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GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	ANSHUMAN RAJ		
Medium Eng./Hindi	English	Registration Number	22419
Center	Online	Date	30-Jul-19

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). उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)। 2. There are TWENTY questions printed in ENGLISH & HINDI. इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं। 3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं। 4. The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं। 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. 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। 6. Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए। 7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off. उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।
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Total Marks Obtained:			
Remarks:			

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EVALUATION INDICATORS

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

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Discuss the need of an Independent Fiscal Council (IFC) in bringing about transparency and accountability in fiscal processes in India. (150 words) 10

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

The concept of an Independent Fiscal Council (IFC) deals with the idea that policies of government should be based more on 'National Interest' rather than 'Political Interest' and should be entrusted to 'Independent' Council.

Need of IFC in bring ART —

(i) Policy stability — Frequent rate change hamper's EODB —
— FDZ is impacted as seen in provision of GAAR, retrospective taxation.

(ii) Realistic Goal Setting — Fiscal targets often overshoots budget prediction and tax collections remains low. bring uncertainty & Poor 'markmanship'

(iii) Populism will be curtailed -

- Frequent loan waivers, uneconomic decisions, proliferation of schemes without sun-set clause can be stopped.

(iv) Alignment with long term

'Economic goals' rather than short term

'Political goals'

- Economic survey 2018-19 highlighted need to bring 'voluntary' restrictions by policy makers on some line.

way forward - Populist ministers being elected by people will not doubt continue to have more

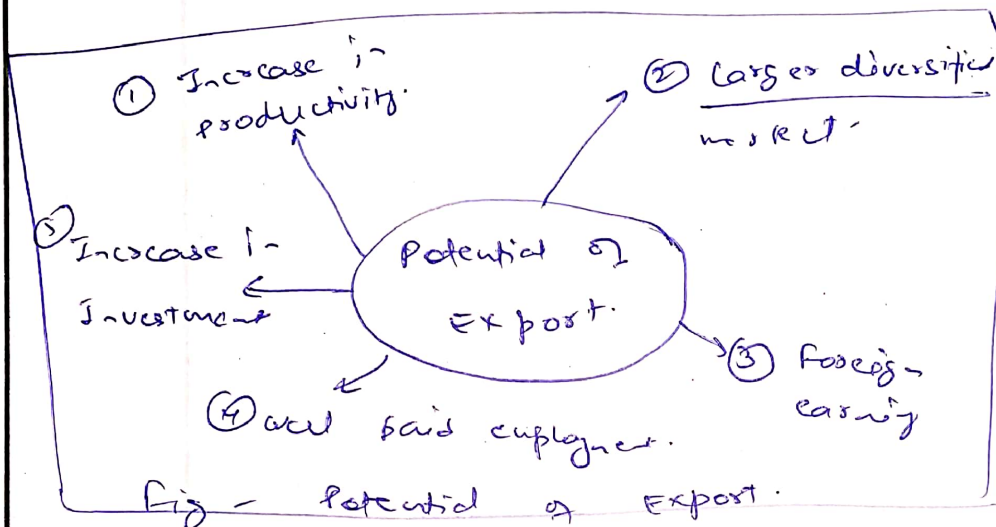
say as they represent 'will of people'

- However given complex & changing 'fiscal space' and global interconnectivity an independent 'IFC' will go long way in handling 'modern' challenges

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।

A 2 Global export in merchandise is expected to be a 16.7 trillion dollars, thus presenting a huge potential.



Steps need to be taken are —

- (i) Skilling people with industry specific demand
- (ii) Promote Champion Sector
- (iii) NITZ Aayog and recommended to focus upon —



Leather, apparel, textile and
other labour intensive sectors which
give more 'Bay for Bucks' in
form of employment.

(iv) Economic Survey 2017-18 highlighted
need for comprehensive trade deals
with (a) EU (b) South east
Asian countries (RCEP) and
middle eastern countries.

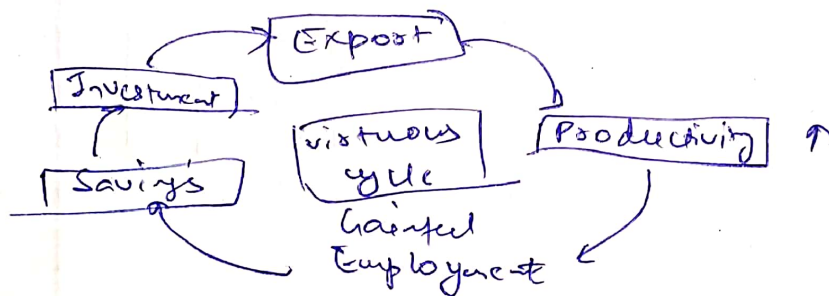
(v) Boost and move up value chain
to provide 'high end' products

rather than primary products.

