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GENERAL STUDIES (TEST CODE : 876)

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Medium Eng./Hindi	ENG	Registration Number	30302
Center	Rajinder Nagar	Date	5 Oct

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 Rajinder Nagar Market, Near Axis Bank, New Delhi – 110060

103, 1st Floor, B/1-2, Ansal Building, Behind UCO Bank, Dr. Mukherjee Nagar, Delhi – 110009

EVALUATION INDICATORS

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

Answer all the questions in NOT MORE THAN 200 WORDS each. Content of the answers is more important than its length. All questions carry equal marks.

12.5X20=250

1. While India has taken a number of steps in order to substantially improve its ranking in the World Bank's 'Ease of Doing Business' Index, it needs to take further action in this regard. Elaborate. Also analyse the utility of these rankings vis-a-vis India's objective of facilitating a sound entrepreneurial environment.

जहां, भारत ने विश्व बैंक के 'इज ऑफ़ डूइंग बिज़नेस' (व्यापार करने की सुगमता) सूचकांक में अपनी रैंकिंग में सार्थक सुधार करने हेतु कई कदम उठाए हैं, वहीं भारत को इस संबंध में आगे और अधिक कार्यवाही करने की आवश्यकता है। सविस्तार वर्णन कीजिए। साथ ही सुदृढ़ उद्यमिता वातावरण प्रदान करने के भारत के उद्देश्य के परिप्रेक्ष्य में ऐसी रैंकिंग की उपयोगिता का भी विश्लेषण कीजिए।

Ease of doing business measures
how conducive is environment for
conducting business. As per
World Bank's 'Ease of doing
business rankings', India
ranked 130th.

Various reforms taken by government
to increase ease of doing business:

- introduction of GST
- Directions to ease labour laws -
WAGE CODE BILL
- Insolvency and Bankruptcy code
- Infrastructure improvements -
dedicated freight corridors,
UDAY, Power to all 24x7, Sagarmala

for ports.

- Credit - MUDRA, Start up India
- Make in India, IPR policy 2016
- Single window clearance

However the reforms taken, India only moved up by 1 rank ~~to~~ from 2016 to 2017 despite government aim to achieve 50th rank by 2018.

Utility of these ranking:

① Most steps taken eg: GST, Insolvency code, infrastructure investment will show result LONG TERM

② only takes into account - Delhi and Mumbai into consideration.

Still, the government needs to take further reforms to boost rankings.

① Production depends on 4 factors -
dedicated reforms required in

Production = Land + Labour + Credit + Entrepreneurship

← ease land acquisition law and digitisation of land records	↓ multiplying rigidity of laws - eg: Industrial dispute act Sec V-B - rationalisation and simplification	→ credit at affordable rates specially to MSME sector
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② Back end infrastructure:
improvement in electricity - stable,
24x7, affordable, better roads,
supply chain management.

③ Better Taxation administration -
service friendly regime

④ Reforming clogged judiciary
leading to delays.

With the following reforms, government
will be able to invite investment,

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.

देश द्वारा सामना किए जा रहे कृषि संकट के आलोक में, कृषि नीति के आधार के रूप में उत्पादन-केंद्रित दृष्टिकोण के स्थान पर आय-केंद्रित दृष्टिकोण अपनाने की आवश्यकता पर चर्चा कीजिए। इस संदर्भ में, 2021-22 तक किसानों की आय दोगुना करने का लक्ष्य प्राप्त करने के लिए जो कदम उठाए जाने चाहिए, उनके साथ-साथ विद्यमान चुनौतियों पर भी प्रकाश डालिए।

With government goal of adopting doubling farmers income by 2022, need for adopting income centric approach :-

① POVERTY AMONGST FARMERS

As per NSSO estimates, net ~~per~~ annual income amongst farmers is 20,000 (net of production). Farmers are poorest section in population.

