

VISION IAS

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6:40 pm - 7:40 pm.

GENERAL STUDIES (TEST CODE : 1836)

Name of Candidate	POORVA AGRAWAL	Registration Number	1043458
Medium Eng./Hindi	ENGLISH	Date	21/8/22
Center	ONLINE		

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
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17	15	
18	15	
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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. The PM-AASHA scheme is aimed at improving procurement mechanism as well as ensuring remunerative prices for farmers. In this context, highlight the various components of the scheme and discuss the concerns associated with it. (150 words) 10

पीएम-आशा योजना का उद्देश्य खरीद तंत्र में सुधार के साथ-साथ किसानों के लिए लाभकारी मूल्य सुनिश्चित करना है। इस संदर्भ में, योजना के विभिन्न घटकों को रेखांकित कीजिए तथा इससे जुड़ी चिंताओं पर चर्चा कीजिए।

The government has taken various steps towards doubling farmers' income. PM-AASHA is one among them

Components of the scheme

- ① Use of NAM for procurement.
- ② Creating a national-level combined market for agricultural produce.
- ③ Better marketing & branding facilities to farmers.
- ④ Credit support for inputs.
- ⑤ Market-led determination of prices.

Concerns

- ① Digital divide — only few rich farmers might benefit.
- ② Low infrastructure & credit availability for small & marginal farmers.
- ③ Lack of policy implementation
- ④ Ignorance & low awareness among farmers.
- ⑤ Inadequate social audit mechanisms

Thus, it is important to address the structural issues to ensure success of PM-Aasha.

2. Explaining the concept of blended finance, discuss the role it can play in mobilizing capital for infrastructure development in developing countries like India.

(150 words) 10

मिश्रित वित्त की अवधारणा की व्याख्या करते हुए, भारत जैसे विकासशील देशों में अवसंरचना विकास हेतु पूंजी जुटाने में इसकी भूमिका पर चर्चा कीजिए।

Blended finance refers to raising credit from multiple sources & agencies, with different payback terms & mechanisms.

Role

- ① It can diversify the risk of infrastructure projects.
- ② It provides additional sources of finance.
- ③ Innovative payment mechanisms to suit the long gestation period of infrastructure.
- ④ Increase participation of different sectors — retail players, mutual funds, banks, etc.

Thus blended finance holds the
key to development of
infrastructure projects in the
country. It is important to
integrate it to PM-Gati Shakti
to ensure sustainable finance.

3. Discuss the challenges faced in the revival and revamp of dry ports in India and state the measures that can be adopted in this regard.

(150 words) 10

भारत में शुष्क पत्तनों (ड्राई पोर्ट्स) के पुनरुद्धार और सुधार में आने वाली चुनौतियों पर चर्चा कीजिए तथा इस संबंध में अपनाए जाने वाले उपायों का सुझाव दीजिए।

Dry ports have been ignored in India's infrastructure network, there is a need to revive them.

Challenges

- ① Lack of policy focus.
- ② Infrastructure & finance constraints.
- ③ Problem of desilting of rivers.
- ④ Lack of inter-grid connections with other modes of transport.

Measures that can be taken

- ① Include dry ports in transport links.
- ② Subsidy for its development to private sector.
- ③ Use PPPs to develop them.

- ④ form a dry port - authority for
focused policy support.
- ⑤ Integrate dry ports with SFZs
- ⑥ Learn from global best practices

Integrating dry ports in PM-Gate
Shakti can be a major way
towards their revival

4. Monoculture is one of the major threats to ensuring food security and sustainability of Indian agriculture. Discuss. (150 words) 10

एकल कृषि (मोनोकल्चर) खाद्य सुरक्षा और भारतीय कृषि की संधारणीयता सुनिश्चित करने के समक्ष विद्यमान प्रमुख खतरों में से एक है। चर्चा कीजिए।

Monoculture refers to the practice of cultivating a single species of crop over vast areas for economic purpose.

Threats of monoculture

① Environment

- 1.1. Fall in bio diversity
- 1.2. Threat of invasive species.
- 1.3. Unsustainable agricultural practices.

② Food security

- 2.1. Diminishing Importance of local food items.
- 2.2. Example of Bt-Cotton shows that in long run, monoculture leads to lower yield.
- 2.3. High focus on yield & less on diversity of food basket.

③ Farmers

- 3.1. Monopoly of Big farmers.

3.2 Corporate players might exploit the farmers

3.3. Rise in inequality among rich & poor farmers.

Way forward

- ① Sustainable agriculture practices like - multicropping, strip cropping, ZBNF.
- ② Using new techniques like aquaponics, hydroponics.
- ③ Raise credit & infrastructure support to small farmers.
- ④ Food processing Industries.

Thus, monoculture is a threat to the sustainability of agriculture & thus of entire Indian economy.

5. While highlighting the impact of single-use plastic on health and the environment, state the recent efforts taken by the government to curb plastic pollution in India. (150 words) 10

स्वास्थ्य और पर्यावरण पर एकल-उपयोग वाले प्लास्टिक के प्रभाव को रेखांकित करते हुए, भारत में प्लास्टिक प्रदूषण को रोकने के लिए सरकार द्वारा हाल ही में किए गए प्रयासों का उल्लेख कीजिए।

Only 60% of plastic waste is ~~being~~ collected in India - this leads to problems for health & environment.

