



VISION IAS

www.visionias.in

GENERAL STUDIES (TEST CODE : 1836)

Name of Candidate	AYAN JAIN		
Medium Eng./Hindi	ENG	Registration Number	1040520
Center	ONLINE	Date	19/8/22

3 hours

~~9:00-11:58 AM~~

INDEX TABLE			3 hours		9:00-11:58 AM		INSTRUCTIONS	
Q. No.	Maximum Marks	Marks Obtained						
1	10		1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).					
2	10		उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।					
3	10		2. There are TWENTY questions printed in ENGLISH & HINDI					
4	10		इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।					
5	10		3. All questions are compulsory.					
6	10		सभी प्रश्न अनिवार्य हैं।					
7	10		4. The number of marks carried by a question/part is indicated against it.					
8	10		प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।					
9	10		5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.					
10	10		प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (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।					
11	15		6. Word limit in questions, if specified, should be adhered to.					
12	15		प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।					
13	15		7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.					
14	15		उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।					
15	15							
16	15							
17	15							
18	15							
19	15							
20	15							
Total Marks Obtained:								
Remarks:								

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi- 110009

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.

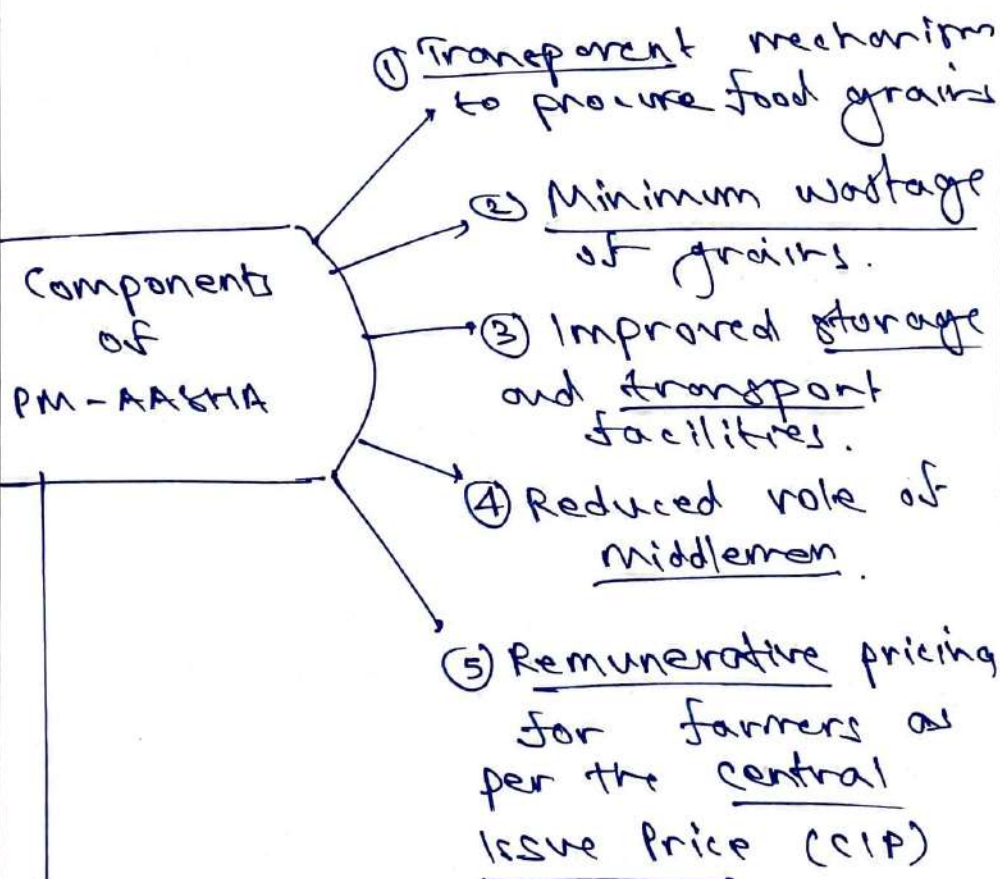
6.

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 National Food Security Act 2013 has laid out many objectives for procurement and farmer support. PM-AASHA is one such scheme.



This ensures farmers get maximum pricing, and food security needs of India are met in buffer too.

Concerns associated with PM-AASHA

- ① Administrative leakages: presence of corruption and malpractices

↓ ↓
 Hoarding Adulteration
- ② Price support to farmers is inadequate.
- ③ Lack of targeting of beneficiaries
(eg. Poor farmers should get more benefit)
- ④ Questions are raised at the transparency.
- ⑤ centralized mechanism which also causes conflict between centre and state (federal issues)
- ⑥ Burden on government's fiscal envelope due to inefficiencies.
- ⑦ overlapping schemes: redundancy

Recommendations of ASHOK DALWAI committee and MS SWAMINATHAN committee will help ensure SDG 2: No hunger.

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 mix of finance from government and private sources

eg. [Co-lending] model where NBFCs and Public Sector Banks together lend money.

