

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	12.5	
2	12.5	
3	12.5	
4	12.5	
5	12.5	
6	12.5	
7	12.5	
8	12.5	
9	12.5	
10	12.5	
11	12.5	
12	12.5	
13	12.5	
14	12.5	
15	12.5	
16	12.5	
17	12.5	
18	12.5	
19	12.5	
20	12.5	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

75, 3rd Floor, Old Rainder Nagar Market, Near Axis Bank, New Delhi 110060

103, 1st Floor, B/12, Ansal Building, Behind UCO Bank, Dr. Mukherjee Nagar, Delhi 110009

1. Alignment Competence
2. Context Competence
3. Content Competence
4. Language Competence
5. Introduction Competence
6. Structure & Presentation Competence
7. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

$$12.5 \times 20 = 250$$

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★ the "distance - from - frontier" score shows how far a country has performed, compared to the best performer on that indicator.

* India has taken multiple steps in this regard - to improve banking:

(a) Judicial Reforms: India ranks at 136/189 for "Resolving Insolvency" and thus

(i) Insolvency and Bankruptcy Code, 2016 seeks to expedite insolvency faster.

(ii) Commercial Courts, Bench in High Courts

(b) "Power for all" and "Deen Dayal Upadhyay Grameen Jyoti Yojana" (DDU (JY) are meant to give easier access to 24 x 7 power

(c) Tan Shree Yojana, MUDRA scheme and Stand-up India schemes to facilitate access to credit

(d) Single window clearance and digitisation of tax

Collection — like GST Network and Saksham (Customs, excise).

(c) Legal reforms like Goods and Services Tax Act; Arbitration Act (Amendments) and doing away with retrospective taxation to enhance attractiveness of liberalisation of FDI policy

* However some concerns on the Index's effectiveness are raised (a) It includes only Delhi and Mumbai — whereas Vigorel, Telangana, Gujarat, Bangalore so underestimates our potential

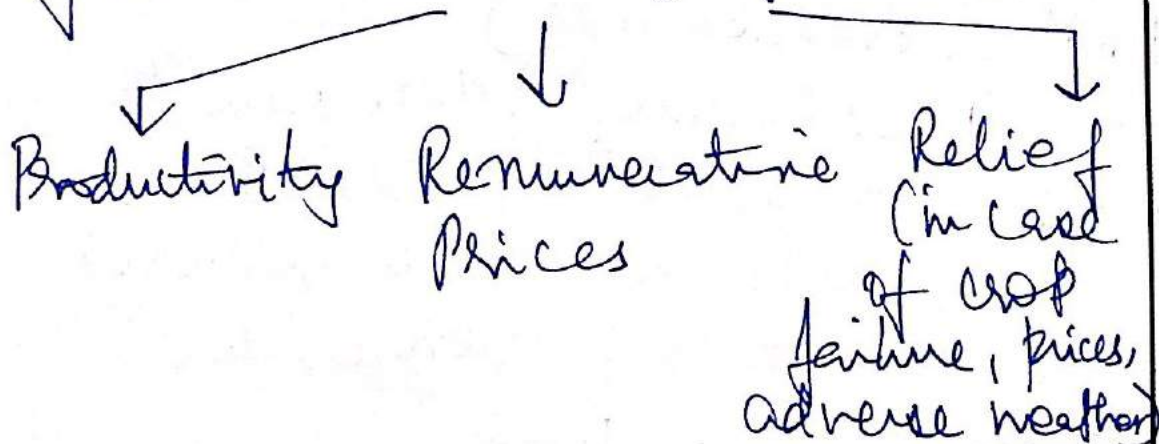
(b) Post — index reforms

→ Therefore DIIP has come up with its own Index for ranking our States (Andhra Pradesh tops) Called the "Business Reform" Action Plan to infuse competitive federalism among States and have accurate representation of domestic economic reforms.

2. In wake of the agrarian crisis that the country is witnessing, discuss the need for adopting an income-centric approach in preference to a production-centric one as the basis of agricultural policy. In this context, also highlight the steps that should be taken to achieve the goal of doubling the income of farmers by 2021-22 and the challenges that exist.

