



# VISION IAS

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## GENERAL STUDIES (TEST CODE : 1244)

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Medium Eng./Hindi	English	Registration Number	87661
Center	ORN	Date	08 Feb 2020

### INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
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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।

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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 कीजिए।

The idea of Independent Fiscal Council was proposed by the 14th as well as 15th Finance Commission so that better fiscal discipline can be observed at the centre.

Need of Independent fiscal council

- (1) At present, centre regulates the fiscal budget of the states but no authority in place to monitor  
↳ fiscal discipline of centre
- (2) It can make suggestions regarding  
↳ devolution of funds  
↳ fund raising through  
• Dis investment  
• Bond issuance  
and hence sets accountability.

(3) Can assess the allotment of funds  
by the centre in its budget  
and hence  
↳ brings transparency in  
the budgetary process  
↳ make people more aware  
about the spending.

(4) At present, CAG audits the account  
of centre only after the expenditure  
has already been made.

↳ Independent fiscal council can  
so avoid such disproportionate  
use of funds before the  
expenditure. ⇒ transparency.

(5) Fiscal scrutiny over various schemes  
being perpetually renewed by the  
Government  
→ hence checks populist steps

Hence, IFC is the need of the  
hour as it also balances the  
power tilt presently in favor of  
Centre.

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 exports have seen a decline in the past five years ~~comp~~ in contrast with the rapid growth of the economy. This indicates towards the weakening export competitiveness of India.

Potential of exports in generating employment :

- (1) Exports are propelled by industries and hence is directly linked with human resource demand
- (2) For labor intensive industries like Textile, leather, etc. - exports can create millions of jobs
- (3) Exports require other infrastructure like roads, ports etc. and hence

can spur the demand.

Steps need to taken :

- (1) Focus on manufacturing sector as
  - ↳ opportunity is high due to increase in labor cost in china
  - ↳ labor intensive in nature  
eg. Footwear industry
  - ↳ high involvement of women's SHGs in this sector.
- (2) developing the special economic zones on lines of recommendation by Baba Kalyani committee
- (3) Government incentives need to be re-aligned as dispute regarding MEIS is in WTO.
- (4) IT/ITES sector contributes heavily and hence this should be leveraged.  
Through FTAs like EUFTA

Hence, Export needs a boost which depends on infra capabilities of India as well.

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।

Mineral falls under the state list of schedule VII but mining falls under the ambit of union list. The need of uniform legislation in wake of Rat hole mining incident pushed the passage of National Mineral Policy, 2019

### Main features

- (1) Reverse bidding be employed for the auction process.
- (2) Blocks can now be chosen by the company depending upon its Research in the area.
- (3) Revenue sharing basis of mining activities
- (4) Environmental Assessment needs to be taken & stricter implementation

- (5) Bans the practice of Rat hole mining,  
Road side mining, etc  
→ Mining to be carried out in place considering health of miner
- (6) Annual health check up mandatory for the miner  
↳ due to exposure of poisonous gases.
- (7) Set up corridors for mining.  
Helps in sustainable and responsible mining as.
- ⊗ Keeps environment at preference to prevent pollution of air, land, water.
  - ⊗ Aims to maintain health of the worker
  - ⊗ Bans practices that risk human life
  - ⊗ Deployment of Technology to mine deeper
  - ⊗ Mining corridors limit the spread of health hazard to adjacent areas

And hence, policy can result in sustainable & responsible mining by targeting multiple SDGs like

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 aims to increase the adoption and production of 'Jaiwant idhan' - that is Biofuels

### Salient features of PM JI-VAN

- (1) growing climate suitable varieties on the fallow lands  
→ eg. Jatropha
- (2) Increase the blending ratios in both diesel and petrol vehicles to 15% and 20% respectively.
- (3) using algae for biodiesel production
- (4) Biofuel be produced through methanol blending as well.
- (5) minor forest produce can also be used.

- ⊗ It can assist in achieving the vision of National Biofuel Policy as
- it increases the blending ratio, thereby decreasing import dependence on oil
  - creates job opportunities with increased production of methanol and other bio oils.
  - Moving towards cleaner & less pollution India.
  - use of food crops (surplus) - eg. sugarcane for ethanol production helps in better utilization of the produce
    - ↳ better remuneration to farmers as well

Hence, PM JI-VAN is a well-intended scheme which augments the National Biofuel Policy.

This forms the an important step towards the cleaner India Dream.