Impact of single use plastics

Environment

1. It clogs drains, leading to overflows & disease breeding insects.
2. It causes marine pollution.
3. Microbeads have become a major source of water & soil pollution.
4. Being non degradable, it persists to damage the environment for years.

Health

1. It can choke animals and lead to death.
2. It can enter into food chain & cause bio magnification.
3. It is shown to cause hormonal problems for women.
4. It is also shown to enter blood streams.

Efforts taken by government

- ① Plastic waste management rules, 2016 have been amended in 2021 to ban single use plastics by 2022.
- ② Extended producer responsibility (EPR) for waste collection & recycling.
- ③ Reducing plastic use at government offices.
- ④ At United Nations Environment Assembly (UNEA), India suggested a resolution on single use plastics.

Banning single-use-plastics is imminent for the environment, society & health of global citizens.

6. Aapda Mitra – a force of volunteers from across India trained in disaster response – is becoming a game changer in the field of disaster management in the country. Elaborate. (150 words) 10

आपदा मित्र-आपदा प्रतिक्रिया हेतु प्रशिक्षित भारत भर के स्वयंसेवकों का एक बल-देश में आपदा प्रबंधन के क्षेत्र में एक गेम चेंजर के रूप में उभर रहा है। सविस्तार वर्णन कीजिए।

The 82% of Indian territory is vulnerable to one or or multiple disasters. The example of Aapda Mitra shows the importance of community participation in the process of disaster management.

Importance of community volunteers

- ① They are the first responders to the disaster.
- ② If well trained, they can provide relief & rescue to old & vulnerable.
- ③ They can help to integrate traditional knowledge of community into disaster management.
- ④ They can conduct social audits on government's disaster relief machinery.

- ⑤ They can promote Incorporation of sustainable practices to avoid & mitigate disasters -
- ⑥ They can raise awareness & educate fellow citizens on the issue.
- ⑦ They are the vital link between administration & citizens.

Thus, It is essential to inculcate community volunteers into disaster management by :-

- ① Adequate training & mole drills
- ② Education, video films
- ③ Incentives like rewards & recognition -

National Disaster Response Plan 2016 recognises their importance too.

7. Why is the rise in lone wolf attacks considered as a serious challenge for security agencies around the world? Highlight the role of the internet in exacerbating such attacks. (150 words) 10

विश्व भर में लोन वुल्फ हमलों में वृद्धि को सुरक्षा एजेंसियों के लिए एक गंभीर चुनौती क्यों माना जाता है? ऐसे हमलों की वृद्धि में इंटरनेट की भूमिका पर प्रकाश डालिए।

Lone wolf attack means threat to security of a nation by an Individual who is not linked to any big ~~to~~ organisation.

Challenge

- ① Difficult to trace & identify
- ② They can exist in multiple forms - underground workers, financers, weapons suppliers, etc
- ③ They are easily vulnerable to radicalisation
- ④ They are difficult to pre-empt

Role of Internet

- ① Used by terror outfits for spreading radicalisation.
- ② Presence of dark web, beyond government's control.

- ③ Easy financial transfers to
supp from international donors.
- ④ Social media can be used to
spread false messages.

Way Forward

India needs to follow a 3 pronged strategy :-

- ① Security - Raise intelligence,
modernise police force &
use AI, Internet of Things to trace such attackers.
- ② Development - Provide employment
& skill development to youth.
- ③ Propaganda - Use social media &
NGOs to spread positive feeling &
harmony.

8. The fundamental inefficiencies embedded in our military structures and processes are now being addressed through a slew of defence reforms in the country. Discuss.

(150 words) 10

हमारे सैन्य ढांचे और प्रक्रियाओं में अंतर्निहित मूलभूत अधमताओं को अब देश में विभिन्न रक्षा सुधारों के माध्यम से दूर किया जा रहा है। चर्चा कीजिए।

A flourishing defence sector is the bedrock for India's dream to be Aatmanirbhar Bharat.

Fundamental Inefficiencies

- ① Low budget support - (Only 1% of GDP)
- ② Low R&D (Only 6% of defence expenditure allocated to it)
- ③ Weak Industry - military - academia linkage.
- ④ Delayed procurement system
- ⑤ Low private sector participation.
- ⑥ Lack of coordination in the three arms of military.
- ⑦ Weak military - civilian communication channels.
- ⑧ Lack of modernisation.

Defence Reforms

① For domestic manufacturing

- 1.1. positive indigenisation list in procurement process.
- 1.2. Liberalised FDI

② for procurement

- 2.1. Defence Acquisition Policy 2020
- 2.2. Inter-governmental agreements
eg° LEMOA with US, RECOS with Russia

③ for coordination

- 3.1. Creation of Office of Chief of Defence Staff (CDS).
- 3.2. Integrated Command Units.

④ For modernisation

- 4.1. Use of military of things
- 4.2. Support of Israel in modern military hardware.

These steps are crucial for a flourishing defence sector.

