



GENERAL STUDIES (TEST CODE : 1244)

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Medium Eng./Hindi	ENG	Registration Number	627140
Center	ORN	Date	05/09/2019

INDEX TABLE

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

Total Marks Obtained:

Remarks:

INSTRUCTIONS

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

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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 15th Finance Commission chaired by NK Singh has recommended an independent fiscal council for more accountability in fiscal processes.

① Need For Fiscal Council

1.1 Present budgetary estimates are very poor and often lead to increased expenditure and low revenue thus need revision.

1.2 Creative accounting to transfer expenses to next fiscal year to artificially keep low deficit.

1.3 Borrowing from non-budgetary sources such as small saving fund.

OR disinvestment Thus leading to low
parliamentary accountability and
low deficit

1.4 Politicisation of taxes to support majority

1.5 No real parliamentary scrutiny
due to dominance of one party

② (Benefits of Fiscal Council)

2.1 Transparent method of accounting

2.2 Reliable estimates will provide
prudence to government

2.3 Multi-stakeholder approach

2.4 Experts can decide fiscal
stability and responsibility

Thus present system requires an overhaul
to ensure long term stability and
responsibility with respect to fiscal
policy.

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। विक्षेपण कीजिए।

In 2018-19 India saw Current Account deficit balloon to 2.4% of GDP from 1.8% in 2017-18 due to poor exports and more imports

① Potential of Exports to generate employment

1.1 Labour intensive industries such as textile, leather etc have seen a vacuum due to China's evolution and give jobs to women also

1.2 Export based ecosystems such as SEZs or Coastal Economic Zones have a full array of job opportunities

1.3 New avenues of standardization, quality, sanitary measures lead to new sales

1.4 logistics sector becomes relevant
and transport, storage etc create jobs

② Steps to Address Weakening Export Competitiveness

2.1 Use of technology such as AI, data analytics to increase efficiency of process

2.2 Use of efficient transport i.e. Waterways

2.3 Free Trade Agreements and low tariffs with countries

2.4 Increase Infrastructure and manufacturing competitiveness and investment

2.5 Skill development especially in new electronics etc

With reduced China influence due to trade war with USA a window of opportunity is there for India to capitalise ~~on~~ on export markets,

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 संघारणीय और उत्तरदायित्वपूर्ण खनन सुनिश्चित करने में कैसे सहायता कर सकती है।

The National Mineral Policy, 2019

Focuses on an innovative approach
for mining in a sustainable manner

① Features of Policy

1.1 Allows private participation in
scanning and locating minerals

1.2 Provides right of first refusal
to the private party to
ensure investment by private
players

1.3 Harmonized all minerals and
thus all India license required
only once.

1.4 Mandates Internal Environmental
Impact Assessment that allows
for local interests to be
ensured

1.5 Gram Sabha remuneration in
district mineral Funds, employment to
locals and rehabilitation plan have
all been discussed

Thus the policy gives special
emphasis to the local population
while underlining the responsibility
of the private mine which ensures
a holistic approach to mining

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।

The PM-JIVAN Yojana aims to increase the use of 2nd generation lignocellulosic biofuels by supporting industry to increase biofuel production.

① Features of PM-JIVAN

1.1 Allows for wood, cellulose and lignocellulose based biomass to be used for bioethanol production.

1.2 Viability Gap Funding (VGF) model to develop plants.

1.3 Mandatory procurement by the oil companies for blending purpose.

1.4 Specially created body Technology Development Center to implement

1.5 Financial support in the form of credit subsidy.

② How PM-JIVAN ~~is~~ helps to achieve goals of National Biofuel Policy, 2018

2.1 Increased biofuel production to meet 10% blending target

2.2 Focus on 2nd Generation Biofuel to ensure food security

2.3 Develop market of fuel for future export and energy security

Recently government has announced high price for livestock procurement to ensure development of industry -

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) was introduced by Subhash Palekar as a sustainable low-cost method for farming.