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।

Recently Sikkim was awarded by the FAO for its high adoption of Zero Budget Natural Farming achieving 100% organic farming.

Zero budget Natural Farming as an alternative :

- (1) Complete use of agricultural waste in making manure, composting, etc.

↳ this eliminates the need to purchase expensive chemical fertilizers which harm the fertility of the soil in long run

- (2) Also, the technique requires large amount of agricultural waste and

animal stock waste management  
↳ is labor intensive in nature  
thus does not require  
capital to buy heavy machinery

(3) since it emphasise on organic  
produce, it involves used of  
seeds naturally obtained from fruits  
etc.

(4) The demand of organic produce is high  
all over the world  
→ hence better remuneration  
→ can help achieving target of  
doubling farmer's income by  
2020

(5) In order to avoid weeds & unwanted  
herbs, mulching is used in the  
field  
→ it makes less / zero use of  
herbicides.  
→ soil retains water for longer  
time, hence reducing  
demand of water.

Thus, the practice of zero budget  
natural farming could become an  
answer for the agricultural distress  
in India, furthering the goal and

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।

Sargasso patch in the Atlantic ocean is the most widely known example of human imprints on sea, and how plastic pollution is taking over the seas.

Implications of plastic pollution on marine ecosystem :

- (1) Remain suspended in the marine ecosystem for thousands of years
- (2) are often ingested by fishes/sharks in search of food.
- (3) end up in human system through the process of Bioaccumulation and Biomagnification at each level.  
→ microplastic beads - are one such example.

- (4) Affects the biodiversity by increasing oxygen demand of water body for complete degradation
- (5) Blocks sunlight from entering the sea  
 → can change the temperature of water body  
 → thereby causing loss of phytoplankton, corals etc.  
 → can hamper growth of aquatic flora

Measures to address the issue:

- (1) Recycling the plastic waste  
 → need segregation  
 → effective disposal of plastic by consumers
- (2) Ban single use plastic
- (3) moving towards Biodegradable and reusable products.  
 eg. cloth bags instead of plastic ones  
 © paper straws instead of plastic straws.
- Hence,  
 # Discourage use of plastic and extended producer responsibility principle can also be used to tackle the menace

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 inspired from the European norms and depend heavily on the European frameworks
- In wake of high Air pollution, these norms were formed by the Government of India
- At present Bharat norm IV are in place which are same as EU-IV.
- Government has planned to skip BS V and directly implement BS VI due to rapid increase in air pollution

### Significance of BS VI norms

- (1) Can lower the SO<sub>2</sub> and CO<sub>2</sub> emissions by around 75% from diesel vehicles
- (2) Addresses the demand of public to

control the vehicular emissions.  
→ contribute around 35% to Delhi  
Pollution.

- (3) At present, India ranks poor in air  
pollution standards  
→ Delhi being worst capital in  
terms of pollution

(4) BSVI norm

Fuel and vehicles can also spur the  
growth in auto sector currently going  
through a slowdown.

↳ as the demand may increase  
due to regulations

challenges to BSVI norms

- (1) Auto manufacturers complain of less time  
for compliance
- (2) Technology upgradation requires time  
and this probably has also caused
- (3) a slowdown in auto industry
- (4) lack of incentives for people to move  
towards BSVI

Hence, Government needs to take concern  
of all stakeholders while framing  
any future policy so that an

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 defined as region in space where the density of matter tends towards infinity and hence it is able to absorb all the light that is thrown at it.

Challenges in imaging a black hole:

- (1) It absorbs all of the light thrown at it and hence no reflection takes place.

→ This makes it difficult to capture the image.

- (2) Due to duality in nature of light, even in the nearby region, it tends to bend the light and hence path traced by light gets bent.

Event Horizon telescope overcame these challenges by employing a large number of telescopes at different locations of the world.

- the light which gets bent was received by the receiver at some other location.
- Repeated transmission & reception of light signals over a period of time helped in creating the image of the black hole.

This breakthrough can help scientists in further analyzing the nature of black hole and how information interacts with it as theorized by the late Stephen Hawking Sir as well.

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।

Arms Trade Treaty aims to regulate the trade of arms among governments or private companies.

Objectives of Arms Trade Treaty are

- 1) prohibition on the transfer of weapons to the party which uses it for mass destruction or terrorism.
- 2) sets the Government (supplier one) to be responsible for the above act.

Challenges to Arms Trade Treaty :

- 1) withdrawal of global powers like USA, indicates the lowered confidence in treaty.
- 2) non compliance by nations like China which once supplied arms to

insurgents in Punjab.

