RECEIVED
01 SEP 2023

NEXT IAS

NEXT IAS (Head Office) : 27-B, Pusa Road, Metro Pillar no. 118, Near Karol Bagh Metro, New Delhi-110060
Bhopal Centre: Plot No. 46, ZONE-2, M.P. Nagar, Bhopal-462011
Ph: 8081300200, 8827664612 | E-mail : mts@nextias.com | **Web:** www.nextias.com

(To be filled by candidate)

Name of Candidate : Anubha Nonoan

Roll No. : MT23 RCA PA 111

Registration Number : ..... Date of Examination : 31/08/23

Exam Centre : Old Rajinder Nagar ☐ Bhopal ☐ Online ☐

Test - 7

Code : TC709

RCA Batch 2023

GENERAL INSTRUCTIONS

This Question-cum Answer (QCA) Booklet contains 56 pages. Immediately on receipt of the booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.

Candidates must read the instructions on this page and the following pages carefully before attempting the paper.

Candidates should attempt the questions strictly in accordance with the instructions specified in the question paper and in the space prescribed under each question in the booklet. Any answer written outside the space allotted may not be given credit.

Question paper will be provided separately and can be taken by the candidates after conclusion of the exam.

.....

SUBJECT/PAPER
GENERAL STUDIES

Invigilator's Sign. : .....

[To be filled by the STUDENT]

Student's Queries for the Evaluator (if any write them below)

[To be filled by the EXAMINER]

Evaluator's response

(For filling by Examiners only)

Evaluator Code :

Q.No	Pg No.	Maximum Marks		Marks	Total
1	1				
2	3				
3	5				
4	7				
5	9				
6	11				
7	13				
8	15				
9	17				
10	19				
11	21				
12	24				
13	27				
14	30				
15	33				
16	36				
17	39				
18	42				
19	45				
20	48				
Grand Total					

Signature

MACRO COMMENTS

IMPORTANT INSTRUCTIONS

CANDIDATES SHOULD READ THE UNDERMENTIONED INSTRUCTIONS CAREFULLY. VIOLATION OF ANY OF THE INSTRUCTIONS MAY LEAD TO PENALTY.

DONT'S

1. Do not write your name or registration no. anywhere inside this Question-cum-Answer Booklet.
2. Do not write anything other than the actual answers to the questions anywhere inside your QCA Booklet.
3. Do not tear off any leaves from your QCA Booklet, if you find any page missing do not fail to notify the supervisor/invigilator.
4. Do not leave behind your QCA Booklet on your table unattended, it should be handed over to the invigilator after conclusion of the exam.

DO'S

1. Read the Instructions on the cover page and strictly follow them.
2. Write your registration number and other particulars, in the space provided on the cover of QCA Booklet.
3. Write legibly and neatly. Do not write in bad/illegible handwritings.
4. For rough notes or calculation, the last two blank pages of this booklet should be used. The rough notes should be crossed through afterwards.
5. If you wish to cancel any work, draw your pen through it or write "Cancelled" across it, otherwise it may be evaluated.
6. Handover your QCA Booklet personally to the invigilator before leaving the examination hall.

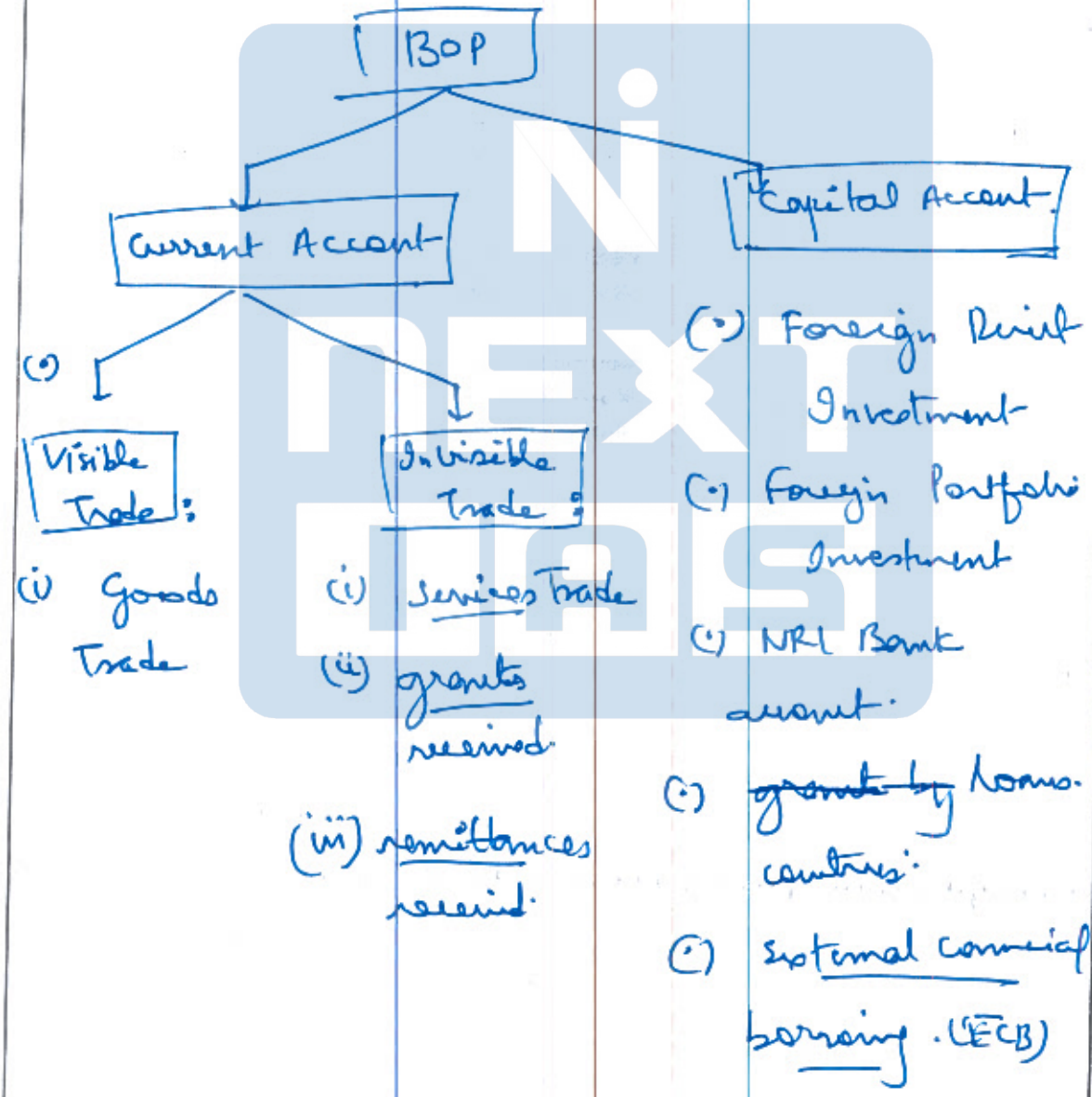
Candidates must not write on this margin