① What is ZBNF

Organic farming method dependent on only natural resources and is a 4 step process

1.1 Biyantra: Seed Treatment solution of Urine of cow, water and local soil

1.2 Jivamitra: Mixture of cow urine, dung, jaggery which is mixed with soil to increase microorganism (jiva)

1.3 Mulching: Covering of soil with dead plants to keep optimum Temperature and Soil Moisture

1.4 Waaphosa: Conserve Soil Moisture

② ZBNF as an alternative to conventional farming

2.1 Economic Survey 2019 has pointed out use of ZBNF vis-a-vis capital intensive farming is sustainable

2.2 It is not free or Zero Budget due to costs of low maintenance, harvesting, soggeey etc

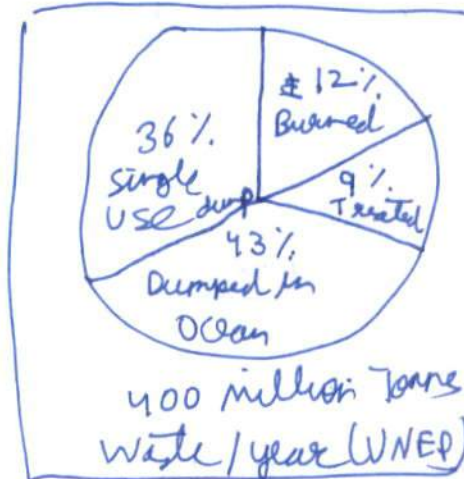
2.3 Better environmental externalities

Thus ZBNF is a viable alternative to responsible ~~and~~ farming and holds potential as a long term strategy

6. ① 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।

VNEP report on plastic pollution has said that ~70% of all plastic ends up in oceans out of 400 million tonnes ~~are~~ disposed each year



① Impact on Marine Life

1.1 Bioaccumulation of plastic in whales, sharks etc.

1.2 Non biodegradable thus fragment to make microplastic which accumulate in plankton, small fish etc

1.3 Biomagnification This cause more concentration in higher level of food chain

1.4 Found in ocean deep upto 10kms in
ocean thus destroying marine life

1.5 ⇒ Plastic gives surface for vectors of disease

1.6 leakage of plastic eg. Bisphenol A leads
to water pollution

② Measures to address issue

2.1 Disposal Mechanism should be
adjusted to reduce dumping

2.2 } UN Report gives 2 step method

① Reduced Usage
by public

② State led drive
to reuse &
recycle

2.3 NGOs such as #Ocean Cleanup show
~~power~~ power of Civil Society

Thus plastic has become the defining
geochemical artifact of human race
and may lead to demise if not controlled

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।

The Bharat stage norms are a set of vehicular standards set by the government to ensure environmentally responsible car manufacturing.

① Evolution of BS Norms

1.1 Introduced in 1995 after the Rio Earth Summit 1992

1.2 BS I, II, III were parallel copies of Euro norms

1.3 BS IV is presently in use

1.4 BS V will be skipped and directly to BS IV by 2020 to fulfill NDCs of Paris Pact

② Significance of BS VI Norms

- 2.1 Less Sulfur pollution to 10ppm from 50ppm
- 2.2 Catalytic converter prevents NO_x pollution
- 2.3 On board diagnostics for better regulation
- 2.4 Lesser PM₁₀, PM_{2.5} pollution

