



VISION IAS

www.visionias.in

VISION IAS
R
N
10 AUG 2019
RECEIVED

GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	POOJA KUMAR	Registration Number	36343
Medium Eng./Hindi	ENGLISH	Date	10/08/19
Center	ORN		

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।

Need for independent fiscal council has been highlighted by NK Singh committee report on fiscal deficit.

Need

1. Technical expertise in understanding, evaluating & recommending about fiscal measures.
2. Ensuring overall effectiveness of fiscal policy.
3. Maintaining inter-generational equity and continuity in fiscal policies.
4. Independent council will help to ensure that fiscal policy does not get derailed due to party politics and populist measures.
5. Provide need based escape clause that is deviation from the fiscal

policy when most required

6. For coordination of fiscal policy with monetary policy.

7. Boosting investor confidence as well as strengthen industry dynamics by having more predictive fiscal policy.

8. Improve credit worthiness of the Indian economy by various credit rating agencies like Moody's, S&P etc.

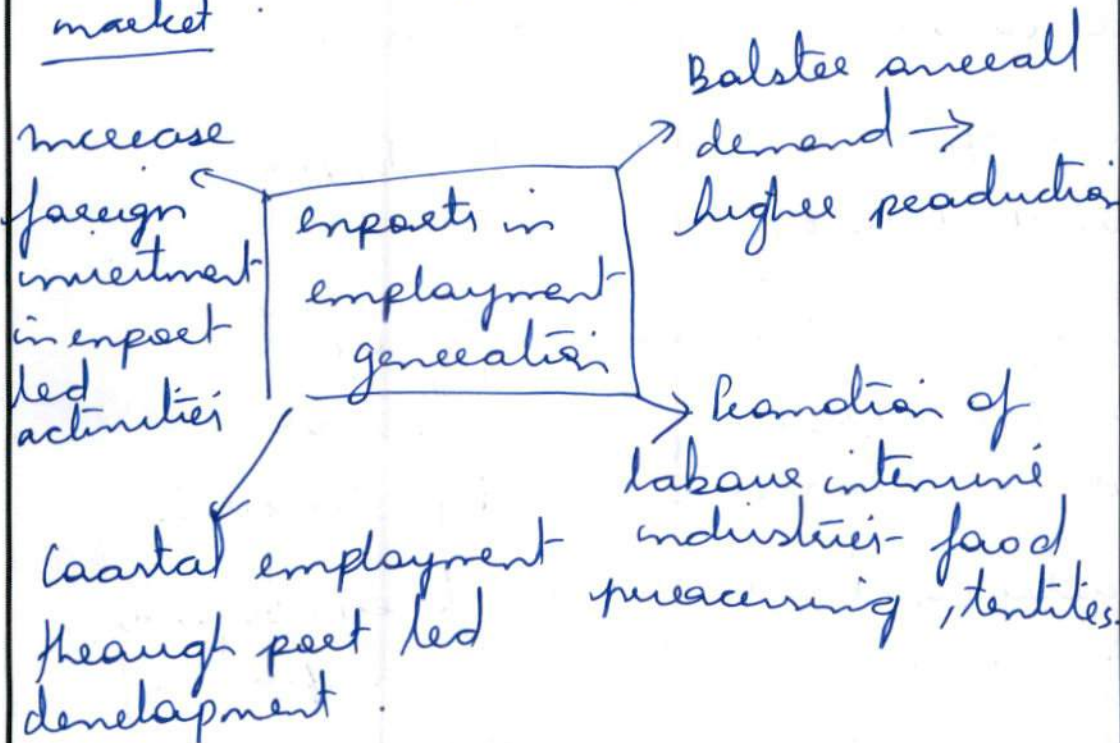
Way forward

Thus, IFE is an independent component in achieving the ambitious target of trillion dollar economy by 2024.