9. In light of the recent establishment of the WHO Global Centre for Traditional Medicine in India, discuss the advantages and challenges in mainstreaming traditional medicine in the country. (150 words) 10

हाल ही में, भारत में डब्ल्यू. एच. ओ. ग्लोबल सेंटर फॉर ट्रेडिशनल मेडिसिन की स्थापना के आलोक में, देश में पारंपरिक चिकित्सा को मुख्यधारा में लाने के लाभों और चुनौतियों पर चर्चा कीजिए।

WHO Centre was recently established at Gujarat. This highlights the importance of traditional medicine for the world.

Advantages

- ① Including AYUSH practitioners will raise doctor - patient ratio to 1:900 from 1:1400 (WHO recommends 1:1000).
- ② It focuses on holistic care.
- ③ It is useful for chronic & lifestyle related illness.
- ④ It can raise accessibility of healthcare in rural areas.
- ⑤ It can raise India's soft power in global geopolitics.

Challenges

- ① Lack of trust & awareness about traditional medicine.
- ② Cases of quacks & pseudo-doctors.
- ③ Low budgetary support.
- ④ Lack of regulation of traditional medicine education & practice.

Way Forward

There is a need to integrate both - traditional & modern healthcare into WHO's

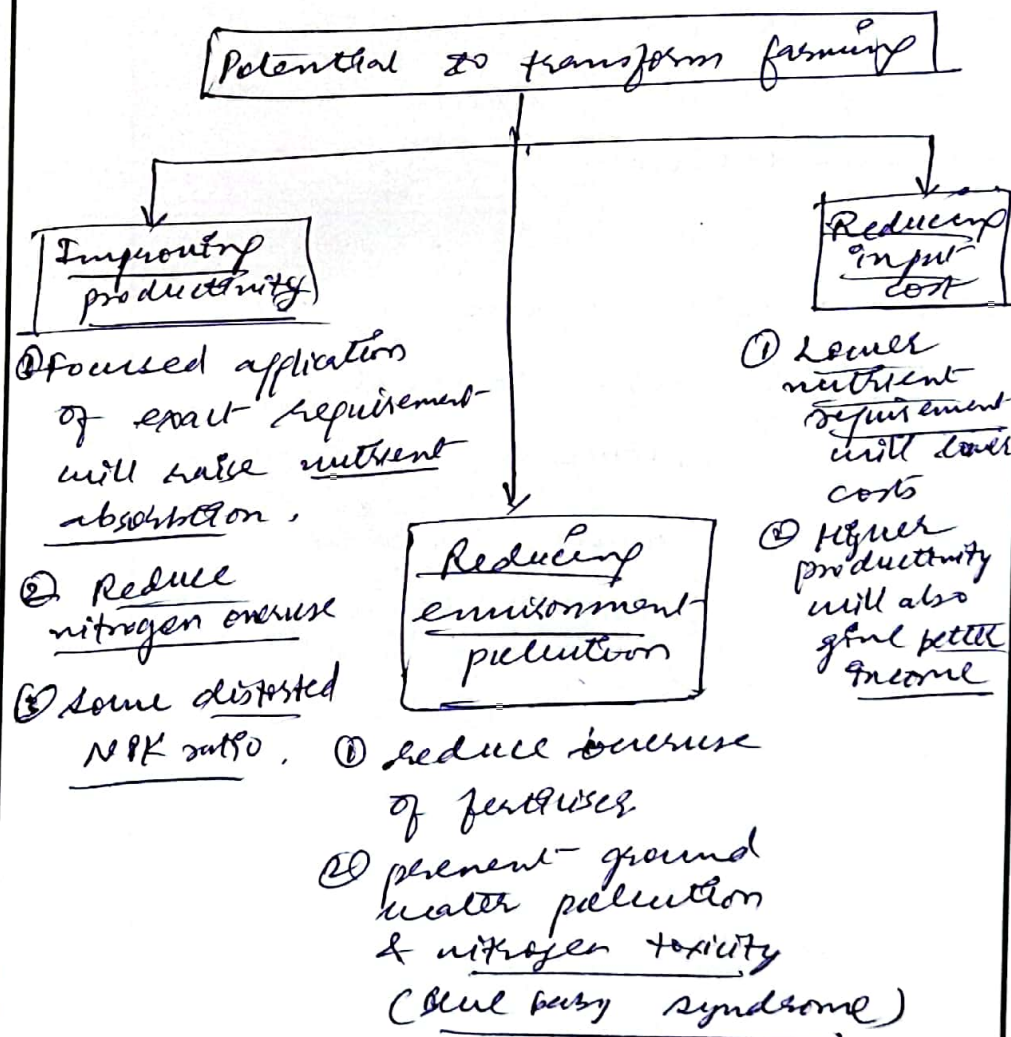
recommended One Health

Approach for holistic focus on human health, animals and environment.

10. Nano Urea Liquid has the potential to transform farming in India and across the world by improving productivity while reducing environmental pollution and input cost. Discuss. (150 words) 10

नैनो यूरिया लिक्विड में पर्यावरण प्रदूषण और इनपुट लागत को कम करने के साथ-साथ उत्पादकता में सुधार करके भारत और विश्व भर में कृषि कार्य को रूपांतरित करने की क्षमता है। चर्चा कीजिए।

Recently, India Inaugurated world's first nano urea plant. ~~into~~ This has brought into limelight the importance of nano urea.