Role blended finance can play in mobilizing capital for infrastructure development in developing countries

- ① It ensures enhanced liquidity and credit distribution.
eg. No more liquidity crunch
- ② Can serve as fiscal stimulus to dying industries
eg. DISCOMS.
- ③ Low rate of interest especially for long-term lending will boost investment in infrastructure

- ④ Risk sharing models will further incentivise infrastructure projects.
 - ⑤ Will give a boost to Public-Private-Partnerships (PPPs)
 - ⑥ Ensure last-mile-accessibility of credit
eg. Rural areas.
 - ⑦ Diverse lending arrangements will be feasible
eg. Installments, Annuities
 - ⑧ Will have a Multiplier effect since infrastructure creation also lead to employment.
 - ⑨ Will allow government to increase spending on Welfare and Social Sector.
 - ⑩ Clearances and regulatory hurdles can be eased
eg. Regulation Review Authority
- * KELCAR committee's guidelines on PPP will serve as guide light for blended 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 refer to ports which are situated inland rather than on coast / rivers.

Challenges faced in the revival and revamp of dry ports

- ① Insufficient utilization of dry ports
- ② Pressure on already burdened resources
- ③ Riverine ports are already developed so more in use.
- ④ Lack of political focus.
- ⑤ Environmental issues and clearances (eg. EIA)
- ⑥ Land acquisition issues
- ⑦ Increasing use of trucks and rail as alternative.

Measures that can be adopted to re-amp and revive dry ports

- ① Increased use of inland waterways
- ② clear policy roadmap on use of dry ports. (eg. Vision Statement)
- ③ Involve private sector in PPP model.
- ④ Increase role of ports Trust Authority with regard to maintenance.
- ⑤ International collaboration to develop a few major dry ports
- ⑥ Increase road and rail connectivity with riverine ports.
- ⑦ Increased investment (eg. FDI) and budgetary allocation for shipping sector.

HONG KONG CONVENTION on shipping has potential to make ports more sustainable and economically viable

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 संघारणीयता सुनिश्चित करने के समक्ष विद्यमान प्रमुख खतरों में से एक है। चर्चा कीजिए।

Monoculture is the practice of planting only one type of crop in the entire field.

Reasons for monoculture	- Commercial crops (eg. Tea) - Easy to grow - Climatic conditions may only allow one crop.
-------------------------------	--

How monoculture is a major threat to food security and sustainability of Indian agriculture

- ① Monoculture focuses on the commercial crops like Tea, coffee plantations.
- ② Reduces incentive to plant food crops.
- ③ Makes the crop fields more vulnerable to pest attacks.
eg. Locust attacks.
- ④ Depletes the soil of the same nutrients repeatedly.

- ⑤ Soil becomes infertile and difficult to replenish.
- ⑥ Efficiency/throughput of yield decreases over time.
- ⑦ Multicrop fields are a more stable ecosystem than a monoculture field.
- ⑧ Different kinds of food grains are needed for Nutritional Security and good health
(SDG 3)
- ⑨ Many monoculture crops are highly water-intensive which depletes groundwater.
- ⑩ Emissions of Greenhouse gases are higher in such crops.
- ⑪ Total food availability can decrease.

FAO's warning about monoculture should be taken seriously, and crop-diversification and MIXED FARMING should be the aim.

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।

The recent amendment to Plastic Rules has completely banned the use of Single-Use Plastics (SUPs)

These SUPs are those plastics which cannot be reused and must be thrown immediately after one use.

Impact of SUPs on health and environment

- ① Plastic pollution increases.
- ② Most of this goes to oceans
⇒ Marine pollution.
- ③ Animals and humans can choke on plastic.
- ④ Many such SUPs contain toxic material.
- ⑤ Burning of such plastic releases harmful fumes.

③ Soil quality degrades which affects plant health.

⑦ The plastics often find their way into food due to negligence.

Recent efforts by government to curb plastic pollution

① Amended the Plastic Rules.

- Ban on single-use plastics
- Increased thickness from 50 μm to 120 μm
- Extended Producer Responsibility on plastic manufacturers.

② Signed UNEP pact to end plastic pollution.

③ Part of Global COMPACT.

④ Promotion of paper bags and JUTE ~~bags~~ (eg. Mandatory packing of foodgrains in Jute bags)

⑤ Clear policy stance on plastic

Plastic should be phased out and reusable alternatives should be prioritized.

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।

AAPDA MITRA ("friend in difficulty") is a force of non-government public volunteers to contribute to disaster response.

How AAPDA MITRA is becoming a game changer in Disaster Management in India

- community response is seen to be quicker than NDRF/SDRF.
- covers the inadequate force/personnel of NDRF/SDRF.
- skilled volunteers are also trained well in ICT.
- Volunteers are actually more Trusted by the public.
- People cooperate willingly.
- Last-mile connectivity: The

volunteers reach even remote areas which takes time for officials.

