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(To be filled by candidate)

Name of Candidate : ATIF

Roll No. : MT23RRA PA 069

Registration Number : ..... Date of Examination : 31/Aug/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.

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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

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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 is the annual record of transaction done by any country with other countries.

IMF gives guidline & format of creating BOP. Net BOP of world is zero

Difference

Capital Account	Current Account
(1) Records capital transactions- (Eg) loans	Records normal transaction (Eg) Remittances.
(2) Creates assets or liability (Eg) line of Credit.	Do not create asset or liability.
(3) Settled over period of years (Eg) long term loan	Once in time transactions (Eg) Salary transfer.

Candidates must not write on this margin

Measures to adress BOP crisis

1. Promote export policy and incentivise export led buking
2. Rationalise oil imports.
   - Eg Indegenous renewable transition
   - Eg Solar
3. Promote FDI & FII : adress both BOP and investment.
4. Promote healthy Monetary Policy to healthy Market exchange rate.
5. Expansion of schems like PLI, China +1 Strategy for greater investment.
6. Boost competitive economy for lucrative exports
7. Bilateral deals with countries & more favourable FTA.
   - Eg ETCA with Australia

Hence, this will alignment already strong more than $560 billion Forex reserve & strong BOP.

Candidates must not write on this margin

2. लॉजिस्टिक्स (रसद) क्षेत्र, विनिर्माण उद्योग के विकास के महत्त्वपूर्ण 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

India ranked 44th in Logistic Performance Index of world Bank 2023.

Importance of logistics

(1) Promote efficiency in business
   - (Eg) 14% logistic cost to prodn. (India) Chna below 8%.

(2) Quick delivery of Goods
   - (Eg) Dedicated freight corridor

(3) Promote ease of doing busin.

(4) Connect entire value chain.
   - (Eg) Hub & Spoke model

(5) Promote export Competitiveness.

(6) Expand market to hinterland.
   - (Eg) PM GATI Shakti Connectivity

(7) Enhance value of product.
   - (Eg) Cold storage truck boost food processing industry

(8) Decrease turnover time of Ports
   - (Eg) Sagarmala Project.

Candidates must not write on this margin

Various Components of Logistic Policy 2022

(1) Port connectivity to enhance Global trade.

(2) Multi-modal logistic parks
(Eg) Gujarat hub.

(3) Interlinking all means of Communication.
(Eg) UDAN → Air + Rail + Road

(4) Develop transshipment hub.

(5) Develop Cold storage transport

(6) Digitalisation of trasport sectors & enhanced tracking.

(7) Reduce road time & toll
(Eg) FASTAG.

(8) Link with rural connectivity project (Eg) Gram Sadak Yojana

(9) Decongestion of road.

(10) Promote inland waterway
(Eg) Varanasi Haldia.

(11) Expand new arenas (Eg) Seaplane.

(12) Hill area connectivity (Eg) Parvatmala
This will promote ease of Doing business

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

Recently, WTO agreed on new Fisheries roadmap.

India's stand

(1) India supported most of stand.
(2) India initially opposed to high subsidy to already developed country
(3) India raised concern over IUU fishing for ecology conservation.

Fisheries Significance for India

(1) Nutrition security as fish good source of nutrition.
   (Ex) 36% Malnutrition - NHFS-II
(2) Food security for coastal community
(3) Export promotion of fisheries
(4) Harness large Coastline ~7500 km
(5) Augment livelihood to large fisherman community.

Candidates must not write on this margin

Steps taken

1. Kisan Credit Card expansion to fisheries.
2. Modernisation of boats subsidy
3. PM. Matsya Sampada yojna for subsidy & Capacity building
4. Subsidy for bio-floc technique
5. GAGAN phone for security & safety of fisherman
6. Sagarmala Project → fisherman important link
7. Community led disaster manager for Coastal area
8. Cold storage tanks through national Logistic policy.
9. Boosting Food processing especially Fishery.
10. Support to Subsidy in WTO fishery sector → IUU fishing
11. Development of deep trawlers
12. Seaweed farming Promote (TNadu) Budget 2022.