1. भुगतान संतुलन (बीओपी) के घटकों के रूप में पूँजी खाते और चालू खाते के बीच अंतर का सविस्तार वर्णन कीजिए। भारत के बीओपी घाटे को संतुलित करने के लिए कुछ उपाय सुझाएँ। (150 शब्दों में उत्तर दीजिए) 10 अंक

Elaborate on the difference between Capital Account and Current Account as components of Balance of Payment (BOP). Suggest a few measures to balance the BOP deficit of India.

(Answer in 150 words) 10 Marks

Balance of payment refers to net payments made between two countries.



Candidates must not write on this margin

Measures to balance BOP deficit :

Reduce imports

(i) strategic oil reserves.
(eg): Padurai.

(ii) Gold monetisation scheme, lab grown diamonds.

(iii) - switch to renewable energy
(eg): solar and wind energy.

(iv) - PLI scheme to become manufacturing hub.

(v) - fertilizer industries

(vi) - electronics hub manufacturing under PLI.

This way deficit can be reduced.

Improve exports

-(i) - improve logistics for export competitiveness

(ii) - Foreign Trade Policy implementation.

(iii) - One district one product (ODOP) for export promotion

-(iv) - Agriculture export cess for agri. exports.

Candidates must not write on this margin

2. लॉजिस्टिक्स (रसद) क्षेत्र, विनिर्माण उद्योग के विकास के महत्वपूर्ण घटकों में से एक है। चर्चा कीजिए। साथ ही, हाल ही में घोषित राष्ट्रीय लॉजिस्टिक्स नीति, 2022 के विभिन्न घटकों का भी उल्लेख कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

The logistics sector is one of the important components of the growth of the manufacturing industry. Discuss. Also, mention various components of the recently announced National Logistics Policy 2022.

(Answer in 150 words) 10 Marks

Logistics sector, according to Economic Survey is the backbone of economy

For improving manufacturing sector logistics plays crucial role:

(i) reduces transportation cost.

(ii) reduces turnaround time.

Eg: shipping time, harbour layoffs.

(iii) improves export-competitiveness.

(iv) improves ICOR in economy

Eg: currently ~ 6.5.

Logistics sector cost is around 14% GDP as of now, in order to improve this govt has come up with:

Candidates must not write on this margin

National Logistics Policy 2022 :

-(i)- integrated coordination among various ministries and departments.

Eg : road ministries, shipping ministry.

-(ii)- dashboard for key data analysis. i.e. data driven outcome.

-(iii)- creating skilled workforce for the sector.

-(iv)- generation of employment productive in nature.

-(v)- ULIP component for integrated resource management

In order to create 25% contribution from manufacturing sector, we need to improve logistics sector.

Candidates must not write on this margin

3. डब्ल्यूटीओ के तहत मत्स्य पालन सब्सिडी पर नए समझौते पर भारत का क्या रुख है? भारत के लिए मत्स्यपालन क्षेत्र किस प्रकार महत्त्वपूर्ण है? इस क्षेत्र के विकास के लिए सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।
(150 शब्दों में उत्तर दीजिए) 10 अंक

What is India's stand on the New Agreement on Fisheries Subsidies under WTO? How is the Fisheries sector significant for India? Enumerate the steps taken by the Government to develop this sector.
(Answer in 150 words) 10 Marks

WTO in Buenos Aires meeting initiated talks on fisheries subsidies and now it has culminated in New Agreement on Fisheries Subsidies.

Objectives

- reducing unsustainable fishery subsidies
- equitable development by Blue economy
- preserving ocean resources SDG 14

India's stand :

-(i)- India rejects to totally ban fishery subsidies.

-(ii)- as per CBDR principles, island nations and developing economies

Candidates must not write on this margin

depend on fisheries sector.

(iii)- India demands technology and fund transfer for sustainable fishing.

Importance for India :

(i)- 7500km long coastline gives access to fishery industry.

(ii)- livelihood of coastal community.

(iii)- Kerala fisheries Association

(iii)- important for reaping benefits of Blue economy.

Steps taken by government :

(i)- PM Matsya Sampada Yojana for scientific development of sector

(ii)- Seaweed programme

(iii)- Sagarmala initiative for port led development and stilling the community.

Candidates must not write on this margin

4. उन प्रणालीगत और संस्थागत बाधाओं का विश्लेषण कीजिए जो भारत में भूमि सुधार प्रयासों में बाधा बनी हुई हैं और भूमि के न्यायसंगत वितरण को सुनिश्चित करने के लिए व्यवहारिक समाधान प्रस्तावित कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

Analyze the systemic and institutional constraints that continue to hinder land reform efforts in India and propose pragmatic solutions to ensure equitable distribution of land.