- Psychological and Trauma care is provided by the Aapda Mitras
- Easier family reuniting post-disaster.
- contribute to future prevention of disasters as well.
- Empowers people as active participants in field of disaster management
- Donations to the volunteers ensures no burden on government resources.
- They are seen to be more motivated and sensitive.

SENDAI Framework and HYOGO Protocol both prioritize the role of community. Hence Aapda Mitras are a game changer.

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 attacks refers to standalone terror/violence events which are not a part of any larger organization or series of events.

Why Lone-wolf attacks are a serious challenge for security agencies around the world

- ① Anonymity since there is a single attacker.
- ② Difficult to track,
- ③ Trans-national nature creates diplomatic issues.
- ④ No history / previous intel on these attackers.
- ⑤ They can go unnoticed even in public arenas and cause lot of damage.

- ⑥ After they are suicide attacks without fear of repercussions
- ⑦ Huge access to weapons (eg. USA gun laws)

Role of internet in exacerbating lone-wolf attacks

- ① Easy indoctrination by terror outfits. (eg. ISIS)
- ② Youth is exposed to violence and terror content online.
- ③ Dark Web allows purchase of dangerous weapons.
- ④ Poses a threat to critical Information Infrastructure (eg. Hacking)
- ⑤ People can easily learn how to create weapons (eg. Bombs).
- ⑥ Information about public gatherings and vulnerabilities

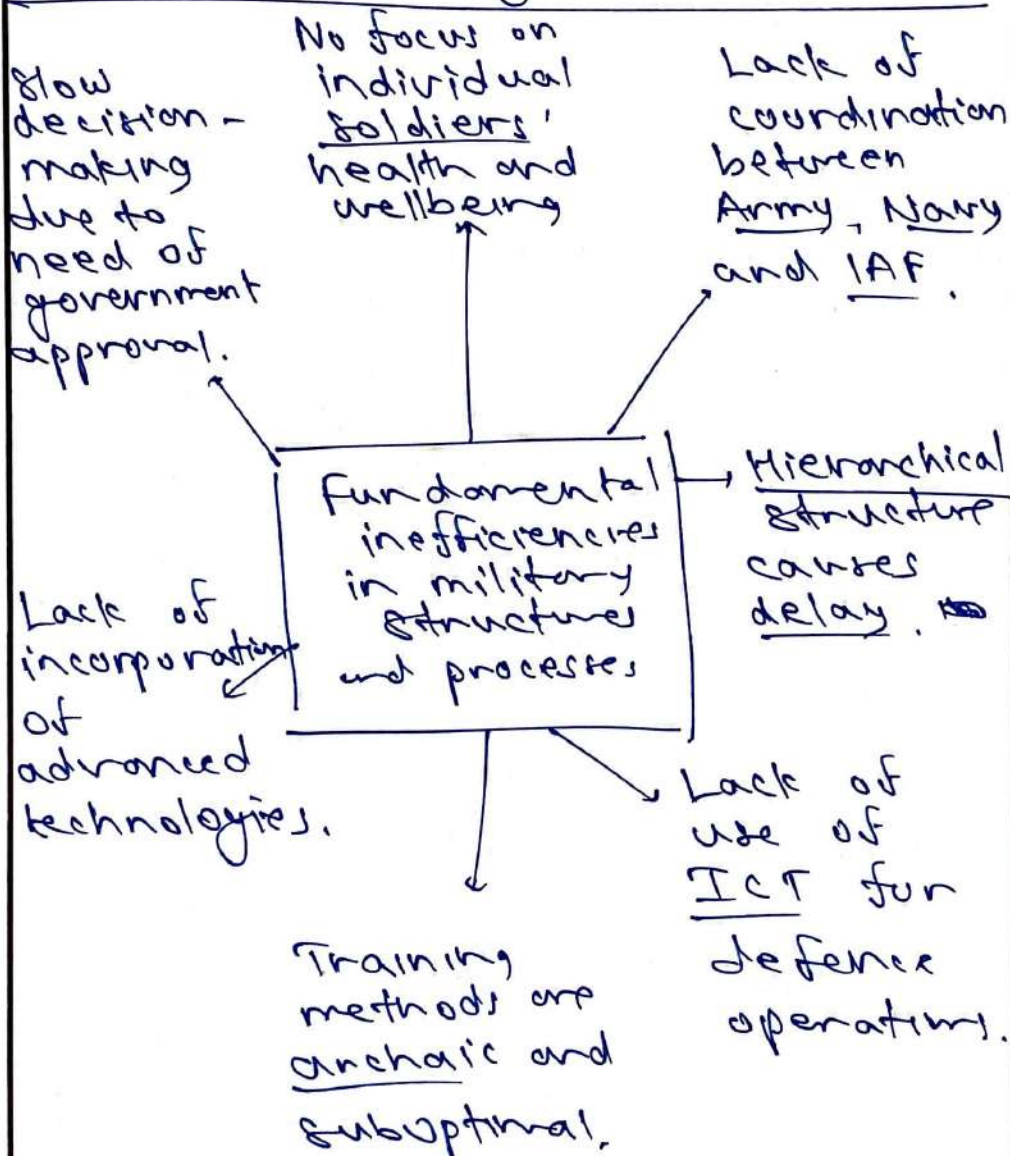
A National Security Doctrine with specific Standard Operating Protocol (SOP) for lone-wolf is needed.