The Agriculture sector contributes around 17% to India's GDP, while employing nearly 69% of our labour force. Why this anomaly?

↳ NSSO data reveals that over 70% of farmers earn less than 50,000/- per month. Therefore, there is a need to focus on improving farmer incomes by focusing on



↳ The shift from a production to income - centric model suggests that we focus on better outcomes so that farmers are able to use their limited resources better and improve efficiency ..

↳ The NITI Aayog in its 2 year plan has highlighted how "Doubling Farmer" income by 2022 can be achieved :

(a) Productivity Improve access to quality seeds, inputs, fertilisers and also expand organic farming (PM Paramparagat Krishi Vikas Yojana). Deep-irrigation can improve water use efficiency by 20%.

(b) Remunerative Prices Reforming the APMC system and introducing the National Agriculture Market (NAM) can improve farm gate prices. Even in the New Reforms

Index, the focus on APMC reform is crucial

(c) Relief the loss due to fall in prices and adverse weather creates famine-like situations. the PM Fasal Bima Yojana is to be implemented to cover all risks

* What are the challenges?

① Costs we need over 1 lac Crore investment by the State (from 60,000 Crores now) where will the money come from?

② Land-leasing policy is crucial to allow tenants to cultivate lands and reduce fragmentation

③ Access to Technology and extension services is poor (need schemes like E-choupal of ITC)

* Conclusion As Ashok Dalwai's report said, we need to focus on an integrated, holistic rural reform so that agriculture becomes remunerative. We have to push further so that we can actually double farmer incomes.

3. It is argued that India's fiscal centre of gravity has rapidly shifted from the Centre to the States. Analyse the statement in context of the debate on fiscal discipline. Also, enumerate the key recommendations of the N.K. Singh panel on Fiscal Responsibility and Budget Management Act.

The increasing focus on "Cooperative" and "Competitive" federalism, whereby the States of India have an equal role in the development of India, necessitates that States manage their finances with discipline and prudence.

— The Fiscal Responsibility and Budget Management Act, 2003 was legislated to regulate and manage sovereign finances — to prevent overshoot of spending when the economy was in a "Boom".

— While the Centre has managed to gradually reduce its fiscal deficit to 3.2% (2017), States continue to have high

fiscal deficits and revenue deficits because of :

(a) UDAY - DISCOM Yojana ~~whereby~~ which highlights the deficiencies of State Power Companies

(b) Droughts leading to poor agricultural output

(c) fall in F&I in states such as Tamil Nadu

— therefore, it is imperative to improve the fiscal position of states so that their GSDP improves and balance-sheets are sustainable. Else, it may hurt central finances too.

— states are the economic hubs of India → industries, resources and employment

— In this context, the N.K. Singh Committee was setup to review the FRBM Act —

* Whether we need to move away from fixed fiscal deficit and revenue deficit targets?
The Committee recommended

as follows:

↳ Reduce fiscal deficit to 2.5% by 2022-23 and Revenue deficit to 0.8% by 2022-3 (from 2.1% now)

↳ Debt to GDP ratio be reduced to 60% (40% Centre and 20% for States) from 68% now

↳ Escape Clause of 0.5% in case of ~~wars~~, Calamities etc.

* therefore, this seeks to streamline Centre's and States' resources, by setting up a Financial Council to monitor, advise.

* Conclusion States are the dynamo of Economic Growth and thus, in the spirit of federalism, steps are needed to reinforce their balancesheets and make them power-houses of growth!

4. Strategic sale of state-run firms is a prudent step to deal with the challenges being faced by the public sector enterprises in India. Comment. Also enumerate other measures that can be taken in light of NITI Aayog's suggestions in this regard.

The Public Sector Enterprises (PSEs) were set up post-1947 for the "Commanding Heights" of the economy.

• However, over the years they have been expensive, inefficient and burdened the economy.

↳ Over-staffed
↳ Lack of competition
And product innovation

↳ Cost overruns
and poor performance outcomes

• Recently, the NITI Aayog has suggested some reforms!