Challenges ahead

- ① Majority of farmers (85%) are small & marginal, having less investment to buy nano urea.
- ② Potential impact of nano-urea on environment & human health needs further study.
- ③ Low awareness & education level of farmers might hinder implementation.

There is a need to develop multi-stakeholder approach and undertake continuous monitoring to ensure nano-urea is used in a sustainable way & helps in boosting of farmer's income.

11. Discuss the domino effect of high crude oil prices on the Indian economy. Also, enumerate the measures that India can take in this context.

(250 words) 15

भारतीय अर्थव्यवस्था पर कच्चे तेल की ऊँची कीमतों के डोमिनो प्रभाव की विवेचना कीजिए। साथ ही, भारत द्वारा इस संदर्भ में अपनाए जा सकने वाले उपायों को सूचीबद्ध कीजिए।

Russia - Ukraine war along with COVID induced supply chain disruptions has led to a rise in global crude oil prices.

Effect on India

A. Economic Effect

- ① Crude oil is a crucial input in production. Rise in input costs will raise cost of production and overall prices causing inflation.
- ② Crude oil is among top five import commodities. So rise in its price means wider Current Account Deficit.
- ③ India refines crude oil and exports refined products. This means exports will become costly.

and uncompetitive.

- ④ worsening trade balance will lead to depreciation of rupee.
- ⑤ It will lower forex reserves too.
- ⑥ business incentives will further fall due to high cost of production.

B. Social Effects

- ① High prices affect the poor more and raise inequality.
- ② Inflation is a critical political issue, with effect on public harmony.
- ③ It will make financial savings unprofitable, (due to fall in real returns) and lead to higher gold imports.

Measures to take

Short Run

- ① Enter into agreements with oil supplying countries to secure supplies.
- ② Bring oil under GST to reduce tax burden.
- ③ Reduce central excise duty and persuade states to reduce VAT.
- ④ Subsidise oil for Industries with input credits.

Long Run

- ① Explore alternative fuels and renewable energy.
- ② Increase domestic exploration of oil.
- ③ Enter into after exploration contracts in foreign countries.
- ④ Promote Electric Vehicles & public transport to reduce oil demand.

Thus, easing oil prices is crucial for the health of Indian economy.

12. The consistent high operating ratio of the Indian Railways is indicative of its incapability to generate high operational surplus. Explain the reasons behind this trend. Also, highlight the remedial measures taken by the government in this regard. (250 words) 15

भारतीय रेलवे का लगातार उच्च परिचालन अनुपात उच्च परिचालन अधिशेष सृजित करने में असमर्थता का संकेत है। इस प्रवृत्ति हेतु उत्तरदायी कारणों को स्पष्ट कीजिए। साथ ही, इस संबंध में सरकार द्वारा किए गए उपचारात्मक उपायों को रेखांकित कीजिए।

Operating ratio means the expenditure incurred to earn a unit of revenue.

Indian Railways has a high operating ratio because:-

- ① Low tariffs - Passenger tariff is heavily subsidised
- ② High freight charges - Charges for freight transport is high, which ~~reduced~~ raises logistical costs
- ③ Inefficient management
- ④ Corruption & leakages
- ⑤ High staff salary

Remedial measures

- ① Dedicated freight corridors
- ② Increasing private participation to bring competition & raise efficiency.
- ③ Vande Bharat trains to provide higher quality services & attract commuters.
- ④ Separation of railway budget is scrapped.
- ⑤ Using My Rail App & technology to raise consumer awareness & grievance redressal.

Thus, it is vital to refurbish the railways to enable it to function as a tool of India's development.

13. Micro food processing sector is the key driver of growth in the Indian economy as it encourages food processing innovation. In this context, state the challenges faced by the micro food processing sector and discuss how the recent initiatives taken by the government aim to address them.

(250 words) 15

सूक्ष्म खाद्य प्रसंस्करण क्षेत्रक भारतीय अर्थव्यवस्था में संवृद्धि का प्रमुख चालक है क्योंकि यह खाद्य प्रसंस्करण नवाचार को प्रोत्साहित करता है। इस संदर्भ में, सूक्ष्म खाद्य प्रसंस्करण क्षेत्रक द्वारा सामना की जाने वाली चुनौतियों का उल्लेख कीजिए और चर्चा कीजिए कि किस प्रकार सरकार द्वारा हाल ही में प्रारंभ की गई पहलों का उद्देश्य इनका समाधान करना है।

Food processing sector is the missing link between agriculture and industry that can help to raise the contribution of agriculture in GDP from 17% to 25%.

Importance of the sector

- ① It creates employment opportunities in rural areas, thus reducing urban migration.
- ② It can reduce wastage.
- ③ It can help in food fortification and improve India's rank of 101 in Global Hunger Index.
- ④ It can help to double farmers' income by preventing distress sales.

Challenges Faced

- ① High Informalisation.
- ② Low Infrastructure support.
- ③ Less R & D (0.6% of GDP is devoted to R & D compared to 4% in the west)
- ④ Missing supply chain, cold storage.
- ⑤ Lack of finance & credit.
- ⑥ Agriculture being a state subject, many reforms like Cooperative Model Contract Farming Act, Land Leasing Act are not implemented well, preventing private participation.

Initiatives taken

- ① PM - Formalisation of Micro Food Processing Enterprises Scheme
- ② PM - Sampada.
- ③ Increased FDI limit under automatic route.