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's current growth & employment is fuelled by domestic consumption largely. Hence, there is need to graduate to export led growth which is urgently pace as India only occupies 1.8% of the global export market.



Steps to bolster export competitiveness

1. Reduce logistics cost & time through

schemes like multimodal logistics park, RF2D & NFC tags, Bharatmala & Sagarmala as currently logistics cost is 13-14% of the GDP while other developed countries → 7-8% of GDP

2. Focus on branding & value addition

3. Better labs for testing compliance for sanitary & phytosanitary norms.
for eg - Alfonso mangoes in EU was once banned due to poor quality.

4. Developing dedicated - SEZ, Export processing zones.

5. Revisiting tax reforms - for eg - tax holidays & breaks for exporters or addressing inverted duty structure

6. Early conclusion of FTA - for eg - EU India FTA, RCEP for becoming a part of global & regional value chains.

The above steps will enable to increase India's export share to 3% as envisaged in the foreign trade policy (2015-20)

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।

National mineral policy 2019
has been formulated to strike a balance between development, environment & people.

Features

1. Provide for district mineral fund which will be used for welfare of the locals.
2. Require environment assessment before the area is provided for mining.
3. Provide for a national mineral data base.
4. Provide for detailed social impact assessment and working to minimise social impact - eg- reduce displacement of locals.

5. Promoting employment of locals in mining project.

Thus, National mineral policy reduces the exploitative & extractive tendencies of mining projects.

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 Yojana has been introduced to encourage shift towards biofuels

Salient features

1. Construction of national route to energy plants
2. mechanism for collection and transportation of biomass
3. Generating awareness regarding importance of biofuel
4. Branding biofuel stores in rural areas
5. Allowing foodstocks to be used for biofuels if there is a surplus.

These features are in line with National policy on biofuels which

also focuses on overall increase in
biofuel consumption through a target
based approach; 201. blending of
~~ethanol~~ ethanol in diesel and procurem
ent of biodiesel by oil companies.

- Goals achieved
- Reduced generation of solid waste
 - Increasing farm income by selling surplus biomass
 - Generation of rural employment by setting up waste to energy plants
 - Reduce overall carbon footprint.
 - Reduce import dependency on crude oil.

Thus, PM-JIVAN will also help us achieve - Swasth Bharat and Sundar Bharat through Swachh Bharat.

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।

ZBNF is a novel farming practice proposed by agriculturalist Subash Palekar.

ZBNF is a farming practice involving negligible input costs incorporating natural products to produce overall higher ~~and~~ agrarian output.

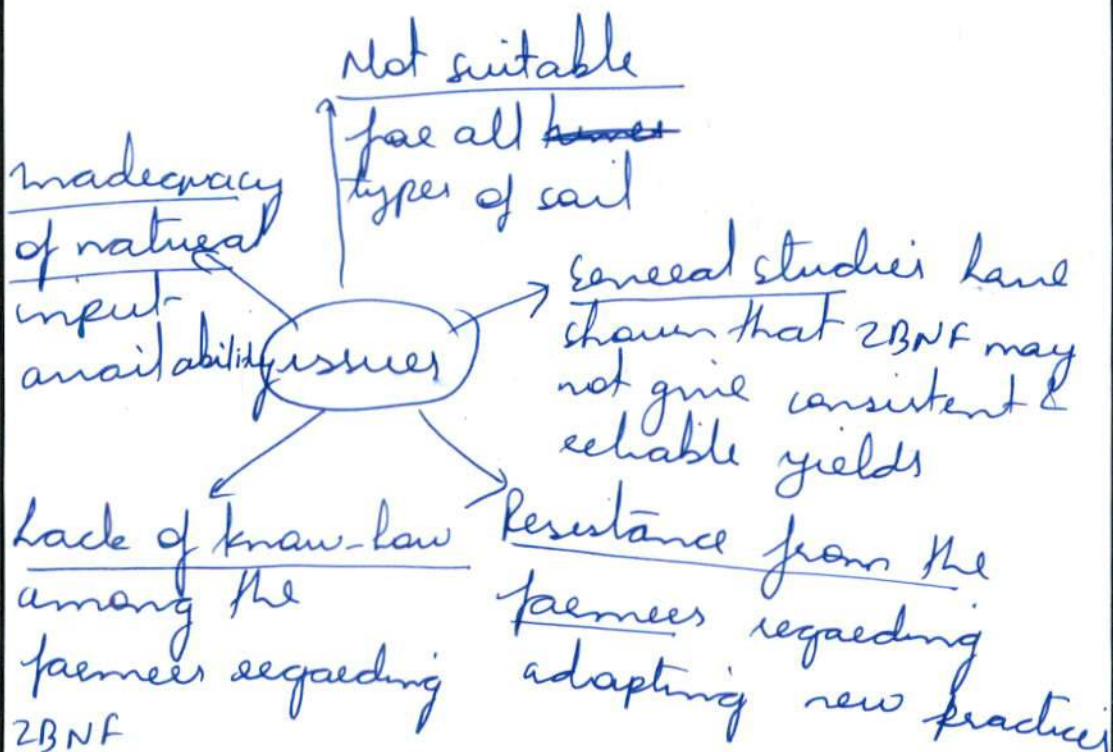
Alternative to capital & chemical intensive agriculture