(a) Closure of loss-making

Entities

(b) Hindustan Photofilms,
Hindustan fertilisers etc. have
remained unproductive

(c) Disinvestment and
strategic sales of some PSUs
with benefits for government

- the recent proposal for
disinvestment of Air India is
a case in point too

↳ the CAG has pointed
out that faulty acquisition
of aircrafts has been the
reason for its economic
failure, combined with VIP
flying - for-free

↳ It has a debt of over
50,000 crore rupees and its
market share is a meagre 13%.

- The reason behind the need to close down/direct the government share is that why should the tax payer pay for malfunctioning of PSUs?

- If they are not profitable, and no more serve the public interest (post - 1991), the government is right in taking steps in this regard.

5. Shell companies in India are neither legally defined nor properly understood. Analyse in the light of recent developments, prevalent understanding and steps required to effectively deal with shell companies.

"Shell Companies" are those that merely exist on paper but carry on no economic transactions. They are used for economic manoeuvres and to park illegal money.

→ the recent government crackdown on shell companies has shown that over 60,000 of them do not file income tax returns.

→ these firms are used for money-laundering purposes, tax evasion and round-tripping of money. Often, they are ~~are~~ only on paper and have no business, trading.

→ Some even route the illegal money from abroad

And convert them into white money.

↳ the reasons for their proliferation include:

- (a) Poor regulatory oversight
- (b) Poor tax enforcement
- (c) Poor enforcement of other laws like Benami Prohibition Act, Prevention of Money - Laundering Act etc.

↳ What steps required?

- (1) Compulsory e-registration of such Companies by the Registrar of Companies
- (2) Stricter enforcement of the Benami Transaction Act, 2016 (new law) which allows for Confiscation of Property.
- (3) The new project "Insight" by the Income Tax Department is

crucial to check and monitor transactions (suspicious) online on social media

(*) Reduce Corporate tax rates (OED) so that firms are not hesitant to pay taxes \rightarrow tax compliance will go up

(5) Digitisation of economy will improve our tax - GDP ratio by 0-2%.

(6) Recent changes to DTAA with Singapore, Mauritius, Tyfems need to be enforced.

\rightarrow However, care should be taken not to exercise discretionary powers to harm legitimate economic firms.

\rightarrow Therefore, the steps to weed out shell companies will clean up our economy and boost GDP by 1-1.5-1%; our ease of business shall improve, so will our financial attractiveness!

64 years. This demographic dividend has to be harnessed by 2040 (India Skill Report)

- Further, India needs over 100 million skilled persons by 2022 in the 24 high priority sectors.

- Thus, to shift the excessive labour force from agriculture (69%) to the manufacturing sector, we need to ensure skilling, education and employment, for which MSMEs are vital.

- The Challenges of MSMEs are
 - ↳ lack of access to capital, resources, technology
 - ↳ Loans (over 90% MSMEs don't have access to formal loans)
 - ↳ burden of labour laws

* The steps taken by the government include

(a) PM MUDRA Yojana : offering loans upto 5 Lacs for entrepreneurs

(b) Start-up India, Stand up India (SC/ST, women \rightarrow 50% of loans) and SC/ST hubs

(c) PM Kaushal Vikas Yojana and PM Yuva Yojana to train, skilled the youth

(d) Aatmanirbhar Centres where startups can use the facilities.

(e) Zero-defect, zero-reject to improve quality of produce and also reduce pollution

* Therefore, we need to give further impetus to MSMEs so that we can increase jobs and also achieve 10% GDP growth.

7. What are the reasons for the growing informalization of industrial labour in India? Discuss the issues associated with the phenomenon and reforms required to deal with them.

Currently, over 90% of our labour force is employed in the unorganised sector. This data reveals the skewed nature of our economic growth — for it has not been very inclusive.

What are the reasons for growing informalization?

(a) Labour laws At the moment, the restrictions on number of employees, "fire-hire" restrictions and issues on closure of loss-making firms has led to firms preferring to remain small and informal.

(b) Lack of incentives for MSMEs they employ 75% of our workforce yet contribute only 8% to our GDP. How do they scale up?

(c) Lack of sufficient social -
security for unorganised,
informal sector workers.