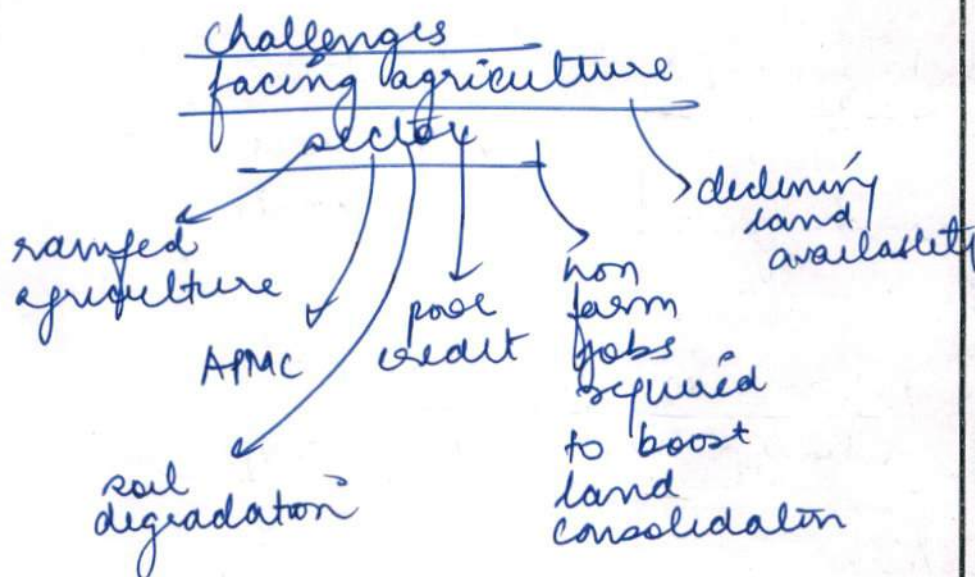
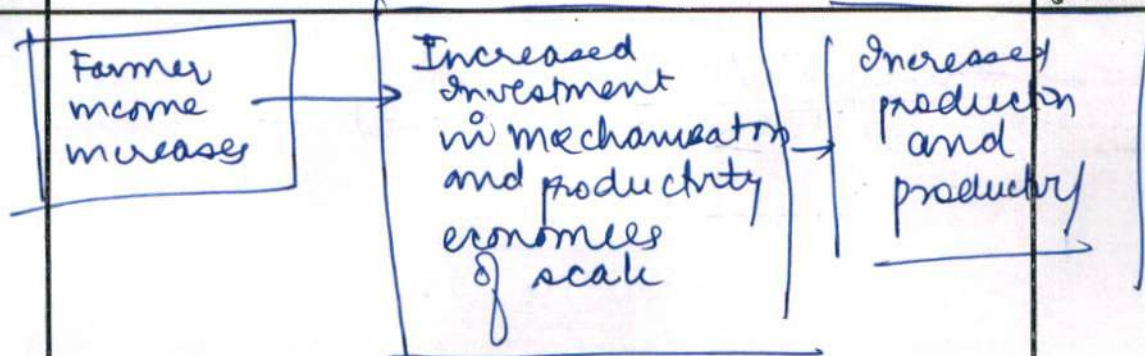
② APMC - middlemen

Most gains attributed by ashatryas while for farmers, agriculture remains non-remunerative

③ Agricultural distress and suicide

④ Benefit to agricultural sector

If farmer income increases,



HOW TO DOUBLE FARMERS INCOME:-

- ① Expansion of irrigation
specially micro irrigation / drip irrigation to reduce dependence on monsoon / stable incomes.
- ② Marketing reforms

Reforms in APMC where maximum
gain attributed to middlemen

③ Crop diversification

From cereal centric approach
to horticulture, pulses and
oilseeds

④ Livelihood diversification

agroforestry, animal husbandry
provide greater resilience to
farming.

⑤ Reforms in procurement,
storage and MSP policy

⑥ Allowing contract farming

⑦ Boost to food processing

as ~~to~~ reduce post harvest losses,
remuneration and enhanced
investment in agriculture

various schemes like Pradhan Mantri

Kuski sinchai yojana, Fasal

Bema Yojana, Soil health card

launched. Expansion of investment
in agriculture and creation

of NON FARM JOBS to create

land consolidation

would boost farm income

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.

यह तर्क दिया जाता है कि भारत का राजकोषीय गुरुत्वाकर्षण का केंद्र तेजी से केन्द्र से राज्यों की ओर स्थानांतरित हुआ है। राजकोषीय अनुशासन पर वाद-विवाद के संदर्भ में इस कथन का विश्लेषण कीजिए। साथ ही, राजकोषीय उत्तरदायित्व एवं बजट प्रबंधन अधिनियम पर एन. के. सिंह पैनल की प्रमुख अनुशंसाओं को सूचीबद्ध कीजिए।