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 अक्षमताओं को अब देश में विभिन्न रक्षा सुधारों के माध्यम से दूर किया जा रहा है। चर्चा कीजिए।

The last few years have seen major changes in Defence, to modernize it, enhance its capabilities, as well as prepare it for future emergencies.



How defence reforms are addressing these issues

- ① Appointment of Chief of Defence Staff (CDS) to unify the three forces and ease coordination.
- ② Modernization of the forces
- ③ Defence agreements with countries (eg. USA).
- ④ Indigenization of defence procurement (eg. "Positive List")
- ⑤ High quality equipment from Russia (S-400), Israel etc
- ⑥ Soldiers are being allowed education/courses.
- ⑦ Coordination between government and army has been greatly simplified.
- ⑧ A National Security Doctrine is being evolved.

SHEKETKAR COMMITTEE on Defence reforms has played a major role in the reforms of military structures and processes

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।

Owing to the growing popularity and success of Traditional Medicine (eg. AYUSH) in India, Homeopathy, Ayurveda, Yoga, Unani, Sowa-Rigpa WHO established a global centre.

Advantages of mainstreaming traditional medicine

- ① Increased solutions to problems not easily cured by medicines
- ② Alternatives to medicines can solve issue of unavailability of medicines (eg. During COVID-19)
- ③ Traditional medicine is a lot cheaper and early available
- ④ No/low side-effects as compared to scientific drugs.
- ⑤ Increased recognition of Indian culture (eg. Soft Power)

- ⑥ Improved health outcomes and productivity of individuals
(eg. Demographic Dividend)
- ⑦ Self-reliance.
- ⑧ Job opportunities in AYUSH sector

~~Disadvantages~~ of mainstreaming
challenges of traditional medicine

- ① Lack of scientific evidence
- ② Possible superstition
- ③ People may stop scientific medicines.
- ④ Lack of certification mechanism
(eg. Many homeopathy are scam)
- ⑤ Lack of acceptance among the educated class.
- ⑥ Will negatively affect the existing medicine sector,
(eg. Lobbying possible).
- ⑦ Institutionalization of these systems has not been done.

Traditional Medicine offers huge scope towards SDG3 (good health) and should be gradually normalized.

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।

Nano Urea Liquid is a new intervention in the fertilizer sector by making concentrated and targeted delivery of Urea, at the root of plant.

How nano-urea can improve productivity in farming

- ① Lesser input cost due to targeted use.
- ② Minimum wastage of urea.
- ③ More effective absorption of urea by the plant.
- ④ Liquid form is easy to apply and maintain.
- ⑤ Improved yields.
- ⑥ Replenished soil quality.
- ⑦ Can be used in all soil types.
- ⑧ Increases profit for farmers.

How nano-urea can reduce environmental impact and input cost

- ① As it is a concentrated chemical, less amount is used.
- ② It is applied in targeted manner.
- ③ No excess urea, so reduced surface runoff of urea to water
⇒ Less marine pollution.
- ④ No need of standing water, so less emissions.
- ⑤ It is a safer and less harmful chemical.
- ⑥ Lower water requirements prevents groundwater depletion.
- ⑦ Chemical is easily absorbed so doesn't seep into the groundwater.

Thus, Nano Urea Liquid will play a great role in achieving FOOD SECURITY as well as DOUBLING FARMERS INCOME 2022.

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।

The Russia-Ukraine conflict has pushed crude oil prices, which has consequences on all countries

Domino effect of high crude oil prices on Indian Economy

- Imported inflation : will make fuel prices rise in India.
- Burden on consumers and reduced consumption.
- As crude oil is raw material in many industries, they will suffer (eg. Textiles)
- Burden on government's fiscal resources will reduce spending.
- May have to borrow money, leading to fiscal deficit.
- Sales of vehicles will see temporary slip due to rise in fuel prices.

- Certain sectors may have to layoff employees.
- Depletion of India's FOREX reserves.
- Hamper overall economic growth.
- Reduced multiplier effect.
- Government may increase taxes.
- India may enter trade deficit.

Measures that can be taken in this context

- Diversify countries from where crude oil imported.
- Enter into long-term crude oil pricing agreements to prevent price fluctuations.
- Increase strategic reserves of petroleum and crude oil to prevent urgency.
- Enhance oil extraction capabilities.
- Look for alternative oil sources

like Shale Oil (eg. K-G Basin)
and coalbed methane

- Harness renewable sources of electricity (eg. Solar, Hydro)
- Promotion of Electric vehicles (eg. FAME, NITI Aayog's Battery Swapping policy)
- Increase forex reserves.
- Incentivize NRIs to deposit currency in India.
- Complete ongoing projects like TAPI pipeline.
- Improve connectivity of own transport systems (eg. HVT pipeline)
- Improve refineries in India

Crude oil is an essential item and its prices can cause global slowdowns. Hence, we must be prepared for any shocks beforehand.