This will augment the welfare & income of fishermen.

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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 व्यावहारिक 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 reform in India was taken Post independence to promote Redistributive Justice.

Systematic & Institutional Constraints

(1) Lack of land record.

(2) legacy land disputes in Court

(3) fragmentation of landholdy
   (Es) Avg 1.15 Hectare / farm

(4) No records with tribals and their community based ownership

(5) State list: so lack of coordinated response.

(6) Expensive Judicial System for farmers.

Candidates must not write on this margin

Solutions:

1. Digitalisation of record - based on Satellite Mapping
2. Promote consolidation & collective farming.
3. Boost Co-operative Movement.
4. Forest Right Act 2006 - promote letter & spirit.
5. Convert wasteland to productive use.
6. Promote monetisation of unused land (Eg) Nat. Monetisation pipeline.
7. Digital ownership of land and digital transaction
8. Speedy trial of legacy dispute.
9. Special court for land dispute.

This will help augment land as resource & boost economy.

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 is joint project of India & Russia.

Unique features

1. Supersonic ie > 4 MAC.
2. Intercontinental Missile.
3. Ballistic missile.
4. Precision targeting.
5. Manuvour on board
6. Realign to target while moving.
7. Locking of target mid air.
8. Multiple variant : land, sea, air.
9. Capable of nuclear warhead
10. Nuclear triad.

Candidates must not write on this margin

Help in defence Capacity & Strategic posture

(1) Agile warhead. (SMART power)

(2) Defence capability

(3) Boost Indian nuclear triad.

(4) tackle two front war.

(5) Robust even in high altitude.

(6) Help in net security provider.

(7) Deterrence creation.

Hence, boost Indian capability as responsible power

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

Samudrayan project is Indias ~~xxxx~~ ocean exploration project in Indian Ocean.

Advancement in Ocean Science & Tech

1. Help in mapping seafloor map.
2. Explore new arena of unexplored ocean.
3. Study Ocean Vertical & Horizontal profile.
4. Promote scope for Resource exploration
5. Boost Private sector participation

Candidates must not write on this margin

Challenges

1. Capital intensive project.
2. Lack of critical technology
3. Bad experience of "OLEAN" recent accident.

Collaboration is need of time to boost Samudrayan Project

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

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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 was greatest disaster management issue of world.

Key strategies for managing pandemic

(1) Global Collaborations.

(2) Investment in Research
   (Eg) Vaccine dev.

(3) Robust capacity building

(4) Support from citizens & local community
   (Eg) Gram Sabha.

(5) Strengthening organisation of Global Governance
   (Eg) WHO.

(6) Robust detection & Screening

(7) Co-operative federalism

Candidates must not write on this margin

Challenges

1. Narrow National interest
2. Commercial interest of Countries
   - Eg: Vaccine IPR.
3. lack of Global Collaboration
4. Poor Capacity of developing Countries
5. lack of robust health care infra
6. lack of funding infra of health.
7. lack of Awareness on health.
   - Eg: Ayushman.
8. Centre - state tussle.

This needs to be addressed along with participation of States in Disaster management in line of Sendai Framework.

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

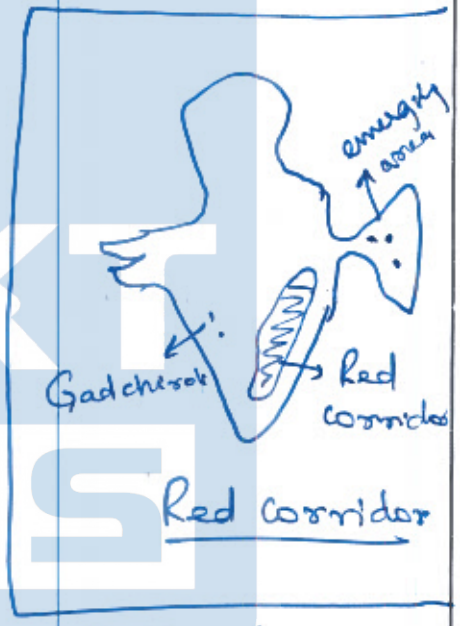
"The resource curse of Eastern and Central India has been a crucial driver of LWE". Elaborate and suggest measures for sustainable and inclusive development of the region.

