



APTI PLUS

Academy For Civil Services
No. 10/11, Brindavan, 4th Floor, Sector 10, Gurgaon 20200
An ISO 9001:2008 Certified Institute
Established in 2005

MAINS MOCK TEST, 2022

GS III PAPER

Date: 20th August 2022

Time: 9 AM to 12 PM

Total Marks: 250 marks

Time duration: 3 hours

GS III Paper Instructions.

- There are 20 questions printed in ENGLISH.
- All questions are compulsory.
- The number of marks carried by a question/part is printed against it.
- The medium of the answers will be English.
- Answers to questions no. 1 to 10 should be in 150 words, whereas answers to questions no. 11 to 20 should be in 250 words.
- Keep the word limit indicated in the questions in mind.
- Any page or portion of the page left blank, must be struck off clearly.
- You are directed to scan/ take photos of your answer booklet and send the same to aptiplus.mains2022.openmock@gmail.com ONLY IN PDF FORMAT.
- Name the pdf format in the format (aspirant's full name)_(paper).pdf. For example, if your full name is Aman Kumar and the paper is on GS III then the file's name will be amankumar_GSIII.pdf.
- The deadline for submitting the answer sheets is 20th August 12:30 PM

108.5



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1. What are AI chips and how are they different from traditional chips? (10 Marks, 150 words)

who do apt and the → AI chips are built with specific architecture and have integrated AI acceleration to support deep learning-based applications.

point → These chips with their hardware architectures and complementary packaging, memory, storage and interconnected technologies, make it possible to infuse AI into a broad spectrum of applications.

→ There are different types of AI chips such as application specific integrated circuits, field programmable gate arrays, central processing units designed for diverse AI applications.

} try to show in flowchart format



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AI chips different from traditional chips

AI chips

Traditional chips

① These consist of processor cores and several AI optimized cores

① These consist of processor cores and memory only.

② These can handle AI as well as non AI programmes.

② They can handle non AI programmes only

③ They have wide application in emerging fields like generative pre-trained transformer, machine learning and soon

③ They have limited capacity and reduced scope for emerging technologies

Thus, we can say that AI chips are marked improvement over traditional chips.



conclusion

could be

better if

any future innovations included.

4

valued points and beautiful presentation

could also mention computing power active language



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2. Widening Current Account Deficit (CAD) indicated that the value of imports is exceeding the value of exports. Justify (10 Marks, 150 words)

who
is
fine

The country's Current Account deficit is when the value of the imports of goods and services is greater than its exports.

CAD \rightarrow not
always
detrimental

Recent status of India's CAD

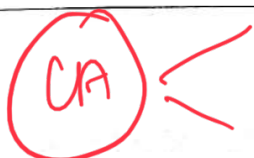
① The CAD for the first half of 2022-23 was 3.3% of GDP due to lower commodity prices and moderated imports, which is widening over consecutive years.

well
justified

Implications of widening current account deficit

① The CAD is significant because it affects the economy, stock markets, and people's investments.

② A lower CAD can boost investor sentiment and make the country's currency



invisible
visible
(Goods)

services
income
Transfers

try to
show
fig/glow
chart



Avoid highlighting

more attractive to investors.

③ A surplus in current account indicates that money is flowing into the country, which can boost foreign exchange reserves and value of the local currency.

the nature statement

How steps to moderate current account deficit

① By promoting exports via schemes like production linked incentive schemes.

good points

② Promoting import substitution via Atmanirbhar Bharat.

③ Improving ease of doing business within the country.

Thus, moderating current account deficit will help India achieve \$5 trillion economy.

future conclusion

4



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3. The launch of e-RUPI could potentially highlight the gaps in digital payments infrastructure that will be necessary for the success of the future digital currency. Examine. (10 Marks, 150 words)

e-rupi is a cashless and contactless instrument for digital payment developed by National Payments Corporation of India.

neither
cryptocurrency
nor
CBDC

frui
and
crisp
crnd

gaps in digital payments infrastructure

① Despite increased penetration of digital payments, rural India lags behind in terms of adequate digital infrastructure as highlighted by Niti aayog.