(vi) Boost logistic, Infrastructure & Tax Compliance
Export thus creates a

~~or~~ 'Virtuous cycle' boosting employment

Above mentioned steps will help realise it.



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।

Niti Aayog India @ 75 highlights

poor mineral exploration with only

10% of obvious Geological potentials (OGP)
being explored & 15% mined.

National mineral policy 2019 aims
to utilise 'national wealth' in
minerals in sustainable & responsible way -

main features of Policy are —

- (i) Boost to exploration - Simplified
procedures for getting clearances for
exploration
— Proposes unified single-window
clearance department in each state
— 'Digitalisation' to bring transparency

(ii) Sustainability by encouraging
environmental concerns through
better 'EIA' (environment impact
assessment) & 'SIA' (social impact)

(iii) Licensing regulations have been
simplified for exploration in
nearby fields

(iv) Aims to introduce 'low-banks'
for better acquisition.

(v) Accountability of miners by 'geo-
tagging' and use of technology
to check 'illegal mining' & environment
degradation.

National mineral policy 2017,
aims to reduce huge 3,70,000 crore
mineral imports in 'New India'
through simplified procedures bringing
much needed transparency.

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 'JaiVik Indhan' (Biofuel)

promotive scheme 'JI-VAN' aims

to increase use of bio-friendly fuel.

Salient features —

(i) Focus on increasing 2nd Generation Bio-fuel.

— Subsidies & support for 'ethanol' makers.

(ii) Allowed use of sugarcane to produce bio-fuel.

(iii) Target of 10% mixing of biofuels.

(iv) Reduced export restriction to boost industry.

National Policy on Biofuels

2018, aimed to achieve following goals —

- (a) incr. mixing of Bio-fuels
- (b) Reduce Crude oil import
- (c) Boost to farmer's profit & industry.

How it help achieve policy —

- (i) Removing restrictions on 'food based Biofuel' will increase production & 'check' wastage as well as price glut.
- (ii) Boost to 'make-in-india'
- (iv) Saving of foreign reserves.
- (v) Better price realisation for farmers.
- (vi) Industry will get more fuel for mixing.
- Way Forward — 'PM-JI-VAN' should be augmented through robust 'R&D' and learning from international best practices for eg Brazil to achieve policy goals.

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 'farming process' which aims to use 'natural resources' for sustainable agricultural practices. Now it provides an alternative to capital & chemical intensive agri.

(i) Jeevamrit - use of 'indigenous' earthworms, fungi to boost aeration, moisture & carbon retention.

- Bio-manure is used.
- It will reduce use of 'Urea' and inline with 'Urea Policy' for reduction.

(ii) Zero Budget - Since all ingredients are natural it aims to have 'zero' input cost.

- estimates suggest $\downarrow$ 'Desi Cow'
with dung & urine can cater
'30-Acres' of land sustainably

(iv) water catchment - Through rainwater
harvesting in Ponds reduced input.
- Irrigation accounts for 70% of input

(v) 'Beejamrit' - Seeds are naturally
processed in 'Panchgavya'
- reduce reliance on 'Hybrid' costly
seeds.

Limitations - Many studies found
reduced yield after few years.
Given national food security needs
we need to have a diversified
Agri-practices.

Overall '2BNF' with concept
of 'Back to Basics' yield high
potential of 'income augmentation' and
recent budgetary proposals is right step.

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।

UN report suggest that by 2050
there will be more plastic
in oceans than 'fish' highlighting
grave implications.

Implication on marine ecosystem.

(i) plastics are non-biodegradable
and remain for 1000's of years
- micro plastic gets stuck in gut
killing life in sea.

(ii) Diversity of marine life specially

small fishes gets impacted.
- Fishing nets, micro-plastic all
becomes a killing agent.

(iii) Livelihood - Reduced fishing

impacts livelihood of poor fishermen
measures to address

(i) Reduce - Generation of plastic waste every minute 1 million plastic bottle & Carry bags are used across globe. A simple 'Thomas' and Carry bag can reduce it

(ii) Hotspots - 90% of marine litter comes from rivers in South Asia.
- global efforts to check it.

(iii) Extended producer responsibility.