(Answer in 150 words) 10 Marks

Hon'ble Ex Prime Min Manmohan Singh called Left wing Extremism (LWE) as greatest internal security threat.

Resource Curse as driver

(1) Funds: derived majorly from cuts from mining lease and extortion
(Eg) Saraikela Kharsawan mining issue.



Red corridor

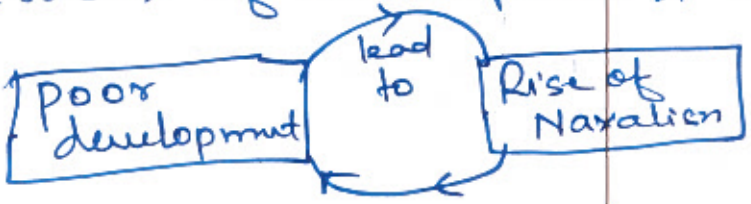
(2) Forest resource: LWE core area of operation is forest MFP MSP for Minor forest produce they get cut/share from it.

(3) Miners - Politician - LWE Nexus in mining operations and safe travel and transport from those areas.

(4) Poor development parameter of these Red Corridor states
(Eg) Jharkhand more than 25% poverty.

Candidates must not write on this margin

(5) Paradox of development & use of force.



Vicious cycle

(6) Cycle of force & greater violence



↓↓

- loss of social capital
- loss of life.
- derailing development.

Measures

(1) Building capacity of State forces.
   (Eg) Andhra battalion
(2) Develop special forces (Eg) Bastar Battalion of CRPF
(3) Developmental Approach
   (Eg) Eklavya School, Special central Assistance.
   Civic Action program
(4) WHAM policy – Winning hearts & Minds.
(5) Proper Rehabilitation & Surrender Policy
(6) Integrate Gram Sabha & tribals in ending menace.

This will help reduce menace of LWE as internal security threat.

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

According to Annual Report of Ministry of Home Affairs 2021, there is more than 60% decline of violent incidents in North East.

Utility of AFSPA

(1) Necessary to tackle hard core terrorist and Organised crime.
   (Eg) Nagaland → NSCIM (IM) group.

(2) We have Porous border in N.E.
   (Eg) Free movement regime.

(3) Presence of Sympathisers & sleeper cells in Kashmir
   (Eg) Pulwama attack.

(4) Diverse nature of threats

(5) In midle of Golden triangle of Organised crime.

(6) Use of Moden tech by terrorist
   (Eg) Drone in Kashmir.

Candidates must not write on this margin

(7) Necessary to end the deep rooted network of groups.
(Eg) ISIS & Indian Mujahedden.

Approach to take for AFSPA

(1) Deploy wherever necessary, Remove when not required
(2) Case by case basis on merit.
(3) In collaboration with State Govt.
(4) Adress complaint of Human right violation. & excess use of force & internal enquiry for same.
(5) Sensitise people & Army about threat.
(6) Special training to not use hard force with civilian.
(7) Simultaneously, promote non-police civilian community dev progs
(8) Aid & Capacity building of Civil Admin (state)

Thus we need multipronged strategy to tackle it.

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

Dominant Currency paradigm means the ecosystem of international trade centred around one dominant currency (Eg) Dollar.

Evolution of Dominant currency :

Steatite → Bronze → Copper → Token Currency (Present day Dollar)

Dominant currency is one whose share is maximum with respect to other currency (Eg) IMF basket has maximum Dollar weightage.

Importance of Hard Currency

Positives

1. Easily acceptable to all.
2. High liquidity
3. Can be easily converted to other currency.
4. Trust on that currency.
5. Strongly backed by sovereign banks
6. Banks collectively take efforts to not loose that currency valuation.

Candidates must not write on this margin

⑦ Global Benchmark for goods trade.

⑧ Provides value to a product

Negatives

① Can have monopoly of few.