② Issues regarding seamless operability, resilient infrastructure and secured networks continue to hassle Indian digital payment scenario.

good
points



eRupee → success of future digital currency

well-justified
the
and
point
buy

① eRupee will improve the penetration of digital payments especially small value transactions.

② It will act as a cushion to support by providing alternatives to BHIMUP eg

③ It will enhance safety of digital payments as it is backed by central bank's assurance.

④ PAN needed for transactions beyond ₹50000 will ensure safety and prevention of money laundering and other crimes.

mention
the application
through

eg) to sum up, we can say that eRupee will help in ensuring success of digital currency in India.

four conclusions

3 1/2



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4. The frequency of purchase, rather than the share of expenditure, shapes inflation. Analyse the statement with the recent food inflation surge in India. (10 Marks, 150 words)

could have begun with from FAD

The inflation ^{states} existing in the Indian economy depends on exogenous and endogenous factors.

Research has shown that the frequency of purchase, rather than the share of expenditure shapes inflation - related expectations

apt
chho

Food inflation surge in India

① Not only is around 40% of overall consumer spending on food, its purchase frequency is also higher. Thus, rising prices have a sticker impact on inflation expectations.

related points and

② Food inflation, at 6% on average in the past three years, is significantly higher than the pre-pandemic 5 year average of 3.5%.

good (29)

through stats

you could also mention

demand-supply mismatch
Changing consumption pattern

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Some of the reasons being:

- (i) A surge in transportation cost
- (ii) rising cost of production, and,
- (iii) elevated global food prices

etc
also, partially due to Russia-Ukraine war

③ Rising food inflation hurts consumers a lot more than inflation in other commodities since households don't have much discretion in altering food consumption.

Way forward

- ① Focusing on domestic production of fertilisers, and other agriculture machinery.
- ② Adequate buffer stock to be maintained of essential food grains.
- ③ Sound policy to prevent artificial scarcity via hoarding.

Thus, we can say that food inflation must be controlled effectually to prevent hurting of the common man.

concluded well

4 1/2



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systematic and coherent manner

Discuss the recent reforms that have been undertaken in the National Security Architecture of India. (10 Marks, 150 words)

The national security is one of the primary responsibilities of the state. with rise of state sponsored terrorism, organised crime, asymmetric warfare and lone wolf attacks, various reforms have undertaken in recent past.

Too the point intro

① The post of the Chief of Defence staff has been created, based on recommendations of the Kargil review committee.

② The number of deputy national security advisers has been increased, to allow the national security advisor secretariat to function better.

well presented arguments

③ Increase impetus on state of technology Information and communication



Technology to prevent new age crime.

setting
defense
planning
committee
security
in

(4) strategic policy group has been reformed with national security advisor as its chairman.

The Cabinet, home, finance defense and external affairs are its members.

The above changes are being supported with smooth information sharing across various departments and organisations.

4

Thus, these reforms will ensure safety of the country internally and externally.

try to conclude by mentioning some futuristic way forward and optimistic solutions



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6. Describe the issues associated with online gaming and also provide a way forward. (10 Marks, 150 words)

good
to
begin
intro
with
eg.

Online gaming is the digital manifestation of sports such as e-Sports, fantasy games, videogames and online gamers-casual games.

The online gaming industry has grown exponentially since covid-19.

Issues with online gaming

① Lack of regulatory oversight leading to creation of a grey area.

② Online gaming is a state subject leading to conflicting legislations. eg Tamil Nadu has passed heavy regulations on online gaming.

Addiction

ex. are good

③ Multiple definitions with regards to 'gambling' & 'betting'

Games → addiction

↓
blackmailing (Q)

Blue whale game.