1. Low input cost - as it focuses on natural manure from biomass farming - Sivamites (mixture of microbial culture, animal dung etc) as well as indigenous seed development - Beejamites (natural seedling)

2. Low on chemicals - focuses on mulching for reducing water evaporation,

which is known as "Achhadana".
Optimal moisture through a technique -
Wahpasa.

This farming technique has been
successfully adopted in Andhra Pradesh
and Karnataka.



Way forward

Despite the shortcomings, ZBNF provides the most viable alternative to address agrarian distress.

Finer Budget 2019, highlighted the need to go back to the basics in farming.

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।

Plastic waste all over the world is increasingly reaching the ocean which has been largely held responsible for great Pacific garbage patch

As per a UN report, by 2050, there will be more plastic in the ocean than marine animals. This shows the gravity of the issue.

Implications

1. fixing deaths & reproductive ail-
-ments faced due to lethal toxins in plastic as well as plastic being trapped in the intestine.
2. Bioaccumulation (increasing concen-
-tration of toxins in the same trophic level) and biomagnification (rising

concentration of toxins as ~~one~~ ^{one} moves up the trophic level).

3. Decline in marine biodiversity.

4. Eutrophication due to untreated plastic waste leading to formation of dead zones.

Measures

1. Phased ban on single use plastic.
2. Segregation at source to allow separate treatment of plastic wastes.
3. Using alternatives like jute, cloth ~~bags~~ bags etc.
4. R&D in developing biodegradable plastic such as bioplastics.
5. Using plastic in construction sector ~~road construction~~ in Bangalore.
6. Lifestyle changes - adapting - 4R - refuse - reduce - reuse - recycle.

Thus, a multi-pronged approach involving public sector, private sector & people is required.

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 were introduced in India based on Euro fuel standards in 2000.

Evolution

- Bharat Stage - I in 2000s early
- Bharat stage II in late 2000s,
- Bharat stage III 2010 onwards
- Bharat stage IV 2016
- Bharat stage VI - 2020 onwards by skipping Bharat stage V.

Significance - of Bharat -VI

1. Reduced carbon footprint
2. Decline in polluting gases like SO_2 & NO_x due to catalytic converter.
Sulphur from 50ppm in BS-IV

reduced to 10 ppm in BS-VI

3. Decline in emission of ~~toxic~~ toxic lead

Challenges

1. Increase in price of automobiles which is significant for a price conscious market like India.

2. Resistance from the automobile players.

3. Conversion of all oil refineries based on new standards.

4. Handicap met access to technology regarding BS-VI

India needs to work at bilateral levels with EU to adapt their Euro fuel convention.