(Answer in 150 words) 10 Marks

Land reforms play major role in ~~first~~ redistributive justice for equitable development and inclusive growth.

Land Reforms

Traditional
- → Zamindari Abolition Act.
- → Tenancy Act
- → Land consolidation
- → Land ceiling etc

Modern
- → Digital Land Records Modernisation
- → Model Tenancy Act.
- → Land leasing Act.
- → Unique ID : Bhu Aadhar

*** Systemic and institutional constraints :**

(i) – lack of digital data / documents for claiming land title.

Candidates must not write on this margin

(ii) – lack of political will in many states.
Eg: Failure in U.P., Bihar etc.

(iii) – interdepartment coordination is lacking.

(iv) – centre – state coordination is lacking.
Eg: Land Acquisition Act

(v) – lack of proper grievance redressal system
Eg: Pepsico and farmer in Contract farming

Pragmatic solution:

(i) – Suvamitva drone survey for solving title dispute.

(ii) – implementation of Digital land Records modernisation in letter and spirit.

(iii) – proper grievance redressal. Eg: land lease cases

(iv) – use of Bhu Aadhar for resolving discrepancy.

Candidates must not write on this margin

5. ब्रह्मोस सुपरसोनिक क्रूज मिसाइल की अद्वितीय विशेषताएँ और क्षमताएँ क्या हैं, और इसने भारत की रक्षा क्षमताओं और सामरिक स्थिति के क्षेत्र में किस प्रकार योगदान दिया है? (150 शब्दों में उत्तर दीजिए) 10 अंक

What are the unique features and capabilities of the BrahMos supersonic cruise missile, and how has it contributed to India's defence capabilities and strategic position in the region? (Answer in 150 words) 10 Marks

Brahmos supersonic cruise missile is the result of joint partnership between India and Russia.

Unique features and capabilities

(i) – supersonic i.e. > Mach 2.

(ii) – cruise missile – trajectory is observable.

(iii) – capabilities : can be launched from air, sea, land.

(iv) – reconnaissance, surveillance

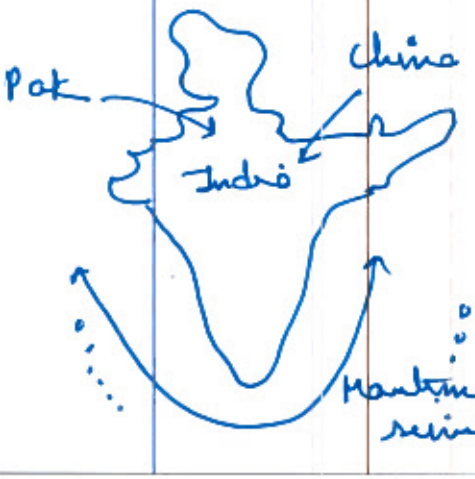


Fig: Two Front Threat and maritime threat

Candidates must not write on this margin

contribution to India's defense and strategic position :

(i) - tilt in balance of hard power in the region.

(ii) - help India in deterring two front war from china and Pakistan.

(iii) - also helps in making Indian ocean 'zone of peace'.

(iv) - India as net security provider'

(v) - capabilities against chinese assertion in land and sea.

(vi) - now India is manufacturing Brahmos indigenously.

Brahmos missile makes India self-sufficient in defense capabilities and can avert future wars.

Candidates must not write on this margin

6. समुद्र की गहराई का पता लगाने और उसमें मौजूद संसाधनों का दोहन करने के देश के प्रयासों के अनुरूप, भारत सरकार ने गहरे समुद्र में अन्वेषण मिशन 'समुद्रयान' का प्रस्ताव रखा है। यह मिशन देश में समुद्र विज्ञान और प्रौद्योगिकी की प्रगति में किस प्रकार योगदान दे सकता है?
(150 शब्दों में उत्तर दीजिए) 10 अंक

In line with the country's efforts to explore the depths of the ocean and harness the resources it holds, the Indian government has proposed a deep-sea exploration mission Samudrayaan. How can this mission contribute to the advancement of ocean science and technology in the country?
(Answer in 150 words) 10 Marks

Deep Sea Mission called Samudrayaan is a manned submersible vehicle (by NIOT, Chennai) mission for deep sea exploration and utilisation of resources.

* contribution of the mission :

(i) – exploration of ~~polymodule~~ polymetallic nodules (PMN)

Eg : India became pioneer investor in central Indian ocean by IBSA (UNCLOS)

(ii) – exploration of flora and fauna and conservation of biodiversity.

Candidates must not write on this margin

(iii) - help India explore Ocean Thermal Energy conversion (OTEC) for sustainable renewable energy and water desalinisation.

(iv) - helps private sector in exploring engineering solutions and

(v) - sustainable, fair and equitable use of biodiversity

(vi) - also helps in ocean science advisory for disaster management

Eg: deep sea earthquakes, cyclone formation and Tsunami

Along with Samudrayan, O-SMART, Blue Economy vision 2030 etc can help reap ocean resources and also contribute towards SDG 14 in order to conserve 'life below water'

Candidates must not write on this margin

7. वैश्विक मीथेन प्रतिज्ञा क्या है? क्या आपको लगता है कि वैश्विक मीथेन प्रतिज्ञा मीथेन उत्सर्जन को कम करने की दिशा में एक सकारात्मक कदम है? इस मुद्दे पर भारत का रुख स्पष्ट कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

What is Global Methane Pledge? Do you think the Global Methane Pledge is a positive step toward mitigating methane emissions? Explain India's stance on this issue. (Answer in 150 words) 10 Marks

Global Methane Pledge is an initiative of developed countries on the line of UNFCCC. They aim to reduce methane by 2030.