- ④ Operation Green, TOPS to Total Scheme.
- ⑤ PM-Mudra, NABARD to provide easy finance

Way forward

Agriculture employs about 50% of the Indian population, but contributes ~~at~~ only 12% to GDP. This structural imbalance must be solved by encouraging food processing along with other steps like skill development, capacity enhancement, entrepreneurship and creating industry-academia linkages.

14. Despite efforts by successive governments, equitable growth remains elusive and income inequality continues to persist in India. Discuss. (250 words) 15

क्रमिक सरकारों के प्रयासों के बावजूद, न्यायसंगत विकास दुष्प्राप्त बना हुआ है और भारत में आय असमानता निरंतर बनी हुई है। चर्चा कीजिए।

As per Oxfam Inequality Report 2022, 50% of the population holds a wealth of only 6% in India. This shows failure of successive policies to bring inclusive growth.

Manifestation of Inequality

- ① While the rich is moving towards organic food products, the poor remain malnourished, as shown by India's poor rank of 101 in Global Hunger Index.
- ② While one set of students studies at International Board schools, the other faces teacher absenteeism and poor infrastructure of government schools.
- ③ While India hosts ^{some of} the richest people globally, 20% of population lives under poverty.

Steps taken by government

- ① Mid-day meals for school children.
- ② MGNREGA for employment.
- ③ PM-Kisan, PM-Asha for farmers.
- ④ Subsidised food by a combination of MSP and PDS system.
- ⑤ Labour laws & minimum wage laws.

Reasons for continuing inequality

- ① Improper implementation of schemes.
- ② High leakages and corruption.
- ③ Inclusion & exclusion errors.
- ④ Input oriented, rather than output oriented approach.
- ⑤ Poor audit mechanism.
- ⑥ Lack of involvement of local organisations.

Way Ahead

- ① Technology Interventions.
eg. SMS-based PDS tracking in CG.
- ② Social audits, involving NGOs & STGs.
- ③ Use of DBT transfers
- ④ Increase awareness among beneficiaries by citizen's charter and ITC activities -
- ⑤ Rationalisation of beneficiaries for focused targeting on the needy.

Resolving deep ~~rooting~~ rooted inequality is sin-gua-non for the achievement of a five trillion dollar economy. After all, one section of the nation can't progress, while the other sits in poverty, hunger and deprivation.

15. Stating the factors that determine the employment situation of an economy in the long-term, discuss the measures that are needed for India to address its unemployment problem. (250 words) 15

किसी अर्थव्यवस्था की दीर्घावधि में रोजगार की स्थिति को निर्धारित करने वाले कारकों का उल्लेख करते हुए, उन उपायों की विवेचना कीजिए जो भारत में बेरोजगारी की समस्या के समाधान हेतु आवश्यक हैं।

As per Economic Survey (2021-22), India faces a high unemployment rate of 4%. There is an urgent need to resolve this problem.

Factors determining employment

Demand Side Factors

- ① Level of business activities in the economy
- ② Level of capital use & ~~test~~ machine usage
- ③ Flexibility of labour laws
- ④ Global economic conditions & value chains

Supply Side Factors

- ① Education level of the workers
- ② Health & physical fitness of workers
- ③ Level of skill development
- ④ Preference over labour - leisure trade off

Reasons for high unemployment

- ① As per NITI Aayog, SKILL India Report, only 30% of educated youth is employable
- ② Low female LFPR at 20%
- ③ Rigid labour laws
- ④ Weak economic scenario due to COVID induced lockdowns.
- ⑤ Impact of Russia - Ukraine war on Investment expectations.
- ⑥ Poor education and health standards of employees.
- ⑦ High jobless growth due to service led growth.
- ⑧ Missing middle i.e. absence of medium medium sized enterprises.

Measures needed

- ① As per Amartya Sen, there is need to build capability of mothers by education & health interventions.
- ② Skill development - Government has launched a campaign for this.
- ③ Workplace safety & Implementation of Vishaka guidelines to save female LFTR.
- ④ Rationalise labour laws.
- ⑤ Easy credit & ease of doing business to boost investment.

Recent Initiatives like labour codes, Make in India, Ayushman Bharat, Skill India Mission are a step in the right direction. Their implementation will be crucial for India to reap its demographic dividend.

16. In view of the rapidly increasing socio-economic damage caused by disasters, integrating Disaster Risk Reduction (DRR) into development planning requires an effective stakeholder engagement mechanism. Discuss. (250 words) 15

आपदाओं के कारण तेजी से बढ़ रही सामाजिक-आर्थिक क्षति को देखते हुए, आपदा जोखिम न्यूनीकरण (DRR) को विकास योजनाओं में एकीकृत करने के लिए एक प्रभावी हितधारक जुड़ाव तंत्र की आवश्यकता है। विवेचना कीजिए।

As per Sendai Framework, government is the major authority for disaster management, but other stakeholders are equally important for an effective disaster response.

Increasing socio-economic damage caused by disasters

- ① Disasters affect the economic, social & political structure of an area
- ② Its affect on poor & marginalised is higher, thus raising inequality
- ③ With climate change, frequency & intensity of disasters is rising, as per the Sixth Assessment Report of IPCC.