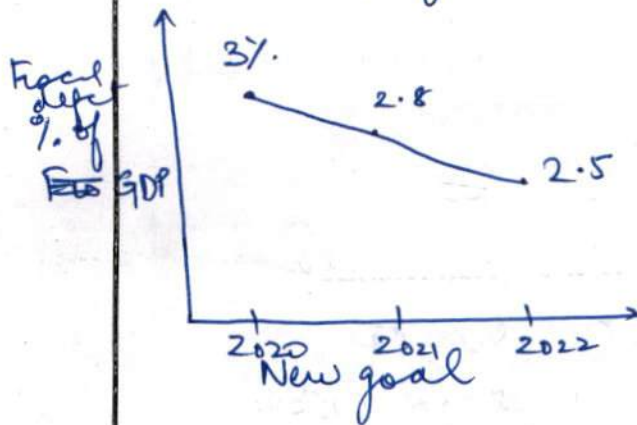
Reasons for increasing concern on fiscal discipline for state :

- ① For first time, combined fiscal deficit of states exceeded 3% of GDP due to deteriorating fiscal situation of states due to
- ② Uday Bonds - 75% of debt taken by states
- ③ Farm loan waivers
- ④ Increased revenue expenditure after 7th pay commission - 23.5% increase.

Key recommendations of NK Singh Panel :

- (i) Aim to reach 60% debt by 2022 where 40% centre and 20% by states.

(ii) Flexibility to centre in meeting fiscal targets



due to sluggish investment by private sector and need to secure growth by public investment.

(i) Escape clause - skipping fiscal deficit target for year due to conditions like national security

(iv) Fiscal council for monitoring fiscal performance of centre, consultation to invoke escape clause

(v) New dist and fiscal responsibility act to

replace FRBM act 2003

Way forward :

Fiscal consolidation is necessary to ensure long term macro-economic stability, investor confidence and global financial inflows. Monitoring states fiscal finances through greater parliamentary oversight, introducing fiscal performance as criteria for vertical devolution of central funds and enhancing efficiency of state expenditure is the need of hour.

Also public investment by centre required to enhance growth and investment in light of sluggish demand.

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.

भारत में सार्वजनिक क्षेत्र के उद्यमों द्वारा सामना की जा रही चुनौतियों से निपटने के लिए राज्य-संचालित उद्यमों की रणनीतिक बिक्री एक विवेकपूर्ण कदम है। टिप्पणी कीजिए। साथ ही इस संबंध में नीति आयोग के सुझावों के प्रकाश में उठाए जा सकने वाले अन्य उपायों को भी सूचीबद्ध कीजिए।

Strategic sale refers to transfer of ownership and management to the private sector.

Recently strategic sale of ACR India, Pawan Hans, disinvestment of CIL, ONGC, NHPC was considered.

Challenges faced by public sector are political interference, low efficiency, poor culture, low ROCE.

EVALUATION OF STRATEGIC SALE TO DEAL WITH THESE Challenges:

Arguments
in favour

- ① political interference, trade unionism hamper efficiency
- ② Private sector brings efficiency in technology, human resource and innovation.
- ③ performance driven culture
- ④ Value addition
- ⑤ competition and market discipline
- ⑥ Government capital freed for social sector expenditure

Arguments against
privatisation

- ① Shift from social objective to profit objective
- ② Oligopolistic/monopolistic practices of private sector
- ③ Staff entrenchment issues
- ④ Favoritism/underpricing of assets during sale can lead to loss to exchequer.

Way forward

Golden Balance needs to be achieved between social objectives and efficiency of private sector

Privatisation of Air India was need of hour due to huge debt burden of 46,500 crores.

- (i) Private sector can be introduced in management rather than complete ownership transfer
eg: gaipur, Ahmedabad Airport
- (ii) Sale through ETF to bring market discipline
- (iii) Curbing political interference
- (iv) Diluting monopoly by enhancing competition eg: Recent decision to corporatise CIL ~~to~~ by breaking it into 7 independent firms.

Therefore need of hour is to achieve social justice along with high growth and competition

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.

भारत में शेल कंपनियां न तो कानूनी रूप से परिभाषित हैं और न ही उनके विषय में उचित समझ है। हाल के घटनाक्रमों, व्याप्त (प्रचलित) समझ और शेल कंपनियों से प्रभावी ढंग से निपटने हेतु आवश्यक कदमों के आलोक में विश्लेषण कीजिए।

Post demonetisation, government cancelled the registration of around 2 lakh companies as shell companies.

shell companies?

Companies without active business but significant assets majorly for purpose of tax evasion and money laundering.

CONFUSION over status :

LEGAL / ILLEGAL

as many startups to raise equity, also open & companies.

