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GS 3

GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	Angad Mehta	Registration Number	461609
Medium Eng./Hindi	English	Date	4-09-19
Center	Delhi		

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
2	10		उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विराधी क्रमांक आदि)।
3	10		2. There are TWENTY questions printed in ENGLISH & HINDI
4	10		इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
5	10		3. All questions are compulsory.
6	10		सभी प्रश्न अनिवार्य हैं।
7	10		4. The number of marks carried by a question/part is indicated against it.
8	10		प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
9	10		5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
10	10		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 (क्वैरी) 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।
11	15		6. Word limit in questions, if specified, should be adhered to.
12	15		प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
13	15		7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
14	15		उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।
15	15		
16	15		
17	15		
18	15		
19	15		
20	15		
Total Marks Obtained:			
Remarks:			

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. 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।

There has been a proposal to establish an Independent Fiscal Council to replace some of the functions that were done by the Planning Commission.

Benefits :

- 1) Allocation of Resources to states with emphasis on development
- 2) Supplement role of Finance Commission transfers and GST Council
- 3) Check the growing deficits of Center + States and Extra Budgetary Provisions (EBR) that together account for almost 7% of GDP
- 4) Coordinate planning and schemes on combined platform - Cooperative federalism.

However there are many challenges to the creation of an Independent Fiscal Council →

1) Transparency: it will lead to disclosure and coordination by all parties which is unfeasible due to political compulsions and motivations

2) Accountability - it will lead to clear statistics and scale of borrowing but that is unlikely to curb expenditures on social sector.

↳ It has been suggested by N.K. Singh, head of the ~~the~~ Finance Commission to function within the Inter-State Council.

↳ The proposal has merits but it will lead to loss of autonomy of the States and Union and faces problems.

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 remained stagnant or declining since 2012-13 period. Many reasons have been attributed for this stagnation →

- 1) Rise in real exchange rate (RER): as other competitor economy currencies have fallen faster than INR.
- 2) cumbersome regulations: in electricity and enforcing contracts
- 3) Rising interest rates: real exchange rates in India are the 2nd highest in the world after Brazil due to low inflation.
- 4) falling competitiveness: compared to Bangladesh / Vietnam that compete in same goods basket

Exports have the potential to give employment to India's huge demography which is currently not being utilised.

Steps :

- 1) economic → loose monetary policy by RBI - lower exchange rates
 - 2) fiscal → public investment by govt at massive level to enhance efficiency.
 - 3) Regulatory → loosen strict rules on land / electricity / water connections
 - 4) Labour → permit flexible hiring / firing
 - 5) Skills → entrance National Apprenticeship Programs & PM Kaushal Vikas Yojana.
- ↳ a combination of these measures has the potential to shift India to an employment boom.

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।

The National Mineral Policy 2019 is focused on some core focus areas:

- 1) exploration
- 2) licensing
- 3) domestic production

under these measures have been outlined to boost India's domestic mineral industry and create 10 million additional jobs by 2022. NITI Aayog ~~defines~~ states that only 10% of India's territory has been explored for mineral deposits.

- ① → This is to be raised to 20%.
- ② → OALP (open acreage licensing policy to encourage mineral production)

③ HELP (Hydrocarbon exploration licensing policy) that will boost ~~areas~~ domestic production of hydrocarbons in India.

Benefits

1. Lower imports → currently 80% of Indian oil is imported
2. higher employment → in the exploration and production ~~and~~ sectors
3. Research & Development → in the ~~hydroge~~ hydrological & geological sciences field.
4. lower prices → protection from external shocks and currency changes.

The Deep Sea Mission by Ministry of Earth Sciences for sea-bed mining will further strengthen the Indian industry in this field.

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 (Jaiv ~~Indhan~~ Indhan

~~Ata~~ Vatavaran Anulcool Fasal
Arshesh Nivaran) is basically
the policy on implementing the National
Policy on Biofuels, 2018. It sets
out the transformation of cellulose based
organic material into biofuel ~~that~~.