This will ensure a smooth transition to BS VI

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 होराइजन टेलीस्कोप प्रोजेक्ट द्वारा इन चुनौतियों को कैसे दूर किया गया?

Black holes are astronomical & extra ~~terrestrial~~ terrestrial spaces which have infinite mass such that even light cannot escape.

Challenges in imaging

1. Difficult to capture as no light can ever escape through black hole.
2. Detection of black hole itself is difficult as gravitational waves are also not detected near black hole.
3. Capturing the nanometre size of the black hole.

However, recently, a ~~breakthrough~~ major breakthrough was achieved.

with Event Horizon telescope capturing the image of a black hole.

Challenges overcome

1. Placing multiple telescopes throughout the world.
2. Simultaneously capturing the image & joining it.
3. Studying the interaction of light with the black hole.

With the successful capturing of black hole image, we are one step closer to understanding the origin of the universe.

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।

Recently, Donald Trump, President of US walked out of the ATT which regulates national trade in arms.

Objectives of ATT

1. To regulate arms trade in the international sphere.
2. Prevent arms from falling into wrong hands eg- terrorists, criminals.
3. To use ~~arms~~ ^{arms} for defensive reasons or protection and not offensive attempts.
4. To look into the safety features in arms.
5. To ensure that arms trade takes place in a free & fair manner.

Challenges

1. Legitimacy issue as the world leader - US has walked out
2. Lack of participation by all countries
3. Rise of terrorism & organised crime who are illegally using arms.
4. Differences in arms regulation and norms throughout the world.

Need of the hour is to strengthen ATT as arms have immense destructive and potent potential

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।

Communication network in recent times is serving as a "double edged sword" by creating several security threats.

Security threats

through the communication network

1. Using internet to generate & spread propaganda videos to radicalise the masses for eg. Zake mark IFF videos.
2. Digital currency maybe easily transferred through the network without being detected to finance terrorist activities.
3. Using internet to recruit, plan & train radical elements for eg.

26/11 attacks, ~~leaves~~ terrorists used satellite phones to communicate.

To the communication network

1. Cyber attacks like Ransomware - Petya & Wannacry.
2. Attack on critical infrastructure eg - nuclear installations, power grid
for eg - Black Rejoan attack on power grid of Ukraine.

Steps by the government

1. National critical information infrastructure protection centre (NCIIIC)
2. Computer emergency response team ~~NCIIIC~~ (CERT) for immediate response
3. National cyber coordination centre (NCCC)
4. Cyber Swachh Bharat & Cyber Surachta Kendra.
5. National cyber security policy, 2013.

Further, need to adapt Gulistan Rai committee recommendations on cyber security.

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।

India has set itself an ambitious NDC target of renewable energy of 175GW by 2022.

Importance

1. Less polluting when compared to the carbon footprint of hydrocarbon.
2. Unlimited reservoir of renewable energy like wind & solar energy.
3. Reduce import dependency thereby help save precious forex reserve as India imports 70% of its crude oil requirements.
4. Manage peak load energy demand particularly during summers in Northern India.

5. Building robust renewable energy manufacturing base in India which will also generate employment
6. Revenue earnings for residents who sell solar energy through "net metering"

- Challenges
- Harmonics and phase-frequency mismatch during integration
 - Intermittent-nature of renewable energy for eg - solar energy not available during monsoons.
 - Lack of indigenous manufacturing base of renewable energy equipments - eg - solar panels imported from China
 - Inadequate raw materials for manufacturing equipments for eg - Lithium, rare earth materials

Steps for smooth integration

1. Building on power systems equipment based on state of art technology -
for eg - harmonic filter;
2. Changing to smart grid which is based on more optimum energy dynamics
3. Developing overarching hybrid policy for eg - Hybrid wind energy policy in place.
4. Better predictive analysis through big data about energy variables will help in better ~~and~~ supply.