SHELL / DORMANT COMPANIES

Companies which have not filed annual return for 2

2 consecutive years are
dormant.

Therefore strict action over
start up companies / dormant
companies in the name of
shell companies would
lead to unnecessary
restrictions.

Steps to curb shell companies:

① More stringent auditing:
Auditing standards and
norms and fixation of
responsibility of auditors to
ensure such companies don't
exist.

② International collaboration
using G20 - AEOI -
Automatic exchange of information
to check international
linkages.

- ③ evidence based/smart enforcement
by tax administrators.
- ④ Clarity in rules and regulations
regarding dormant status,
role of registrar of companies.

With only 17% of GDP as tax base
and huge tax evasion and
money laundering, curbing
shell companies is necessary
to ensure growth and
development and freeing up of
assets.

6. If a larger population in India is to be involved in the economy in a big way, Small and Medium Enterprises (SMEs) are key. Elaborate. Also discuss the challenges faced by the SME sector in India and give an account of the measures taken by the government to deal with these.

यदि भारत में एक बड़ी आबादी को अर्थव्यवस्था में बड़े पैमाने पर सम्मिलित करना है, तो लघु और मध्यम उद्यम (SMEs) महत्वपूर्ण हैं। सविस्तार वर्णन कीजिए। इसके साथ ही, भारत में SME क्षेत्रक द्वारा सामना की जाने वाली चुनौतियों पर भी चर्चा कीजिए और इनसे निपटने के लिए सरकार द्वारा उठाए गए कदमों का विवरण भी प्रदान कीजिए।

MSME act 2006 defines MSME (on basis investment)

Micro	Mfg < 20 lakhs	service < 10 lakhs
Small	20 - 50 lakhs	10 - 200 lakhs
Medium	500 - 1000 lakhs	200 - 500 lakhs

Importance of MSME sector:

- ① Jobs: more job created per unit of capital employed
- ② Rural development, traditional industry, creation of non farm employment, poverty eradication
- ③ Resilience to domestic and international crises eg:
growth in past 10 years averaged at CAGR @ 10%

④ wage and self employment, entrepreneurship

challenges faced by MSME	Measures required
① <u>Lack of</u> <u>scale</u> poor economies of scale	NITI aayog 3 year agenda suggested ancillarisation and <u>subcontracting</u> by larger firms to enhance productivity and scale
② <u>Lack of</u> <u>capital</u>	Reprimement of credit at affordable rates to Government launched <u>MUDRA loans</u>
③ <u>Low</u> <u>technology,</u> <u>lack of</u> <u>skills</u>	government support for percolation of latest technology, capital subsidy for investment, skilling centres and

- dedicated channel for entrepreneurship (eg. like DD Kisan)
- ④ Infra-structure challenges (electricity, transportation) stable 24x7 electricity, improvement in road infrastructure, ports, supply chain.

Government has launched Zero defect zero reject, MUDRA, MSME cluster development, etc focussing on MSME sector -

Implementing recommendations of Prakash Sharma committee eg: increasing MUDRA loan limit, technology support, selling, branding can ensure goal of high growth, poverty eradication, equitable development and Make in India.

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.

भारत में औद्योगिक श्रम के बढ़ते अनौपचारिकरण के क्या कारण हैं? इस परिघटना से जुड़े मुद्दों और उनसे निपटने हेतु आवश्यक सुधारों पर चर्चा कीजिए।

Reasons for growing informalisation:

① Rigidity of labour laws

Multiplicity and stringent laws
(eg. Sec V-B of Industrial disputes act 1947 - stringent conditions on lay off) forces them to stay small and employ contractual labour.

② Jobless growth

lack of jobs created in formal sector has promoted "petty entrepreneurship"

③ Dominance of agriculture sector

% of gdp	17%	30%	53%
% of population	50%	22%	27%
	↑ agriculture	↑ Industry	↑ service