③ Issues in adoption of BS VI

3.1 Very Expensive technology to adopt
thus economic challenge for manufacturers

3.2 Time limit is prohibitive

3.3 Skipping BSV leads to skipping
important technology which are
prerequisites to BSVI

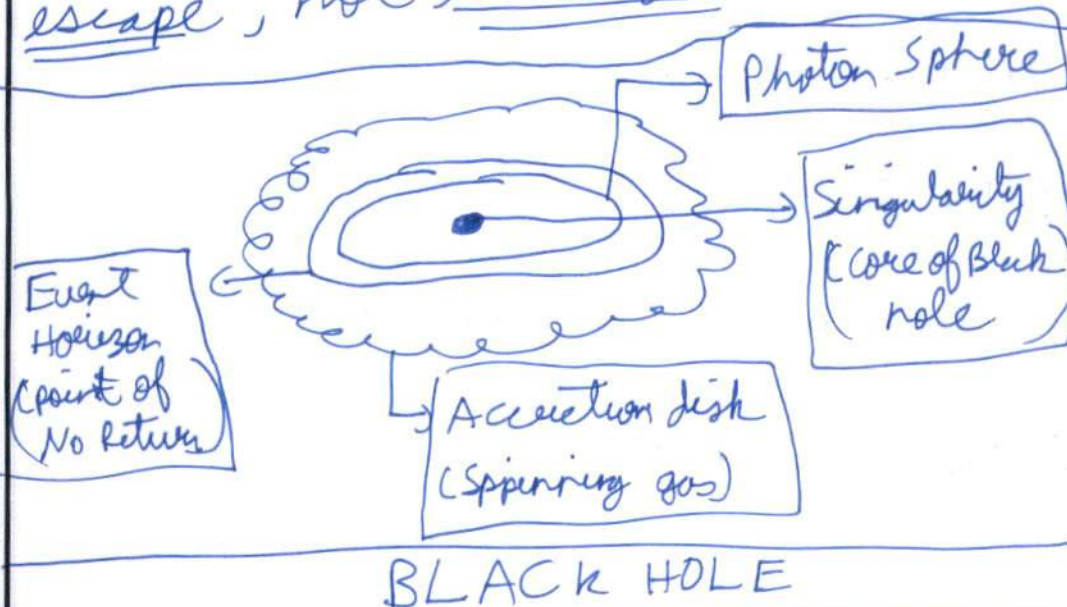
3.4 Unsold stock of BSVI cars

Thus despite environmental benefits
it will be challenging to adopt
BSVI in time.

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 were first predicted by A. Einstein in his theory of general relativity as objects so dense that their gravity does not let anything escape, not even light



① Challenges in Imaging a black hole

1.1 Emits no light

1.2 Small in size, difficult to track

1.3 Messier 87, which was photographed
was more than 5 Billion light years
away

1.4 Heavy Computation required

1.5 Relay of Telescopes required

② | Event Horizon Project

Event ~~Horizon~~ Horizon project used
Very long Baseline Interferometry
(VLBI) to map the Black hole
from 8 different telescopes in 3
continents. A supercomputer from MIT
was then used to compile information
and give the picture.

Thus this has revealed the structure
of the ~~new~~ mysterious phenomenon of
Black hole

9. While mentioning the objectives of the Arms Trade Treaty (ATT), discuss the challenges which are hindering the utilization of the ATT to its full potential. (150 words) 10

शस्त्र व्यापार संधि (ATT) के उद्देश्यों का उल्लेख करते हुए, उन चुनौतियों की चर्चा कीजिए जो ATT को इसकी पूर्ण क्षमता से उपयोगित किये जाने में बाधक हैं।

The USA has recently withdrawn from the Arms Trade Treaty thus reducing its legitimacy in the international arena.

① What is the Arms Trade Treaty (ATT)

It is a UN-led Treaty that enforces coordination and cooperation on a global level to control the trade of arms in order to reduce the instances of terrorism especially in the Middle East.

The objectives of the ATT include a full and complete arms trade free world ensued by.

a robust rational participation mechanism

② Challenges to ATT

2.1 Poor membership eg. US left recently;
India is not a member as it claims
internal laws are adequate

2.2 Poor enforcement due to irregularity
to regulate and control trade
of arms

2.3 Global interest of such companies
that are pressure groups to
further arms trade

2.4 Often States provide arms to rebels
to further political motives eg. Iran
to Houthi rebels

Arms Treaty is thus a noble
endeavour to cease trade however
it will require support of all nations
to realize its potential.

10. Threats to internal security of India may be posed both through the communication networks and also to the networks. Discuss. Also, highlight the steps taken by the government in making the networks more secure.

(150 words) 10

भारत की आंतरिक सुरक्षा को खतरा संचार नेटवर्कों के माध्यम से एवं स्वयं संचार नेटवर्कों को खतरा होने, दोनों ही प्रकार से हो सकता है। चर्चा कीजिए। साथ ही, नेटवर्कों को अधिक सुरक्षित बनाने हेतु सरकार द्वारा उठाए गए कदमों पर प्रकाश डालिए।

Communication networks refer to systems that facilitate communication and due to recent evolution from "post to e-mail" or digital communication, the risk of disruption has increased as an internal security threat

① Threats through Communication Network

1.1 Use of Internet to pass passwords or hack other computers

1.2 Remote monitoring of information by tapping eg. Tapping Sea lines

1.3 Remote access to communication eg. if facebook views chat history

1.4 Used to indoctrinate and radicalize new recruits by terrorists

1.5 Used to coordinate, plan and commit during terror attacks

② Threats To Communication networks

2.1 Communication networks form the backbone of a country's defence

2.2 Threat to Internet fibers in Sea

2.3 Threat to Satellites

2.4 Threat to Servers

③ Steps Taken by Government

3.1 Cyber Swachh Bharat Initiative for PPPs for security

3.2 Cyber Security Cell in MHA for Cyber Crisis

3.3 Nation Critical Information & Infrastructure Protection Centre (NCII PC) by

NTRC

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 use of sources such as solar, wind etc which provide variable output as per natural conditions eg. Solar does not produce energy at night or if it is cloudy.