- (3) No monitoring mechanism for member countries.
- (4) Responsibility without Accountability in case of breach of the provisions.

Steps needed :

- (1) Countries need to utilize the ATT as a global platform to fight against terrorism.
- (2) Getting developed nations like US on board and stricter monitoring and regulatory mechanism.

The present status of ATT can be revived by India by playing a major role to further strengthen the fight against terrorism and setting Accountability for rogue nations like Pakistan which provide safe heavens to terrorists.

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।

Recently, the data breach in one of the Nuclear power plants created an alarmed situation about the threats to India's internal security.

Threats through communication network:

- (1) through phone tapping - most widely used tool to breach privacy
- (2) through cyber attacks on government portals which contain sensitive information of citizens.
- (3) through social media platforms spreading extremist messages for brainwashing.  
→ recently youth from Kerala joined ISIS.

(4) Honey trapping the armed personnel  
eg. case in point could be that  
of DRDO scientist.

(5) Attacking critical infrastructure  
like Nuclear plant  
→ can create Nuclear Hazard

Threat to networks :

(1) Dismantling communication connectivity  
→ in event of disaster to create  
chaos

(2) under sea cable being attacked  
by pirates for personal & vested gains

(3) In present age, it can very well  
isolate a region from the mainland.

Hence, communication safety was  
addressed by the Government through

→ Data protection bill

→ Telegraph Act which prohibits phone  
tapping

Also, India needs to develop its

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 been pushing towards adoption of Renewable energy in the domestic as well as international platforms and hence, has put a high target of getting 175 GW from Renewable sector under Paris deal.

Ⓕ Importance of integration of variable renewable energy :

- (1) To overcome the problem of inter-mittent supply from the renewable projects eg solar
- (2) utilization of the existing transmission infrastructure through integration.

- (3) Help achieve the Nationally determined Goals ~~to~~ for Sustainable growth.
- (4) Increases reliance of the renewable sources through Grid connectivity.
- (5) Mainstream use of renewable energy through integration as it encourages
- people to use/opt for renewable energy
  - DISCOMs to purchase this energy

Challenges related to integration of variable renewable resources:

- (1) Need Research and development in the sector for effective integration
- (2) over reliance on the impacts for key components in the renewable sector
- ↳ links fluctuation with energy Security.

- (3) price disparity between renewable and coal based plants electricity.
- (4) under utilized capacity of the renewable sector and hence production is too low to be significant
- (5) Recent events of grid failure can create a period of complete blackout in case of interdependence.

### Steps needed for smooth integration

- (1) Achieving hybridization among renewable energy first eg solar-wind plant  
↳ this creates continuity in supply
- (2) use of technology to determine peak demands and avoid grid failure.

Therefore, India needs to further the efforts in this field to achieve the goal of Green energy and have sustainable growth

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?

Middle income trap was recently mentioned in the Economic survey of India. It is a phenomenon where a country grows rapidly to enter the category of middle income countries but fails to move further into the high income countries. This phenomenon was observed in countries like Thailand, Vietnam

Reasons for the arguments that India could fall into such trap being

- (1) High unemployment rate at 6.5%

- (2) low skill set - only 2.3% of working population are formally trained.
- (3) outcomes of learning are poor as reported by pratham in its ASER report
- (4) low focus on vocational training as Indian society continues to value 'degree' more
- (5) Not being able to expand the Manu-  
-facturing sector and majority of the population still involved in the primary sector (agriculture)  
~49% of population in agriculture.
- (6) Apprehension of Not being able to reap benefits of Demography

How Indians can avoid it?

- (1) creating high skill jobs  
↳ upgrading manufacturing sector technology

↳ tackling issue of disguised unemployment in agriculture

(2) Skill India programme

↳ emphasis on skill acquisition

↳ helps people switch to higher skill set.

(3) Apprenticeship - on the job training for the employees. eg: National Apprenticeship program.

(4) creating environment of innovation

↳ start up India

↳ Stand up India

↳ Imprint scheme

(5) Growth along with job creation

Therefore,

India has already taken some initiatives as mentioned above to tackle the middle income trap. The rapid growth of the Indian economy is likely to gain momentum with structural reforms.

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 transmission is the effect of the decisions taken by the RBI through various instruments like

- ↳ changing repo rate
- ↳ open market operations, etc.

on households and whole economy in general.