Methane has 25 times CO_2 carbon forcing.

Positive step towards mitigating emission

(i) - methane emission has exceeded more than 400% from 1750s level.

(ii) - very harmful greenhouse has GHG

(iii) - leads to 25 times carbon forcing than CO_2.

Candidates must not write on this margin

(iv)- pledge helps in unity of purpose to reduce methane emission.

Eg: ICMR says animal rearing and traditional rice cultivation is biggest contributor.

India's stance:

(i)- since source of methane is mostly livestock and agriculture field, India didn't join the pledge.

(ii)- it is difficult for developing country with 49% population dependent on agriculture.

(iii)- India has rather pledged to improve its livestock and agriculture on scientific lines.

Eg: System of Rice Intensification,

Thus, Common But Differentiated Responsibility (CBDR) must be followed in mitigating climate change.

Candidates must not write on this margin

8. कोविड–19 महामारी ने सार्वजनिक स्वास्थ्य में आपदा प्रबंधन के महत्त्व पर प्रकाश डाला है। महामारी और अन्य संक्रामक रोग के प्रकोप के प्रबंधन के लिए प्रमुख रणनीतियों और चुनौतियों पर चर्चा कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

The COVID-19 pandemic has highlighted the importance of disaster management in public health. Discuss the key strategies and challenges for managing pandemics and other infectious disease outbreaks.

(Answer in 150 words) 10 Marks

Covid-19 pandemic came as a biggest public health crisis in recent times which called for holistic public health management.

Key strategies in managing pandemics

(i) - public health surveillance : data driven policy making for future pandemics.



(ii) - rational steps of testing, quarantine and treatment

(iii) - improving primary and secondary

Candidates must not write on this margin

health centres as first point of treatment

(iii) : ventilators, oxygen cylinders.

(iv) – proper training of frontline workers.

(v) – timely vaccination for prevention of spread.

Challenges :

(i) – health expenditure is more ~1.2% GDP; National Policy on Health suggests 2.5% GDP.

(ii) – lack of prevention measures like vaccination, isolation

(iii) – increasing population pressure and unplanned urbanisation.

(iv) – globalisation and foreign travels makes problem in source identification

Thus, capability building, WHO guidelines and Digital Health mission provision can help India in preventing future infections.

Candidates must not write on this margin

9. "पूर्वी और मध्य भारत का संसाधन अभिशाप वामपंथी उग्रवाद का एक महत्वपूर्ण चालक रहा है"। इन क्षेत्रों के सतत और समावेशी विकास के लिए उपायों को विस्तार से बताइए और सुझाव दीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

"The resource curse of Eastern and Central India has been a crucial driver of LWE". Elaborate and suggest measures for sustainable and inclusive development of the region.

(Answer in 150 words) 10 Marks

According to former PM Manmohan Singh, LWE is biggest security threat for India.

Resource curse of East and central India :

(i)- exploitation by mining industries
Eg: Niyamgiri
Dongria Kondh Tribes and Vedanta issue.

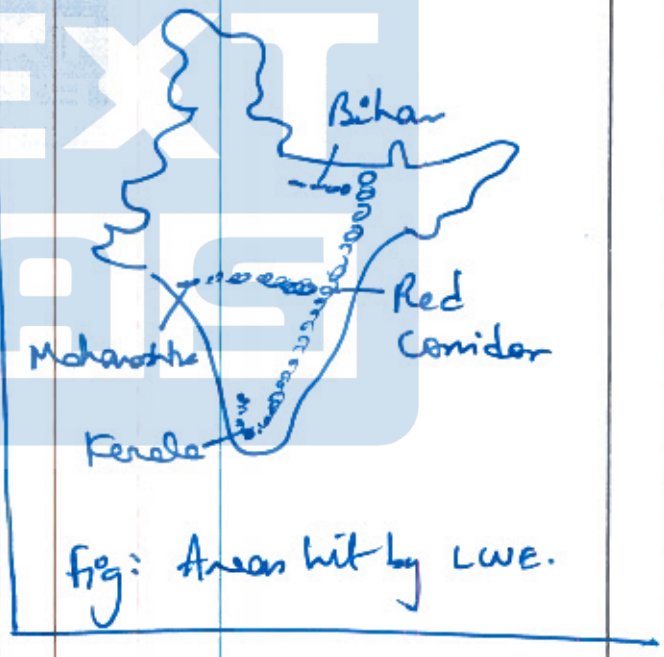


Fig: Areas hit by LWE.

(ii)- destruction of forests, water resources makes forest dwellers vulnerable.

(iii)- improper governance structure

Candidates must not write on this margin

(iv) – non tribal encroachment in forests.

(v) – state interference in forest lands.

Eg: 11 lakh tribal evictions under Forest Rights Act.

Measures for development:

(i) – **Combat measures:**

↳ proper training to paramilitary and police force. Eg: Greyhound Model.

↳ sensitivity training and community policing Eg: Amcho Bastar, Amcho Police

(ii) – **Development measures:**

↳ District Mineral Foundation for inclusive development.

↳ special fund for healthcare, education, road construction in LWE districts.

↳ proper surrender and rehabilitation policies for tribal youth.

Candidates must not write on this margin

10. उत्तर पूर्व और जम्मू-कश्मीर क्षेत्र में हिंसा की घटती प्रवृत्ति के आलोक में क्या आपको लगता है कि एएफएसपीए (अफ्स्पा) अपनी उपयोगिता बरकरार रख पाया है? टिप्पणी कीजिए (150 शब्दों में उत्तर दीजिए) 10 अंक

In light of the declining trend of violence in the North East and J&K region do you think that AFSPA has lived its utility? Comment. (Answer in 150 words) 10 Marks

"An eye for an eye makes the whole world blind" - Gandhiji

AFSPA was deployed in N.E and J&K to reduce militancy and insurgency in the region by giving army special powers and protection"

Declining Trend of violence :

i) Mizoram and Tripura are success model of AFSPA deployment

ii) - reduced stone pelting cases in J&K and

iii) - reduced radicalisation and insurgency cases.