(iv) Global awareness. R&D for plastic alternatives

way forward - many EU nations pledged to remove plastic in next 5 years by alternatives. 23 India's states also

banned plastic. need is to have comprehensive 'PPP' for Nature in line with SDG 14.
People ↙ Private Partnership ↘

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 'air pollution'

~~are~~ 'Standards' which fix limits

to the source from exhaust.

Evolution ..

(i) India followed on European union's practices through Euro norms.

(ii) A series of SC judgements in 1990's due to grave pollution in 'Delhi' led to introduction of BS-I on line of Euro-I.

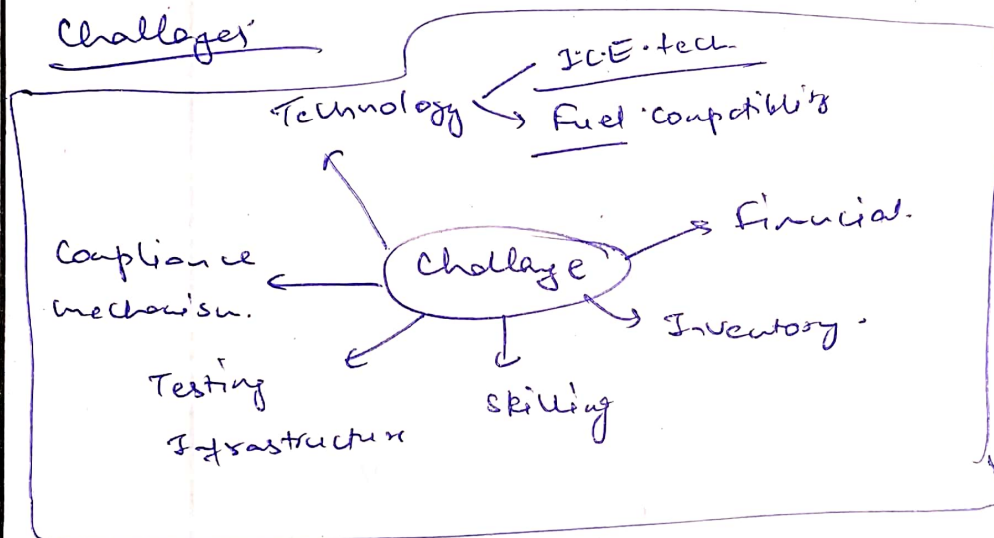
(iii) Over time it was upgraded to BS-II, BS-III, BS-IV.

(iv) A Supreme Court judgement in 2016 again led government to skip

Phase IV to BS-VI from 2020.
significance

- (i) Environmental — 14 of 15 worst
air polluted cities in India.
- (ii) Economical — transition will require
50-60,000 crores in Automobile industry.
— Refineries have to be collimated.
- (iii) Social — Poor are most vulnerable
as they lack healthcare. Benefiting to them

Challenges



India will catch up with
world by introducing nationwide BS VI
norms. challenges should be seen as
opportunities to shift to cleaner
Sustainable future.

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 remnants of
dead stars (above Chandrasekhar limit)
with 'tremendous' gravitational
force and extremely small size.

Challenges in imaging a black hole -

(i) Extremely difficult to observe -

- Their gravity is so high that not even light can escape.
- Hence they are not visible.

(ii) Location of nearest Black hole
is very far away.

(iii) Requires secondary tell-tale
signals to image.

How these challenges were overcome -

(i) 'Event Horizon' was used to
capture 'anti-particles'.

- Acc- to theory by 'Stephen-Hawking'

these 'horizons' are key to
understanding black hole.

(ii) Data Collected by various
Powerful Telescope over 10 years
on secondary characteristics amounting
to million TB was processed
in super computer

(iii) A Superimposition of all data
created image of black hole.

Image location of Black hole was one of
most significant developments in recent
science. They not only demonstrate
advance capabilities but will help
us know more about origin of
universe in future.

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 was a multilateral agreement which aims to regulate global arms trade.

Objectives	Challenges
(i) Reducing Arms trade specially to vulnerable nations undergoing 'Civil war' or are sanctioned. - Role of security Council or other enforcing agencies not defined, because of its voluntary nature.	- many countries do not comply with treaty since it lack <u>enforcing mechanism</u> - Nations use these countries as proxy. - For eg <u>china providing arms & technology</u> to North Korea & Russia to Syria.

Objectives	Constraints
(1) Global Peace - Stop Terrorism - Stop Genocide	(i) No consensus on Terrorism. - ' <u>National Interest</u> ' often triumphs ' <u>International Order</u> ' and concerns (ii) Superpower rivalries also complicates issues as ' <u>New Cold War</u> ' is simmering.