① Importance of Integration of VRE to Indian Grid

1.1 Future is bound to be dominated by renewable energy thus integration is a must

1.2 ~60 ~~GW~~ GW capacity of Solar and Wind needs to be integrated to source demand and supply match.

1.3 Goal of 40% Non Renewable Energy by 2030 as per NDC.

1.4 It gives more choice to DISCOMs to purchase energy

② Challenges to integration of VRE

2.1 Geographical challenges especially for offshore wind, remote solar plants etc

2.2 Economic challenge of building concretion infrastructure

2.3 Infrastructure issue due to need of scarce materials, labour etc.

2.4 Non-reliable sources, thus vary and this may be problematic in long run

③ Steps to Integrate VRE with National Grid

3.1 Green Energy Corridor by Powergrid is doing concretions of renewable

energy to grid at inter-state level

3.2 Use of Storage devices such as Li-ion battery, thermal batteries etc to use when energy not available

3.3 Global Grid allows for 24x7 global solar supply

3.4 Dams can be used to raise water during the day using energy and release at night to release energy thus making a huge battery

3.5 Ensure focus on Nuclear power which is non-variable

3.6 Supplement variable with thermal plants on a need-only basis

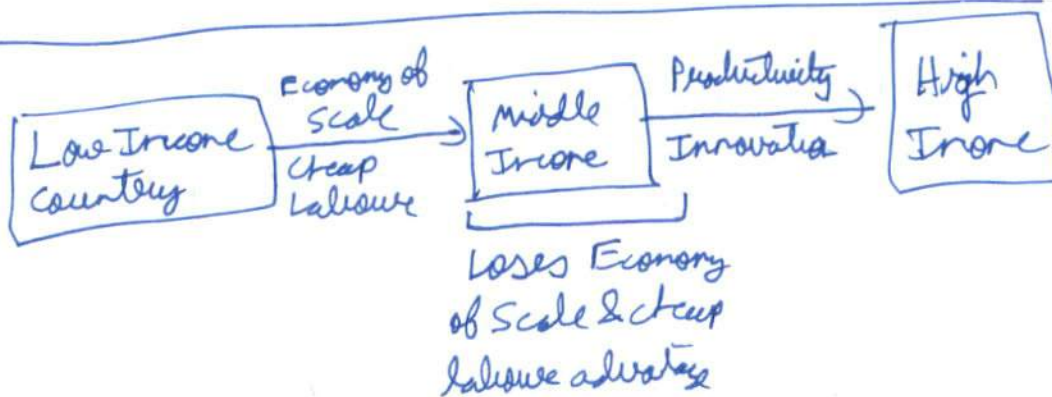
Thus ensuring 24x7 power supply will be an issue with VRE and thus overcoming the challenge should be given equal priority as convention to grid

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?

The World Bank defines middle income as \$1000-12000 per year as such countries with rising per capita often fail to rise to a high level of income per capita due to arrested growth. This is the middle income trap

① Reasons for Middle Income Trap



Evolution of Country's Economy

Thus an irratulity of the ration to transform a laboure intensive and manufacturing economy to a productivity based innovative system leads to low income trap.

This has been seen in the case of South East Asian countries, South America, Europe etc.

② Case of India

Reasons to be wary of trap

2.1 Current slowdown in economy due to low demand, low supply, poor exports

2.2 Poor investment in Research and development $\sim 0.67\%$ of GDP compared to $\sim 2\%$ by China, US etc.

2.3 Lack of highly skilled labour

2.4 Brain Drain takes human resource from India to the west

2.5 Poor Intellectual Property performance

Reasons to be optimistic and how India can avoid the trap

2.6 Ensuring Education levels at all stages

2.7 6th rank in publication and 10th in Patents

2.8 Large number of Engineers who can derive innovation

2.9 Conducive IPR, start-up policy

2.10 Adequate government support to innovation

Thus to move to a high income bracket India needs to overcome poverty, utilize technology and derive innovation to avoid middle income trap.