AFSPA deployment - Positive :

i) deterrence in militant cases. like NSCN-K

Candidates must not write on this margin

(ii) – smooth and quick decision making

(iii) – Mizoram and Tripura are successful eg.

Issues :

(i) – In Verma Committee points out at various human right abuses.

eg : using human shield in J&K.

(ii) – violence continues in Manipur, Nagaland and Assam (UCFA)

(iii) – 2nd ARC suggests reforms and more humane law.

Supreme Court emphasised that AFSPA cannot get blanket immunity and due process of law must follow.

Moreover, alternatives must be searched for humane tackling of the issues.

Candidates must not write on this margin

11. अंतर्राष्ट्रीय व्यापार प्रमुख मुद्रा प्रतिमान (डीसीएम) पर केंद्रित है। अंतर्राष्ट्रीय व्यापार में हार्ड करेंसी (दुर्लभ मुद्रा) के महत्त्व का आलोचनात्मक विश्लेषण कीजिए और डॉलर साम्राज्यवाद के विकल्प के रूप में वैश्विक व्यापार में रुपये की स्वीकार्यता की संभावना पर चर्चा कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

International trade is centred on the dominant currency paradigm (DCM). Critically Analyze the importance of Hard currency in international trade and Discuss the potential of rupee acceptance in global trade as an alternative to dollar imperialism. (Answer in 250 words) 15 Marks

International Trade dependans on dominant and trusted currencis. which can be accepted worldwide, are stable and reliable..

Importance of Hard currency :

(i) — helps in improving Fores reserves thus improves import cover.

(ii) — helps in stabilisation of market fluctuation and impotan currency.

Candidates must not write on this margin

(ii) – helps in trade balance.

(iv) – generates trust and credibility in world community.

Potential of Rupees acceptance as alternate to dollar

(i) – Stability and credibility of Rupees.

(ii) – various bilateral agreements for dedollarisation:

(a) India-UAE domestic currency led.

(b) Rupee Rouble (Russia) Trade

(c) Iran oil deal in Rupees.

(iii) – increasing popularity of masala bonds (Rs. denominated).

(iv) – domestic currency swap agreements

(Eg) – India – Japan.

Candidates must not write on this margin

Issues :

(i) - 80% world trade still in US dollars.

(ii) - stability and credibility of dollars is high.

(iii) - increasing yuan internationalisation by china also pose threat.

(iv) - Rupees internationalisation may further expose to currency fluctuation.

Thus, comprehensive analysis and guided steps must be taken for Rupees internationalisation.

Candidates must not write on this margin

12. जनसांख्यिकीय लाभांश संवृद्धि सुनिश्चित नहीं करता है; यह केवल सामर्थ्य उत्पन्न करता है। जनसांख्यिकीय परिवर्तन से उत्पन्न अवसरों का लाभ उठाने के लिए सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए।

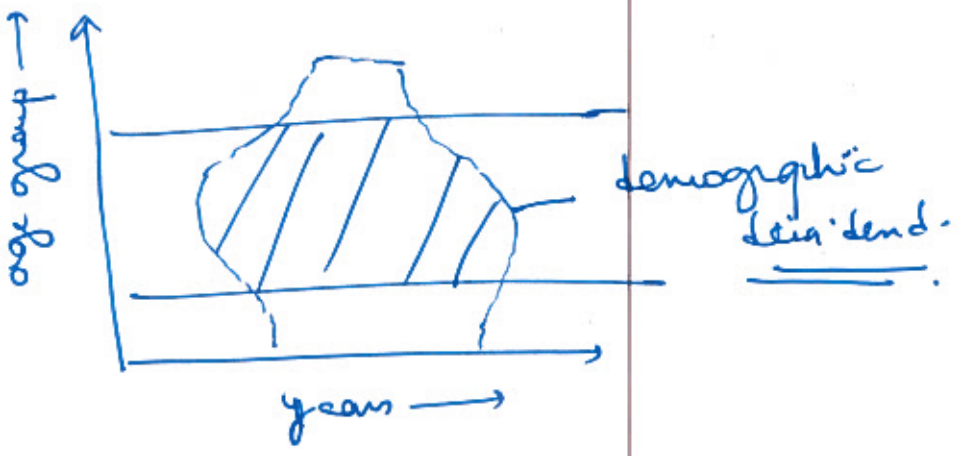
(250 शब्दों में उत्तर दीजिए) 15 अंक

A demographic Dividend does not ensure growth; it only generates potential. Discuss the steps made by the government to take advantage of the opportunities presented by the demographic transition.

(Answer in 250 words) 15 Marks

As per recent UN world Population fund Report India has surpased china in terms of highest population in 2023.

2/3rd population in India is under 35 years, thus working age population is more as compared to dependant population - thus can generate Demographic dividend.



Candidates must not write on this margin

Steps taken by government :

(i) – **Healthcare benefits :**

↳ PM Jan Aarogya Yojana > Health and wellness centres to reduce out of pocket expenditure.

↳ POSHAN Abhiyan, FIT India Movement : for healthy population

↳ National Health Policy for both preventive and curative health.

(ii) – **Educational upliftment :**

↳ NEP 2020 focuses on multidisciplinary education, early childhood & education.

↳ National Research foundation, Institute of Eminence helps in fostering research and development.

(iii) – **Skilling of workforce :**

↳ under PM Kaushal Vikas Yojana,

Candidates must not write on this margin

skilling in emerging technology like AI, Blockchain etc.