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 refers to the ratio of input costs to the revenue generated.

High operating Ratio indicates revenue generated is not adequate for profit-generation.

Reasons behind high operating ratio of Indian Railways

- ① Rail fares have been kept very low to allow common man to use railways.
- ② Cross-subsidization further reduces profits for the railways, and use of freebies (eg. Metro) and
- ③ obsolete technology machinery is ripe with inefficiencies.

- ④ Lack of maintenance standards makes overall expenditure even costlier.
- ⑤ Many trains are not at full utilization / passenger
- ⑥ Low budgetary allocation to railways.
- ⑦ Luxury trains (eg. Shatabdi) have very high cost of operation.
- ⑧ Lack of innovation and R & D.
- ⑨ Low political will to modernize.

Remedial measures taken by the government in this regard

- ① Rail gauges are being electrified to reduce fuel costs
- ② cross-subsidization is being done away with.
- ③ Modernization of railway systems to improve their efficiency.

- ④ Strengthening the cadre of Indian Railway Service and adding Indian Railway Management Service (IRMS)
- ⑤ Gradually allowing private sector investments and FDI.
- ⑥ Redundant or low-functioning train routes are removed.
- ⑦ Alternatives in form of cheap air travel to reduce burden on railways.
- ⑧ Hiring catering services to improve efficiency of services.
- ⑨ Boosting demand of railways.
- ⑩ Increased investment in railway technologies and foreign collaboration.

BIBER DEBROY committee's recommendations can be used to improve profitability of the rail system.

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.

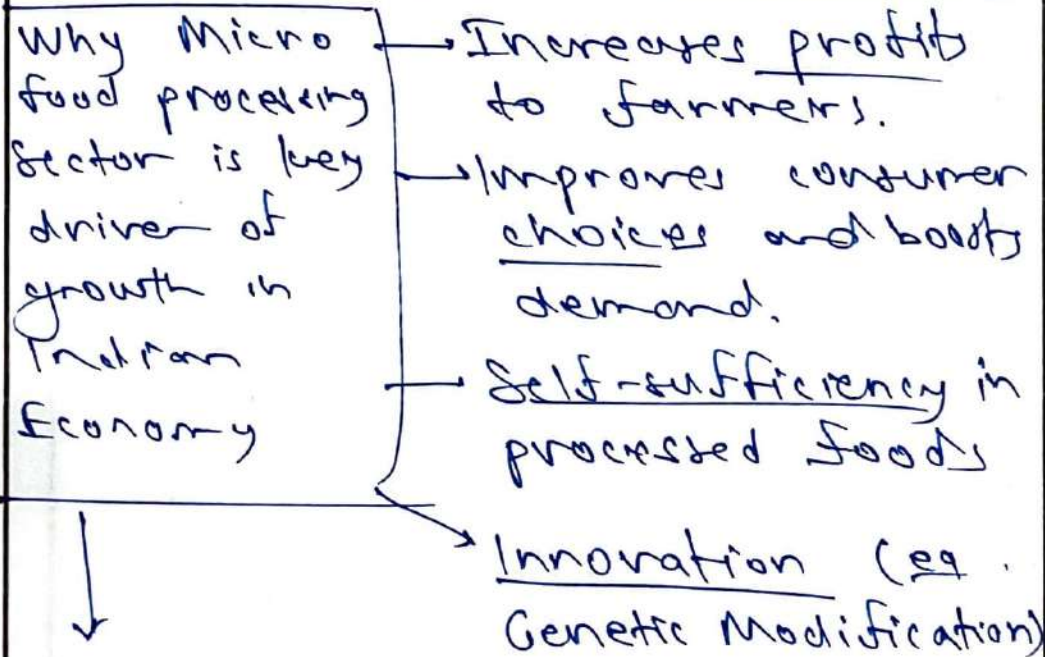
(250 words) 15

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 is the value addition stage to harvest. It includes:

PRIMARY	→ Cleaning, sorting, grading
SECONDARY	→ Packing, fortification
TERTIARY	→ Branding, Marketing.

Micro-food processing means these processes are carried out at a micro scale (eg. Small units)



Food Security and Nutrition
(eg. MURTOSHRI Rice → Iron)

Challenges Faced by Micro Food processing sector

- ① Lack of investment.
- ② Low credit availability, since food processing is expensive.
- ③ Poor quality of food processing
- ④ Lack of modernization and use of technology.
- ⑤ Heavy post-harvest losses
- ⑥ Lack of skilled employees.
- ⑦ Low hand-holding support from government initially.
- ⑧ Poor storage facilities, like cold chain infrastructure
- ⑨ Issues in transport of agriculture
- ⑩ Climatic conditions aggravate perishability.
- ⑪ Low demand among poor people.
- ⑫ Lack of branding/marketing
- ⑬ Low competitiveness compared to big firms and international companies.