DRR into development- Planning

As per Sendai Framework, each dollar spent on DRR, saves 7 dollars spent on disaster relief & rehabilitation. Thus, integrating DRR into development can reduce the cost of disaster management, along with saving lives & property.

Importance of stakeholder engagement mechanism

Different stakeholders play a vital role in DRR :-

- ① Central government - It is the major provider of finance.
- ② State government - It deals with state specific requirements and preparedness.
eg: Cyclones in Odisha, Droughts in Rajasthan.
- ③ Local government - It is the prime executing agency of plans.

- ④ Community - It is the repository of traditional knowledge and gives first response to the disaster.
- ⑤ NDRF - It provides security & aid post disaster.
- ⑥ National Institute for disaster management (NIDM) - for research & development.
- ⑦ Neighbouring countries - To deal with floods, India engages with Nepal, China, Pakistan (Indus Water Treaty).

Thus, we see each stakeholder has a vital role in DRR.

It is important to engage all of them. National Disaster Management Act 2016 provides a mechanism for this by providing a grid with clear roles of each actor. Increasing community involvement & global coordination is needed to support this.

17. Provide an account of the existing carbon trading mechanisms in India. Also, discuss the significance of an efficient carbon trading market in the country and state the challenges that currently exist. (250 words) 15

भारत में मौजूदा कार्बन व्यापार तंत्र का विवरण प्रस्तुत कीजिए। साथ ही, देश में एक कुशल कार्बन व्यापार बाजार के महत्व पर चर्चा कीजिए और वर्तमान समय में विद्यमान चुनौतियों का उल्लेख कीजिए।

India has committed at Glasgow to reduce emission intensity of ITD GDP by 45% by 2030.

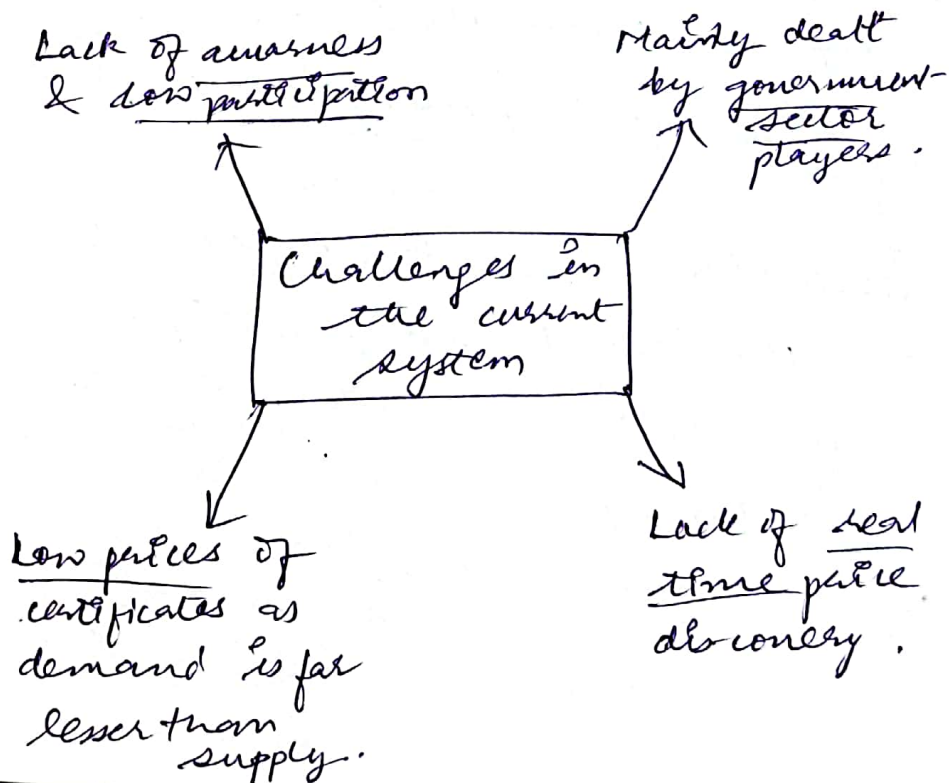
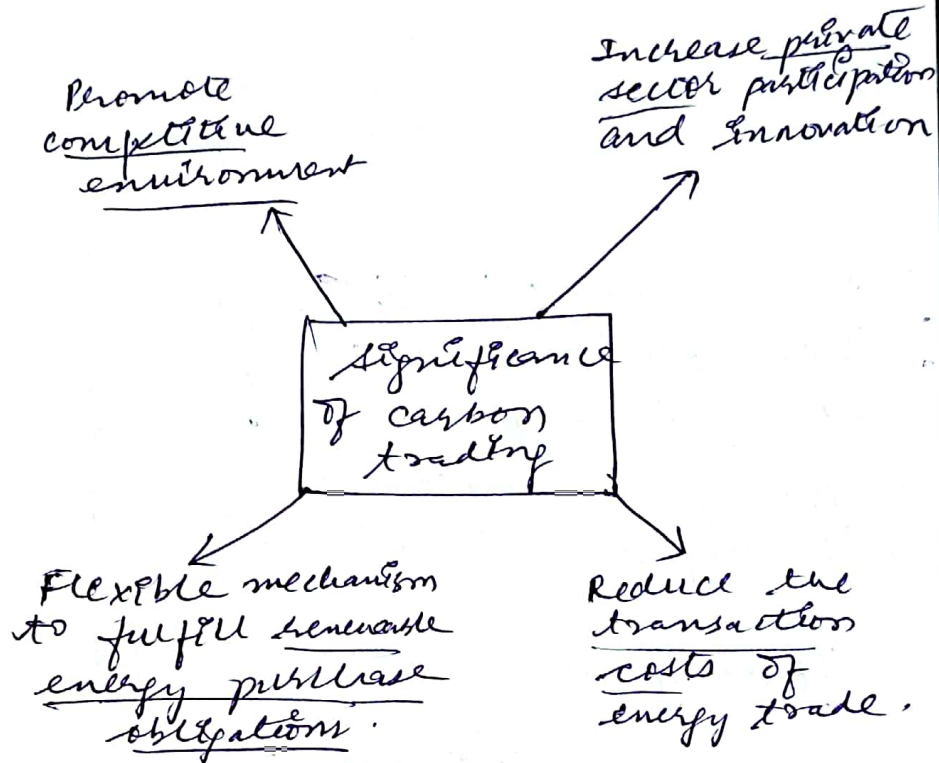
Carbon trading mechanisms are a crucial step in this direction.