(iv) startup ecosystem | entrepreship :

↳ Startup and Standup India

↳ MUDRA loans, MSME sector upliftment.

↳ Atal Tinkering Labs for innovation.

(v) gender equitability :

↳ women led development : ICDRAN scheme.

↳ gender budgeting : One stop Solutions

Thus multipronged strategy can help in reaping demographic dividend and make India developed country by 2047 in Amrit Kaal.

Candidates must not write on this margin

13. 'जीनोम एडिटिंग (जीनोम संपादन) में फसल सुधार की अपार संभावनाएँ हैं, लेकिन यह नैतिक और सुरक्षा संबंधी चिंताओं को भी जन्म देती है।' भारत में जीनोम-संपादित पादपों के सुरक्षा मूल्यांकन के लिए नए दिशानिर्देश आनुवंशिक रूप से संशोधित फसलों की सुरक्षा को कितना सुनिश्चित करते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

'Genome editing holds immense potential for crop improvement, but it also raises ethical and safety concerns'. How far do the new guidelines for the safety assessment of genome-edited plants in India, ensure the safety of genetically modified crops? (Answer in 250 words) 15 Marks

Genome editing is a subset of genetic engineering.

Immense potential for crop improvement:

(i) – increase crop yield.

(ii) – pest resistance.

Eg: BT cotton against Pink Bollworm

(iii) – increase nutrition value.

Eg: golden rice – beta carotene

golden corn – sucrose content high.

(iv) – gm edited banana: as a vaccine for Rotavirus

Candidates must not write on this margin

Raises ethical / safety issues

(i) – mostly terminator seeds which increases input cost for farmer.

Eg: Monsanto Bt cotton

(ii) – may wipe out indigenous native species.

(iii) – safety threat to health.

Eg: concern of Bt mustard and brinjal.

(iv) – may promote invasive species.

(v) – may create have / have nots among farmers.

New guidelines assessment :

(i) – prior permission from Genetical Engineering Appraisal Committee (GEAC)

Candidates must not write on this margin

(ii) – supervisory over living modified organisms (LMOs)

(iii) – strict adherence to export/import of LMOs.

(iv) – strict penalty for violations.

Thus comprehensive oversight is required for the policy to reap benefits and make India a food secure country following

SDG-12 – sustainable consumption and production

Candidates must not write on this margin

14. भारत में कृषि क्षेत्र पर प्रत्यक्ष और अप्रत्यक्ष कृषि सब्सिडी के प्रभाव की चर्चा कीजिए। न्यूनतम समर्थन मूल्य (एमएसपी) ने कृषि अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (250 शब्दों में उत्तर दीजिए) 15 अंक

Discuss the impact of direct and indirect farm subsidies on the agriculture sector in India. How have Minimum Support Prices (MSP) affected the agricultural economy? (Answer in 250 words) 15 Marks

Subsidies are transfer payments made by government, agencies to producers and consumers.

eg: PDS, fertilizer subsidy

In recent budget total food (major) subsidies amount for 2.1% of budget

Direct subsidies → direct benefit transfer (DBT) on fertilisers, inputs; PM KISAN.

Indirect subsidies → PDS, MSP etc.

Mr Swaminathan argues for lowering subsidy burden. by giving less to irrigated farms. etc.

Candidates must not write on this margin

* Impact of subsidies on agriculture sector :

Positive impact :

(i) – MSP helps in remunerative farm income and food security.

Eg : MSP on ragi, jowar etc.

(ii) – PDS helps in food security and cheap grain availability.

Eg : rice and wheat.

(iii) – fertilizer subsidy helps in better productivity of farms.

Eg : Urea, DAP etc.

(iv) – overall helps in farm security and remunerative prices.

Negative impact :

(i) – ~~Rabi~~ rice wheat system : due to MSP / PDS procurement

Candidates must not write on this margin

(ii) – water guzzling crop, groundwater table lowering. Eg: Jowar(yr in Punjab.

(iii) – overuse of fertilizer and electricity

Eg: Punjab as cancer capital.

(iv) – soil fertility loss, eutrophication of rivers

(v) hidden hunger due to lack of crop diversification.

MSP affected agricultural economy

Positive	Negative
• remunerative prices for farmers.	• promoted monoculture Eg: rice-wheat
• 85% farmers are small and marginal.	• lack of crop diversification
• cushion in case of market price crash.	• cobweb phenomenon.
• reduced farm suicides.	• environmental issues like soil degradation

Evergreen Revolution must be promoted in order to improve state of agriculture in country.

Candidates must not write on this margin

15. रोगाणुरोधी प्रतिरोध (एएमआर) एक तेजी से बढ़ता संकट है जो दुनिया भर में सार्वजनिक स्वास्थ्य के लिए एक गंभीर खतरा है। रोगाणुरोधी प्रतिरोध की बढ़ती समस्या में योगदान देने वाले प्रमुख कारक क्या हैं, और इस वैश्विक स्वास्थ्य खतरे से निपटने के लिए कौन से कदम उठाए जा सकते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

Antimicrobial resistance (AMR) is a rapidly escalating crisis that poses a grave threat to public health worldwide. What are the major contributing factors to the growing problem of antimicrobial resistance, and what steps can be taken to address this global health threat? (Answer in 250 words) 15 Marks

Antimicrobial resistance (AMR) is increasingly becoming a public issue. and leading to health crisis

Eg: resistance towards Tuberculosis drugs; MDR-TB, XDR-TB.

Concerns
- may reduce drugs ineffective.
- creation of superbugs
- pose major challenges for vulnerable population
- disproportionately affects Tropical countries.
- climate change, disruption of one health.

Candidates must not write on this margin

Major contributing factors :

(i) – improper use of antibiotics :

~~over use~~ overuse ; irregular use.