(d) Acute poverty in India -
Over 40% live below the
poverty line — so they have
no skills or education to

enter the formal sector
* the issues listed above
are indicative of the
anomalous growth model
of India. Further,

(a) Women in informal sector
lack maternity benefits

(b) No social security -
insurance, pension guarantee

(c) No access to formal
credit

(d) Poor economic outcomes

(e) Poor intra-generational
equity → Children of these

workers suffer too.

* What reforms can be done

① Flexible labour laws: The Unorganised Sector Act, 2007 can be overhauled to include social security for informal workers, while also allowing firms to remain competitive by following suitable employment practices.

② Tax base has to be widened by calculating informal sector incomes. Digital tools can be used.

③ Skilling - over 100 million are needed by 2022 - the Pradhan Mantri Kaushal Vikas Yojana, Apprenticeship Scheme are crucial.

(A) Labour code reforms

→ Thus we need to balance the interests of workers and employers so that we achieve optimal outcomes and move to formalisation of economy.

8. A number of far-reaching developments have taken place in the local and global energy space which have to be reflected in our own energy policy framework. Discuss.

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Global energy outlook has been changing rapidly.

While oil prices per barrel had fallen, renewables too became cheaper and cheaper.

↳ The Global Energy Architecture Report - however, ranks India low → 97th rank.

★ Have we been unable to benefit from the changing energy landscape?

★ The Government's Energy Policy enlists some of the objectives to be achieved in light of the changing global energy space : —

(a) 175 GW of renewables target
of which 100 GW (solar), 60 GW
of wind and rest from biomass
and small hydro power

(b) Improve power generation
capacity of our power plants

(c) Nuclear power can be
expanded

(d) Regulator for energy sector

* These suggestions, however,
do raise some concerns viz -
viz the global scenario

(a) The world is moving away
from coal and fossil fuels -
to investing in dirty coal can
breach our Paris Pact obligation

(b) Shale gas is rising globally
and India should focus more
on it - rather than nuclear
power → The recent Hydro -

Carbon exploration policy is welcome

(C) Solar and wind capacity has to improve

★ therefore, as India is the third largest oil consumer, soon to become second largest, we should create a buyer's group (like seller's OFEC now) to have better bargaining power

★ As we have development needs, coal cannot be completely shut off, but incorporating SMART grids, cleaner coke can help mitigate environmental concerns.

★ Thus, if we follow a balanced approach, we can seek to achieve our goal of 10% reduction in oil imports by 2022.

9. The Indian IT-BPM (Information Technology-Business Process Management) industry is a global powerhouse today and its impact on India and the world has been unprecedented. Comment. Also, mention the challenges being faced by India's IT-BPM sector.

The 1980s onwards, India witnessed the boom of the IT industry. Further, post-1991, the IT & BPM industry has grown to nearly 60% share of our GDP (as the services sector).

→ IT employs skilled persons and pays them salaries that were hitherto unimaginable.

→ The technological revolution has led to spin-offs in other sectors like banking, finance, etc.

→ The Indian IT majors employ millions of persons not only domestically, but also worldwide — Infosys, TCS

have a global presence and are enlisted on NASDAQ, London Stock Exchange etc.

↳ The Indian diaspora in the IT sector ~~has~~ plays a vital role in selling India's "Soft-power", along with economic power.

↳ The wave of globalization has made India an exporter of software, hardware components at globally competitive prices.

★ Yet, all is not as well as it may seem. Some of the Challenges include:

① Protectionism with the US looking inward — (Nearly 70% of approved H-1B applications were from India) — Indian majors in US are looking at

greater computerisation and
recruitment locally.

① Robotics and Automation

can make nearly 50% of IT
jobs irrelevant in 2-4 years

② Economic slowdown globally
will lead to 1.75 - 2 lac job losses
in the next few years in this sector

③ Rising costs: With Mexico,
Vietnam, & emerging as strong
competitors for IT, Indian
labour costs have shot up.

WAY FORWARD India needs
to re-skill and re-orient its IT
sector to remain competitive.
Moving to high-value jobs by
incorporating Artificial Intelligence
and cloud-technology can be the
solution. If we have to grow
at 10%, our IT sector has needs
to grow by leaps and bounds!