↓
death/depression

- Polamon etc

ultimate vicious cycle can be shown



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as well as apprehensions, whether online gaming involves matters of skills, hence, leading to concerns of taxation provisions

- (4) Implications on youth as it might lead to addiction and significant financial harm.
- (5) China games might hampers economy of the country.

name some

Way forward

- (1) Online games must be strictly regulated by an independent oversight committee.
- (2) Inter-ministerial task force to study impact on youth population, as well as, regulating Chinese gaming apps.
- (3) Adequate taxation provisions (i.e. e&I, GST) well should be implemented.

way forward is explained

Online gaming must be properly regulated to ensure for effective impact on govt. revenues and minimum negative impact on youth



final conclusion

5



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7. In light of the recent power shortage in India, how to shock-proof India's power sector?
(10 Marks, 150 words)

good intro
The coal-shortage induced power outages across many states has created socio-economic impact. Hence, the need to shock-proof India's power sector.

Ways to Insulate India's power sector

1) Giving directions to ensure maximum production of coal at captive mines; rationing of coal to non-power sectors, and, a price cap of ₹12 per unit.

2) Creating an enabling ecosystem to ensure power plants work efficiently.

3) Smart assessment and management of demand via careful analysis and trend observations during peak seasons.

first mention the reasons why there is rise of power crisis / shortage in India

suggestions
are

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4) Empowering electricity regulators to help well bring down discom losses, to ensure. explained operational inefficiency and poor recovery of dues

5) Infuse payment discipline, via, introducing smart meters, network strengthening and so on

6) Emphasis on renewable energy eg roof top solar panels. These steps will help improve the power sector in India and prevent power shortage in India.

3 1/2

Reasons → DISCOM losses → structure and infra. costs → FOOD situation

conclude in at least 2-3 lines to give closure to the answer.

8. Discuss the types of wetlands and also the threats to wetlands. (10 Marks, 150 words)

Wetlands are areas where water is the primary factor, controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land.

Types of Wetlands

- ① Coastal Wetlands : Found in areas near land & open seas.
- ② Shallow lakes and ponds . Eg. vernal ponds, spring pools, salt lakes.
- ③ Marshes → characterized by herbaceous vegetation adapted to wet soil.
- ④ Swamps → dominated by trees and shrubs.
- ⑤ Bogs → waterlogged peatlands in old lake basins and depressions.

types are valid and well justified through eg.

include 'front part / dig' to show the regions



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⑥ Estuaries : The area where rivers meet the sea and water changes from fresh to salt.

Threats to Wetlands

① Urbanization leading to pressure on wetlands
eg) Kolkata wetlands.

② Agriculture leading to eutrophication due to rampant fertilizers usage.

③ Pollution caused by industrial effluents etc.

④ Climate change & inflow of invasive species
eg) Dipper keel in Hyderabad choked by water hyacinth.

⑤ Increased Salinization of water bodies.

Thus, to sum up, due to various threats, wetlands must be preserved and protected as it provides valuable ecosystem services.

conclusion is fine



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9. Stop and Start approach to fuel price is neither beneficial for consumers nor investors.
Comment. (10 Marks, 150 words)

good intro
Though, India has officially adopted a deregulated pricing regime, this practice is often put on hold during election campaigns and other such scenes.

Hence, there has been a stop-and-start approach to price changes.

stop & start approach - harmful to both consumers & investors

content? comp? to good
Repeated demonstrations, doesn't augur well for the Indian economy as it renders it vulnerable to global crude price pressures.

you could separately define investors

concerns for consumers

① This stop and start pricing approach for fuels also adversely affects interest from global investors in the Indian oil and gas sector.

② Notably, the adherence to market administered price policy as the crude oil prices have reached a high doesn't augur well for economic recovery in India. If fuel prices are passed on fully to consumers and industrial users, they will generate high retail inflation.

Way forward

- ① Systematic reduction in excise duties & taxes
- ② Government should diversify from heavy dependency on oil imports

Thus, stop and start approach to fuel price is neither beneficial for consumers nor investors.