ATT aimed to bring 'UN Charter's' objective of 'Peace' and democracy. While its aims were noble a number of constraints plague its implementation which needs to be resolved.

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।

India suffers from both internal & external security threats which may be exacerbated through various networks.

A. Communication Networks -

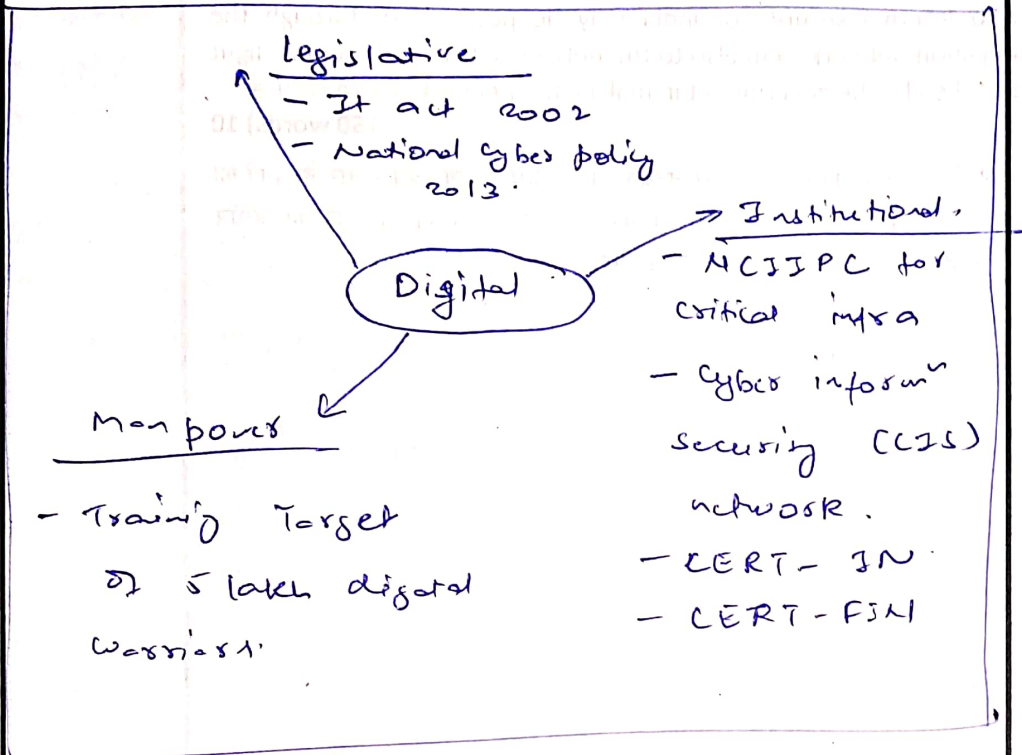
- (i) Digital network such as social media for radicalisation (eg ISIS)
- (ii) For money laundering through digital currencies, cryptocurrencies.

B. Other Networks

- (i) Flowed Channels for Terrorism, Radicalism & black money.
- (ii) organised crimes network.

Steps taken by Government -

A.) To strengthen 'digital Networks'



B. For securing other networks.

(i) Legal — PMLA act, FEMA regulations and various sections of IPC on terror financing.

(ii) KYC norms in banks

(a) Ban on crypto currencies

evolving threat requires a concerted effort in multipronged manner i. continuous review & interagency co-operation to neutralise it.

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's ambitious NDC aims to

have 175 GW renewables by 2022

and 40% by 2030. Solar, wind,

Small Hydro will form a major chunk

'Variable nature of Renewable Energy'

(VRE) highlights need for integration

Importance

(A) Economic

(i) Energy extraction from surplus

state & better price realisation

(ii) compensate cyclic fluctuation - Renewable

energy suffers from cyclic fluctuation

due to sun, wind intensity

(iii) Create incentives for producers

through large 'integrated market'

(iv) Promote 'Electric vehicles'

(B) Social importance -

(i) India aims to have 'Electricity for all' by 2022-23. Surplus energy needs to be diverted.

(ii) Energy access key to Poverty alleviation.

(C) Ecological importance.

(i) Fulfill 'Paris Commitments'

(ii) Fight climate change.
Challenges related to URE integration.

(i) Financial - Grid connectivity will require over 1 Trillion USD investment

(ii) Creation of 'Storage' infrastructure requires technology which India is lacking.

