such as bank accounts, medical records if breached can create havoc for the user.
- ⑥ will improve data sovereignty of the country.

Challenges

- ① India do not have the infrastructure (~~storage~~ Storage system) to hold the data. Most data is stored in services provided by private players like Amazon.
- ② India do not have the processing capability to process the data internally
- ③ US withdrew the Generalized ^{System} ~~Services~~ of Preference in response to India's data localized rules

- ④ It is against the principles of USA's CLOUD Act and EU's GDPR.
- ⑤ Will increase access of government to the data fueling concerns of surveillance state
- ⑥ The record of data storage of government is poor as seen in multiple leaks of Aadhar Data from government departments.
- ⑦ Data storage requires huge electricity.
For eg:- 2% of USA's total electricity demands.

India need to ramp up its capacity in storage, data protection, procuring ability if it really wants to make data localization a success.

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?

Money laundering is the method of transferring money around the world outside the banking channel. The money is often the result of illicit activity.

It involves 3 steps

Placing → layering → formalization

It is a menace for India as:-

- ① Most of the proceeds of ~~so~~ corruption are laundered away.
- ② Proceeds of crime are laundered and are used to instigate terrorism in India.
- ③ It is outside the banking system and no taxed. This reduces government ~~revenue~~ revenue.

④ Money laundering has intricate relationship with other crimes like round tripping, organized crime, hawala network, fake Indian currency notes:

Domestic Steps

- ① Prevention of Money Laundering Act, 2002. → It is administered by Enforcement Directorate.
- ② FEMA and FCRA to regulate foreign money coming to India.
- ③ Special PM LA courts to prosecute.
- ④ Investigating the separatist leaders of Kashmir.
- ⑤ Other methods that curb corruption, black money and hence money laundering → Benami Act, Income Declaration scheme, Foreign Income Act, Demonetization.

International Steps

- ① OECD's Base Erosion and Profit shifting framework
- ② USA's FATCA Act
- ③ Financial Action Task force on Money Laundering and Terror financing
- ④ UNSG special group on Al-Qaeda and Taliban

Many steps have been taken to curb money laundering which has intricate relation with black money, corruption, organized crime, terrorism - A multi-pronged approach is needed to attack all at the same time

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।

Terrorism is the use of terrorist tactics to achieve a particular political or social goal. The primary motive of terrorism is to ~~achieve~~ ^{fulfill} an ideology. For eg:- the aim of ISIS is to establish an Islamic Caliphate. The aim of ~~JEM~~ ^{annex} JEM, Hizbul Mujahudeen is to ~~liberate~~ Kashmir from India.

organized crime's main aim is to increase their financial resources. They have a highly organized network which can use a conduit for various activities. Also they can engage in many activities like smuggling, kidnapping, murder and assassination etc.

But, there exists a symbiotic relationship between the two.

Influence of terrorism on organized crime

- ① Terrorists have knowledge of the terrain. They help to smuggle items for criminal units.
- ② Terrorist can also provide recruits to the organized crime units.
- ③ Increase in terror activity in a region allows the organized crime to flourish. For eg: in Taliban.
- ④ Terrorists ~~also~~ group help organized crime set up their network in local area.

Influence of organized crime on Terrorists

- ① They provide terrorists with arms and ammunitions.
- ② They help spread opium and fake currency (major source of terror revenue) far and wide. For eg:- opium grows in

Afghanistan in ~~terror~~ Taliban controlled area is brought to India through organized crime unit

- ③ They help terror group get external help.
- ④ They also provide monetary support to terrorist when needed.

organized crime and terrorism have a symbiotic relationship where both help each other to grow and flourish. Tackling one without the other would be ineffective.