4 1/2

way forward is good



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10. What determines the value of the rupee? What factors cause the rupee to lose value against the dollar? (10 Marks, 150 words)

The "rupee" based on dirty floating system depends on various factors, such as:

need
not to
define
the
intro
well
explained

- ① Level of imports & exports from India
- ② Existing inflation rate within economy.
- ③ Employment - Unemployment scenario
- ④ The prevailing interest rate in the economy.
- ⑤ Existing trade deficit, fiscal deficit
- ⑥ Macroeconomic policies of the government.
- ⑦ Foreign investment inflows in the country.
- ⑧ Financial market conditions, and the overall world geo-political situation.

Factors which cause rupee to lose value against dollar

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use headings like
→ The depreciation of rupee against dollar is caused by multiple factors:

Global economic slowdown
(i) Russia-Ukraine war has put stress on food, and other imports of fertilizers.

Policy changes
(ii) The consequent geo-political tensions, leading to FPI pullout into safer investments.

Policy changes
(iii) Increasing value added imports due to rising demands for higher end consumer goods.

Policy changes
(iv) Increased volatility in crude oil, due to, various factors.

Policy changes
(v) Increasing inflation within the Indian economy.

Policy changes
(vi) Federal reserve actions like increasing interest rates.

→ Thus, to sum up, due to multiple and internal and external reasons, the rupee is depreciating against the dollar.

What are they define them or name few

4 1/2



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11. Discuss the key components of the Disaster Management Plan of the Ministry of Panchayati Raj. What is the significance of the involvement of Panchayati Raj Institutions in Disaster Management? (15 Marks, 250 words)

The Ministry of Rural development & Panchayati Raj has released the Disaster Management plan of Panchayati Raj with a larger perspective of community based planning starting from village to district level.

Key Components of the Disaster Management Plan

- ① It comprehensively covers areas such as:
- (a) Institutional arrangement for disaster management
 - (b) Hazard risk, vulnerability and capacity analysis
 - (c) Coherence of disaster risk management across resilient development and climate change action

good intro

presentation of arguments is fine

but avoid highlighting entire statement



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d) Disaster specific prevention and mitigation measures

e) Mainstreaming of community based disaster management plan of villages and panchayats

make some pts.

Significance of the Disaster Management Plan

A) Helpful in managing disaster comprehensively

by involving all the stakeholders such as Panchayats, institutions, elected representatives

lengthy & cumbersome

B) Ensure participatory planning process which is integrated with the Gram Panchayat Development plan for addressing disasters across the country and initiate a new era of community based disaster management.



③ Better understanding of the ground realities will help in better tackling of the crisis situation, as the bottom tier of governance is more in sync with the onground situation.

well explained points and

④ Decentralization, via, following a bottom-up approach will help in building resilience as advocated by the 2nd ARC Report.

very nicely

⑤ It is the adoption of international best practices as followed in countries like Japan, South Korea. Thus, involvement of Panchayati Raj Institution in disaster management will help in building better strengths for disaster management.

fine conclusion

5/3

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12. While most insurgent groups in North-East India have given up violence and are engaged in peace talks with the government, several issues could create hurdles in the future. Discuss, (15 Marks, 250 words)

As per the 2nd ARC report, insurgency in North East India has largely shrunk as militants are giving up violence and engaging in peace dialogues. Eg Bodo Peace Talks, Jaga Peace talks, Shillong Accord and so.

- (1) Improvement in law and order situation by close cooperation between the centre and state to check flow of funds and arms & weapons.
- (2) Commitment of the government to uphold the provisions of the peace talks and amnesty.
- (3) Improved thrust on infrastructure development, roads, bridges, schools & hospitals to bring north east India into the mainstream.
- (4) Decentralisation via panchayati Raj and 6th schedule areas. Eg Bodo tribal district council



Issues that might crop in the future integration

Most of the points are good and your understanding about the topic fine

① Split within the insurgent groups, due to conflicting ideas. eg ~~Splinter~~ groups formed with NSCN in Nagaland

② Breaking up of the ceasefire due to perceived violation by either side of the party.

③ International tensions such as, influx of refugees from Myanmar might lead to disturbances in demographic pattern.

④ International interferences by China in supply of funds as well as, providing ideological support.