② Hoarding at large scale can lead to trade prices manipulations.

③ Many a times leads to currency imperialism.

④ Subject to will of few dominant of few rich countries.

Potential of rupee in global trade as alternate to dollar imp:

① India is 5th largest economy. 3rd in terms of PPP terms.

② Indias GDP will reach $5 trillion in few years.

③ Reliable Global partner.

④ Advocacy for rule based world order will ensure just currency Policy.

Candidates must not write on this margin

(5) Advocacy for strengthening Institutions of Global governance. So promote collective will in place of Dollar imperialism.

(6) Balance between North & South and also bw two New Cold war countries. So, accepted by all sectors.

(7) High Global trade of Currency

(8) Presently we already have currency swap agreement with multiple countries (Eg) Russia, Japan.

(9) BRICS swap agreement as testing of Rupee at small scale for larger goal.

(10) India already has trade with all major economies. So transition easily.

What lacunas needs to be addressed

(1) Strong Monetary Policy.
(2) Data driven quick Policy stance.
(3) Bilateral currency deals with multiple Country
(4) Trust based fixed Exchange regime.
(5) Full capital account convertability.
(6) Shedding away tag of Currency manipulator (USA)

This will ensure Global acceptance as alternate to Dollar for rupee.

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

Demographic dividend is a phase where countries reap the benifit of high working age population potential to steer economic growth.

Presently India has 67% popula from age bracket (15–64) years

However, this demography itself does not convert into Growth, rathe we need to make economic environm to convert this demography to turn into economical enterprise, otherwise it will lead to demographic disaster.

Steps taken by Govt to take advantage of this demography

① **Health**

① Ayushman Bharat → ensure healthy work

② ANM, and chain of Primary, seconday healthcar.

Eg Recently we have reached 1.5 lakh health & wellness cente

Candidates must not write on this margin

(2) **Education**:

(a) Saru Siksha Abhyan, for primary educatn
(b) Chain of IITs, IIM, NIT for technical education.
(c) Eklavya school.
(d) PM SHRI model schools across countries.
(e) Focus on data numeracy.

(3) **Nutrition**

(a) Mid Day meal scheme for eradicating mal nutrition.
(b) PDS for subsidised food grains
(c) Fortification of rice prog.
(d) Anemia Mukt Bharat

(4) **Skills**

(a) PM KVY → for skill development.
(b) National Skills Dev. Corporation expanss to international skill (Budget 2023)
(c) Apprenticeship prog for youth
(d) PM Vishwakarma Scheme (VIKAS) for artisan & workers (Budget 2023)

(5) **Job integration**

(a) Mandatory social security for organised workers. (Pg) Pan linking

Candidates must not write on this margin

(b) MNREGA, DAY-NURLM scheme for job opportunity.
(c) National Migrant data bank.

Others schem

(1) Longitivity dividend / Skills for old age.
(2) Social security for Old age.
   (Eg) Vriddha pension yojna.

What more needs to be done

(1) Convert literacy to tangible skills.
(2) Promote job creating sectors.
   (Eg) Textile, IT.
(3) Explore new job sector (Eg) Space, Gaming
(4) Capacity building approach of Amartya Sen.
(5) UBI for vulnerable (Economic Surv 2020)
(6) Interlinking with Global trade of Mode 4 of WTO.

This will help India convert demographic potential to demographic dividend.

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 means alteration of ~~Genome~~ sequence of nucleotides in DNA to produce desired traits.

(Eg) Drought tolerant plants.

Tool used: CRISPER CAS-9

Immense potential

(1) Increase productivity (Eg) BT-Cotton

(2) Specific resistance to particular threat
(Eg) Pest resistant plant.

(3) Supression of few undesirable trait.
(Eg) Cross pollination BT-Mustard.

(4) Expression of desirable trait.
(Eg) BT-Brinjal.

Ethical issues

(1) Changing and altering the germline threatens existence of entire species

(2) Modify natural evolution process.