(iii) Inter-State issues regarding ownership.

Steps that can be taken are

(i) 'Framework' to maximise

Efficiency by taking stock $\Rightarrow$ existing
infrastructure should be created.

(ii) Focus on small projects to
check feasibility.

- For eg 'Germany' has introduced
municipal level integration which
not only provides excess income
but also ~~idea~~ creates infrastructure
in silos over time.

(iii) International co-operation.

(iv) Tapping 'Green Bond' market
for finances

Way Forward - 'One Nation One green

Grid' will give boost to energy
ecological security. Programmes like
'KUSUM' should be integrated with
it over time. At present focus should
be on 'developing capabilities' in construction
& international co-operation.

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?

Economic Survey '2017-18' highlights
danger → India falling into
middle income trap like many
developing countries

Middle income Trap & Reason

① Poor countries having cheap 'labours'



② 'cheap', 'Competitive' 'Low skilled'
manufacturing, eg - Textile, leather etc.



③ Exports boost employment, & brings
income increase



④ Low High wage demand



⑤ Some other poor country because

of low wages replaces country
↓

(b) In high end products 'monopoly'

of 'developed country' hence the
company can not shift to that class
resulting to 'middle income trap'.

How India can avoid it —

(i) while continuing to produce
labour intensive products India
should use its huge 'demographics'

— 'Skill' a part of labour in
'modern' industry requirements.

(ii) India should over time
increase its 'productivity' to
remain competitive in low-end
manufacturing while at the same

line 'invest' in high end products

- For eg 'IT goods', high end
cars, ships etc.

(iii) 'moving up production Ladder'

will help India avoid sea trade
way forward.

(i) Skillig missions such as

- DDU - GKY.

- Skill - India should have

two focus (a) Becoming 'Labour
capital of world' (b) Industry relevant
skillig.

(ii) EODB & better policy to
bring FDI & Technology to shift
whole 'High end value chain' to
India.

(iii) International attempt at WTO for
'IPR' transfer's & equity.

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।

RBI has continuously displayed its
dismay over poor monetary policy
transmission (MPT) by banks.

Importance -

(i) Consumers fail to get benefits
of reduced rates by RBI.
- Banks fail to transmit it.

(ii) Inflation targeting efforts become
meaningless if banks does not
transmit it.

(iii) Economic growth depends on
loans.
- despite rate cut non-transmission
will reduce competitiveness of
industry & reduced consumption.

(iv) major issues plaguing it -

(i) large NPA's of banks (~9.3%)

(ii) Competition with 'small-savings'

schemes - Since interest rates are fixed at high rates banks find it difficult to cut beyond certain rates.

(iii) Over reliance of banks on govt securities.
In foreign banks portfolio is diversified through investment in market.

- It reduces profitability of banks.

(iii) Lack of 'competition' and almost 'monopolistic' scale of banks -
limited number of banks reduces choices of people.

Steps taken by RBI —

(1) RBI introduced a framework of mandatory transmission pro-
cess April 2019. At present it is
delayed.

(ii) Reduced CRR & SLR requirements

(iii) Budget by RBI.

(iv) Introduction of 'Base Rate'

concept to improve banks profit &
increase transparency & accountability.

(v) 'PCA' framework to improve
'NPA' issue.

Way Forward - Lower interest rate will

help India achieve targets of

5 trillion dollar economy & increase
investment. 'MPT' is key to this.

Implementation - → mandatory transmission
should be introduced at earliest.

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 provides 85%.

Pulses, 50% cereals and employs

close to 60% of agri families.

Constraints faced —

(i) Variability of climate - monsoon

dependence leads to poor income

trap, suicides cycle & drudgery.

(ii) Poor production - Rainfed

area produces 4 times less Cereal

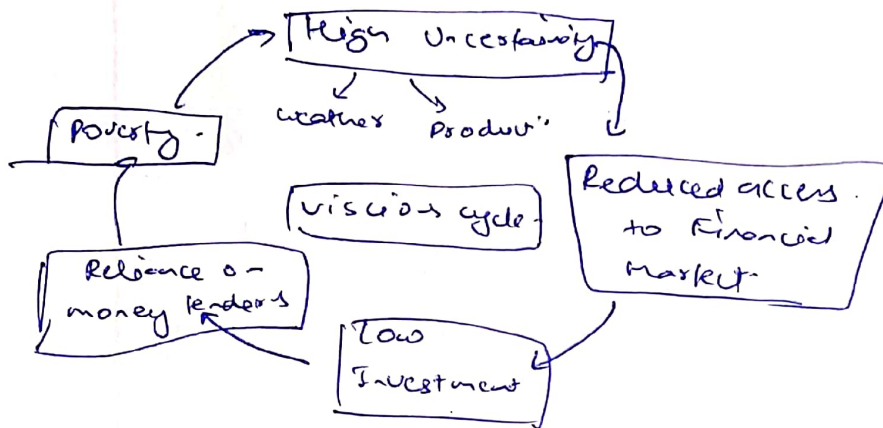
per hectare than irrigated according

to 2012 survey.