Overall, government-industry-academia needs to work hand in hand to develop renewable energy.

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?

Economic Survey 2018 had cautioned that India might fall in the middle income trap.

Middle income trap is basically the economic phenomena where middle income countries continue to remain middle income due to their incompetence in various domains.

Reasons

1. Inability of middle income countries to compete with high income countries due to

→ Poor R&D ecosystem

→ Lack of innovation so do not provide any ~~and~~ rich products

→ Low quality of products due to weak infrastructure of labs,

industries etc.

→ Industrial base is limited
to secondary & tertiary sector
while high income economies have
quaternary & quinary sector -
characterised by golden dollar jobs
for eg- Silicon Valley in US.
These sectors provide higher value
addition than secondary & tertiary
sector.

2. Middle income countries face disad-
vantage vis a vis low income countries.

→ fixing labour wages for eg- China
is facing this recently having lost to
Vietnam, Bangladesh.

→ More regulatory hurdles in
middle income countries in the
form of environmental clearances,
land acquisition.

→ Higher government expenditure
hurdles in public service delivery
eg- education, health etc.

Thus, overall, growth potential of middle income countries saturates

- India can avoid it by
- Shifting to modern industries instead of being just assembling units of US based enterprises
 - Developing a new industrial revolution - 4th - by schemes like National strategy for AI (N272 Aayog), National mission for interdisciplinary cyber physical system etc.
 - Focusing on skilling - up skilling & reskilling
 - skill → up skill → re-skill
 - Focusing on exports through free trade agreements like - RCEP, India-EU-FTA - thereby becoming a part of regional & global chains.

India needs to work on a war footing to prevent such a trap and achieve the goal of 5 trillion \$ economy by 2024.

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 refers to the economic framework adopted by the central bank to maintain macroeconomic stability.

Monetary policy transmission is the actual realisation of the envisaged monetary policy in the economy.

Importance

1. More predictable results of RBI policy rates.
2. Ensuring ~~be~~ stable rate of inflation between $4 \pm 2\%$. (Ujjit Patel)
3. Promotion of monetary sentiment and keeping the confidence of the monetary players intact.
4. For overall credit worthiness of the economy by overall credit

rating agencies like S&P, Moody's etc.

Reasons for ineffective monetary policy transmission

1. Weak balance sheet problem faced by the banks with NPAs to the tune of \$ lakh crore
2. Unwilling deposit dependence of banks.
3. Low credit demand in the economy.
4. Lack of synergy with fiscal policy at times.

Steps by the RBI to improve it

1. Increase in the powers of the RBI to regulate banks.
2. Meeting with the heads of all major PSB for better policy rate transmission.

3. Shifting from the system of prime lending rate to benchmark lending rate.

4. Seeking banks to adjust their deposit rates also in accordance to monetary policy.

Way forward

With these steps of the RBI along with greater vigilance it is expected that the recent rate cut of 35 basis points will be better transmitted to the economy.

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।

In India over 55% of total agricultural land (159 million hectares) is rainfed which has been majorly held responsible for the agrarian distress.

Constraints faced by rainfed agriculture

1. Increasing uncertainty in terms of growing intensity & frequency of disasters - flood & draught due to climate change.
2. Low productivity as the supply of rainfall is erratic. This is the reason for lower yields in India when compared to China, US etc.
3. Price volatility faced due to bumper crop or failed crop depending on the rains.

4. High level of indebtedness faced by farmers of the rainfed region due to unpredictable outputs, for eg - as per NABARD survey, more than 60% of the farmers are ~~ind~~ under debt.