13. Highlighting its importance, discuss the major issues that plague effective monetary policy transmission in India. Also, mention the steps taken by RBI to improve it. (250 words) 15

भारत में मौद्रिक नीति संचरण के महत्व पर प्रकाश डालते हुए, उन प्रमुख मुद्दों पर चर्चा कीजिए जो इसकी प्रभाविता को बाधित करते हैं। साथ ही, इसमें सुधार के लिए RBI द्वारा उठाए गए कदमों का उल्लेख कीजिए।

Monetary Policy refers to the steps taken by the central bank to control inflation, and its effective transmission refers to transmission

① Importance of Monetary Policy transmission

1.1 Bank interest rates determine ease of access to funds thus are a direct source of money control

1.2 Controlling supply of money into the market can control inflation

1.3 Over Inflation or Under inflation can lead to slowdown

1.4 Investors confidence depends on stable inflation rate

1.5 Bank loan returns may be hurt

due to over inflation

1.6 ~~Reason~~ Stable rates are conducive
for ease of doing business

1.7 Rapid change in value of rupee due to
inflation can lead to current
account fluctuations

② Issues of Monetary Policy Transmission

2.1 Use of Marginal Cost of Funding based
Rate (MCLR) by banks

2.2 Thus change in Repo rate does not
lead to change in interest rate

2.3 Overdependence of market on banks
~~or~~ for money or credit

2.4 Poorly developed bond market

2.5 High interest rate of government
securities coupled with high
SLR rates leads to over

subscription to government securities.

③ Steps taken by RBI to weave it

3.1 Link Repo rate to interest rate

3.2 Reduce funding to government
directly

3.3 Use of moral suasion by news,
media etc to push down interest
rates

Thus Monetary policy transmission is
essential for proper control of
inflation and development of the
country as a destination for
investment and a stable business
hub and thus requires to be
robustly controlled by the RBI

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 refers to the practice in areas dependant on rain and less than 50% coverage of irrigation according to Ministry of Agriculture.

① Constraints faced by areas practicing Rainfed Agriculture

1.1 Dependence on rainfall due to poor or no irrigation

1.2 low yields due to poor water availability and thus ~~so~~ cannot use high yielding variety

1.3 Cannot grow sugarcane or wis which are the most remunerative Crops.

- 1.4 Government schemes such as fertiliser subsidy, MSP, irrigation subsidy, micro irrigation etc are all biased towards irrigated agriculture.
- 1.5 Reduced government focus on these areas and farmers.

Rainfed agriculture is done over $\sim 60\%$ of the Net Sown Area and gives $\sim 38\%$ grain output and $\sim 88\%$ pulses output as per Rainfed agriculture atlas

② Measures to stabilise agricultural production to rainfed areas

2.1 Technology and information extension services through Krishi Vigyan Kendras (KVKs) to ensure best

practices as per the conditions

2.2 Mixed Farming is, livestock, fisheries,
bee keeping, agro forestry etc
to ensure income

2.3 Rain Water Harvesting and Utilization
to maximise available water

2.4 Use of Genetically Modified Crops
that are resistant to droughts

2.5 Use of land for pulses and oilseeds
which are currently imported

~~2.6~~
Thus rainfed agriculture needs an
equal level of importance as it forms
the core of rural poverty and
thus must be supported to realise
the dream of a truly inclusive
India.

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 ($\text{NH}_2\text{-NH}_2$) is a chemical fertilizer that is used for agriculture and industrial purposes.

① Steps taken by Government

- 1.1 Urea subsidy on end-use basis only for agriculture & not industry
- 1.2 Subsidy given to producer based on cost of production
- 1.3 Centralization of imports i.e., only ~~2~~ 2-3 companies can import urea
- 1.4 Non inclusion in Nutrient Based subsidy scheme

② Issues in Sector

2.1 End-use restriction leads to black market creation which diverts to industry

2.2 Black market leads to poor supply for farmer and only rich farmer can buy from black market thus hurting poor farmer's output

2.3 Subsidy on cost of production leads to inefficiency which is paid for by the government

2.4 In case of demand-supply mismatch exports are restricted & thus lead to black market penetration

Thus despite well meaning intention poor subsidy has led to black markets and ~~poor~~ only ~35% of benefits

of subsidy to farmer

③ Reforms required to address the issue

NITI aayog has recommended the following

3.1 Include Urea in Nutrient-based subsidy scheme

3.2 Allow imports by all companies

3.3 Direct Benefit transfer of subsidy to farmer and do not subsidize production

3.4 Allow Competitive market thus leading to export

3.5 GPS track fertilizer bags to prevent black market

Thus Urea Subsidy reforms are an urgent requirement to ensure benefit to the poor farmers.

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।

The Convention on Biological Diversity (CBD) introduced the concept of Access and Benefit Sharing (ABS) in 1993 as "the equitable sharing of genetic resources and their benefits for all stakeholders".

