

NEXT IAS

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MAIN TEST SERIES 2023 (FULL LENGTH TEST-7)

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SUBJECT/PAPER
GENERAL STUDIES

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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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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 (BOP) refers to the net of external trade of a country with rest of the world. It has two major components:

BOP

Capital Account

Current Account

- | | |
|--|--|
| <ul style="list-style-type: none"> - All those transactions which lead to either increase / decrease of assets & liabilities of a country are part of Cap. A/c. - for e.g. external commercial borrowings, Capital Investments, FDI, FPI above 10% etc. - No surplus or deficit concept | <ul style="list-style-type: none"> - All those transactions which have bearings on exports and imports of goods and services are part of current A/c. for e.g. merchandise trade (export / import), services export, private remittances etc. - can be surplus (2003) or deficit. |
|--|--|

India can balance its BOP deficit by following measures:

- ① Boost exports : Through RODTEP, Credit Guarantee Scheme, TRIFED, APEDA etc
- ② Capital Investment : to boost Incremental Capital-output ratio of industries
↳ can boost GDP growth by 2%
③ Public expenditure : IMF data - 9% of public expenditure can knock out 10% of private expenditure
- ④ Raise agro-economy : to boost agro export and decrease import dependence of pulses etc
- ⑤ Investment in Renewables : - to cut down on oil imports and forex drain.

A strong BOP is vital for sustained growth required to reach 5T\$ economy.

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

Manufacturing sector contributes to 28% of total national GVA and is the most central sector for national growth.

Logistics sector — vital for growth of manufacturing sector

- ① Boost connectivity — thereby decreasing delays & wastage of goods & resources
- ② Enhance production capacity — of industries by streamlining up and down supply chain
- ③ Boost to GVA — by increased production and transportation
- ④ Integration with global supply chain — as a result of improved competitiveness

Government Initiatives

- ① New Logistics Division in Mo Commerce
- ② PM-Gati Shakti - multimodal development project
- ③ Bharatmala Pariyojaya
- ④ Lagarmala Pariyojaya
- ⑤ National Railway Plan, 2030 . etc.

Components of National Logistics Policy, 2022 :-

- ① A dedicated wing in Mo Commerce to oversee logistics bottlenecks.
 - ② Aims to boost ranking in World Bank's Global Logistics Index.
 - ③ Dedicated Capex for repairing infrastructural bottlenecks of each sector - railways, shipping etc.
- A strengthened logistics sector is prerequisite to achieve developed country status in long term.

3. डब्ल्यूटीओ के तहत मत्स्य पालन सब्सिडी पर नए समझौते पर भारत का क्या रुख है? भारत के लिए मत्स्यपालन क्षेत्र किस प्रकार महत्वपूर्ण 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

The recent ministerial conference (MC) of WTO agreed on New Agreement on Fisheries Subsidies.

Features : ① Outright ban on IUU (Illegal underreported fishing).

② Continuation of subsidies by developing and LDC nations

③

India's stand :-

① India's agreed to conditions on IUU fishing.

② Supported the subsidy regime.

Fisheries sector contribute to 7% of agricultural GVA and 1.2% of national

GVA.

Opportunities to India

- ① 300 M coastal population depend directly or indirectly on fisheries sector.
- ② Largest exporter of shrimps & frozen fishes to USA, Eurozone & China.
- ③ Potential to become lucrative sector and tool to double farm income by 2025.

Government steps to develop the sector

- ① Development of 5 major harbours as fisheries dept. eg. Petughat, Vizag, Chennai etc
- ② PM-Matsya Samyada Yojana
- ③ 50,000 fish farmers brought under KCC scheme
- ④ Lagar Parikarma Initiative - to bring to the fore of fisheries communities
- ⑤ Blue revolution - to boost fishing harvest of

Fisheries have potential to help double farm income by 2025

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 Reforms refer to equitable sharing of agricultural land parcels among the farming, tenant, share cropper etc. of India.

India has dedicated policy for land reform right since 1951 (1st CAA & introduction of IX schedule).