Candidates must not write on this margin

Safety concern

1. May lead to Superbug.
2. May increase toxicity to food chain.
3. long term impact yet to be seen.
4. Can affect growth of other micro organs and plants
5. Super weed.

Gout came up with new guidlins to adress some of these concern and bring more robust Genome editing benefit reaping.

Benefit of new Safety assessment

1. Proper check and balance ensured.
2. Final approval authority with Goverment.
3. Consultation with all stakeholder like farmer, Scientist, Botanists.
4. Robust Quality testing mechanism
5. Power to withdraw product in case of threat.
6. Regular mandatory assessment of progress

Candidates must not write on this margin

What more needs to be done

① long term impact yet not realised.

② Promote other productivity enhancing mechanism away from Genome editing
(Eg) Hybrid seeds.

③ GM crop share is only few, we can explore new arenas
(Eg) Aquaponics, terrace farming.

④ Robust external screening body for GM product.

This will help us realise the food security and also adress hunger issue and SDG 2 (Zero hunger)

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

In Budget 2023, India gave Food and fertilizer subsidy of scale of more than 2.5 lakh crore.

Impact of direct & indirect Subsidy

(A) Positive impact

(1) Support to marginal farmer.
- (Eg) 86% farms less than 1 hectare.

(2) Boost productivity of Crop.
- (Eg) Nutrient based fertilizer subsidy

(3) Promote safety net in form of insurance
- (Eg) Fasal Beema Yojna.

(4) Money to buy valuable input like seed.
- (Eg) PM Kisan DBT

(5) Promote scientific agriculture.
- (Eg) Soil health Card based fertilizer.

(6) Transition to renewable energy
- (Eg) PM KUSUM yojna.

(7) Adress Groundwater concern
- (Eg) Subsidy for drip irrigation.

Candidates must not write on this margin

Negative Impact

1. High fiscal burden.
   - (Eg) More than annual 3lakh crore.
2. Most Subsidy given in not Capital creation assest.
   - (Eg) Subsidy on Seed.
3. Breaching WTO peace clause limit.
4. Leading to ground water extraction
   - (Eg) Free electricity & Pump → uncontrolled water extraction.
5. Soil acidification & salinisation due to excess fertilizer use.
6. Ground water contamination due to excess fertilizer use.
7. Distortion of agriculture Market.

Positive Impact of MSP

1. Assured income to farmer.
2. Assured procurement of produce
3. Reduce distress Sale.

Candidates must not write on this margin

(4) Quality price to produce.
(Ex) 1.5 times of A2+FL

(5) Pre ~~too~~ sowing price realisation

(6) Govt can control the diversity of production.
(Ex) MSP on millets increased to growth

(7) ~~Cost~~ Covers wide range of crop.
presently 23 crops.

What more needs to be done to ~~address~~ make it more effective

(1) MSP on basis of Swaminathan report
1.5 time of C2.

(2) Diversify crops & include other crops also

(3) Address dominance of Wheat & rice procurement only.

(4) Statutory backing to MSP.

(5) Procurement only to few states needs to be addressed.

(6) Also provide Cold storage facility to address crop damage.

This will help boost farmers income & double it already to Ashok Dalwai Comitte.

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 is the resistance of pathogens to the normal use of drugs (Antibiotics) thereby making them ineffective.

This issue is rapidly escalating to multiple regions & poses grave threat to worldwide because we only have limited number of antibiotics. If they get exhausted we'll be left with no choice and it will turn into disaster.

WHO termed (AMR) as one of the 9 greatest threat to humanity

Major factors to this problem

① Non completion of prescribed dose, few pathogens still live and turn resistant.

Candidates must not write on this margin

(2) Overprescription of medicine to patients.

(3) Use of Medicine for cattle feed for their productivity has multiple issues, it enters entire food chain.

(4) Improper disposal of Medicines in barren land. leads to pathogen developing resistance.

(5) Flushing of medical waste in sewage without treating enters ground water.

Steps to be taken

(1) We need to follow strictly WHO guidline on AMR.

(2) No - overprescription by doctors.