Eg : pharmacist giving medicines without prescription.

(ii) – crisis in livestock sector :

overuse of antibiotics in poultry and mulch animals.

(iii) – industrial effluents :

untreated waste in rivers and drains creates spreading ground for superbugs.

(iv) – lack of one health approach.

(v) – mutation in pathogens

Candidates must not write on this margin

leading to different strains of pathogens. (Antigen drift and antigen shift)

Measures to address the challenge :

(i) – medicine regulation : red line 'X' symbol, 3 levels prescription. to regulate use of antibiotics

(ii) – regulating livestock : World Animal Health organisation guidelines must be followed; ICMR principles for poultry management.

(iii) – proper treatment of industrial waste before flowing in rivers.

(iv) – following one health approach:

Humans – Animals – Ecosystem

↑ _____ |

(v) better research and development on superbugs.

(vi) – improving immunity system.

Candidates must not write on this margin

16. विघटनकारी नवाचारों से आप क्या समझते हैं? हाल के दिनों में विघटनकारी नवाचार के कुछ उदाहरण बताइए और यह भी बताइए कि इन नवाचारों ने उद्योगों के संचालन के तरीके को किस प्रकार परिवर्तित किया है?

(250 शब्दों में उत्तर दीजिए) 15 अंक

What do you understand by Disruptive innovations? What are some examples of disruptive innovation in recent times, and how have they changed the way industries operate?

(Answer in 250 words) 15 Marks

Disruptive innovations refers to technologies which disrupt current structural and institutional forms, economical changes, employment patterns and growth type.

Eg: Artificial Intelligence may lead to job losses, change education system etc.

J. Schumpeter calls it: **Creative Destruction**

Recent examples of D.I, and way they changed industrial operations:

Disruptive Innovation	change in industrial operation
(1) Artificial Intelligence (Machine and Deep learning)	→ increased job losses by replacing humans with machines

Candidates must not write on this margin

Eg: Amazon warehouses are 90% driven by machines.

→ data driven e-commerce has improved business profit.

Eg: emergence of unicorns like Nykaa etc.

(2) Robotics

→ tends to replace human in automation industries like car manufacturing, thermal steel plants etc.

→ robotic surgeries, healthcare. more precision in industry

(3) cryptocurrency and Blockchain

→ creation of digital assets like Non Fungible Tokens (NFT)

→ may make cash redundant

→ Propose central bank architecture.

Candidates must not write on this margin

(4) Metaverse

→ shaping fashion industries by virtual and augmented reality

→ immersive learning experiences.

→ may help in disaster management.

(5) 3D printing

→ led to job losses of manual work.

→ may boost defense sector automation.

→ real sector may gain profit.

(Eg): 3D printed houses.

Thus, global regulatory framework is required for reging best use of these technologies.

Candidates must not write on this margin

17. हानि और क्षति (L&D) कोष के क्रमिक विकास को चिह्नित कीजिए। COP27 में हानि और क्षति कोष से संबंधित कौन–से प्रमुख घटनाक्रम हुए हैं? इस सम्मेलन में भारत ने क्या प्रतिबद्धताएँ व्यक्त की हैं?

(250 शब्दों में उत्तर दीजिए) 15 अंक

Trace the evolution of the Loss and Damage fund. What are the major development related to loss and damage funds in COP 27?, What are the commitments made by India in this conference?

(Answer in 250 words) 15 Marks

Loss and damage fund was first initiated in Warsaw conference 2013 under UNFCCC.

Objectives

- Common But Differentiated Responsibility (CBDR)
- Polluter pays Principle
- help developing countries to mitigate and adapt to climate change

Evolution:

Warsaw meeting (2013)
↓
Paris Agreement (2015) (Rulebook)
↓
Talanoa Dialogue
↓
Sharm Al Sheikh (COP27)
↓
creation of L&D Fund.

Candidates must not write on this margin

Major developments :

(i) – creation of loss and damage fund in COP27.

(ii) – Sharm-El-Sheikh Implementation plan :

↳ Mitigation efforts : submitted by countries and organisations.

↳ adaptation : countries pledged to help developing countries.

(iii) – technology and fund transfer : developed countries pledged for transfer.

(iv) – following CBDR principles and not escaping from commitments.

(v) – special fund for island nations which suffer from Sea Level rise.

Candidates must not write on this margin

Commitments by India :

(i) - India pledged new Nationally Determined contributions (NDCs) :

(a) 50% non fossil fuel energy source by 2030.

(b) 45% reduction in emission in GDP from 2005 level.

(c) additional 2.5 - 3 billion tonnes carbon sink.

India also pledged "net zero by 2070.

Achievements :

(a) 24% emissions already reduced.

(b) 43% renewable energy installed.

(c) 24.62% forest and tree cover achieved.

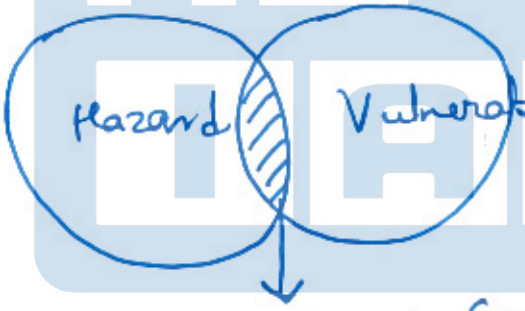
These combined effort from all countries can help in abating global temperature rise to 1.5°C / 2°C. under UNFCCC.