Classification:

① 1st Generation - plant based such
as sugarcane

2nd Generation - based on waste/or
other plants such as jatropha

3rd Generation - microbe based
Conversion of organic matter.

The recent goal of 10% mandatory addition of biofuel with retailed petrol has given massive support to PM JI-VAN.

Benefits :

- 1) Address sugarcane crisis : that is due to massive overproduction in UP/Maharashtra, by allowing use of 'B' molasses & even sugarcane juice
 - 2) Raise farmer/tribal income : by involving them in high value biofuel such as sugarcane/jatropha.
 - 3) Reduce rural distress/economic stability
sustainable business model without need for govt interventions.
- Massive improvement in the biofuel industry will also reduce environmental damage.

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 (ZBNF)

is a traditional organic method of production that has been promoted by the PM in his Independence Day ~~speech~~ speech.

Components →

1. organic manure
2. mixture of natural herbs/plants

The use of these is supposed to be an effective counterweight to the current challenges of chemical intensive agriculture →

1. High toxicity : throughout the food chain that has permeated everywhere
2. High costs : borne by govt. due to subsidies.

3. Perverse incentives : as the farmers have no reason to reduce chemicals but increase use to maximise production.

4. falling fertility : due to monoculture and intensive agriculture / absence of micro-nutrients :

Yet, there are challenges to ZBNF because it is not a demonstrated technology that can ~~not~~ reliably increase ~~farm~~ and double farmers income by 2022.

Possible options :

- 1) Direct benefit transfer - so that farmers can choose ZBNF or chemicals - also incentive to save money and reduce chemicals.
- 2) Promote agroecology to raise yields - such as SRI in rice without other inputs

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।

One-time plastic use is set to be banned
in India in 2022 under its commitment
to UN Habitat in Nairobi. The
decision was taken ^{keeping} in mind the
dramatic damage it has caused →

- ① to our ecosystems in marine region
- ② → microplastic invasion into food
chains through fish
- ③ → carcinogenic components
- ④ → destroying ecosystems such as reefs
- ⑤ → also the non-biodegradable nature
of plastic that collects together
eg → garbage patch in Pacific
Ocean.

Measures :

- 1) Research & Development - alternative options such bioplastics that are formed of organic material & which does not harm ecosystems.
 - 2) Banning one-use plastic but retaining in multi-use package industry.
 - 3) increasing thickness to 50 microns so that components do not change into micro-plastics and affect the food chain.
- ↳ global conversation on plastic use can lead to comprehensive action such as alternatives, regulation and rectification of damaged ecosystems — discussed in STOPCAR (Status of Protected Coral Reefs) - 2018.

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 (BS norms) have closely followed the motor fuel efficiency standards in European Union since the early 2000s. The recent stage for implementation is BS VI, based on the Euro VI standards that have showed multiple benefits:

- 1) lower sulphur emissions - 80% decrease
- 2) lower nitrous oxide emissions by almost 35%
- 3) catalytic converter will also reduce existing emissions by reducing PM 2.5 and PM 10 concentrations eg: relevant to Indian cities.

Challenges :

- 1) Difficult time period as Indian auto industry has only few years from transitioning ~~for~~ BS IV to BS VI directly by 2020.
- 2) High investments required for R&D and developing new engines for all models.
- 3) Market conditions that currently the auto industry is struggling with profitability as demand down by 33%.

Therefore, the auto industry faces many difficulties in meeting the deadline and perhaps temporary relaxation of implementation will assist the financial health of the industry that counts for 9% of GDP.

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 centers of gravity that suck in all light emanating from within it. They are remnants of stars that eventually compress into a small center of great density.

They are detectable only by gravity waves and have been the center of much scientific debate on whether they can be medium for travel through space and time.

The challenge of imaging a black hole is immense as no light is allowed to escape its gravity.