Agroeconomic practices for rainfed regions

1. Focusing on traditional water harvesting methods like tankas, johads, step wells.
2. Building farm ponds for capture of rain water & under various schemes like MGNREGA.
3. Modern storage techniques like artificial wells, injection tanks.
4. Cultivation based on agro climatic conditions for eg cultivating millets instead of water guzzling crops like rice & wheat in Rajasthan.
5. Adapting agricultural practices like

organic farming, zero budget natural farming (ZBNF) (prepared by Subash Palekar) & system of rice intensification

6. Following weather advisories in deciding cultivation & harvest patterns.

7. Cultivating drought resistant variety of HYV and hybrid seeds.

8. Adapting mulching, crop rotation, etc to reduce water evaporation from farmlands.

Way forward

These measures when adapted will not only help to alleviate farm distress but also aid in achieving the dream of doubling farm 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?

Urea sector in India provides critical input to the fertilizer industry which supports agriculture.

Steps by government

1. Adapting nutrient based subsidy scheme including NPK for balanced soil input
2. Introduction of neem coated urea with twin pronged goals. Firstly, to reduce diversion to industrial areas. Secondly, more optimal release of urea in the soil.
3. Pilot project of Aadhaar based subsidy for fertilizer sector - BAPU - Biometric uptake of details

Issues

1. Imbalance in fertiliser application which has led to soil ideal ratio changing from 4:2:1 (N:P:K) to 10:4:1.
2. Excessive application of urea by farmers due to subsidy & lack of knowledge.
3. High urea subsidy burden of over Rs. 60,000 urea.

Reforms

1. Rationalising urea subsidy by targeting small & marginal farmers
2. Facilitating an optimal urea application through proper implementation of soil health card scheme, Kisan call centre and other extension services.
3. Curbing leakages of urea to industrial sector through radio tagging urea bags.

GPS tracking of urea ~~has~~ trucks, SMS alerts.

4. Focusing on better supply chain management of urea.

5. Developing alternatives to chemical laden urea through promotion of organic manure, green manure, vermicomposting.

Urea reforms are urgent to reduce the huge fiscal burden of about Rs. 70000 crore on the government.

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 संघारणीय 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 & benefit sharing (ABS) as a component was introduced based on conservation of biodiversity.

ABS refers to gaining access to biological products but at the same time also providing financial benefit to the locals as source of the biological product.

It aids in the sustainable use in the following manner:

1. Regulate the use of biological products by preventing rampant commercial exploitation.
2. Following environment safe practices met use of biodiversity.
3. Protecting traditional knowledge.

4. Encouraging locals to protect & promote indigenous biodiversity.

global level mechanisms

- Convention on biodiversity (1992)
- Nagoya protocol which provides for safe use of biological products
- Aichi targets which focuses on biodiversity.

national mechanisms

- traditional knowledge digital library
- Geographical indicator tag under GI act, 1999 to protect indigenous products as well as sustainably promote it
- focusing on biodiversity preservation under environment protection act, 1986.

ABS permission allows us to have safe, sustainable & bright future by

focusing on biodiversity in various
developmental plans.

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।

Disaster resilience of infrastructure is a key component in prevention & mitigation in disaster preparedness.

This refers to adaptation of safe practices in ~~disaster~~ infrastructure development through various technological aids in order to reduce the damage caused by disasters.

Significance

1. Reduce loss of life & property when disaster strikes for eg - cyclone shelters to prevent cyclone loss.
2. Long term sustainability of disaster resilient infrastructure
3. Improve overall preparedness to disaster.

4. Achieving targets of Sendai framework
of disaster risk reduction (2015-30)
as well as National disaster management
plan (2010)

5. Reduce the possibility of climate
refugees in future who maybe displaced
due to floods & draughts.

6. Proactive approach instead of reactive.
Challenges

1. High initial cost to setup for eg as
per a recent study, earthquake resistant
building costs almost 2 times of
normal building.

2. Lack of state of art disaster resistant
technology

3. Issue of retrofitting existing infra-
structure with disaster resistant
technology

4. Causing disruption in lives of people
during retrofitting existing structures.

5. Lack of awareness about disaster resilience infrastructure among the common people. Hence, they do not adapt it while building homes.