(iii) Green revolution failed to reach them.

- Poor infrastructure development.

(iv) Economic constraints - Perpetuates vicious cycle.



Agronomical practices that can be adopted -

(i) Micro irrigation techniques

- Ponds with help of MGNREGS can be used to store water.
- drip - irrigation, fertigation can increase productivity.

(ii) Mixed farming including multiple rows of crops and

(iii) Crop insurance

(iv) DBT to incentivise investment

(v) Livestock rearing

(vi) Agriculture to be supplemented

With allied activities such as
Bee-keeping, Inland Fisheries etc.

- 'National Horticulture' and
'Livestock mission' both promotes

it

(vii) Concept of 'Evergreen Revolution'

as suggested by Dr 'Swarinath'

to bring sustainable 'Green revolution'

2.6

(viii) Focus on climate resilient Cereals

(ix) Use of Bio-tech for less water
consuming drought / Flood resilient crops.

Rainfed agriculture holds
key to India's quest to feed
future population & 'Nutrition security'
for 1.5 billion people (2050). Various
techniques suited for different areas should
be explored.

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 alone accounts for
57,000 crore ₹ subsidised out of
total 75,000 crs. Despite a number
of steps taken by govt viz —

(i) Neem Coated Urea to reduce
diversion.

(ii) 'Nutrient Based Subsidy' for non-urea
fertilisers to bring rationalisation.

(iii) 'Gas price' rationalisation, to provide
level playing field to all manufacturers.

A number of problems
continue to persist in urea sector —

(i) Inefficient production - Subsidies

at present are based on
production which does not
take in account efficiencies.

- Incentivised waste & inefficiency.

(ii) Over reliance on expensive

'Kaphan' than cheap 'Gai'.

(iii) Poor farmers despite 85%.

have only (28%) access, rich farmers
(25%) while rest is consumed via
black market.

(iv) Regional imbalances & corruption.

(v) Liberalisation of imports leads
to monopoly.

Reforms to be taken —

(i) Introduce Use in 'nutrient
based subsidy regime.

(ii) Shanta Kumar Committee recommended
to remove all subsidies on
Fertilizers and introduce targeted
'DBT'.

(iii) A Parliamentary Committee report on
& 'Fertilizers & Pesticide' suggested —
— Decentralisation
— Increasing production by 'de-linking'

(iv) 'Soil Health Card' (SHC) needs
to be fast tracked to achieve
national policy for crop demand
reduction

(v) Foreign production, for eg in Iran to take
Fertilizer subsidy has helped economic advantage

India achieve food security in part.
However at present it is ^{mostly} wasteful
and needs rationalisation. recommendations
of Shanta Kumar in this regards
needs to be followed up.

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 संश्लेषणीय 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।

Nagoya protocol of Convention on Biodiversity (CBD) introduced concept of Access and Benefit sharing.

It proposes a framework that use of indigenous techniques. Traditional knowledge or products which bring economic benefits should be shared with host country & local population.

It aids in sustainable use of biodiversity

(i) Promotes 'Conservation' and 'sustainable' management of resources

by local population..

- Since they will get economic benefit out of it they will be more conscious in protection.

(ii) 'Bio-Technological Colonization' can

be checked as large companies misuse

IPR denying local benefits to locals.

- For eg an US company patented turmeric & neem oil.

(iii) More knowledge about benefits of

'bio-diversity' will translate into

better policies.

Different Global mechanisms

(i) Convention on Biodiversity and its Nagoya protocol.

(ii) Conference of Parties COP's of CBD.

National laws & mechanism.

(i) Conservation of Biodiversity act
- India has mechanism of
benefit sharing.

(ii) TKDL - Tradition knowledge

digital library. A collection of
local knowledge.

- It also fights for patent violation
and denial of benefits to locals.

- For eg. currently fighting against

'TEXAMATI' a copy of 'BASMATI'

Access and benefit sharing

aims to give local population its
due, while at the same time
promoting bio-diversity conservation. There
is a need for better conflict
resolution & international co-ordination.