10. An effective multi-modal logistics and transport sector will make the Indian economy more competitive. Analyse.



One of the weakest links in our economic growth is our pitiable state of logistics. Nearly 4% of our GDP is lost because of our logistics inefficiency.

WHAT IS PLAQUING US?

(a) Poor physical infrastructure:

While National Highways are only 4% of travel networks, they ferry over half the goods and people. We need 2 lac kilometres of roads to reduce the stress.

(b) Skewed distribution:

While we have the fourth largest railways, it conveys about 4% of freight movement. Similarly, our inland waters carry less

than 2-1/2% of our goods and people, Roads are overburdened.

(c) High costs: Inter-State taxes and customs barriers add to transport costs.

(d) Lack of integrated multi-modal logistics policy

What can be done to reform this?

① Logistics Efficiency Enhancement Programme (LEEP) seeks to monitor, evaluate performance to roads, roadways.

② Internal Waterways Policy
↳ Enlisting of National Waterways by linking it to Railway Rail Stations and Highways to ensure last-mile connectivity.

③ Eastern Dedicated Freight Corridor from Ludhiana

to Kolkata can be integrated to the Tal-Maig Vikas Project on National Waterway - 4 (Ganga - Haldia).

④ Reduce time on highways with technology such as FASTAG and ATIS.

⑤ Saparamla (Port-led growth) project should connect to other modes like roads, railways for seamless movement.

WAY FORWARD Only an integrated, comprehensive, multi-modal transport network can reduce our costs and enhance our ease of business. New technology like High-Speed Rail and Hyperloop can be integrated with existing networks for faster movement of goods and persons!

agrarian economy and harms
our food security too.

* The family is left behind
with no bread - earner and
are forced into a debt - trap
of wretchedness. The rural
crisis because of drought
and floods has been a vital
reason for farmer suicides.

* Thus, education and
health suffers and the
poverty - cycle worsens.

* HOW DO WE ALLEVIATE
THE SUFFERING?

→ Insurance against pest-
attacks, yield losses and fall
in prices because of global
and domestic reasons has been
envisaged under the PM
Fasal Bima Yojana. At very

low rates of premium (such as Rs. 2 for kharif crops), it uses technology to assess the crops loss and give timely insurance relief to farmers.

→ Similarly, the Plantation Insurance Scheme by Commerce Ministry to seeks to protect tobacco, tea, coffee, rubber planters against losses because of weather, pest-attacks.

Therefore, there is a need to "Climate proof" our development by managing risks and improving the lives of people whose lives are impacted. Climate refugees will continue to grow if we do not address local-level problems of poverty and vulnerability. Thus, a cohesive, global response is the need of the hour!

12. Why are women particularly vulnerable to the impact of natural disasters? Also analyse, with adequate examples, how women can play a more effective role in disaster risk management cycle.

Women comprise nearly 51% of the world's population, yet are the worst affected by natural disasters. The reasons are multifold:

→ Feminisation of agriculture
Whereas, over 70% of (NSSO) agriculture ~~lab~~ labour force is women. So when crops fail, due to floods or drought, the women and children suffer.

→ Traditional roles of women
As Care-givers — when disasters strike, they need to ensure the safety of others before their own.

→ Lack of access to economic resources, including land - so when faced with crisis, they are further impoverished and are at the mercy of others

→ Pregnant women, elderly women, and children face physical difficulties in running and escaping from disasters.

★ WHAT ROLE CAN THEY PLAY

Community participation is the central focus of disaster prevention and mitigation.

↳ Women are more alert, vigilant and comprehend the risks better and thus, can be made active participants.

↳ they need to be trained, given mock drills and can help as co-rescuers.

↳ the UNCA resolution on Afghanistan highlights the role of women in conflict situations - Similarly, they can play a vital role in disaster - management too

→ Prevention
→ Mitigation

↓
Rescue
and Rehabilitation

→ Thus, the role of women is indispensable for success of the Sendai Framework, as well as our National Disaster Plan -
Keep our world safer,
and peaceful!