Constraints enroute equitable land distribution

- ① 85% of farmers are small and marginal
- ② lack of will on part of state governments to effectively address the inequality
- ③ No proper land titling system
- ④ Ambiguous land laws — 60% of cases in lower courts are related to land
- Systematic

- ① No dedicated agency to carry out land distribution

Institutional - ② Bureaucratic apathy to listen to the plea of marginal farmer

③ Noxus among land lords, politicians and criminals - thwarting reforms

Way out

- ① A dedicated regulatory body on lines of CBI to carry out execution of policies
- ② Sorting out land titling issues eg through VAMITVA and HLP NDLP system
- ③ Coordination between centre and states to effectively address bottleneck
eg. Kerala model can be studied and emulated.
- ④ Presumptive land titling - state must take responsibility about registration & transfers etc.
- Land reform is first step towards resilient farmers of tomorrow

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? (50 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 a joint defence product between India and Russia and world's first and only supersonic cruise missile.

Unique features & capabilities :-

- ① Speed can reach upto 3-5 mach
- ② Mid-flight manoeuvre possible
- ③ Can be launched from all these
bases — land, sea, air
- ④ Can carry nuclear warheads on it
- ⑤ Range can be extended to 1500 km from present 700 km.

Contribution of Brahmos to India's defense capabilities -

- ① Give credible deterrent against provocations of Pakistan and China
- ② Can target most strategic cities of Pakistan & China e.g. Karachi, Lahore etc
- ③ Potential to develop into long range cruise missile e.g. along with ballistic missiles e.g. Agni Prime
- ④ Exported to Philippines and Vietnam
↳ boost to defense industrialization and export ecosystem
- ⑤ Increased manufacturing means increased employment & boost to M/SMEs - supply central park.

Defense export & weapon upgradation is vital to ensure a future ready & AtmaNirbhar Bharat.

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 Ocean Mission (DOM) a.k.a. Samudrayaan

Is a first and dedicated Indian deep sea mission carried out by Mo Earth Science to understand and explore Central Indian Ocean Basin (CIOB).

Features of mission :

- ① Will take a view of 3 to a depth of 6000m below sea-level.
- ② The vehicle to be called - Matsyagan
- ③ To explore polymetallic nodules on the floor of CIOB.
- ④ To study marine biodiversity.
- ⑤ To enquire about ocean climatology and cyclone / typhoon occurrences.

Samudrayaan can contribute to advancement of ocean science and technology in following ways -

- ① Help in understanding of ocean climatology
eg. SST, sea-Isoterm.
- ② Help in preparation of comprehensive bathymetric data.
- ③ Understanding of marine biodiversity of Indian ocean.
- ④ Exploration of PMN on COB can help us achieve energy security
eg. a study says 10% of PMN can propel 100 year of power demand.
- ⑤ Help decarbonise our environment and timely realise Panchamset targets

Samudrayaan is a right step towards achievement of SDG-14 (life under water).

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 (GMP) was a joint initiative by USA and UK to decrease the emission of 2nd most potent GHG - methane below 30% by 2030.

~~Get~~ A positive step

- ① Methane is the second most potent GHG after CO₂.
- ② Global warming potential (GWP) of CH₄ is 300 times CO₂ over 100 year period.
- ③ CH₄ is also responsible for stratospheric ozone accumulation - causing respiratory issues.

However, the pledge has not been
endorsed by India.

Reason: ① Agro-dependent Economy

— 45% depend on agriculture

① Animal Husbandry — 2nd largest GHG
emitter — contribute to 1.5% of national GVA

② Rice cultivation — India is largest producer
of rice — can reduce production

③ Ensure food security — of 22% multibillion
monetarily poor population by sustained
production of rice, and animal products.

Although Global Methane Pledge is a
right step, it needs to be in sync with
climate justice principle — allowing required
leeway to developing nations.

8. कोविड-19 महामारी ने सार्वजनिक स्वास्थ्य में आपदा प्रबंधन के महत्व 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

Disaster management, as per NDM Act, 2005 is continuous efforts to mitigate risks, hazard and vulnerability and capacity building for effective recovery and rehabilitation.

COVID-19 pandemic brought the importance of management of public health as vital component of overall disaster management.

Key strategies regarding pandemic management-

- ① National level coordination - by a nodal agency eg Mo Health, Mo Home Affairs.
- ② Effective mobilization of resources eg food, medicine supplies, hospital services.
- ③ Nodal agency for correct information dissemination about pandemic.