### Importance of Policy Transmission

- (1) Ensures macroeconomic stability of the country.
- (2) helps in keeping inflation in check
- (3) has regulating effect on the banking system

- (4) aligns its goals with the government's objectives of public welfare
- (5) Avoids the situation of economic crisis and also ensures price stability in retail market as well

④ Major issues that plague the monetary policy transmission:

- (1) low deposit of RBI with banks i.e. household form major deposits for banks  
∴ Banks have little effect of Policy rates.
- (2) internal Benchmarking by the banks  
i.e., use of Marginal cost of lending rate where banks are not bound to transmit the policy.
- (3) Transmission with a time lag as banks delay the transmission
- (4) low credit availability with banks

also acts as deterrent in policy transmission.

(9) Issue of NPAs have created a liquidity crunch in the market.

### Steps taken by RBI

(1) External benchmarking will be adopted for quicker and effective transmission of policy rate.

(2) long term Repurchase agreement (repo)  
→ to increase lending ability of the banks.

(3) capital infusion to solve the issue of rising NPAs  
along with Prompt Corrective Action (PCA) norms.

Hence,

In order to have effective policy transmission, RBI has taken some steps. Further recommendations of PJ Nayak committee can be implemented to get results.

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, more than 50% of the Gross cropped area falls under the rainfed region - that is, region where dependence is on Rain for water needs of the crops.

Constraints faced by rainfed agriculture

- (1) huge dependence on monsoon for rain
- (2) Climate change with increased frequency of extreme weather events like floods, droughts;
- (3) Even during normal rainfall year, 80% of the total rain falls within 100 days of year.

- (4) limited yield - as high yield variety (HYV) seeds are water guzzling in nature.
- (5) low productivity implies low remuneration for the farmer.  
↳ increases chance of getting into a debt trap.
- (6) other constraints like  
↳ monoculture practice leading to depletion of sources  
↳ Declining soil productivity

Agronomic practices that can be adopted are :

- (1) Traditional knowledge utilization  
eg. creation of johads, wells.
- (2) using micro irrigation from nearby channels/wells.
- (3) Rain water harvesting can be made mandatory in such regions
- (4) more emphasis on allied sector

eg. @ livestock farming  
@ pisciculture

- (5) using R&D in collaboration with Krishi Vigyan Kendras to develop high yield seeds but less water consuming in nature.
- (6) Inter cropping - can be promoted to restore fertility of the soil.
- (7) Judicious use of fertilizers using soil health card.
- (8) Developing a network of barrages, wells and tanks, so that dependence on rain can be reduced.

Hence,

agriculture with above steps can be done in rainfed regions to increase the productivity and remuneration. While adopting any technology, M.S. Swaminathan's concept of evergreen Revolution can be referred.

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?

India is the second largest producer of urea in the world and is also the second largest consumer of it. Urea forms an important ingredient of the fertilizers and hence is regulated by Indian Government.

Steps taken by the Government :

- (1) Canalised import of urea to control the prices of it.
- (2) Production cost based subsidy on urea to producers
- (3) Introduced soil health card to prevent misuse of urea.
- (4) Neem coating on urea to prevent

its black trading to chemical companies.

- (5) Recently, Government has indicated to transfer subsidy to the farmers directly instead of producers.

### Problems in the urea sector :

- (1) Issue of over use by farmers has skewed the N:P:K ratio to 8:4:1  
(ideal: 4:2:1)
- (2) leakage issues → loss during transportation  
black hoarding of the stock at point of sale
- (3) Beneficiaries are majorly large farmers and small and marginalized farmer continues to suffer
- (4) less incentive for production companies to be efficient in their process as the subsidy is production cost based
- (5) Demand supply mismatch due to

poor forecasting models.

⊕ Reforms to be taken up :

- (1) De-canalization of urea import  
↳ creating a free market space
- (2) usage be controlled
- (3) supplying biogas / (which is used as  
CNG input) at uniform price  
↳ to incentivise the efficient production.
- (4) Aadhar based distribution to ensure small and marginalised farmers are just to get benefits.
- (5) Subsidy to farmers directly through DBT → to plug leakages
- (6) Encourage Zero Budget Natural farming so that farmers move to environment friendly practice.

Hence, by above steps the major issues in urea sector can be addressed.

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 where the benefits of the development / research are also shared with the origin country/people. In addition to benefits, access to such technology is also available to all the stakeholders.

Aids in sustainable use of biodiversity

(1) Principle is accepted on international level hence prevents exploitation of biodiversity rich countries.

(2) Development of pathbreaking technology based on traditional knowledge creates information free flow.