13. In view of the seriousness of heat waves and its consequences, greater attention is required for dealing with it as a natural disaster. Analyse in the context of recent developments and the actions taken by relevant government bodies.

"Heat waves" kill hundreds of persons every year. India faces a strong summer every year.

• Recently, changes were made to the concept of heatwaves

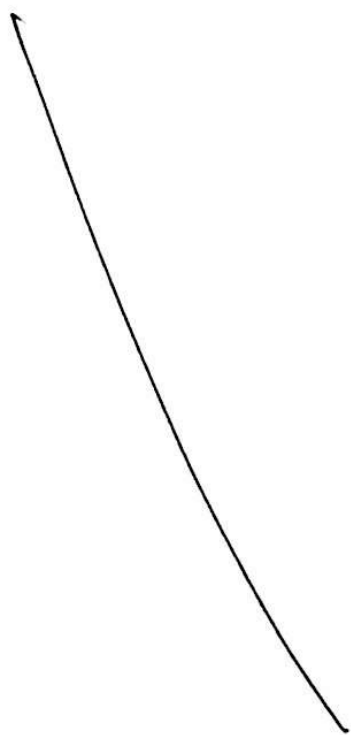
↳ 30°C for hills and 40°C for plains for two or more consecutive days

↳ 45°C (+) is regarded as "severe heat wave"

• Therefore, we need to set up adequate shelters, give access to water and food for persons stranded

On the roads

- Seasonal shelters can be set up (like for winters in Delhi)
- MGNREGS work can be given where drought is declared due to lack of rains
- Telangana government has taken steps to alleviate the suffering of those during heatwaves.
- Compensation for stroke-related deaths is essential too, since usually street-vendors and rickshaw-pullers are worst affected.



14. While genome editing offers immense potential benefits in the area of healthcare, there are a lot of apprehensions regarding its use. Discuss.

The recent case of 1-parent baby in Mexico has brought to light some concerns about genome editing.

★ Genome-editing refers to the process where a particular genome of a gene is modified or altered to remove any defects that may pass on to the off-spring.

★ Some of the benefits of this process are:

- ① Reduction in hereditary diseases, congenital defects (such as Mitochondrial diseases)
- ② Healthy off-spring.

→ However, some challenges remain:

(a) the pluripotent stem cells are used and thus, scientists argue that making genetic changes alters the course of nature — this is against the laws of diversity of nature

(b) Excessive costs involved
(c) "Designer babies" whereby people prefer "normal" babies over "abnormal" ones — this further inhibits scientific innovations and disease-treating technology to find a cure

(d) Effect on other sectors too — that increasing unregulated technology can prove harmful to human kind

★ Thus, In Conclusion, it
may be signed that we need
to stay careful of such
~~large scale~~ technology
and use it only when the
life of mother and child
would be at risk because
of some untreated
diseases.

- 15.** Discuss various ways in which supercomputers have benefitted mankind over the years. Also enumerate the objectives of the National Supercomputing Mission and the mechanism for its implementation.

China recently, for the
4th time in a row, won the
award of having the fastest
super computer (TIANYUEN)
in the world.

in the work

Supercomputers have
played a vital role !

- (a) Technological innovations such as fast-Computing
- (b) Study Mathematic Models for disaster prevention and climate forecasting
- (c) Economic businesses can use it for data analytics
- (d) healthcare - used for evidence-based healthcare