(iv) Ensure buffer stock of food grains to feed unemployed population

eg. Garib Kalyan Anna Yojana - 80 crore beneficiaries

Challenges in pandemic management:-

(i) Accommodation of surge of patients in limited health care facilities

(India - among top 5 global pandemic death grid)

(ii) Provision of adequate social support to weak, vulnerable and marginalised eg. old, women, children, tribals etc

(iii) Lack of required funding - Only 2% of GDP on health sector

Way out (i) One health approach to tame future pandemics

(ii) Increase public expenditure to at least 4% (WHO mandate 5%)

Emerging disease outbreaks need dedicated focus to ensure SDGs are met timely

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

Left wing Extremism (LWE) or Naxalism has been considered as the greatest internal security threat by ex pm - Dr. P. V. N. Singh

Central drivers of LWE :- Resource curse :

- ① Underdevelopment of central & eastern India eg. Orissa, Jharkhand, Chhattisgarh.
- ② Marginalisation of native tribes from developmental functions.
- ③ Displacement due to multiple corporate projects of Samantha Tribe - from Odisha to Andhra
(considered criminals in Andhra)
- ④ No local participation - Resource extraction or mining activities eg. Bauxite, Iron, Aluminium etc.

- ⑦ NO effective use of District Mineral Fund for tribal benefits

Suggestions for Inclusive development

- ① Integration of all bpg projects with local development plans prepared by Gram Sabha and District administration
- ② Regulation of District Mineral Funds for effective utilisation toward tribal welfare
- ③ Out-of-box solutions - Chho-lo-Aasman scheme by Dantewada DC - O.P. Chandhary to boost P.B. literacy level
- ④ Synergy among Central, State and local governments for integrated development of LWE affected regions.

The greatest internal security threat requires Coordinated effort of all stakeholders.

10. उत्तर पूर्व और जम्मू-कश्मीर क्षेत्र में हिंसा की घटती प्रवृत्ति के आलोक में क्या आपको लगता है कि एफएसपीए (अफ़सपा) 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

AFSPA, 1958 is legislation to ensure
peace and law and order in disturbed
areas so declared by central or state governments.

Currently active in - Assam, Arunachal, Nagaland
and Manipur.

Given the declining trend of violence and the
fact that today's true PE of human resources
development thus, AFSPA appears to have
outlived its utility as -

- ① Number of casualties in NE and J&K
is at record low in last 10 years (MHA data)
- ② The focus has turned more towards
socio economic development e.g. APMs in
Aruachipora, Vijaynagar (Samba) and
Manipur.

③ The purpose of AFSPA to maintain law and order can be effectively dealt by other neo-age legislations of NIA, VAPA

④ In sync with recommendations of II ARC and B. P. Jeevan Reddy Committee.

⑤ Progressively removed from Terapan (2015) Meghalaya (2018) and from Assam (announced by CM)

Qot the utility sometimes feel desirable —

① Given present condition of Manipur.

② Increased cross-border insurgency from Myanmar due to Tin U Crackdown

The legislation — 60 years old — need to be repealed in favour of greater human insolence and eco-economic development.

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

According to IMF, 95% of global trade is
carried out in US dollar (\$), followed by
Euro and yen/yen.

Importance of Hard Currency in global trade

- ① International acceptance - almost all UN members deal in US \$.
- ② Ease of availability - in International forex market
- ③ Global dependence on US as a trade partner - make \$ demand nonnegotiable
- ④ Quick convertibility - in most of the major global currencies eg Yen, Euro, etc.

Yet, there are issues too —

- ① Fed state issues — and resultant capital flow
- ② Sanchon negative — due to monopoly of \$ in global trade
- ③ International price volatility — due to various factors eg Ukraine war, Sino-US trade war
- ④ Trade Protectionism — practised by US.

That brings the idea of using ₹ as international currency.

Can act as alternatives to US \$ as —

- ① India is 5th largest economy and is poised to become 3rd largest soon.
- ② Share in global export is close to 4% (IMF data) and import is 5.5%.
- ③ Already such system working with Russia, UAE and ASEAN nation.

Yet there are some issue too with Internationalisation of ₹ —

- ① India has overall trade deficit of 220B\$
i.e. India depends more on Import.
- ② Acceptance of ₹ by exporting countries such as Russia due to limited usage.
- ③ Not as freely convertible as other global hard currencies e.g. Yen, Euro, etc.