(3) Completion of dosage as mandatory

(4) Promotion of multidose tablets

(5) Research for new antibiotics.

(6) Research in SM technology to adress Superbug.

Candidates must not write on this margin

(7) Strict ban on cattle industry.

(8) Proper disposal of unused medicine.
(Eg) Follow Medical Waste rules

(9) Awareness generation among people

(10) Incentivise doctors as chief awareness campaigner.

(11) Strict regulation in pharmaceutical industry.

This will help us to tackle emerging greatest threat and realise SDG Goal 3.

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

Recently, we have seen rise of disruptive innovation majorly due to rapid rise of ICT.

Disruptive innovations are the creative new innovation which has potential to replace existing productive system and establish themself in place of them.

Eg Dark Net.

Recent example and way they have changed syst.

① Internet browsing space was mostly unknown to dark web. now they have turned into greatest centre for illegal activity like arms trade, human trafficking, terrorism.

② Space warfare: are new emerging arena of warfare. USA has developed new wing of

Candidates must not write on this margin

of defence sector of space. India went for A-SAT test.

(3) Nuclear bomb: as developed by openheimer, has potential to eradicate entire humanity.

(4) Medical warfare such as customised virus in lines of COVID. which can create existential threat.

(5) AI: to many people like Elon Musk thinks can end the dominance of human race.

(6) Robotics: helps increase productivity but it creates large scale unemployment by ending Jobs

(7) Cryogenic engine: are now used for large scale defence industry (Eg) DRDO SCRAMJET.

(8) Genome editing: has potential to turn into superbug and endanged entire food chain.

Candidates must not write on this margin

They have changed the way industry operate. The coming of Guidlins for dual use technology in form of Wassenar agreement, Ethical AI guidlins, Nuclear disarmanet movement, boycott of Space as warfare all have been impacting the way industry operate we come up with regulations for the ruptrie industry to not let them turn into threat.

What more needs to be done

1. Ethical teaching to all stake holder.
2. One health One world approach
3. Developing responsible Global citizens.
4. Strict implementation through Global Surveillance (5) IAEA Safegaurd

In this way we will be able to tackle this menance.

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, is the fund created to ensure principle of CBDR (common but differentiated responsibility) and also HR (historical responsibility).

It creates mechanism where develop countries help poor & developing countries to tackle Climate change through funds & technology transfer.

Origin of it can be traced from 1992 Rio Summit, but it came into final agreement in 2012 Summit (Rio+10), later on it was accepted in Paris deal also. But we see relevance in its implementation as countries do not share their section of fund. So it is presently in limbo.

Candidates must not write on this margin

In COP-27 Summit, govemnt agreed to come ahead to adress the loss & damage fund issue.

They developed the rulebook and mechanism to calculate the loss & damage. They have also targeted the countries based on porosity who will receive funds.

However, major bottlenecks of how much share will be contributed by each country and deadline to give funds are yet to be finalised in coming Summits.

Commitment made by India

India updated its NDC and also modified Panchamrit according to target of 2070 net zero.

1. 500 GW of non fossil fuel based energy by 2030.
2. Additional Carbon Sink of 1.5 - 2 billion tonne by 2030.

Candidates must not write on this margin

(3) Net zero emission by 2070.

(4) Emission intensity to be reduced by 35% by 2030.

This was in line with domestic policy of National Action plan for climate change (8 submission).

We also came up with Hydrogen Policy in 2023 budget targetting 5 MMT production by 2030.

to address our NDC-27 commitment

This will collectively help us realise SDG 13 goal of Climate Action. & Paris deal target of limiting warming of 1.5°C.

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

India came up with its disaster management plan in 2005 through robust architecture to address disasters.

However, Disaster is not only about responding to emergencies but also to building resilience, So our policy focus in large sector to mitigating efforts. We also came up with strategies like CDRI and building code to address it.

~~Key strategies~~

Resilience building efforts taken

(1) Institutions created:

a) Nat. disaster response force.

b) Nat. Disaster management authority

(2) Coastal Management Plan.