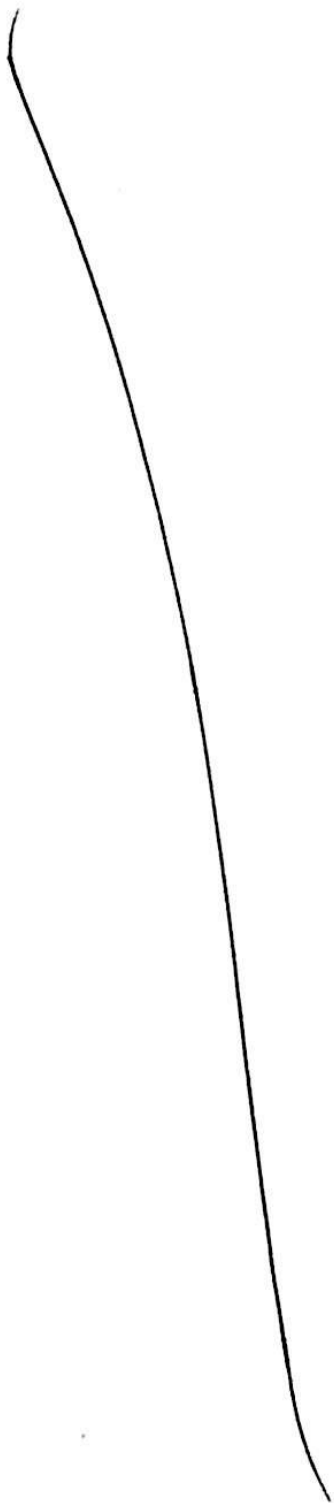
(e) IT Major can use it for software programmes.

↳ India currently hosts "PARAM - ISHANA" (IIT-Guwahati and CDAE) which is the fastest supercomputer outside Bangalore.

↳ The Supercomputing Mission seeks to increase the speed (terabytes) and storage capacity.

↳ It seeks to enhance per second computing missions for enhanced output.

→ This can revolutionise India as a "Knowledge" Economy.



16. Widely seen as a disruption for the traditional banking and financial institutions, cryptocurrencies have gained significant traction lately, at the same time creating a regulatory nightmare for regulators across the globe. Discuss.

Cryptocurrencies are those which are unregulated by any authority and are driven by market forces, with no formal systems or hard currency.

★ The Bitcoin is one such — the benefits it offers are:

(a) Public ledger: The Blockchain technology is open to all users and makes it transparent

(b) Immutability — The transaction once done cannot be altered.

(c) Secrecy

(d) Lack of regulation \rightarrow
taxes need not be paid

\rightarrow From 700 USD, Bitcoins are now worth 2700 USD and worldwide over billions of dollars.

\rightarrow Since there is a fixed upper limit, the Market Online controls demand and supply.

\rightarrow Japan has recently legally recognised Bitcoins as currency because the unregulated nature was a nightmare.

\star Should India do too?

— the RBI has warned against its legalisation saying that anyone transacting, buying bitcoins does so at her own risk

P.T.O

→ Some economists argue that legalising it would be better because:

(a) The incomes would be

~~taxation~~
(b) Can be brought under RBI, SEBI

(c) Regulate terror financing, money-laundering through cryptocurrency

(d) Regulate it as formal sector

★ Therefore India needs to study and examine it before taking any hasty decision. Regulation will be at its own cost, so checks and balances are essential.

- 17.** An internationally-binding agreement to strengthen the Outer Space Treaty of 1967 is both desirable and increasingly a necessity. Analyse in view of the traditional and emerging challenges in this arena.

The OuterSpace Treaty, 1967
was set up in the wake of the
Cold-war, after Russia
launched the "Sputnik".

↳ the reasons for its desirability, necessity are:

(a) Prevent Colonization of space, celestial objects like moon

(b) Prevent nuclearization
and weaponization of space

(c) Das space, noon for perceptual
purposes for benefit of human -
kind

(d) Joint liability of countries
for violation

(e) Prevent space-wars.

* However, some challenges are emerging

① "Race-to-Space" China has recently sent its first manned-mission (Shenzhou) to space and there is a fear that countries will compete once again

② Nuclear weapons Small satellites should be used for only civilian uses like disaster prevention and not to deliver nuclear weapons

③ Space Tourism Virgin Galactic has offered tickets to the moon (one-way) - this is a challenge

④ Commercial space technology As private sector like India (Maha) and Tesla (US) send satellites to space, who will fix liability?

* Under the Liability Convention, the Country is responsible for even private mission with regard to space debris etc.

* Thus, we need to evolve a global response and amend the treaty accordingly.

- and local communities. Diseases

The AFSPA was
 enacted to give the armed
 forces and paramilitary
 forces the permission to
 kill, ~~are~~ search, arrest
 with legal immunity, anyone
 suspected of committing a
 crime, in "disturbed areas".