Way out

- ① Indo-₹ swap deals with countries who depend on India e.g. Bangladesh, Nepal etc.
 - ② Allow them to trade in ₹ with each other e.g. use of ₹ among ASEAN and Russia or ASEAN and Eurozone
 - ③ Boost trade competitiveness to strengthen ₹ against major currencies.
- A strong ₹ is must to ensure realisation of 10T\$ economy in long term.

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

Demography Dividend means such proportion of population in the working age group i.e. (15-59 years). India is one of the youngest nations in the world with ~40% of population below 30 years of age.

But presence of Demographic dividend alone does not ensure growth.

- Reason
- ① Can turn into demographic disaster if not provided with necessary skills
 - ② Lack of education - makes them virtually redundant
 - ③ No healthcare means decrease in productivity of existing workforce and resultant decrease in GVA.

Reasons

- ④ Need skilling, upskilling and employability to become potential human capital
- ⑤ Require an ecosystem of growth, employment and opportunities to channelise their energies.

Steps by government towards the same:-

- ① Formalisation of economy - through e-shram, digitalisation - Digital India etc
- ② Financial Inclusion - through Jan-Dhan Yojana, DBT scheme, JAM Trinity
- ③ Kaushal Vikas Yojana - to skill and upskill 300 M youth in Industrial skills
- ④ Healthcare benefits : PM-JAY, Ayushman Bharat Yojana, AB-Digital Health mission

- ⑤ Schemes for unorganised sector - eg. e-shram portal, Shram Yojana Handloom Yojana, Atal Pusa etc.
- ⑥ Boosting connectivity - through Bharatmala, Sagarmala, PM-Gati Shakti etc. to increase productivity

But some more effort is required to cater on the rich demographic dividend —

- ① Ensure quality + quantity both in health care and education — continuous monitoring required
- ② Foreign exchange programmes - for integrated skill development eg. with Gulf, ASEAN, Japan etc.
- ③ Improving infrastructural issues of existing hospitals, schools etc - eg. ensure WHO mandated patient:bed ratio and UNESCO mandated 6% expenditure on education.

Becoming globally most populated nation can become boon if all steps are directed in right direction

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 refers to artificial changes
made in genes of some organism to have
desired characteristics of GM crops such as
Bt-Cotton, GM-Mustard.

In India GM-organisms are commercially
approved by Genetically Modified Organisms
Approval Committee, Mo Environment, Forest & OP.

Potential for crop improvement:-

- ① Crops become pest / rodent resistant
by GM-Mustard.
- ② Can be grown in any climatic condition
when suitably modified
eg. Golden Rice in Maharashtra, Telangana etc.

- ③ Increased productivity - due to decreased pest and insects attack.
eg. GM mustard, Bt-cotton.
- ④ Boost farmer's income due to increased productivity and harvest
- ⑤ Decreased pesticides, insecticides and irrigation demand → decreased input cost

But also have concerns :-

- ① Once planted, seeds cannot be reused
- Safety - ② Can be dangerous and lead to spill over effect of microbes
- ③ May lead to market monopoly and antitrust among farmers.

Ethical - ① Against law of nature

- ② Decreases species diversity - kill rodents
- ④ Costly affair for small-marginal farmers
(85% of total)

New guidelines for safety assessment of genome edited plants —

- ① Only designated lab with (L-III) security can carry on such editing
- ② Mandatory approval from GAC (MoEFCC) for commercial production
- ③ Adherence to ethical standards while carrying out editing.

The guidelines ensure safety as —

- ① Only limited lab with certified safety standards can carry out research
- ② All such research are monitored Expert Group constituted by GAC (MoEFCC).
- ③ No commercial cultivation without approval from Mo Environment

GM-crops are potential tool to boost farm productivity yet the path needs to be treated ethically and carefully —

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 refer to the support provided by
State to farmers to boost agro productivity,
harvest and farmers income.

e.g. Free electricity for irrigation purpose.