⑤ Conflicts between different insurgent groups themselves. eg ~~Overlapping~~ claims in Kerbi Anglong district in Assam

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6) limited reach of government agencies due to unfavourable terrain, paucity of funds, human resources to ensure establishment of peace

What needs to be done to ensure peace in North East

1) Focus on infrastructure development via dedicated ministry and North East development agency.

2) Ensuring amnesty and surrender policy for militants and effective rehabilitation policy.

3) Ensuring development of sound foreign policies with specific purview of North East. eg Act East policy.

Thus, insurgency in North East can be effectively curtailed via sound and effective management.

Conclusion could be inclusive and use govt initiatives for - this

62



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13. Digital rights aim to protect people's rights, support democracy and ensure a fair and safe online environment. Critically analyze. (15 Marks, 250 words)

quote some data

Digital rights imply the right to privacy and data protection. It also addresses issues of equal distribution of Internet access regardless of economic background. It also aims towards the free flow of information.

Digital Right → Importance

use heading

① It plays pivotal role in protecting people's right such as freedom of expression, information and communication.

line

② It strives towards privacy and data protection by controlling over who stores the data, thus promoting free and fair - safe online environment.

points

Transparency & accountability



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- data security
→ people online
- 3) Right to be forgotten furthers promotes the ideals of fair online environment.
 - 4) Protection of minors and children on the environment internet also ensures safeguarding children rights.
 - 5) Digital rights, thus, directly and indirectly also support democracy by allowing citizens to air grievance, give voters, and, ensures media houses a platform to seek accountability from the government.
 - 6) Digital rights also give platform in protecting the interests of women, minorities, scheduled castes and scheduled tribes.



Challenges of digital rights

- ① Interferences by government forcing media blackouts.
 - ② Monopolisation by big companies like Meta (owns Facebook, Whatsapp, Instagram)
 - ③ Limited awareness among masses regarding digital rights.
- rapidly evolving technology which cuts across the borders of countries.

Thus, it is of prime importance that digital rights must be preserved and protected to ensure free and fair society.

Challenges could have been justified and supported with examples

Conclusion is fine

6



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14. Discuss the benefits of Genome editing for healthcare. Enumerate concerns associated with the use of Genome editing. (15 Marks; 250 words)

Genome editing is a group of technologies that give scientists the ability to change an organism's DNA. These technologies allow genetic material to be added, removed, or inserted at particular locations in the genome.

HGP

Genome editing for healthcare benefits

1) CRISPR-CAS9 was adapted from a naturally occurring genome editing system that bacteria use as an immune defense. This disables the virus by cutting the DNA apart.

2) Genome editing is used in cells and animal models to understand diseases and developing cure for such diseases.

facts are for such

questions

use animal models

for cure for such diseases

for food security



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(3)

parts and cells and well explained

② It is being used to explore research and clinical trials for a wide variety of diseases, including single-gene disorders such as cystic fibrosis, hemophilia and sickle-cell disease.

③ It also holds promise for the treatment and prevention of more complex diseases such as cancer, heart diseases, mental illness, HIV infections and soon.

Concerns regarding genome editing

stem cell therapy

① Making irreversible changes to every cell in the bodies of future children, raises huge questions on ethics, as it interferes with eugenics.

financial concerns

② Off-target mutations, in embryonic and fetal development might have longer term health and safety consequences.



→ Moral concerns



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3) Many philosophies consider altering genome to produce designer-babies interferes with evolution and that nature should be left to run its own course.

4) Ignorance, lack of adequate oversight by regulatory oversight may interfere with safe application of this modern technology

Thus, to sum up, we can say that genome editing in healthcare must be applied with sound reasonableness to reap its benefits.

fine conclusion

fine points

global plans for cooperation

Invest in research

focus on data sharing

way forward

help in genetic counselling



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15. What are the advantages of Lithium-ion batteries? List down some of the challenges to the development of Lithium-ion battery manufacturing in India. (15 Marks, 250 words)

in prob is aptly written
Lithium-ion battery is a type of rechargeable battery using an intercalated lithium compound as one electrode material. Lithium ions move from the negative electrode to the positive electrode during discharge and back when charging.