① ABS and Sustainable Use of Biodiversity

Nagoya Protocol by CBD provides the framework for ABS which allows for the local use of genetic resources such as flowers, trees etc as medicine, food etc.

This ensures that biopiracy is

mitigated and the traditional knowledge is maintained and available for use by the locals.

Locals, mostly tribals, use the knowledge sustainably as they have for generations and as they are not motivated by commercial gain they ensure sustainable use and inter-generational parity.

② Global & National Level mechanisms for ABS

[Global]

2.1 Nagoya Protocol forms the basis of ABS

2.2 Aichi Biodiversity Targets call for rational support to ABS

2.3 Sharm-al-Shaikh declaration of 2018 CBD called for equitable sharing of commercial benefits

National

2.4 Biodiversity Act 2002, regulates the use of resources by foreigners and nationals

2.5 Biodiversity registers to be maintained by the District Committees to characterising resources

2.6 Plant Protection of Variety and Farmer Rights Act (PPVFR) is also based on ABS principle

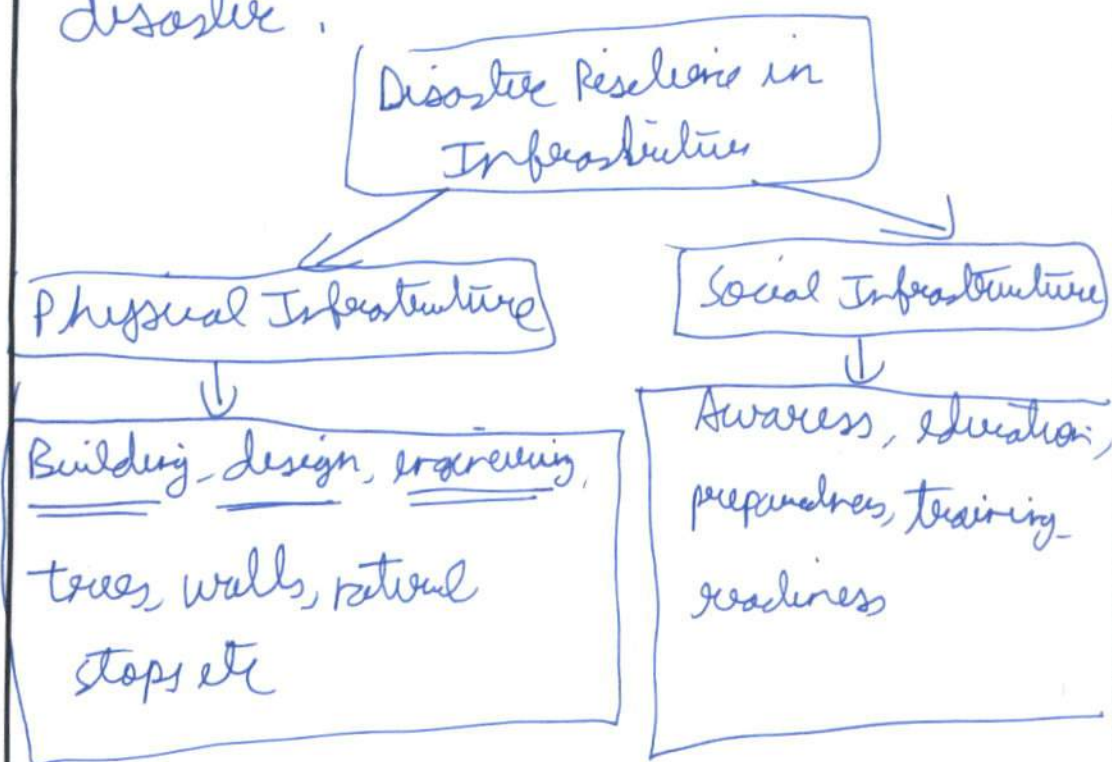
2.7 GI Tag recognises ABS principle

Thus ABS allows for equitable sharing of benefits of biodiversity and allows for sustainable use of the same

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

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

Disaster resilience refers to the ability to be immune to a certain degree and thus mitigate the effects of a disaster.



① Significance of Disaster Resilience

1.1 According to Serdai Framework every 1\$ spent on resilience and

mitigation, saves 8-9 \$ in recovery.