Direct subsidies :- ① Subsidised seeds, fertilisers
and other inputs

- ② Free electricity for irrigation purpose
- ③ KCC - for consumption of farmers
- ④ MSP - for guaranteed procurement

Indirect subsidies :- ① PM-KISAN scheme -
Cash incentive for farmers family

- ② Kaushik Krishi Yojana - for
irrigation support
- ③ Paramparagat Krishi Yojana - to boost
- ④ KISAN RAIL - organic farming

Impact of subsidies

Positive :- ① Ensure guaranteed prices to farmers via - MSP.

② Reduced production of food grains
300 mmT in FY 21

③ Support to 45% of agricultural workforce

④ Ensure sustained growth of agro sector even during pandemic (at 4% annum)

Negative :- ① Increasing subsidy bill to govt. ^{work}

② Stagnant price of grains but increased economic price for FCI

③ Attract other nations like exp. Brazil complained at WTO on sugarcane policy

④ Breach of Bali Clause (10% subsidy breach)

⑤ Tough on state exchequer.

Role of MSP in agro-economy: -

- ① Guaranteed Income to 80% of farmers
- ② Notified for 22 major crops constituting 60% of total cereal production
- ③ Boost PDS and buffer stock to meet domestic + global demand eg. wheat export to Egypt and Latin countries
- ④ Revised production of crops - 330M\$ grain production in FY 21.

Yet some concerns

- ① C2+50% formula by Swaminathan
Committee not realised
- ② No legal backing - demanded by 80% small & marginal farmers.
- ③ Only 20 crops - disproportionate majority crops

These issue need early resolution to boost productivity, ensure food security & double farm income

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) refers to the resistance generated by major pathogens such as TB bacteria etc against commonly available antibiotics such as oxytetracycline, penicillin, erythromycin etc.

Contributing factors to growing AMR :-

- ① Indiscriminate use of antibiotics by citizens and prescription by doctors
- ② Use of antimicrobials in food production e.g. rice, wheat production
- ③ Rampant use of antibiotics in animal husbandry e.g. cattle diseases are treated using antibiotics

(iv) No new class of antibiotic - requires
average 10 years & 100B\$ investment.

(v) No exclusive approach to ONE HEALTH
to integrate animal husbandry, environment
& human health for effective tackling

(vi) Increasing sanitary related diseases due
to pollution and unhygienic living conditions
eg TB, typhoid etc

Steps required :-

(i) Strict adherence of Aware regime
of WHO on antibiotics.

(ii) Adherence of Agenda Manifesto on
ONE HEALTH to integrate all contributing
factors in one dimension.

(iii) Decrease use of anti-microbials in
animal husbandry and food production

- ④ Doctors should be prescribed with
WHO guidelines on Antibiotic regime
- ⑤ Strict Implementation of National
AMR Policy, 2017 by all healthcare
professionals.
- ⑥ Adherence to Chennai Declaration
on AMR policy.

AMR is growing health concern and needs
dedicated attention to stop it turning
into future pandemic. In this
regard, we need to follow all the
recommendations agreed upon in
Muscat Manifesto on AMR.

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

The products emerging out of Industrial Revolution 4.0 such as AI, Machine Learning, Cryptography etc. have potential to solve many vast-scale problems but at the same time can become potential tool of deception due to unethical usage. Such innovations are called - disruptive technologies.

Examples of such technologies and their impact on industrial operations.

① Artificial Intelligence

Impact

① has led to automation of large scale works

② Invention of technologies such as ChatGPT etc

II Machine Learning

- repeated use of a pattern is accepted by machines as algorithm and it then behaves accordingly—

Impact : ① Automation of social media
choices e.g. playing one classic
 song is suggested with more such
 songs

- ② Used in other disruptive technologies
 such as robotics, AI, etc

III Augmented Reality

- Superposition of virtual objects along with
 life / real objects to create an immersive
 experience.

Impact : ① Exploited by gaming industry
 e.g. Blue whale challenge

- ② Used for creation of MetaVerse
 by leading tech giants e.g. FB, Apple

IV Cryptography

- end to end encrypted messaging and connection using blockchain technology

Impact - (i) Used to create way digital coins
eg. Bitcoin, Dogecoin, Ethereum

- (ii) Used for secure communication between defense forces.

V Robotics

- Substitution of human beings with machines to do repetitive / routine work.