Advantages of Lithium-ion batteries

(1) Non hazardous source of energy as no harmful gasses are emitted

points are valid
(2) It has longer shelf life, as low self discharge is maintained in it.

(3) It is maintenance free, as no water needs to be added to it during operations



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④ Charging is faster and safer due to higher efficiency in charging

⑤ Temperature tolerant at extremes - Observed to be safer upto as high as 65°C

⑥ More usable capacity as full power available throughout discharge.

⑦ Lightweight allowing convenience in usage

Challenges to development of lithium-ion battery

① Issues regarding safety of lithium batteries as reports of fatality and material loss due to fires are on the rise

② Concerns regarding sustainability and lifecycle management due to non-existent of circular economy, and, limited

try to use diag to show the mechanism phenomena

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scope for renewable recycling of lithium

(3) Lithium reserves in India are yet to be exploited for commercial usages hence, it must depend on imports from other countries.

(4) Indian companies have limited know-how to develop cutting edge lithium technology batteries with enhanced efficiency.

Thus, lithium ion batteries provide tremendous benefits, and with the founding of lithium reserves in Jammu & Kashmir, the potential for India will increase in coming days.

67



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16. What is Biodiversity? Discuss the concerns with Biological Diversity (Amendment) Bill, 2021 and give your suggestions. (15 Marks, 250 words)

fine
extra
Biodiversity is all the different kinds of life one can find in one area, such as animals, plants, fungi, microorganisms. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life.

Biodiversity (Amendment) Bill, 2021

- good points*
- ① It aims to give boost to the Indian Medicine System
 - ② It decriminalises certain provisions in sync with Nagoya protocol
 - ③ Allows foreign investments in research into biodiversity

Concerns with the Amendments

- ① Trade over conservation by prioritising



valued

appreciate
any

intellectual property and commercial trade at the expense of conserving biodiversity

all the

① Threat of bio piracy emerges by giving exemptions to AYUSH practitioners

necessary
statutory

② Charaignising Biodiversity Management Committees by allowing state biodiversity boards to represent BMCs to determine benefit sharing.

included

④ Redelining local communities by allowing large companies to evade the requirement for prior approval or sharing the Benefits.

Suggestions to the amendments

① The Biodiversity management committees should be empowered by clearly defining benefit claimers to be the conservers.

② Promoting indigenous research and fast tracking of research, patent

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elaborated
very well

with objectives of promoting indigenous medicines

(3) Developing national strategies for conservation, promotion and sustainable use of Biological resources in consultation with state government.

(4) strict civil penalties, with fine for violators of the Biological diversity Act must be ensured.

(5) FDI must be carefully supervised to ensure adequate sustainability as for local communities.

fine conclusion
Thus, the Biological diversity Act must be adopted and complemented in letter and spirit to ensure protection of biodiversity

6 1/2



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17. Concerning National Policy on Biofuels, discuss the ethanol-blending in India and what is the environmental cost of ethanol blending? (15 Marks, 250 words)

Intro is good
The National policy on Biofuels was notified by the Ministry of Petroleum and natural gas in 2018. It classifies Biofuels into 1G (Bioethanol & Biodiesel) and 2G ethanol, Municipal Solid Waste, 3G Biofuels using algae, leading to ~~creation~~ of fuels.

Ethanol blending in India

well explained statesman
1) Ethanol, one of the ~~principles~~ biofuels, is mixed with petrol, with aim of reducing country's dependence on crude oil imports, cutting carbon emissions and boosting farmers' income.

2) The government of India has advanced the target of 20% ethanol blending.

to 2025 from 2030.

Environmental cost of Ethanol blending

① Production of biofuels require lands, which impacts the cost of biofuels as well as that of food crops.

② Massive quantities of water are required for proper irrigation of biofuel crops as well as to manufacture the fuel, which could strain water resources.

③ Fossil fuels produce more energy, than some of the biofuels, hence leading to, lower resource efficiency.

④ Mismanagement of food grains, as, food grains are meant for impoverished are directed to the distillers.