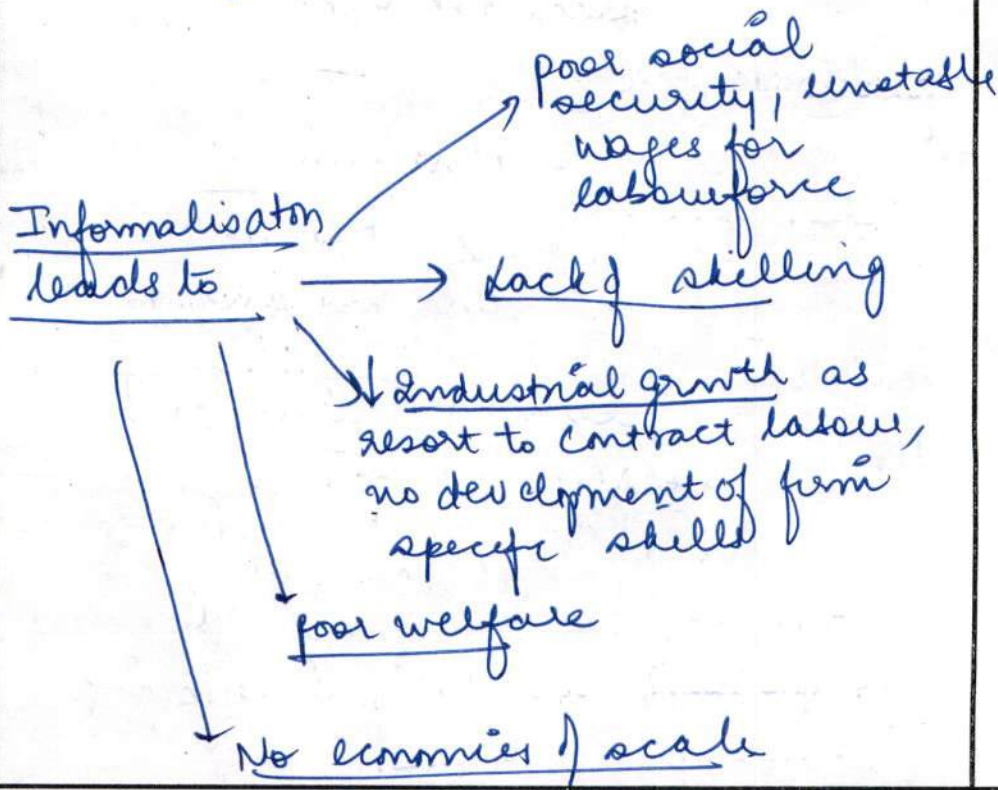
Agriculture workforce is unorganised sector

④ Lack of skills / Vocational education

leading labour force in poor value added jobs

⑤ Low ~~lab~~ female force labour participation

Work in domestic sector and agriculture sector remains unrecognised.



Measures required :

- ① Easing of labour laws
to promote scale of business
to ensure more jobs created.
- ② Accelerated focus on skilling
to promote entrepreneurship and
meet gaps in demand
supply of skills
- ③ Make in India to create
jobs in manufacturing to shift
excess workforce employed in
agriculture sector.
- ④ Infrastructure investment
1 Rs spent on infrastructure creates
MULTIPLIER effect and jobs generation

Therefore focussing on ease of doing
business, skilling and recognition
of role of women and easing
labour laws can ensure
social welfare, higher growth
trajectory through manufacturing
led growth

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.

स्थानीय और वैश्विक ऊर्जा क्षेत्र में कई दूरगामी घटनाएं घटित हुई हैं, जिन्हें हमारी अपनी ऊर्जा नीति के ढांचे में प्रतिबिंबित होना है। चर्चा कीजिए।

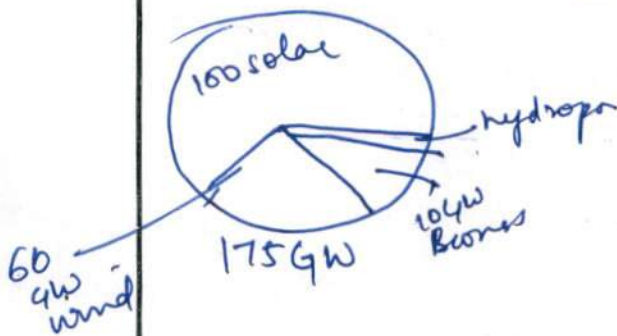
Paradigm shifts have occurred in the energy framework locally and globally such as.

- (i) Crude oil prices have reached historic low due to oversupply and shale oil boom.
- (ii) Renewables tariff solar and wind have declined.
- (iii) Global pushback against nuclear energy due to Fukushima disaster and poor state of companies like Westinghouse and Areva.
- (iv) After Paris summit and focus on declining fossil fuel consumption, more focus on renewables.
- (v) Our INDC commitment of created 40% of total capacity - non fossil fuel based.