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

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

India is amongst most vulnerable regions in world owing to its geographic location and socio-economic profile. In this regard significance of resilience of infrastructure becomes important as _____

(1) Economic significance

(a) Disaster takes away gains of development. For eg in Nepal people still living in tents.

(b) disrupts economic production & other activities.

(2) Social significance.

(i) Poor resilience impact marginalised

Sections most

- For eg women's have to go longer
to fetch water, care for family
members.

(11) Inequality only increases.

(3.) Humanitarian significance.

(i) quick relief, rescue and
rehabilitation

Challenges

(i) Financial - Requires high investment in
Pipelines, roads, grids (gas) etc.

(ii) Political challenges - of decision
making, since opportunity cost is
involved in diverting funds.
- Lack of consensus.

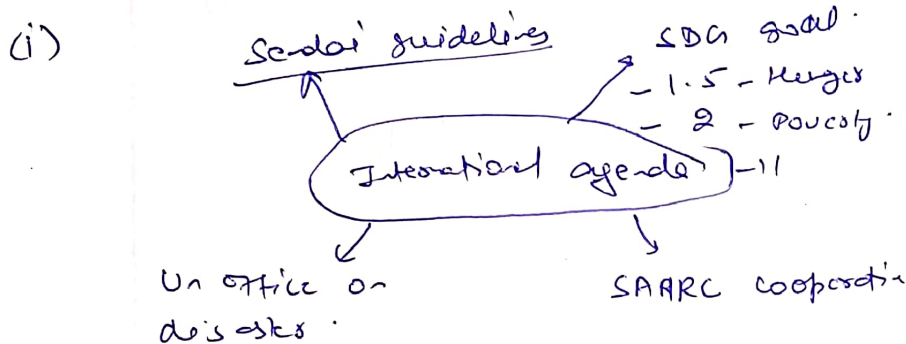
(iii) Infrastructure & Technological challenges

- Lack of Technology, too of disaster
resilience 'building codes' which are

area specific and not generic

- Pre cast materials
- Lack of technology in working infrastructure.

Suggestions to mainstream it.



These should be followed in spirit.

(ii) New NDMA act to align with SDG goals

(iii) Introduce local participation & PRZ's in spirit of 'national disaster policy

2016'. Use 'RUTAG' (RIS) and 'Atal innovation challenge' for new ideas.

(iv) Factor climate change in future down

Climate change is going to increase disaster in future. Resilience will reduce economic & human loss.

Guidelines under international treaties & national policies needs to be implemented.

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।

'Sri Krishna Committee' recently
in 'draft data policy' suggested
Data localisation, i.e. storing all
data created in country in
local servers.

Significance

(A.) Economic significance -

(a) Data is new oil. NITI Aayog

suggested that indians will generate

17 mb/sec data by 2020.

Since it is difficult that India
will have any advantage in

technology, data mining can be

great revenue generator.

(b) Prevent Data Colonization -

- Future IR 4.0 will run on data.

(B.) Legal significance

i) crime & criminal investigation -
- specially digital fraud, cyber security
fraud.

(ii) necessity & due care to rely on
Cooperation eg through CLOUD act & use

(C) Constitutional Significance - state co-operation

Right to Privacy (Art 21) Only if it
has control over it.

Various challenges -

(i) International nature of Data

- since most ^{companies &} servers located in west,
creating new services may be
against national law.

- Resistance by west, they want more
liberalisation, through e-commerce sales

(ii) Investment - huge investment is
required in setting servers, coding

infrastructure.

- Power requirement will be huge.

(iii) Environmental - Cooler countries are naturally suited for servers.

- Storage infra may increase further with economies of scale.

(iv) Lack of legal framework for 'Data Security', 'Privacy' and 'International Co-operation'.

Way forward - Data localisation.

is essential for India to emerge as 'data sovereign'. It will boost 'make in India', Industry 4.0 and Artificial intelligence network.

However government must begin with proper framework & laws before pushing companies for localisation, while engaging with governments to reform global

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 processes whereby illegally gotten money is converted to show as legitimate one. money laundering as —

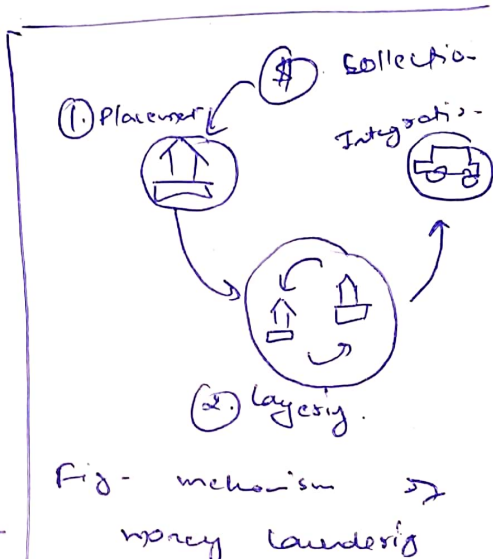
(A.) Social menace

(i) organised crimes
& Terrorism fuelled.