↳ Therefore, it can only be

done by creating a composite picture from data on gravity waves detection.

→ This was done in the Event Horizon Telescope Project which digitally created an image of the Black Hole for the first time ever.

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।

The Arms Trade Treaty (ATT) is a UN Treaty that has gained much global support for banning much of global trade in armaments and instating end-use laws.

↳ However there has ~~no~~ been no support from members of UNSC and India opposes it as well on grounds of sovereignty.

↳ Challenges

1) State interests: national security reasons prevent ATT from gaining much relevance in policy discussions due to real threat of war.

- 2) Growing insecurity - due to failure of UN and the decline of US unipolar dominance.
- 3) Global arms industry - almost \$400 billion in arms trade every year that is at stake, huge lobbying efforts.
- 4) Allies / strategic reasons : US sales to Saudi Arabia / UAE to combat Iran in Yemen, realpolitik
- Thus, like the NPT and the ban on nuclear weapons, the ATT is similarly facing the challenges of realism on the world stage.
- The implementation of ATT therefore looks unlikely due to national interests.

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।

National Cyber Policy, ~~2013~~ (2013)
recognises the dangers to both
networks and through the networks.

It established the NCIIP → The
National Center for Information
Infrastructure Protection.

Various other departments such as
the NIC (National Informatics
Center) and the DCA (Defense
Cyber Agency) endeavour to protect
communication networks.

Threats → ① Communication networks
↓
↳ State sponsored
② Through networks → subconventional

eg: ISIS propaganda or Burhan Wani

① use of facebook in J&K to
use subconventional methods.

↳ Huawei and 5G telecom networks

② pose state threat to India
through use of "Backdoors" as
warned by Goyal, Chairman of
Indian telecom manufacturers.

State Measures

① IT (intermediary rules) to trace
messages on platform to locate source
of messages: terrorists, etc.

② TRAI testing of 5G equipment to
remove / locate backdoors in ~~the~~ Huawei

③ IIT Madras R&D to create Risecreek
chips for fabricating own communication
networks.

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 (VRE)

refers to sources of energy such as

solar - only during day

wind - only during periods of air gusts

tidal - only during tidal period

These are different from other Renewable energy like - ~~Geothermal~~

Geothermal : permanent energy
round the clock

waste to energy : based on supply

IMPORTANCE of VRE

- 1) climate friendly - no emissions
- 2) low costs - lower than coal energy
now
- 3) Reduced land degradation → due to mining or thermal pollution.

The govt of India has decided to →

- 1) have installed capacity of 175 GW by 2022
- 2) include hydropower as renewable energy that will grant increased financing.

CHALLENGES

- 1) Variability - no reliability because of changing environmental conditions
- 2) Need for base power - to complement energy grid during night or during cloudy days → this is mainly through thermal energy (coal based)
- 3) Import dependence - on solar PV cells and wind turbines on Chinese industry.

Measures

①

TechnologyThermal batteriesto charge and
retain power
for later requirementHydro uplift whichpumps water uphill to
retain energy as kinetic
energy.

②

Grid UpgradationSmart metersto account for
home solar sets that
can feed energy to
gridUnified
transmissionto provide
electricity from other
areas - eg: Kutch wind power
to Tamil Nadu solar energy during
cloudy days.The combination of these steps will
establish VRE as 40% of total
~~energy~~ / electricity capacity by 2030

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?

Recently, Rathin Roy termed the current crisis in India as due to the onset of "Middle-income trap" in which nations stagnate at an income level of \$2000 - \$12,000 per capita

This happens due to →

- 1) inability to harness productivity growth and R&D as basis for growth above \$12000 level.
- 2) competition from nations on lower labour costs that threaten your economic position

This is a serious threat ~~of~~ to India which can lead to the end of the Indian growth story. The main social - economic causes of this trap are seen also in South Africa or Brazil →

- ① High inequality in society - this leads to only a very small pool of consumers in society. In India the top 10% own 73% of assets
- ② Productivity stagnation - due to bad education and healthcare in the population which cannot propel R & D
- ③ Redistribution - seen as non-productive expenditure that does not invest in the economy but is merely recurrent expenditure.