Impact - (i) Used to carry out surgery & tele-medicine consultation

- (ii) Used as assistant on space mission
- (iii) Industrial application

New-age disruptive technologies also double
edged swords and must be regulated
effectively to ensure they are
used for beneficial purposes.

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







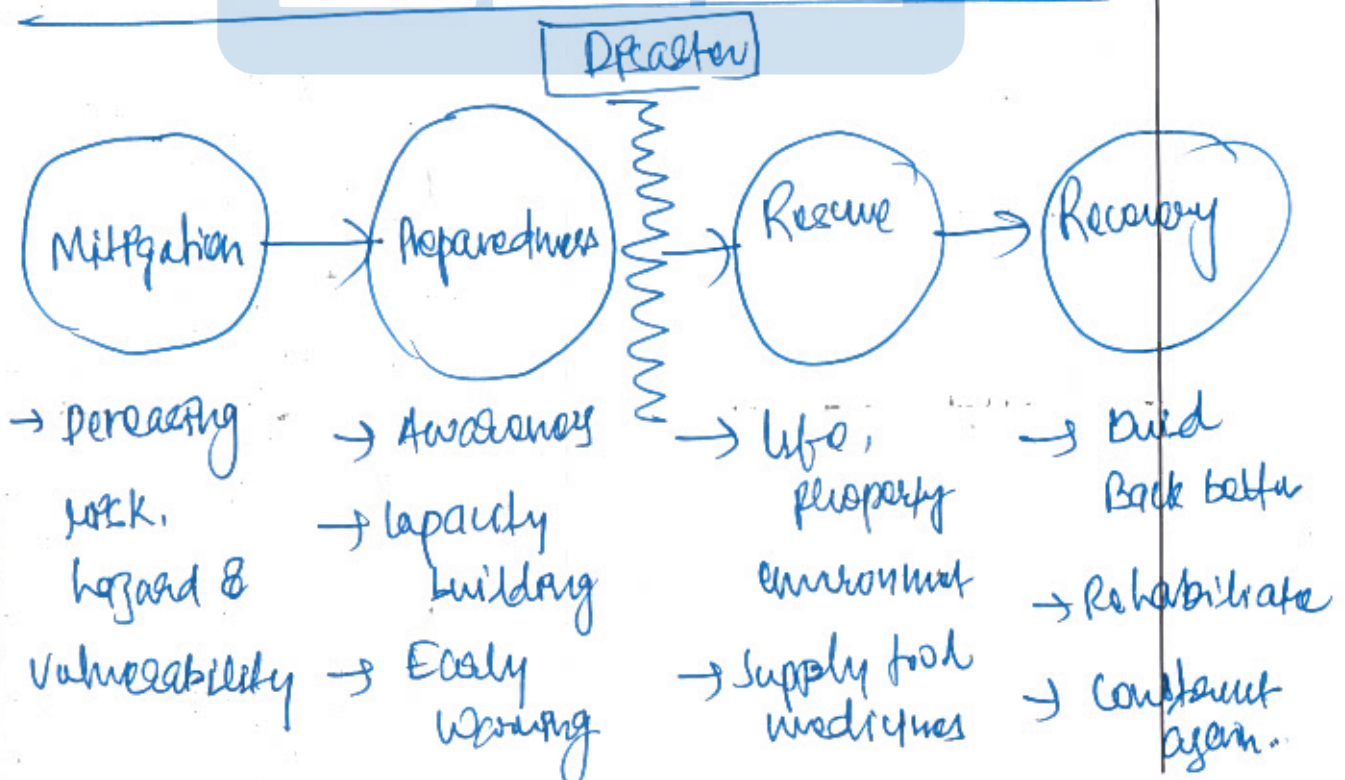
18. आपदा प्रबंधन सिर्फ आपात स्थिति से निपटने के बारे में नहीं है, बल्कि लचीले समुदायों के निर्माण के बारे में भी है। उन प्रमुख रणनीतियों पर चर्चा कीजिए जिनका उपयोग सामुदायिक लचीलापन बनाने और आपदाओं के प्रभाव को कम करने के लिए किया जा सकता है। (250 शब्दों में उत्तर दीजिए) 15 अंक

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

According to Disaster Management Act, 2005,

Disaster management (DM) is continuous process involving measures to ensure mitigation of risk & damage, capacity building for effective preparedness, and timely rescue and recovery.