Candidates must not write on this margin

18. आपदा प्रबंधन सिर्फ आपात स्थिति से निपटने के बारे में नहीं है, बल्कि लचीले समुदायों के निर्माण के बारे में भी है। उन प्रमुख रणनीतियों पर चर्चा कीजिए जिनका उपयोग सामुदायिक लचीलापन बनाने और आपदाओं के प्रभाव को कम करने के लिए किया जा सकता है। (250 शब्दों में उत्तर दीजिए) 15 अंक

Disaster management is not just about responding to emergencies but also about building resilient communities. Discuss the key strategies that can be used to build community resilience and reduce the impact of disasters. (Answer in 250 words) 15 Marks

Recent desasters in Turkey and Syria; Himachal Pradesh floods and Joshimath sinking suggests that Disaster management must focus on resilient building along with preparedness and response.



Disaster : Earthquake, Floods etc.

Steps in disaster management :

Prevention → Mitigation → Preparedness → Disaster → Response → Recover → Resilience

Candidates must not write on this margin

Strategies to build community resilience :

(i) - following Sendai Framework guidelines :

↳ (a) identify vulnerabilities :

Hazard vulnerability and Risk Assessment → zonation / mapping

Eg : Earthquake in Himalayas pose risk of landslide, floods etc.

↳ (b) proper planning for reduce impact :

Structural

→ laws, rules and regulations :

Eg : Ed resilient Building codes

→ engineering solutions

Eg : underground power cables in Odisha to avert from cyclones

non structural

→ use of bioshields like mangroves in east coast of India.

→ preventing construction of schools, hospitals in vulnerable areas

Candidates must not write on this margin

(ii) — community training :

↳ Apada Mitras — 6000 volunteers by NDMA for floods in Bihar, Assam.

↳ drills and field training.

Eg : Chile and Japan for EQ.

↳ (iii) resilient infrastructure :

↳ Coalition for Disaster Resilient Infrastructure (CDRI)

↳ SDG 1.5, 13.1 → reducing disaster impact on vulnerable populations.

(iv) — dedicated Protocols for early warning systems (EWS)

Eg : INCOIS for Tsunami, IMD for cyclone

Thus, multipronged can help in making disaster resilience and reducing impact on vulnerable populations

Candidates must not write on this margin

19. मेटावर्स और वर्चुअल एसेट्स जैसी नई और उभरती प्रौद्योगिकियों के उपयोग के माध्यम से आतंकवाद का परिवर्तन चिंता का विषय है। हम आतंकवादी उद्देश्यों के लिए नई और उभरती प्रौद्योगिकियों के उपयोग का मुकाबला किस प्रकार कर सकते हैं? इस संबंध में "दिल्ली घोषणा पत्र" के महत्व को स्पष्ट कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

The transformation of terrorism through the use of new and emerging technologies like metaverse and virtual assets is a matter of concern. How can we counter the Use of New and Emerging Technologies for Terrorist Purposes and Elucidate the importance of the "Delhi declaration" in this regard?

(Answer in 250 words) 15 Marks

Terrorism has taken a new form by transforming itself into an industry. Use of new and Emerging technology has further excacabated the issue.

New and Emerging Technology
- Metaverse : human rts. abuse
- virtual assets : money laundering
- Blockchain and cryptocurrency for terror financing.
- use of 3D printed guns.
- drone technology, laser sensors for killing.

Candidates must not write on this margin

Concerns regarding these technology :

(i) — lack of proper jurisdiction.

Eg : metaverse.

(ii) — lack of centralised regulation

Eg : cryptocurrency racket busted in Karnataka.

(iii) — deep fakes and propaganda using AI, Machine learning.

Eg : mass recruitment through social media.

Steps to control :

(i) — global consensus on regulation of emerging technologies.

Eg : Hiroshima Global AI governance framework.

(ii) — adoption of comprehensive definition of terrorism.

Eg : CCIT by India in UNSC

Candidates must not write on this margin

(iii) - separate cell/ division in government for tackling emerging technology.

Eg: NEST division in India's External Affairs Ministry.

(iv) - National Cybersecurity Policy and Strategy.

↳ update 2013 cybersecurity policy.

↳ Passage of Digital India Bill and DPDP Bill.

Importance of Delhi Declaration:

(i) - held in Delhi under UNSC for consensus on counter to emerging technologies for Terrorist purpose.

(ii) - brings global community under one roof.

↳ technology transfer.

↳ fund transfer.

↳ international convention and protocol can be made.

Candidates must not write on this margin

20. "अग्निपथ योजना हमारे सशस्त्र बलों के लचीलेपन और प्रभावकारिता के लिए आवश्यक एक कड़वी गोली है।" प्रासंगिक तर्कों के साथ कथन का आलोचनात्मक विश्लेषण कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

"The Agnipath scheme is a bitter pill needed for the resilience and efficacy of our armed forces." Critically Analyze the statement with relevant arguments. (Answer in 250 words) 15 Marks

Agnipath scheme was recently launched in order to recruit new cadres of youth in ~~mi~~ armed forces.

Needed for resilience and efficacy

(i) — state of art training of new cadre.

(ii) — reduces pension and salary burden on goverment

(iii) — goverment can now think and invest on armed forces modernisation.

(iv) — indigenisation of technology also ~~post~~ possible

Candidates must not write on this margin

(Eg): Indigenous manufacturing of Tejas Light Combat Aircraft.

(v) — help in reducing caste and regional affiliations of regiments.

(Eg): Gorkha regiment, Sikh regiment

(vi) — helps in tackling two front war in India.

(Eg): India — China
— Pakistan

(vii) — rise in productive employment.

↳ preference of aspirants in CAPF, security agencies etc.

Better pitch:

(i) — may lead to militarisation of society.

(ii) — since its a ad hoc job may lead to less motivation among new recruits.

Candidates must not write on this margin

(iii) may reduce overall efficiency of armed forces.

(iv) - training is improper and of short period.

Hence, comprehensive suggestion and further reforms can help in improving the scheme.

Candidates must not write on this margin

Space for Rough Work