How the recent initiatives taken by the government aim to address them

- ① Formalization of Micro food enterprises.
- ② Increased investment in cold chain infrastructure.
- ③ Promoting processed foods.
(eg. Iron fortified rice)
- ④ Kisan Rails, Krichi UDAN, etc to improve transport.
- ⑤ From gate to market trucks.
- ⑥ Skilling of labourers.
- ⑦ Doordarshan channels to teach best practices of processing.
- ⑧ Helpline for guidance and handholding (eg. Vikaspedia)
- ⑨ Learning from international best practices.
- ⑩ Incentives in export to small players.

Microfood processing can completely transform agriculture sector.

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 दुष्प्राप्य बना हुआ है और भारत में आय असमानता निरंतर बनी हुई है। चर्चा कीजिए।

Article 39(b) and 39(c) of Indian Constitution (DPSP) seek to promote equitable growth but we still have a high PALMA RATIO and GINI coefficient.

Efforts by successive governments in this regard



Indicators of income inequality:

- OXFAM report : Top 10% have more wealth than bottom 70%.
- GINI coefficient shows inequality
- High PALMA ratio
- Dismal performance in Global Inequality Index.
- Regional disparities.

Why equitable growth is elusive and income inequality continues?

- ① Lack of economic growth.
- ② Huge population of India.
- ③ Resource crunch (17.5% of world's population in 2% land)
- ④ Disasters and calamities have affected poor worse
- ⑤ Differential growth in various states (eg. BIMARU states)
- ⑥ Lacunas in poverty alleviation programmes (eg. Single-pronged approach)

- ⑦ Prevalence of corruption.
- ⑧ Low political will and focus on populism.
- ⑨ Geographical factors such as distribution of resources.
- ⑩ High dependence on agriculture.
- ⑪ Low growth of agriculture as compared to services sector.
- ⑫ Lack of skills and education among poor.
- ⑬ Digital divide aggravated inequalities.
- ⑭ Land distribution is inequitable (e.g. 86% farmers have less than 2 Ha land).
- ⑮ Exploitation of labourers via cheap wages etc.
- ⑯ Lack of targeted approach to inequality.

An inclusive trajectory is crucial on India's march to prosperity of \$5 trillion economy..

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।

The Periodic Labour Force Survey (PLFS) has pointed out various issues in India's employment status.

Factors which determine employment situation of an economy in the long run

- ① Economic growth rate
- ② Increase in job opportunities
(eg. Jobless growth)
- ③ Inflation level trend
(eg. NAIRU : Non-accelerating inflation level of employment)
- ④ Fluctuations in business-cycles.
- ⑤ Whether potential GDP is reached or not.
(eg. Inflationary Gap or Recessionary Gap)

- ⑥ Structure and composition of economy (eg. Primary sector dominance)
- ⑦ Composition of demography (eg. Working age population)
- ⑧ Industry-Academia mismatch or alignment
- ⑨ Adaptation of economy to global demand (eg. ICT)
- ⑩ Fiscal stimulus and capital expenditure (CAPEX).

Measures needed by India to solve unemployment issue

- ① Capital expenditure and fiscal stimulus (especially during lockdowns)
- ② Promote labour-intensive sectors (eg. Textiles - PM MITRA).
- ③ Upskilling of labourers.
- ④ Promote labour guarantee schemes like MGNREGA even in Urban areas.
- ⑤ Tackle disguised unemployment

in agriculture sector.

- ⑥ Rural transformation
(eg. Mission Antyodaya)
- ⑦ Promote MSMEs. (eg. UK Sinha Committee)
- ⑧ Women empowerment via
SHGs (Vidha Thorat Committee)
- ⑨ Enhance cheap credit
availability (eg. MUDRA)
- ⑩ Support self-employment
(eg. Stand Up India, start Up India)
- ⑪ Incubation centres for
startups, and hand holding.
- ⑫ Promote cooperatives.
- ⑬ Practice fiscal discipline as
per ~~FRBM~~ FRBM 2003.
- ⑭ Create alternative sources of
income in agriculture
(eg. Animal Husbandry)

Employment levels are a must for
an INCLUSIVE GROWTH.

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।

Disaster Risk Reduction entails taking pre-emptive steps to minimize possibility of a disaster as well as minimize the potential damages.

Rapidly increasing socio-economic damage caused by disasters

- ① Damage to lives and property
- ② Failure of agriculture
- ③ Affects food security
- ④ Damage infrastructure
- ⑤ Psychological damage
- ⑥ Rise in number of cyclones
- ⑦ Emerging threats like medicines, Locust attacks.
- ⑧ Higher economic losses in recovery.

Integrating Disaster Risk Reduction (DRR) into development planning requires effective stakeholder ~~mechanism~~ mechanism

- ① Community is the first-responder as well as has best understanding of region.
- ② Decentralized planning is key.
- ③ Due to geographical climate, topographical variations, there cannot be one-size-fits-all approach.
- ④ Retrofitting of buildings requires engagement of construction sector.
- ⑤ Standard Operating Protocols (SOPs) need to be disseminated via Media.
- ⑥ NDRF/ SDRF should be compatible with all other agencies.