(ii) Increases inequality.

(iii) Immoral reward
to criminals causing crises in

social contract



(B.) Economic menace

(i) Black money & corruption is fuelled.

(ii) Loss to exchequer on tax.

(iii) Perpetuates cycle of poverty, corruption, and crime.

(C.) Overall Impact

(i) violence in society.

(ii) Reduced money for infrastructure

(iii) Fuels Drugs, Human trafficking, smuggling and crime.

Various steps taken —

(A.) At domestic level —

(i) Legal steps —

(a) PMLA act — Prevention of

money laundering act to check

such acts and various amendments

— Economic offender's act.

(b) Financial Exchange Regulator act (FERA)

(c) FIU — Financial Intelligence unit.

(d) Benami property act.

(ii) Non Institutional steps —

(a) RBZ guidelines on KYC —

(b) Banning of Hawala, cryptocurrencies

(c) PAN Card requirement above 50,000 Rs deposit & gold purchases

(d) 'DTAA' with countries are revised.

measures at international level.

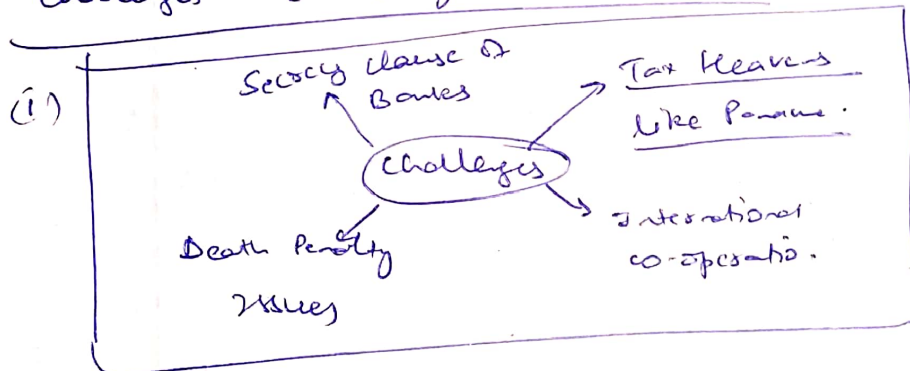
(i) Financial action Task Force (FATF)
by OECD guidelines

(ii) UN office on Drugs and Trafficking
monitors same.

(iii) 'Interpol' for international cooperation.

(iv) Bilateral treaties between nations

Challenges & way forward.



(ii) money laundering destabilises a country in long term. Financial interdependence demands international co-operation. Global consensus should evolve to fight it.

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 and organised crimes
both undermines legitimacy of
'State' & committed violence but
there primary motive differs.

motive	organised crime	Terrorism
1.) Political Power	- works in shadow. No aim of capturing Political power.	- aims to capture Political power, completely or partially.
2.) <u>Economic Aims</u>	- Primary aim is economic gains. - organised structure to achieve the same.	- Economic aims are not a concern. - money needed only to finance operation.

3.) Security & violence.	- violence is often not deliberative but in way of making money.	- Deliberate violence to attain some political gain.
4.) media	- avoids media. - Prefers to work undercover.	- Aims to capture as much media attention as possible.

Despite these differences
there exists a symbiotic relationship
between two in —————

(A.) Economic interdependence.

(i) - Terrorist channels are provided
arms, money in local area through
organised crime network.

- For eg during 'Mumbai blasts 1993'
Dawood Ibrahim provided bombs.

(ii) Terrorists provides 'Drugs',

Smugglers & indulge in trafficking
through organised crime networks
- Seen in J&K and Punjab
where drugs are going in to
finance local operations.

(B.) Security Interdependence - often
both join hands to fight common
threat against state.

Need of the Hour -

There is a need to identify
the interconnectivity to form
'integrated laws & policy'. Institutions
must also evolve to see deeper
relationship between two for
effective response. Forming 'Economic
wings' in security agencies like
'AWA' is a good step in this
regard.