2.2 Builds the capacity of the physical infrastructure to be resilient and thus withstand the damage

2.3 Social resilience ensures preparedness and thus reduces loss of life

② / Challenges to achieve Disaster Resilience

2nd ARC report on "Crisis Management" highlights the following challenges

2.1 Poor capacity of state government financially and technically

2.2 Poor social resilience especially for weaker sections such as tribals and women

2.3 Focus on reconstruction and not

← Resilience increases Cost

2.4 No institutionalized planning

③ [Measures to address the ~~felt~~ issues]

3.1 2nd ARC "Crisis Management" ~~recommends~~

- 3 Tier structure of coordinated planning
- States to take lead due to localized Nature
- Focus on Vulnerable Sections
- Education and awareness are as important as physical infrastructure

3.2 Sardar strategy of ① Build
Back Better ② Understand
disaster risk ③ Invest in
structural and Non structural
resilience is the backbone of strategy

Thus disaster resilience is the need of the
hour especially due to climate change
risks in the future.

18. Highlighting the significance of data localization for India, discuss various challenges associated with data localization. (250 words) 15

भारत के लिए डेटा के स्थानीयकरण के महत्व पर प्रकाश डालते हुए, डेटा के स्थानीयकरण से जुड़ी विभिन्न चुनौतियों की चर्चा कीजिए।

Data localization refers to the principle of storage of data of a part of a population only in a particular area i.e. localized storage of data

① Significance of Data Localization

1.1 Protects the privacy of personal data of the people

1.2 Protects integrity and Security of national data e.g. Defense location, finance etc

1.3 Sovereignty threats due to data have been highlighted in the Russia meddling in US elections and Cambridge Analytics case

1.4 Data is an economic resource that may be used by data mining, analytics to create more value. eg. India will create ~ 2 million Petabytes by 2025 and this has potential to create value of more than 300 Billion \$.

1.5 Other countries should not benefit from India's data without paying Tax.

Recently in G-20 Summit, Osaka track was supported by the developed countries for free flow of data across borders but was opposed by India.

② | Challenges in Data Localization

2.1 Infrastructure creation in the form of servers to store data locally requires capital cost

2.2 Reduces Cost of doing business or higher
Cost for Companies

2.3 Government debt bill uses data as
a rational resource thus threat of
privatization still there

2.4 If everyone starts localization
globally it will restrict trade

2.5 Climate issue due to cold areas
needed for sewer farms

2.6 High Carbon load of infrastructure

2.7 Localized data requires technical
manpower to analyse

Thus the principle of localization is
sound, however a more efficient method

is required to take forward the

BN Srinivasan recommendations and

ensure mutual benefit for all parties

19. Money Laundering as a socio economic offence is a menace especially for developing countries like India. Comment. What measures have been taken at the domestic and international levels to deal with this menace?

(250 words) 15

एक सामाजिक आर्थिक अपराध के रूप में धन शोधन विशेषकर भारत जैसे विकासशील देशों के लिए एक खतरा है। टिप्पणी कीजिए। इस खतरे से निपटने हेतु घरेलू और अंतरराष्ट्रीय स्तर पर क्या उपाय किए गए हैं?

Money Laundering refers to the illegitimate movement, transfer or utilization of money which is usually sourced from illicit activities.

① Money Laundering as a menace

1.1 Even though money laundering itself is not a crime or hazardous it indicates criminal antecedents and is generally associated with fake currency, gun-running, arms trading, trafficking etc.

1.2 Thus money laundering acts as a conduit for other offences

1.3 It leads to the formation of a black economy and market that undermines federal economy and cause issue in policy formulation

1.4 Allows for refarious activities such as terrorism, trafficking to beed.

1.5 Decreases the moral standards of public leading to tax evasion, drugs etc

② Measures Taken to Combat Money Laundering

Global

2.1 Financial Action Task Force (FATF) by OECD monitors states which allow Terrorist Financing and Laundering eg. Recently Pakistan put on grey list by FATF

2.2 Asia Pacific Group is the FATF equivalent for Asia

2.3 UN office of Drugs and Crime
monitors trafficking and money laundering

National

2.4 Prevention of Money Laundering Act, 2002
allows Enforcement Directorate (ED)
to investigate issues

2.5 Fugitive Economic offenders Act, 2018
targets people who laundered money
eg Vijay Malya

2.6 Unlawful Activities (Prevention) Act
(UAPA) declares financing terrorism
as a terrorist activity

Thus Money Laundering is a serious
social, moral and economic hazard
and has implications on rational and
social security and thus requires
urgent management and cooperation.

20. The primary motive of terrorism differs from that of organised crime but there exists a symbiotic relationship between the two. Discuss.