(3) principle of fairness is upheld as all those provided input get benefits.

(4) welfare of the whole globe

eg. in case of Medicines developed in one part, reaches those affected in the other part.

(5) Reinforces the principle of globalisation

→ of knowledge

→ of benefits

→ of technology

} hence prevents monopolisation of necessities.

Global Mechanisms for ensuring  
Access and Benefit sharing:

(1) Nagoya protocol emphasizes on this principle - in biodiversity.  
↳ puts an obligation on all member states to follow it

(2) Cartagena protocol - in case of living Modified organisms

## National level mechanisms

### 1) Seed Bill

↳ companies to share benefits with farmers.

### 2) Medicine

↳ use of traditional knowledge of indigenous tribes entitles them for benefit sharing.

### 3) Technology as a public good

↳ Shodhganga portal for research information sharing among various research institutes

Hence, the principle of access and benefit sharing is underlying principle for many national and international laws. At the time when biodiversity is under severe stress, Global effort with integration of knowledge is required to address the issue.

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।

Recently, Disaster risk reduction conference marked the emphasis on Disaster resilience infrastructure and its relevance in the backdrop of frequent cyclones like Fani, Gaj and floods - in Kerala, Bihar, Assam, etc.

Significance of Disaster Resilient infrastructure :

- (1) Decrease vulnerability to extreme weather events like flooding, cyclones, etc.
- (2) India is one of the most vulnerable countries to climate change and hence there is immediate need to adopt this framework.

(3) helps in preventing → life loss  
→ infrastructure loss

(4) is in line with the principle  
of 'Build Back better' under  
Sendai Framework

(5) Examples which are successful in  
mitigating impacts  
eg Building code in Bhuj  
after Earthquakes

challenges in achieving resilience  
in infrastructure:

(1) lack of code for professionals like  
engineers in India

↳ no regulatory body

↳ no licensing

(2) Need uniform design codes for  
various disasters

(3) capital expenditure will be high in  
such a project given Economic

slowdown

(4) Implementing agencies - multiplicity  
of agencies and ministries.

↳ each disaster being addressed  
by different department of entirely  
different ministry.

(5) low awareness about the principle  
among people

Ways to Mainstreaming it in the  
development paradigm:

(1) Developing uniform design codes  
providing enough flexibility to  
be adapted as per local  
vulnerability.

(2) Mapping the zones as per vulnerability  
and type of disaster

(3) current projects in infrastructure be  
aligned to the norms.

(4)  earmarking Budget for the purpose

(5) use Global facility for funding.

Therefore, for such a daunting task  
Government needs to adopt Sundai

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।

Recently drafted data protection bill <sup>which</sup> has been sent to the standing committee, talks about the need of data localisation and how to achieve it.

Significance of data localization for India :

- (1) Recent events of data breach by facebook goes against the fundamental right of an individual in India.  
→ Art 21: Right to privacy
- (2) Data has become the new oil for tech giants like Amazon Google. and hence India with huge population base needs to control data outflow
- (3) prevent data hegemony by developed nations like USA

- (4) Advent of technologies like AI, Bigdata can manipulate the decision making also.
- (5) Protecting sensitive National data for the purpose of National security.
- (6) Honey trapping being done of various armed personnels, and those working in defence has come to light recently.
- (7) Issue of consented use not followed.
- (\*) Challenges associated with data localisation :
- (1) Need of infrastructure for storing huge data
  - (2) Reluctance by tech giants like Facebook and whatsapp as it increases their cost
  - (3) Issue of implementation and regulation for such huge population
    - ↳ with high vulnerability due to low literacy and even lower digital literacy.
  - (4) Can hamper the growth of data driven platforms like e-commerce

Steps needed in this regard:

(1) Classification of data and obligation  
to store only ser critical data  
in India

↳ can reduce infrastructure requirements

↳ can bring down reluctance of companies

(2) Imposition of huge fine / punishment  
in case of data breach

↳ itself can act as a deterrent

(3) Global norms can be developed  
with like minded Groups / Nations  
eg: EU

Hence in this regard the recommendations of ~~Dr~~ B N Srikrishna should be followed and the Data Protection bill should be debated extensively with all stakeholders in mind to remove all apprehensions and to take holistic view.

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?

Recently, Economic survey represented a comparative study where it showed that the money laundering amount in last year equals the amount that government spent on health and education of the whole country.