- ⑦ Government schemes like MGNREGS should have DRR imbedded in the construction of assets.
- ⑧ Insurance mechanisms need to be diversified
e.g. catastrophe Bonds.
- ⑨ Public must be aware and prepared, via mock drills, information dissemination etc.
- ⑩ Constructions in ^{disaster} prone areas should be avoided.
(e.g. CRZ rules)
- ⑪ Local level institutions should be better prepared.
- ⑫ Agriculture has to be made disaster - resilient.
- ⑬ Evacuation routes and connectivity routes should be pre-defined.

SENDAI Framework and CDRI prioritize DRR to minimize losses and impact.

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।

Carbon trading refers to trading of credits which allow the release of CO₂ during the industry's operations.

Carbon trading mechanisms in India

- ① Offsetting : CO₂ released can be offset by afforestation or sequestration.
- ② Carbon Credits : The credits can be traded / sold on the market.
- ③ Joint development mechanism
A polluting firm can compensate by engaging in sequestration projects with other firm.

Significance of an efficient Carbon trading mechanism

- ① Allows for higher growth and development.
- ② It is environmentally sustainable.
- ③ Companies having excess credits can earn profit by trading.
- ④ Incentivizes lower emissions.
- ⑤ Overall impact on environment is compensated for.
- ⑥ Promotes carbon sequestration and eco-friendly activities.
- ⑦ Government can earn revenue (e.g. carbon tax).
- ⑧ There is synergy in the development and conservation of environment.
- ⑨ Promotes renewable and clean sources of energy.
- ⑩ Self-reliance (Avoids need to buy credits from other countries).

Challenges to Carbon trading in India

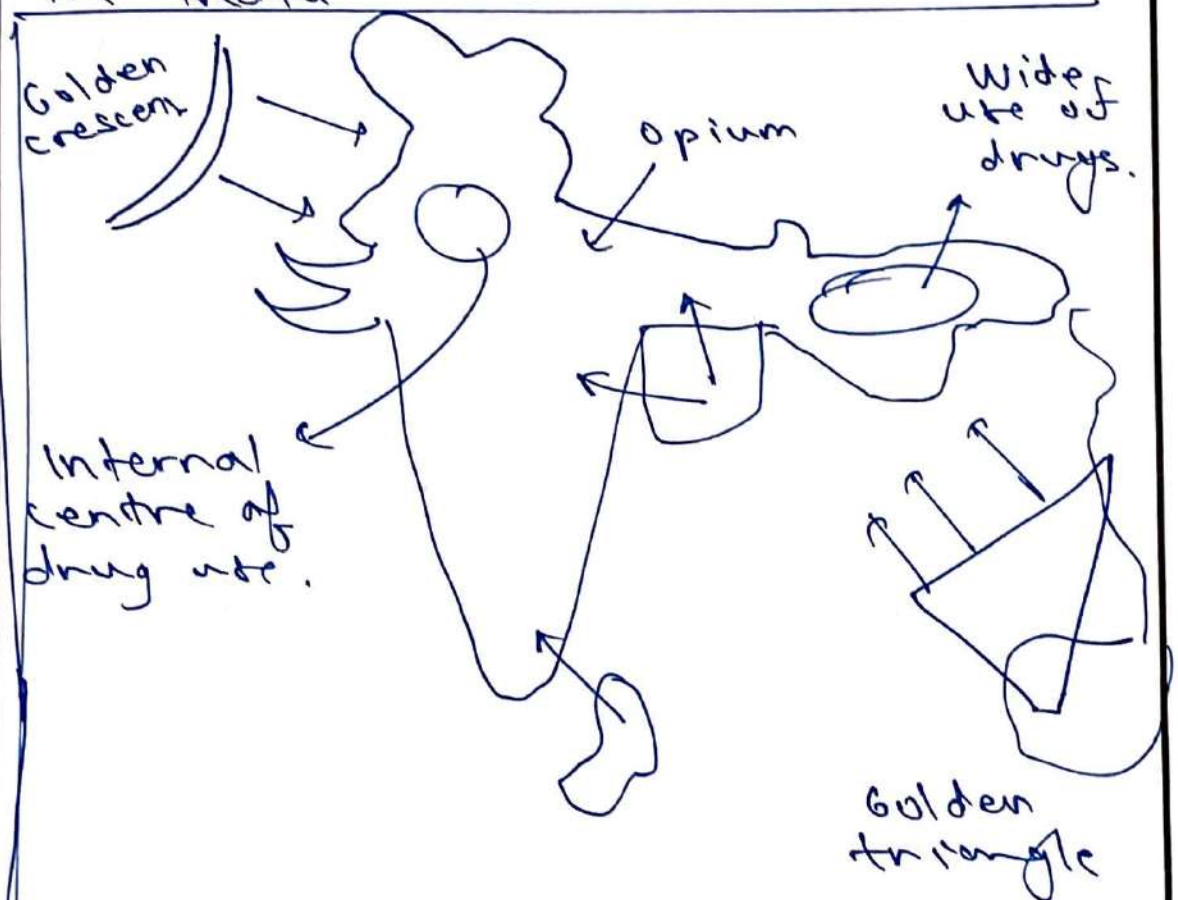
- ① Pollution levels are already very high.
- ② Leads to concentration of emissions around industrial areas.
- ③ Non-transparent carbon trading mechanism.
- ④ corruption and favoritism.
- ⑤ Bribery related to getting more credits.
- ⑥ Inefficient mechanism leading to huge delays.
- ⑦ Promotes deforestation and emissions.
- ⑧ Lack of climate financing.
- ⑨ Institutional mechanism is not there.
- ⑩ Environmental clearances (eg. EIA) and regulatory hurdles.