Use headings for these statements
Advantages
points
part
necessity
elaborated



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free
points

Solutions to reduce ecological concerns for Bioethanol

① India can develop sustainable biofuels from wastes generated from farms.

② The Biofuel policy shouldn't encourage farmers towards water-intensive crops such as sugarcane.

③ Developing alternatives, such as, Electric Vehicles to substitute petroleum demands.

④

Thus, Bioethanol is in the right direction towards ecological sustainability through careful policy implementation.

use
SDG and
govt initiatives
in
conclusion

7



MAINS MOCK TEST, 2022

18. Analyze the storage infrastructure in the farm sector. Also, discuss the measures taken by the government to address the existing impediments. (15 Marks, 250 words)

Good to begin 6

into points facts with

India is an agrarian economy, with agriculture contributing roughly 18.1% to the GDP and 50% population directly involved with it.

Storage Infrastructure in the farm sector

you have justified

(1) The CAG report has revealed the serious imbalance in the availability of storage capacity.

eg. out of 336 LMT storage space available with FCI, 64% located in Punjab, Haryana, Andhra Pradesh, UP.

arguments very well

(2) There is inadequate infrastructure for storage, with huge difference in demand & supply.

(3) There is low private investment due to poor returns, resulting poor development and innovation in storage infrastructure.



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Content is very good

④ Lack of cold-storage infrastructure leading to spoilage of value added horticulture products like fruits and vegetables.

Measures taken by government

Government has taken many initiatives to strengthen the storage infrastructure such as,

① Inclusion of agri-warehousing under priority sector lending by RBI.

② The tax incentives have been provided to boost interests of private players in this sector.

③ The Warehousing Act has been providing subsidies for farmers to access privately owned warehouses.

④ PM Gram Sadak Yojana to connect farmlands to the storage facilities.

Highlighted parts should include some facts



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justified
very
well

⑤ Negotiable e-warehouse receipt will integrate digital infrastructure to facilitate better storage.

⑥ The private Entrepreneur Guarantee scheme will incentivize private investment to construction of warehouses along with guarantee of FCI

Thus, through active intervention by the government, agrarian warehousing is improving by the day, and it will help double farmer's income in the coming years.

Final conclusion

64
62



MAINS MOCK TEST, 2022

19. Identifying the key vulnerabilities in India's cyberspace, and discussing the framework which should be adopted in the envisaged new cyber security policy in India. (15 Marks, 250 words)

Intro
is
from
Digital Economy today comprises 14-15% of India's economy and is expected to grow exponentially in the coming years. Hence, it is expected that vulnerabilities in India's cyberspace will increase manifold.

Vulnerabilities of cyberspace in India

- ① India ranks 3rd in terms of highest number of interest users in the world after USA & China. *well elaborated*
- ② The Indian Computer Emergency Response Team has reported a steep four fold rise in cybersecurity incidents (eg. Wannacry Ransomware, PETYA ransomware). *points*
- ③ Lack of national-level architecture for cybersecurity to unite efforts to secure critical infrastructure across public and private sphere.



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very good

- ④ Shortage of trained workforce equipped to pre-empt cyberattacks and weed out possible cybersecurity issues.
- ⑤ Lack of high-end secured devices across the population, increasing vulnerability exponentially.
- ⑥ Lack of awareness about cyberfraud, cyber laws and regulations at corporate levels as well as individuals.

Framework on new cyber security policy in India

- ① Strengthening the national cybersecurity project such as National Cyber Coordination Centre (NCCC), National Critical Information Infrastructure Protection Centre (NCIIPC) and the Computer Emergency Response team into an integrated team with rapid accessibility to information sharing.

Answer
 very good
 statements and mention specifics only



MAINS MOCK TEST, 2022

② Bringing cyber security in education such as NCERT curriculum, universities and so on.

③ Integrated approach, given increasing dominance of mobile and telecommunication, both National Cybersecurity policy and National telecom policy will be made to coalesce for comprehensive policy.

④ Promoting indigenisation for developing software to safeguard cybersecurity and digital communications via Make in India programme.