Crime, ...

• While giving a free hand to security forces was essential to smell the insurgency (like Jammu and Kashmir or Nagaland), there have been excesses too.

- The Supreme Court has repeatedly ruled that the fundamental rights of the

Citizens of India supersede the legal impunity to the forces

- the Government has argued that filing FIRs and taking action against security forces will not affect their morale.

- However, the local people are often victims of this arbitrary exercise of force. Sometimes innocent civilians are shot-at-sight. In Jammu - Kashmir alone, over ~~250~~²⁰⁰ civilians have been killed since 2009.

- the Hegde Commission has argued that oftentimes there are no reasonable grounds for the killings and these "military operations" have been "murders".

- In the recent Manipur

Case too, the victims' families are seeking legal accountability of the officers for extra-judicial killings.

- The only solution to the issue is to have community participation in fostering harmony and peace in these troubled areas. De-radicalisation education of youths and reducing poverty should be undertaken.

- The Wiihan administration should focus on creating an amicable atmosphere for peace, progress.

19. Analyse the challenges and opportunities inherent in the push for indigenisation of defence production in India. Also, identify the measures through which indigenous manufacturing of defence equipments is being encouraged by the Government.

India is one of the largest importers of weapons, importing over 90% of our needs.

"Make in India" would be complementary to indigenisation of defence production. The recent Defence Budget too has stressed on the same.

What have been the challenges so far?

(a) Lack of domestic capacity
India has relied on Russia for the Brahmos, Sukhoi aircraft and Israel for the Barak-8 etc.
We did not invest Indian industry with technology and money,

(b) Corruption in importing
The Bofors scam and recent
Auguste Mehlend deals suggest
that bureaucratic - politician
nexus has impaired defence
procurement

(c) Lack of sufficient incentives
by government.

Yet, the opportunities
are immense :

(a) India has the 3rd largest
~~armed forces in the world~~ forces
in the world - so its
requirements are immense

(b) TRIAID Comprising Air/
Navy/Army will open up
multiple platforms for
investment

★ What measures taken

- (1) Defence Procurement Policy, 2016 focuses on "Buy", "Make", "Buy and make together" and prioritises procurement internally
 - (2) Defence SEZ in Nagpur with domestic investors like Reliance and also foreign investors like Rafale.
 - (3) Army Design Bureau to "Make in India"
 - (4) Joining Missile Technology Control Regime (MTCR) which will allow use access to technology and help our space programme too.
 - (5) Defence Technology and Trade Initiative (DTTI) with US will allow tech transfer — Civilian and dual-use technology
- ★ Therefore, we must look at indigenisation!

20. India's ability to pursue a clear-cut strategic vision depends on its ability to improve institutional cooperation and coordination between the armed forces and civilian bureaucracy. Discuss.

The Indian military - civilian relationship was designed after 1947 to ensure a smooth relationship between the two, while also ensuring checks and balances.

★ However, over the years, this has stymied the military in various ways:

(a) The bureaucrat appointed as the Defence Secretary lacks understanding of the needs and requirements of each of the 3 forces

(b) No single defence advisor so each of the service chiefs gives advice to the relevant Minister independent of the other

(c) Chiefs of 3 forces have no control over budgetary allocations and defence procurement — they are merely advisory

★ therefore, there have been recommendations for

↳ a Chief of Defence Staff (CDS) who will act as a permanent Chairperson of the Chief of Staff Committee (COSC) who shall be the single-point advisor to the Defence Minister.

↳ The Kargil Review Committee (2000), followed by the Expert Group of Ministers

recommended this. The latter said that the CDS should be a 5-star General Rank Officer

↳ the Narash Chandra Committee recommended a 4-star

Ranked CDS.

↳ Recently, Lt. Gen Shakti Committee has lamented the urgency of having a CDS to ensure smooth cooperation, along with greater budgetary allocation of 2.5% for the defence.

★ We need to reform our Civilian - Military relations as we are fighting a "two and a half war" (Western Neighbour plus Northern plus Internal sexual insurgency).

★ Thus, a CDS with adequate powers and functions is the need of the hour.