Carbon trading can help phase down ~~the~~ emissions by 2070.

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।

NCRB data has shown a huge rise in drug use and trafficking in India



Map : Drug trafficking from internal and external

External factors for rise in drug trafficking

- ① Golden ~~for~~ crescent and Golden Triangle.

- ② Transnational Crime and Terrorism Funding via drugs.
- ③ Organized Crime and Hawala transactions.
- ④ Increased production in neighbouring countries.

Internal Factors for rise of drug trafficking

- ① Rise in demand.
- ② Punjab and Neighbouring areas have huge production.
- ③ Societal issues causing youth to move to drugs.
- ④ Use of medicinal drugs as substance abuse.

Challenges posed by Drug trafficking to India's National Security

- ① Social issues like addictions and loss of productivity.
- ② Rising Law and Order issues.
- ③ Increased sources of terror

Funding.

- ④ Organized crime networks have gained prominence.
- ⑤ Drug-dealers rising in number.
- ⑥ Indoctrination along with drug sale
(ex. In North East / Naxalism)
- ⑦ Economic losses due to huge Black Money.
- ⑧ Money Laundering via drugs
- ⑨ Inability to track because of individual level transactions.
- ⑩ Border management issue due to frequent infiltrations
- ⑪ Border districts often become hostile to armed forces due to all the trafficking.

The UN Convention on Drugs and Psychotropic substances should be ratified and implemented.

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।

The Andaman and Nicobar islands ~~have~~ ~~are~~ are very strategically located in the Indian Ocean, giving India huge opportunities in the Indo-Pacific region.

Strategic significance

- Huge access to the Indian Ocean
- very close to Thailand, Cambodia etc.
- Shipping/trade routes like Malacca are very close
- Bay of Bengal can be easily covered entirely.
- Can act as a check against China's String of Pearls.

How Andaman and Nicobar Islands' significance in IOR has been underplayed by India's 'Mastery inactivity' and Benign Neglect

- ① Lack of development in the islands.
- ② No infrastructure or social sector developed in the islands.
- ③ Poor connectivity with the mainland.
- ④ No political offices present for decision making.
- ⑤ Mostly inhabited by tribals.
- ⑥ India has not harvested the location of the islands.
- ⑦ Negligible military presence in the Andaman and Nicobar Islands.

- ⑧ India's focus has always been on the mainland.
- ⑨ Not tapped water resources or shipping potential in the islands.
- ⑩ Political focus on the East Asia (eg. Look East) has so far neglected the Andaman and Nicobar islands.
- ⑪ No ongoing strategic/military projects in the islands.

The Andaman and Nicobar islands can give India a huge dominance over the IOR, and hence must be prioritized. They must be **SOCIALLY MAINSTREAMED** into the Indian society.

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?

Space exploration has been the focus of world and India's academia for decades. The newly commissioned International Liquid-Mirror Telescope is expected to play major role.

How the ILMT will aid India's astronomical observations and research

- ① clearer, high-definition photos of space will give better understanding.
- ② Longer-range will allow the study of regions of space not yet explored.
- ③ Will enable distant study of the sun and moon with

much better precision.

④ Black Holes and other mysterious phenomenon can be studied.

⑤ Astronomical insights can help in understanding of the weather and natural phenomena.

⑥ Real-time inputs can help us prepare for any disasters/ calamities.

⑦ Space research institutions can immensely expand scope of activities.

⑧ Better and more job opportunities in space research.

⑨ Impetus to the STEM field.

⑩ Opens more avenues for private sector participation

- ⑪ Makes India amongst the leading players in space research and exploration.
- ⑫ Dim objects which were difficult to observe, can now be seen.
- ⑬ New phenomena of interest, like Blue Straddler stars can also be understood.
- ⑭ Allows observation and monitoring of Space Station
- ⑮ Vastly improves our Space Situational Awareness (SSA).
- ⑯ can help prevent clashes with Debris (Kessler Syndrome)
eg. ISRO's Project NETRA.
- ⑰ Boosts ISRO's capabilities and preparedness.

Thus, the ILMT has opened gates to much better understanding of space and the Universe.