Money laundering is a menace

because -

- (1) it amounts to deprivation of their economic freedom for many
- (2) affects the investor confidence badly
- (3) creates liquidity crunch in the lending institutions which in turn leads to
  - further low lending operations
  - halts the infrastructure projects

- (4) Deprives people of their social and welfare entitlements  
 ↳ as after such incidents Government's capital expenditure comes down.  
 ↳ diverts the allocation of funds from welfare measures to other
- (5) Deteriorates the rating of a Government's sovereign bonds.  
 → market may slow down.  
 → fall in FDI  
 → high inflation with low growth  
 → currency depreciation

Measures that have been taken

- (1) Fugitive economic offender's bill  
 → provides for attachment of all property.  
 → creates a deterrent for the offenders to commit such act
- (2) RBI has taken measures to

tighten the regulation on banks to tackle issue of evergreening loans

(3) SEBI mandated KYC norms to enhance transparency in bond market

(4) collaboration with nations  
↳ under Extradition Agreement  
eg: Recent verdict of UK court in Vijay Mallya case

Globally,

\* Institutions like IMF and groupings like OECD have formulated stricter norms against such fugitives.

Money laundering events shake the confidence of people in regulation in economic matters and hence can create moral hazards

Money laundering act by the Government is a right step in the right direction to tackle this menace where International cooperation is the key in complete trial and conviction of such offenders

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।

Globally, there has been a surge in terrorist activities with the rise of ISIS, let like terrorist organisations.

⊛ Primary motive of Terrorism :

- (1) create an environment of fear among the residents / citizens of a nation.
- (2) Act is often committed against the Government  
↳ aim to create anarchy
- (3) Breeds on the ground of hatred towards a particular community or section of people / nation.
- (4) Extremist ideology propels one to commit such an act  
eg Religious extremism.

- ④ Primary motive of organised crime  
like bank robbery :
- (1) Get benefit from unlawful illegal activities
  - (2) Generally committed against the society instead of nation.  
eg. Rape.
  - (3) Motive is personal benefit / pleasure or gain at the expense of violation of rights of other.
  - (4) Do not follow any particular ideology of hate or extremism.

Symbiotic Relationship between the  
two :

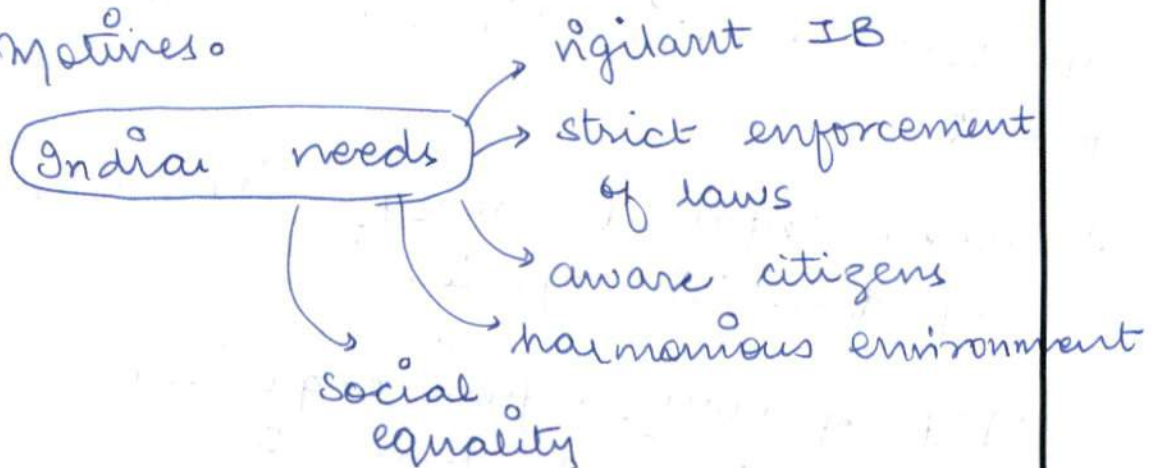
- (1) Illegally obtained money being used by terrorist organisations
- (2) Supply of arms → from organised criminals to terrorists and vice versa
- (3) Disruption of a social order at one

place often facilitates terrorists to  
commit heinous acts. eg. J&K

(4) organised crime like corruption  
weakens the enforcement of law  
and thus makes it easier for  
terrorists to plan attacks.

eg. Parliament attack - one of  
the DSP is involved

Hence, one requires the other  
for its perpetual survival and  
hence often support each other  
to achieve their respective  
motives.



to curb this menace of organised  
crimes and terrorism & block  
their symbiotic relationship