Existing mechanisms in India

- ① Renewable Energy Certificates → for dealing in renewable energy.
- ② Energy saving certificates (ES Certs).

At International level too, Kyoto Protocol provides for energy trading in the form of:-

- Carbon trading
- Cap and Trade System.



Way Forward

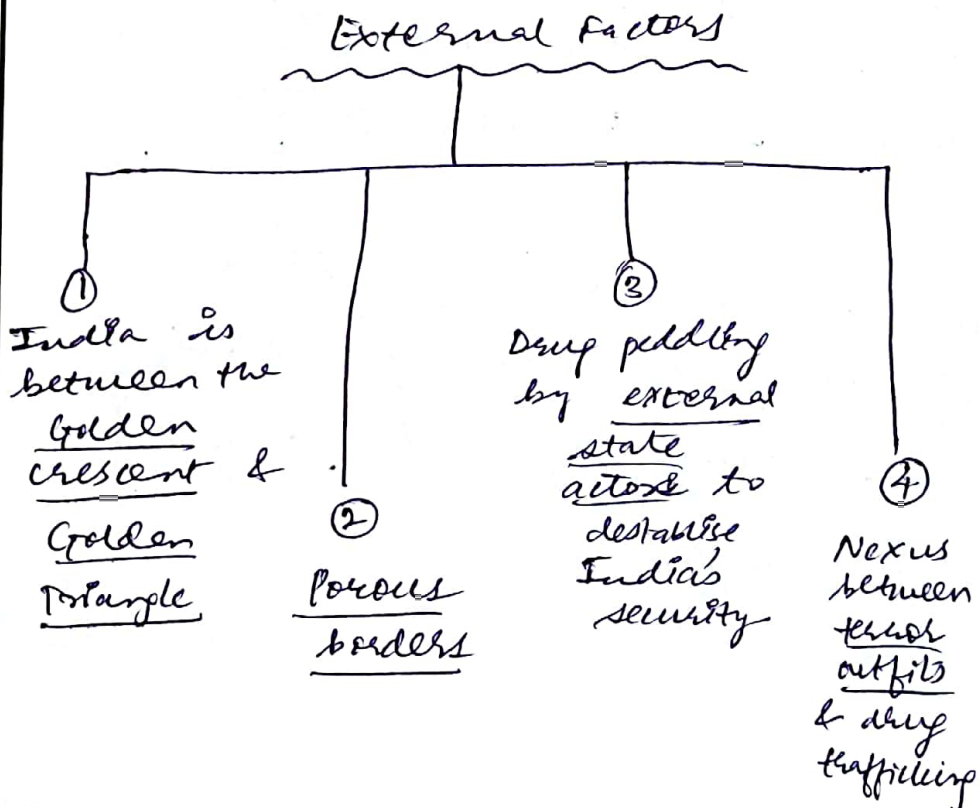
- ① Increase awareness & private participation
- ② Incentivise participation of the carbon trade platform by tax credit, subsidy.
- ③ Integrate the platforms with NSE and BSE for wider reach.
- ④ Inter agency cooperation between SEBI, Ministry of Renewable Energy and Research Organisations.