This is seen in India as well with 25% of all expenditures (6% of GDP) on social sector subsidies while education has (2.7% of GDP) and health (1.4% of GDP)

SOLUTIONS

- 1) Massive education reform and public expenditure on schooling/vocational level
- 2) Healthcare at primary level, not like curative/tertiary care. Disease control
- 3) Subsidies to be shifted into investment expenditure with targeted subsidies to 30% of population (Shanta Kumar Committee - 40% of population)
- 4) Deregulation of economy - banks to be allowed efficient lending and efficient business without govt. distortions of PSUs.

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 cascading of interest rate changes.

Recently, the RBI has been reducing the repo rates but transmission has been weak with lending rates still remaining high.

IMPORTANCE →

- 1) effective management of economy:
as monetary policy is the linchpin to controlling inflation, employment and growth.
- 2) Pro-cyclical / Anti-cyclical role:
as per the economy states the RBI undertakes the policy stance required.

PROBLEMS in effective transmission

- 1) High NPAs - leading to banks using lower repo rates to increase provisioning for bad loans.
- 2) Liquidity squeeze - due to PCA and business environment most banks have limited customers/ therefore lower rates would impact profitability & endanger banks.
- 3) Low credit growth - lower rates help only in an environment of financial lending / growth. Due to current state there is no spirit for investing currently.

RBI has attempted to rectify this problem by →

① linking lending rates to external benchmarks — such as repo rates or Treasury bonds (G-Secs).

However, few banks have done this as of now.

② OMO → Open Market Operations to induct more liquidity in the market which has impacted NBFCs and is now hurting demand in the economy — such as auto sales based on NBFC loans.

The ~~curr~~ current atmosphere requires RBI to reduce interest rates further as inflation is under control & growth has fallen dramatically.

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 faces a bias in India with most irrigation facilities going to other areas such as Punjab, Uttar Pradesh rather than ^{West} Bengal or Odhisa / South India.

Constraints

- 1) Rain dependency / fluctuation
- 2) Drought - prone : such as Vidarbha or Tumkur in Karnataka
- 3) Variable yields : depending on the rain, pests and climate
- 4) Unpredictability in income : leading to loans and indebtedness

However within these limitations many steps can be taken as India has practised rainfed agriculture for thousands of years.

AGRONOMIC PRACTISES :

- 1) Traditional knowledge such as local varieties suited to specific climate
 → rather than HYV seeds
 → local crops suited to conditions rather than sugarcane or other cash crops.
 → multi-cropping
- 2) Water ~~management~~ management
 → local check dams
 → Rain water harvesting structures
 → drip irrigation / sprinklers to reduce water use & increase water efficiency from 38% to 60% (NITI Aayog, 3 Year Action Agenda)

3) Agro-ecology - this involves practises agriculture in conjunction with other activities such as:

- livestock rearing
- silviculture
- agroforestry - teak, sal, etc.
- biofuels such as jatropha which grow in arid conditions.
- dairy farming

These all increase income and increase agricultural production and economy.

Earlier practises must be revisited and improved upon such as Palakkad Underwater farming or System of Rice Intensification.

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?

The Urea sector in India is essential to ensuring food security and preventing hunger among the people. It is crucial to increasing farm yields since the Green Revolution.

However, problems still persist in the sector due to deep-seated issues :

- 1) Financial Viability → pending dues of ₹42,000 crore from the government
- 2) Import dependence → for rock phosphate and other materials for creating chemical fertilisers.

Government Measures :

- 1) Preventing leakage - which was a major issue earlier but has been solved with neem coating
- 2) expansion of production - with a huge capacity program to expand the Green Revolution to East India in West Bengal, Odhisa and Bihar.
- 3) Rising budgets - provision of almost ₹80,000 crore for the fertiliser subsidy in 2019 budget.