⑤ Spreading awareness among the private sector for building resilient spaces cyberspaces.

Thus, pursuing indigenisation and collaborating with private partners will help develop a resilient cyber security policy for India.

Final Conclusion

7

most the points are

valid

are



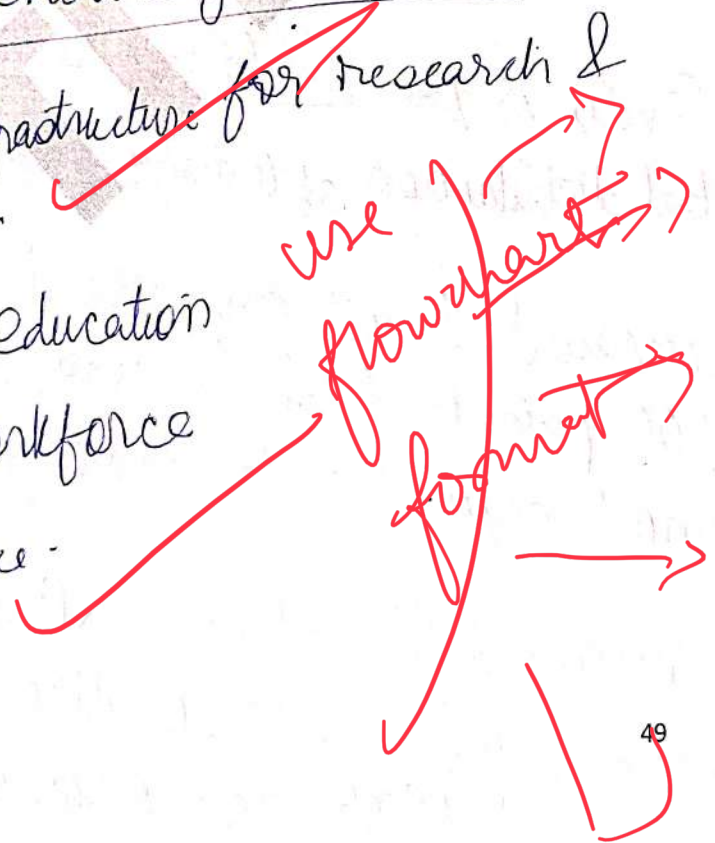
MAINS MOCK TEST, 2022

20. What do you understand about the knowledge-based economy? What are the powers and components of a knowledge-based economy? Can India be considered a knowledge-based economy? (15 Marks, 250 words)

Who is good
knowledge based economy is an economy in which knowledge and information are the main drivers of the economy. It is a system of consumption and production that is based on intellectual capital.

Components of Knowledge Economy

- 1) Adequate infrastructure for research & development.
- 2) Broad based education
- 3) Intelligent workforce
- 4) good governance.





Powers of Knowledge Economy

① Innovation & Creativity → through skilled workforce, adequate set up, ample government support for IP rights.

② Employment Creation & adequate demographic potential to sustain the knowledge economy.

India - A Knowledge Based Economy

① India is the 2nd largest country in terms of global distribution of tertiary degree holders.

② Increased thrust on patent filing, roughly 10,000 patents filed last year as per WIPO, almost equivalent to Germany.

③ Increased thrust on R&D by public and private sector as envisioned in the Economic Survey-2021.

justified well

arguments are good

highly highlighted part in near line



MAINS MOCK TEST, 2022

④ Increased startup formations and rising unicorns (~100 in the ~~last~~ year)

⑤ focus on service economy, and with a thrust on manufacturing (Make in India)

Challenges for India

① Only 1% of GDP is spent on R & D, as per the Economic Survey 2021

② Poor skills, unemployability among the graduates.

③ Stiff international competition from countries like China.

Way forward

① India must ~~em~~ co-erce private sector to improve contribution to R & D.

② Improving skills of Indian youth via National Skill Development Corporation

Knowledge Economy will help India reap benefits of demographic dividend and help attain Amrit Kaal

Conclusion could be better

Keep it up!