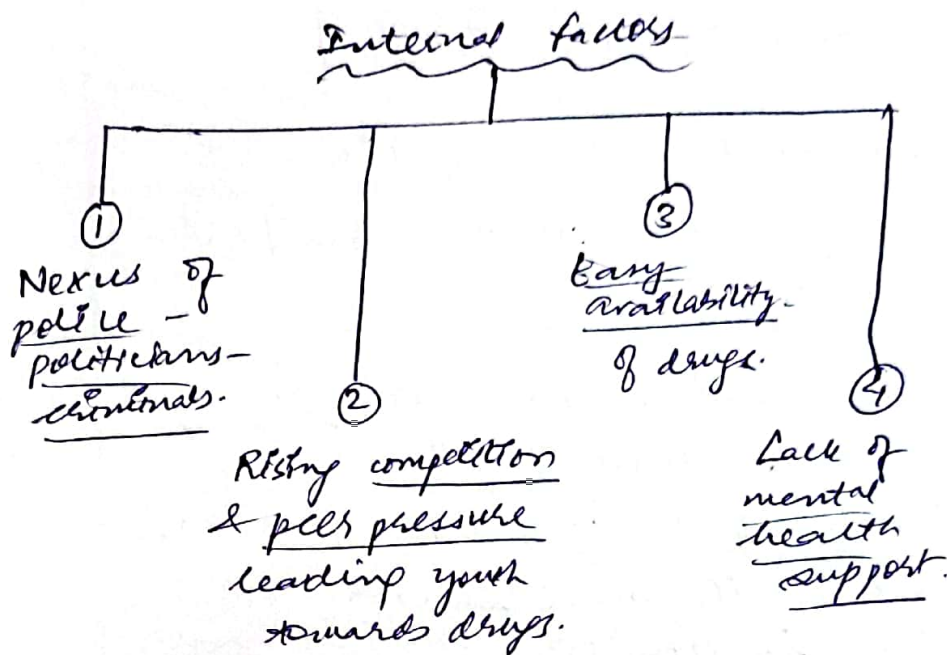
Thus, carbon trading can be a key to India's dream of achieving Net Neutrality by 2070, if used efficiently.

18. The menace of drug trafficking in India has been on a rise due to a mix of factors both internal and external. Discuss. Also, state the challenges posed by drug trafficking to India's national security. (250 words) 15
- भारत में ड्रग ट्रेफिकिंग का खतरा आंतरिक और बाह्य दोनों कारकों के समन्वय के कारण बढ़ रहा है। चर्चा कीजिए। साथ ही, भारत की राष्ट्रीय सुरक्षा के समक्ष ड्रग ट्रेफिकिंग से उत्पन्न चुनौतियों का उल्लेख कीजिए।

According to United Nations Office on Drug and Crime, India is one of the leading markets for opium & drug trafficking. This poses multiple challenges for the country.

Factors responsible





Challenges for security

- ① Drug drives the youth towards crime, to get money to buy it
- ② It mangles family environment & leads to domestic violence.
- ③ It proliferates and sustains terror outfits by giving them income source
- ④ It is linked to money laundering.
- ⑤ It creates management difficulties in border management -

[Need of the hour]

- ① Secure borders by intelligence & policing to prevent cross border smuggling.
- ② Choke funding sources of drug-trade outfits & terror outfits.
- ③ Modern technology like drones, sensor, thermal sensors to detect infiltration.
- ④ Cooperation with a neighbouring countries.
- ⑤ Improve education, awareness & mental health support for the youth.
- ⑥ Treat drug addicts as victims rather than convicts & provide rehabilitation.

Dealing with drug trafficking is
instrumental for securing India's
~~national~~ ^{domestic} and geopolitical interests.

19. The Andaman and Nicobar Islands strategic significance in the Indian Ocean region (IOR) has been underplayed by India's policy of 'masterly inactivity and benign neglect'. Critically discuss. (250 words) 15

हिंद महासागर क्षेत्र (IOR) में अंडमान और निकोबार द्वीप समूह के रणनीतिक महत्व को भारत की 'कुशल अकर्मण्यता और सौम्य उपेक्षा' की नीति के तहत कम करके आंका गया है। समालोचनात्मक चर्चा कीजिए।

Andaman & Nicobar Islands have a strategic location in the Indian Ocean Region which can provide security advantage to India.

Strategic Significance

- ① Close to neighbouring countries of Sri Lanka, Myanmar & Indo China.
- ② Possibility of military exercises with neighbours
- ③ Can give input for Intelligence.
- ④ Can counter China's rise of power policy.
- ⑤ It can provide anchor for future QUAD operations

Maritime inactivity & neglect

- India has ignored the importance of its island groups consistently
- This is evident in low infrastructure development & coastal development of the islands.
- The population of A & N is isolated and leads to ~~no~~ no role in India's security.

Play Forward

- Use A & N for strategic advantage
- Develop it as a hub of IOR naval operations -
- Involve the locals, giving them employment & respect

20. India has recently commissioned the world's first large International Liquid-Mirror Telescope (ILMT). How will the newly commissioned telescope aid in India's astronomical observations and research? (250 words) 15

हाल ही में, भारत ने विश्व का पहला विशाल इंटरनेशनल लिक्विड-मिरर टेलीस्कोप (ILMT) स्थापित किया है। यह नवनिर्मित टेलीस्कोप खगोलीय पर्यवेक्षणों और अनुसंधान में भारत की किस प्रकार सहायता करेगा?

From the invention of zero to launch of ballistic missiles, India's science & technology has been robust in its development.

ILMT is another feather on the cap

Importance of ILMT

- ① Help in deep space observation & research.
- ② Encourage the youth to take up science as career
- ③ Enable global cooperation in research & information sharing.
- ④ Give a boost to private sector participation.

- ⑤ Help to solve the mysteries of universe - black hole, supernova, neutron stars.
- ⑥ Can provide inputs for application in wide sectors like agriculture, environment, medicine.
- ⑦ Can empower India's space mission & way for human space mission.

Thus, DMT remains crucial to India's research sector. It is important however, to raise research expenditure from 0.6% of GDP to reap the benefits of DMT.