However, there will have to be reforms to address the deeper problems of the urea sector →

- 1) Shift to Zero Based Natural Farming (ZBNF) to prevent rising toxicity in food chain.

- 2) Direct Benefit Transfer (DBT)
to resolve the challenge of pending
dues and give choice to farmers.
- 3) Import substitution - which will be
achieved with the construction of
new plants in the next 2-3 years.

With these reforms there will be a
movement towards safer farming
and income rise of farmers to
unleash the Green Revolution in
East India and other regions, which
will lead to food security and
availability, as well as enabling
the doubling of farmers income
(Dalwai committee)

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 संभारणीय 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।

ABS (Access and Benefit Sharing) is one of the foundational principles of the Nagoya Protocol and the Biodiversity Act, 2002 (BDA).

It refers to the use of traditional knowledge by sharing the benefits and profits with local communities.

It is relevant to sustainable use of biodiversity as it creates a value for traditional knowledge by granting it Intellectual Property recognition.

→ This encourages private sector to

① engage in local communities and not engage in reckless exploitation.

- ↳ This also encourages traditional
(2) communities to preserve their
knowledge as a source of livelihood.

ABS Monitoring :

④ BDA mandates a 3-tier structure
with →

- 1) National Biodiversity Authority
with responsibility for supervision and
liaison.
- 2) State Biodiversity Boards to
engage with lower tiers and regulate
biodiversity management & ABS
agreements
- 3) Local Biodiversity Boards to
compile register of traditional
knowledge, have agreements for ABS
and represent communities.

This elaborate structure is also complemented by the Nagoya Protocol and international laws that prohibit ~~biodiversity~~ exploitation of traditional knowledge without benefit sharing.

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, इसमें संबंधित चुनौतियों की चर्चा कीजिए। इसे विकास प्रतिमान की मुख्यधारा में लाने हेतु कुछ उपाय सुझाइयें।

The Hyogo Framework (2005-2015) and the Sendai Framework (2015-30) both emphasise on the need for achieving disaster resilience of infrastructure with →

1) Retrofitting of essential infrastructure such as buildings of national importance or utilities

2) Build - Back - Better principle under which post disaster reconstruction should utilise available standards of resilience →

eg: EoSambhita in code for building resilient infrastructure.

Challenges

- 1) Cost → as disaster resilience increases costs by 10% to 20%.
- 2) Capacity → as skilled infrastructure has not been mainstreamed
- 3) Awareness → in the general public to demand resilient infrastructure
↳ urban flooding requires new standards for public construction

However, these challenges can be addressed. National Disaster Management Authority (NDMA) has outlined guidelines for specific disaster events and structural measures to prepare for each. In conjunction with National Disaster Management Plan, 2016 it seeks to →

~~mainstream~~ mainstream it into the
development paradigm →

- 1) Eco-Niwas Samhita - National
building code with suitable measures
Such as Rain Water Harvesting,
recyclable materials.
- 2) Zoning requirements to be followed
by all with penalties for architect
and builder concerned.
- 3) Capacity building - incorporating
within skilling and education of all
levels of workers in construction
industry / architects / engineers.

A comprehensive movement towards
using infrastructure to adapt to
disasters will reduce fatalities and
economic losses from disasters.

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।

There has been significant debate recently on data localisation in India. Government agencies have also been a part of this debate with some recent measures :

- 1) RBI → data localisation of payment data
- 2) Commerce Ministry → draft e-commerce rules ~~rules~~
- 3) ~~draft~~ Draft → data localisation by all intermediaries, keeping a local copy
Privacy Bill
(Srikrishna Committee).