Not just responding to emergencies but also building resilient communities :-



Key strategies that can be used to build community resilience :-

- ① Integration of PM in development planning at national, state, district and local level
- ② Investment in Disaster Risk Reduction (DRR) strategies
- ③ Capacity Building of local — women, youth and authorities to respond and recover quickly.
- ④ Mitigation strategies e.g. vulnerability assessment, hazard zonation should be done at priority basis
- ⑤ Investment in Early Warning System (EWS) in disaster prone areas e.g. Coastal India, Himalayas etc.

- VI) Pro-active role of District Authorities —
should be constantly trained by NIDM and
further they should train locals.

However, these strategies will require —

- ① Dedicated funding of Disaster Mitigation
schemes, & programmes.
- ② Pro-active role of National Institute of
Disaster Management
- ③ Follow up on Gujarat model of rescue
and recovery — CAG lauded the model.

The effort of mitigating disaster risk at
global level (COP) should first be
strengthened at home by strictly
following Sendai Framework on DRR.

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 refers to politically motivated
harmful attack on state or community to
instill fear and seek revenge.

Motto of terrorism :

- Revenge
- Retaliation
- Retaliate.

When terrorist organisations start using
ICT as backend support for terror activities
then it is called - Cyber terrorism.

e.g. attack on Colonial gas pipeline (U.A.)
Defacement of government websites by Pak
Army (alleged terror group).

Matter of concern: —

- ① Potential to disrupt critical infrastructures
of gas/oil pipelines.

- ② Increasingly hard to detect - due to territorial anonymity
- ③ No physical presence - can be attacked from across the border
- ④ Can destabilise local harmony, peace by provocatory and propaganda videos.

Ways to Counter New age Terrorism :-

- ① lobbying International forum (UNSC) for a global treaty on cyber terrorism.
- ② Synchronising domestic legislation on terrorism with initiatives such as Power Call, Checkmate Call.
- ③ Capacity Building of CERT-In - alarmingly understaffed (30% vacancy)
- ④ Offensive and defensive capabilities training to intelligence agencies eg RAW, IB, DIA
- ⑤ More funding to DRDO - to boost production of indigenous ~~at~~ critical assets. as WAN, LAN etc

In this regard, the conference of INTERPOL resulted in promulgation of Doha Declaration - to deal with new-age terrorism (cyber warfare and cyberterrorism)

Importance

- ① Comprehensive definition of cyber-terrorism - what constitutes the same.
- ② Declaration to check terror funding by strengthening Egmont group.
- ③ Greater synergy among FIU of member nations to track fund flow.
- ④ Collaborative effort to tackle the new form of terrorism.

The mechanism of terrorism need strong global response and Doha Declaration is a strong step in that direction.

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

In order to fulfill the shortage of
army personnel, Govt has launched Agnipath
scheme as a temporary recruitment scheme
to serve Armed forces on a tenure basis.

Feature : ① Age-limit - 17-23 years.

② Limited service tenure of 4-6 year

③ Retention of 40% Agniveers for
permanent service

④ Guaranteed settlement amount and
post-retirement benefits

⑤ E-E-E fund status to Agniveers payment
& fund corpus

It's a bitter pill to ensure efficiency:-

- ① Jeopardise the future of lakhs of youth
who train themselves for army job
- ② No security of job after 23 as
compared to those admitted via
Short Service Commission.
- ③ Call-up in the crucial years of youth
and then left high and dry.
- ④ Only 40% retained for full service.
- ⑤ Expenditure on training of all
Agaveers today - goes waste when
they leave armed forces.

However, all is not bad with the scheme

- ① Government has brought up scheme
with guaranteed adjustment of
remaining 60% Agaveers

II) Their earnings and retirement corpus won't attract any tax or surcharge.
(given EEE status)

III) The training imparted can be utilized
life long in other fields of public service

IV) Ensures fresh supply of personnel
every couple of years - ~~increase~~
average age of army personnel.

V) Help state exchequer with increasing
committed expenditure (80% of defense
funding goes to payments pension)

Agnipath scheme is futuristic scheme

and is in line with practice of most

developed nations. Let the concern need

to be solved by multi stakeholder approach.

Space for Rough Work

Candidates must not
write on this margin