Mainstreaming disaster resilience

global

- Coordination at regional level like Asian conference on disaster risk reduction
- sharing of best practices under Sendai framework.
- setting up global fund for disaster resilience

national

- Policy framework needs to adapt disaster resilience - for eg- national building code
- private contracts, PPP projects should have disaster resilience as a mandatory component.
- generating awareness

Thus, there is need to adapt resilience as "prevention is better than cure"

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 localisation refers to data being stored in servers within the geographical boundaries of the same country.

Need for data localisation has been suggested by several committees -

BN Sri Krishna, Gulshan Rai



Significance

1. National security - data within the geographical borders facilitates investigation of online data without relying on foreign nations.
2. Right to privacy better ~~more~~ protected in case of localisation.

3. Prevent exploitation of data by foreign MNCs as data has become the new oil of the 21st century.
4. Use of data stored by the government for evidence based policy making.
5. Develop data ecosystem in India thereby aid in developing vital data based industries in India thereby even fuelling employment.

Challenges

1. High initial cost of setup of data centres.
2. Resistance by private players.
3. Inhibit ease of doing business.
4. Need for 24x7 uninterrupted electricity supply.
5. Duplication of data storage being considered as redundant by several critics.

Nevertheless, data localisation is vital not only for privacy but also for its intrinsic value.

Data localisation as per Economic Survey (2018-19) will allow data to be used as a public good - data for the people, of the people, by the people

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 refers to the process by which illegal black money through placement, layering & integration is made to appear legal.

This is one of the crimes, organised in nature with the biggest ramifications.

Menace for India

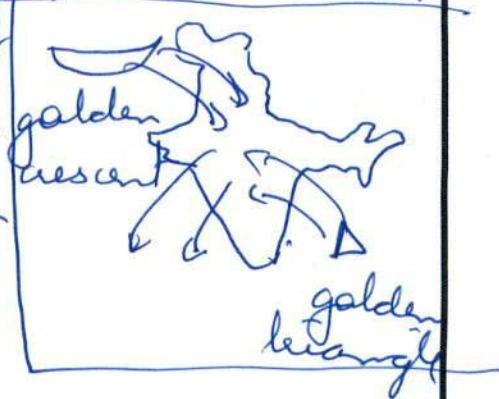
Economic issues

1. Reduce tax revenue and tax base
already India has tax to GDP ratio which is 16.6%; much lower than OECD countries with 34% tax to GDP ratio
2. Weaken impact monetary policy as well as fiscal policy
3. Lead to macroeconomic instability

4. Exacerbate inequality for eg -
currently in case of India 1% of the
population owns 73% of the wealth
(Oxfam report).

Security issue

1. Fuel Terrorism as Landlord agents
use terrorists to facilitate money
transfer
2. Strengthen human & drug & trafficking
particularly because of
India's location between golden crescent and golden triangle



Social issue

1. Fuel corruption - because corruption
and collusion particularly
very capitalistic.
2. Fuel consumerism & materialism

Measuresinternational
level

- FATF formed in 1989 to
look into money laundering,
terror financing & other
threats to the integrity of
financial system
- Platforms like G-7 &
G20 regularly raise this
issue.
- Various UN convention - UN
convention on prevention of
corruption, UN convention on
transnational organised crime.

domestic
level

- Legislative measures
 - Prevention of money laundering
act, 2003
 - Fugitive economic offenders
act
 - Benami Transactions (prohibition)
act

→ Institutional measures

- Enforcement Directorate
- Financial intelligence unit, SFIO

Tackling this menace requires global,
regional & national efforts

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 & organised crime serve as major international threats which is wide ranging - includes social, economic & political ramifications.