There has been opposition to this from MNC social media firms citing →

- 1) High costs - due to data duplication
- 2) Free flow of information - principle of the internet

However, it is significant that India has taken this move ~~due to~~ →

- 1) Law enforcement → cumbersome requests ~~under~~ MLATs (mutual legal assistance treaties)
- 2) Data Sovereignty → principle of China and Russia in which data is the new oil which gives value by processing abroad in other countries but not India
- 3) Privacy → India had no authority over MNC firms, ~~so~~ that could only be done through legislation. eg: EU has GDPR which protects its citizens.

While there are challenges to data localisation, these are not unsurmountable

It is being opposed because it would :

- 1) Reduce profits of Snapchat, FB, Google, etc. by opening duplicate servers here in India.
- 2) Increase oversight by the proposed Data Protection Agency (DPA) over their activities.

Indian firms such as Paytm and Ola support data localisation as they feel Indian govt. should support domestic firms like the Chinese state →

- 1) support domestic eco-system
- 2) create digital titans
- 3) protect Digital Sovereignty

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 financial flows outside the banking system that are often earned through illegal activities.

Anti-Money Laundering (AML) measures are taken especially in developing countries but also in EU and US because of its menace to society →

- 1) Funds anti-social elements like drug dealers, organised crime and terrorists.
- 2) Tax evasion and opportunity cost to the poor / vulnerable in society
- 3) Inflation as it leads to higher prices

There are many ways in which money laundering is carried out →

- 1) through cash
- 2) ~~AR~~ ARS (Alternative Remittance System like Hawala)
- 3) Cyber currencies (such as Bitcoin)

Developing countries are especially hard hit as its sourced from usually corruption and it flows to Safe-havens such as Switzerland or the Cayman Islands. The whole mechanism was uncovered in the Mossack Fonseca Papers which showed the flow of capital from developing nations to developed nations due to corruption by local elites.

Measures

↳ Domestic legislation/Regulations

- 1) KYC norms - for banks
- 2) PMLA (Prevention of Money Laundering Act)
- 3) FEMA (Foreign Exchange Management Act)
- 4) Benami Transactions Act, 2015

These have been supplemented at the international level by →

- 1) Resolution 1373 (to combat money laundering & financing of terrorism)
- 2) Resolution 1267 committee (to sanction economic assets / flows of terrorist individuals)
- 3) Convention for the Suppression of Financing of Terrorism, 1999
- 4) UN Convention Against Corruption, 2003

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 refers to the use of terror and violence to change policies of government. It has two features →

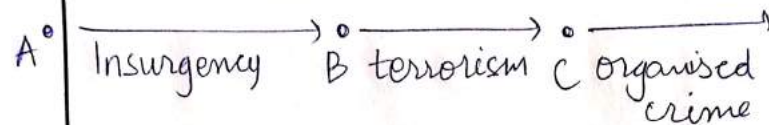
- 1) use of fear of striking anywhere
- 2) use against non-combatants like civilians, women and children.

Therefore it is generally motivated by ideology / religion to achieve some goals by changing government positions due to public pressure.

→ Organised crime has only the motive of gaining profit from illegal activities. This is usually done by collusion with certain actors such as terrorists, police, state officials.

Therefore while organised crime is essentially value-neutral, it can engage with all actors / Organisations.

↳ SYMBIOTIC RELATIONSHIP



- ① there is a tendency among insurgencies to degrade to terrorism when they lose public support.

example → Taliban attacks due to public disillusion with the movements.

Terrorism requires only some limited people while insurgency is the expression of the people against the State.

- ② Terrorism often later degrades into organised crime as time passes &

motivation falls among the members

eg : North East is full of such groups

such as NSCN (IM) or ULFA

which are essentially drug syndicates
now rather than insurgencies or
terrorists.

eg: Taliban has also shifted from
prohibition of drugs to cultivation
of opium.

The symbiosis is sometimes seen among
different ~~are~~ groups such as Myanmar
where Shan State / Kachin Independence
Army permit drug cultivation by
criminal groups while remaining
committed to insurgency.

↳ Thus, while there is a relationship between
terrorists and organised crime it can
often be nebulous to critically
draw boundaries on its nature.