(3) Seismic mapping of entire country

Candidates must not write on this margin

(4) Training of dedicated Cadre.
(5) Decentralised resilience developed
(Eg) Panchayats imp role in mitigation strategy.

Key strategies for Community Resilience

(1) Integrating role of Panchayats in Identification and implementation of efforts.
(2) Rio-Summit highlighted role of Community participation in mitigation implemented through DM Act.
(3) Capacity building of community. through Drills, training, resilient houses, electricity Poles.
(4) Integrating Community in response plan & first respondents
(5) Utilising their traditional wisdom of addressing Climate might
(6) Tribal practices to integrate resilience and reduce impact.
(Eg) Bamboo houses in North East

Candidates must not write on this margin

(7) Sharing Global best practices of community lead initiatives
(Eg) Bengal Mangrove Shelters

Challenges

(1) Lack of documentation of practices
(2) Lack of Coordinated effort.
(3) Non Proactive effort of Govt.
(4) lack of Funds for implementations
(5) low focus on resilience more on crisis tackling.

We need to fully adhere Sendai framework to address the emerging global disaster threats.

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

Recently, BSF intercepted multiple drones used by terrorists for surveillance in Indian border.

This shows transformation of terrorist in using new & emerging technolog.

Other Technolog they use:-

(1) Meta Verse.

(2) Virtual assets like Crypto currency for Global trade to escape sanctions & promote secrecy.

(3) Drones for surveillance.

(4) Big data & AI to track movement & pattern of security forces

(5) Dark web for trade of Arms.

Method to counter emerging tech by terrorist

(1) Develop robust Cyber security framework in lines of Budapest convention.

Candidates must not write on this margin

(2) Strengthen intellegence Sharing.
   (Eg) NCCC → Nat. Cyber crime Coordinate Centre.
(3) Robust security to Critical infra.
   (Eg) Nat prog for Critical Info & infrastructure protection.
(4) Global collaboration against terrorism.
   (Eg) UNSC resolution on terrorism.
(5) Cut the terror funding route.
   (Eg) FATF black listing.
(6) Delink terrorism & Organised Crime. through efforts of INTERPOL.
(7) Promote robust Policy for extradition of terrorists.
(8) Strengthen IT Act 2000 & Telecom Policy.
(9) Implement Murli Manohar Joshi Committee report on indigenisation of critical infra & domestic database.

Importance of Delhi Declaration

(1) Developing Global Collaboration
(2) Address funding cut of terror Organs.
(3) Collective response of countries.

Candidates must not write on this margin

④ Robust intelligence sharing.

⑤ Developing security infrastructure specially digital security.

⑥ No tolerance to violence.

⑦ Coming up with robust defination of terrorism.

Delhi declaration is a landmark event & guideline to promote collaboration to address Menace of terrorism.

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 came to create young pool of cadre for enhancing efficacy of armed force.

Features of Agnipath

(1) Short term service to armed force
↳ 4 yr.

(2) Integration of few to permanent service.

(3) Certification of service.

(4) Integration back to civil roles.

~~today it is~~

Pill for resilience & efficacy

(1) large fiscal burden for long term cadre.
(Eg) More than 50% defence budget on salary & pension.

(2) Fill army with new & young cadre with large skill set.

(3) Retaining the best personnel enhance efficacy.

Candidates must not write on this margin

(4) Create second line of pre trained cadre in need of crisis situation

(5) Modernise army on new lines of emerging double border threat

Challenges

(1) Job security of cadre coming back not secured.

(2) lack of productive years of youth where we develop skills, if they come back to society.

(3) Psychological effect: on youth towards violence and hard power. against values of non violence of Budhha

(4) lack of dedication of cadre: when they know they will have to leave after fixed years.

What more can be done

(1) Simultaneous skill development for other civil jobs.

Candidates must not write on this margin

(2) Social security for cadres.
   (Eg) Pensions.
(3) More development of technology to replace manpower
   (Eg) Drones.
(4) Creating peaceful borders through bilateral deals.

This will create strong India according to 21st century emergig threats

Candidates must not write on this margin

Space for Rough Work

NEXT IAS