Motive

Terrorism

to strike fear in the hearts of people & government through indiscriminate use of violence

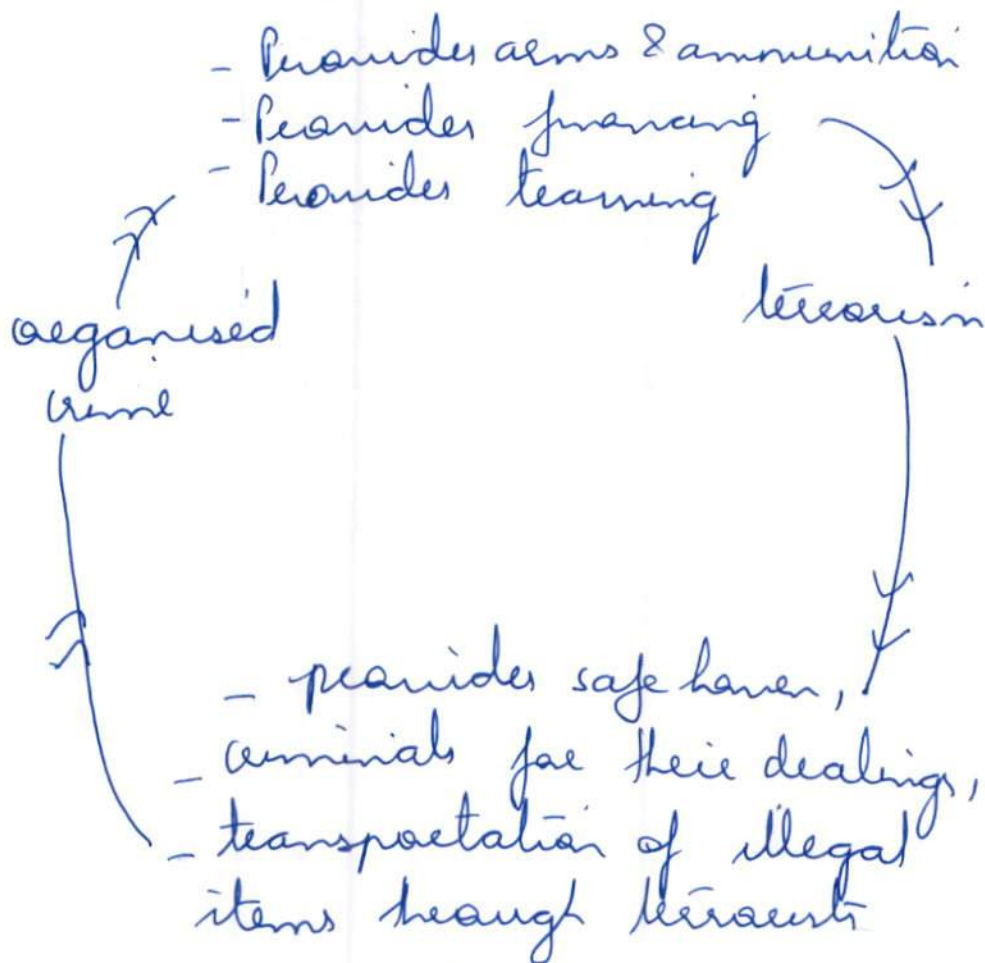
organised crime

generate a profitable business through illegal means such as drugs trafficking, human trafficking

Despite seemingly divergent motives, they share an intimate relationship due to the fact that both employ illegal means to serve their ends.

Hence, it is no coincidence that most terrorist affected regions are also hubs of organised crime.

- Golden Crescent comprising of Pakistan, Afghanistan & Iran is the epicentre of drug trafficking as well as terrorism - LeT, Taliban, Indian Mujahideen.



This symbiotic relationship created creates a vicious cycle which promotes one another.

Way forward

- International collaboration under the aegis of FATF which tackles both terror financing & money laundering
- Bilateral intelligence cooperation for eg- MOSSAD (Israel) & RAW (India)
- National level overarching legislation on organised crime like Maharashtra control of organised crime act.