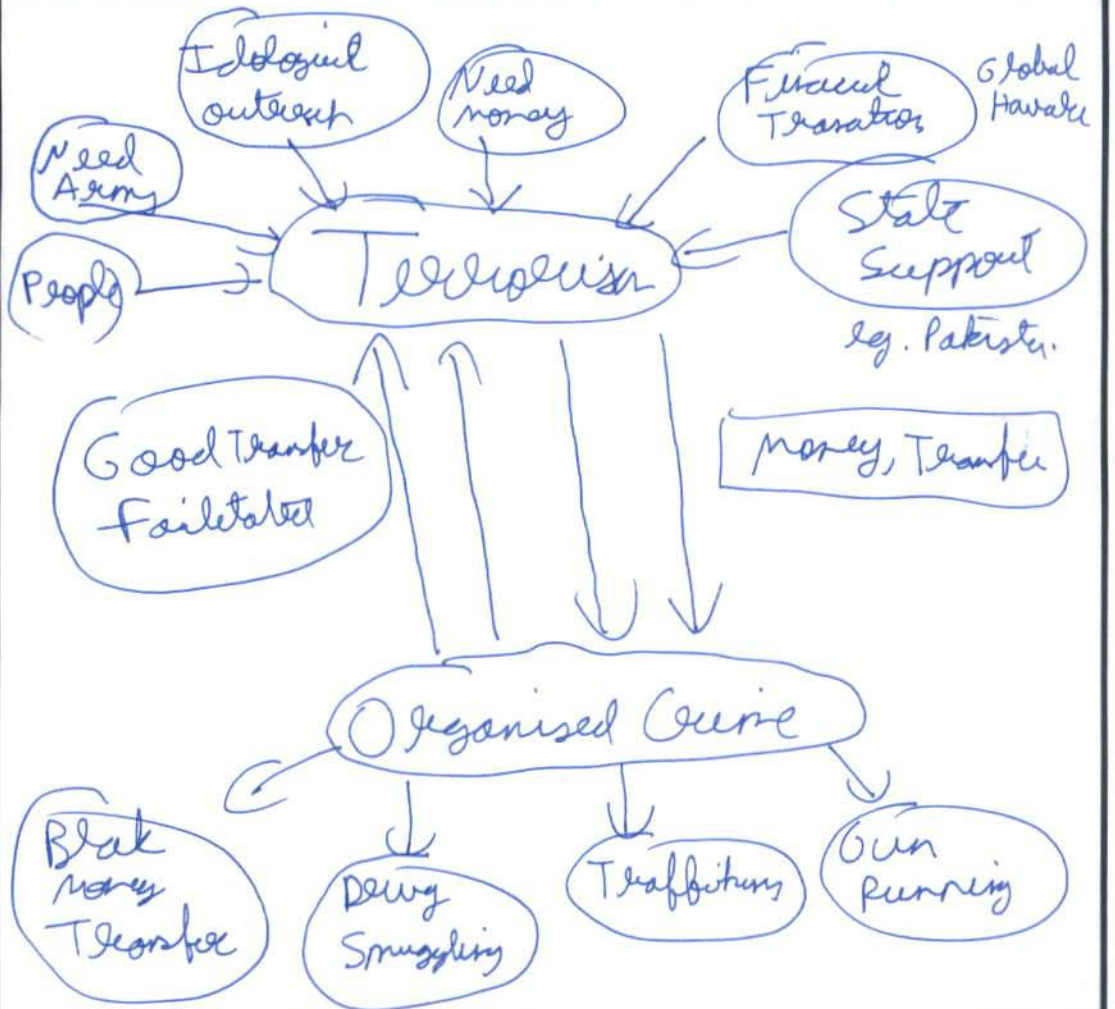
(250 words) 15

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 tactics and violence as a form of coercion to further political, religious or ideological goals.

Organised Crime refers to the systematic use of criminal activities to obtain desired targets

Thus while one focuses on political ideologies, religious beliefs etc. the other is motivated mostly by the urge to earn money.



Symbiotic relation between ~~the~~ Terrorism and organised Crime

Thus both feed ~~on~~ each other to maintain flow of funds, army, people etc.

This is exemplified by the modus operandi of multiple terrorist organisations such as Taliban →

- ① Traffic women by raiding village
- ② Glue opium and sell it to black market
- ③ Revenue arms support from a state partner - Pakistan.
- ④ Cause Terror in Afghanistan & Iran

Thus this complex nexus between terrorism and organised crime needs to be broken by a multi-lateral approach targeting funds, arms, drugs, actions etc and thus requires a robust coordination network and global cooperation to achieve true peace.