~~Ans~~

Niti Aayog 3 year's agenda's
draft energy policy highlights
these changes by:

① Achievement of INDC's



unique
opportunity
to expand
solar
and
wind and
renewable
energy

② Electrification to all
goal of Power to all 24x7

③ Reduction of import dependence
by 10% till 2022 -

④ Increasing manufacture
share of GDP from 15- 25%
till 2022.

for this government has
launched several policies
such as HELP (hydro carbon
exploration policy) & Deen
Dayal Upadhyay Jan Gyaan,
focussing on energy efficiency
in buildings, transportation
and manufacturing.

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.

भारतीय IT-BPM (Information Technology-Business Process Management या सूचना प्रौद्योगिकी-व्यापार प्रक्रिया प्रबंधन) उद्योग आज एक वैश्विक शक्ति का केंद्र है और भारत एवं विश्व पर इसका प्रभाव अभूतपूर्व रहा है। टिप्पणी कीजिए। साथ ही, भारत के IT-BPM क्षेत्रक द्वारा सामना की जा रही चुनौतियों का भी उल्लेख कीजिए।

IT-BPO specially after the 1991 reforms have become powerhouse - impacting globally and India as :

① Service sector driven growth

Today service sector majorly IT-BPO sector ~~can~~ contributes 50% to total GDP

② Attracts FDI and Exports of services

Maximum FDI attracted by the software and IT industry

③ global dependence of MNC on Indian BPO sector -

ranging from USA, UK, EU.

Challenges faced:

- Increasing protectionism
eg: stringent VISA rules
such as H1B visa would
severely impact the margins
of Indian giants such as
Infosys, WIPRO.

- Obsolete skills due to
emerging technology such
as Big data, Internet of
Things, Artificial intelligence
means skill upgradation
in latest technology needed

- Sluggish global growth
Way forward:

(i) greater diplomatic deliberations
with UK, US, EU to
ensure easing of visa
regulations

(ii) Pushing Trade facilitation
agreement in services

in WTO -

- (i) Targeting newer markets
eg. Latin America,
Africa
- (iv) latest skill upgradation
in areas of Artificial intelligence,
IoT, Big data

~~At~~ Finally, the government
enhanced focus on digital India,
~~the~~ digitisation also would
create tremendous opportunities
domestically and decline of
Brain Drain

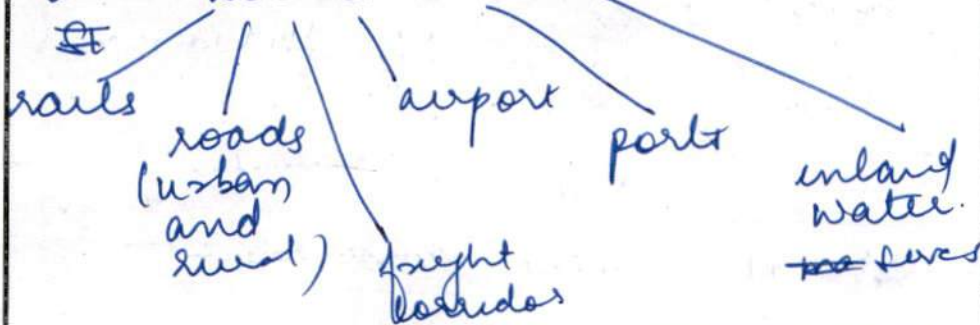
Therefore Indian IT-sector
needs to reinvent itself to
face the global challenges.

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

एक प्रभावी मल्टी-मॉडल लॉजिस्टिक्स (बहु-रूपात्मक संभरण) और परिवहन क्षेत्रक भारतीय अर्थव्यवस्था को और अधिक प्रतिस्पर्धी बनाएगा। विश्लेषण कीजिए।

The requirement of multimodal logistics and transport which brings together different modes of transportation will boost ease of doing business, manufacturing, lower transportation costs, efficiency and faster last mile connectivity.

This would include:-



Sector wise analysis,
challenges and recommendations

Railway

Challenges faced are heavy cross subsidisation of passenger

sector with freight sector,
over congested rail network,
poor rolling stock.

Govt actions: western and
eastern dedicated freight corridors,
high speed rail and Railway
development authority to
ensure competitive tariffs of rail
sector.

PORTS: poor mechanisation,
excessive delays, road connectivity,
poor infrastructure, high turnaround
time

Govt actions: Sagarmala initiative
for port modernisation and road
connectivity.

Roads overcongestion, lack of
pucca roads in rural
areas

Govt actions: Pradhan Mantri

gram sadak yojana,
National highway policy,
implementation of GST to
ensure easier inter state
movement.

Also recent regional connectivity
scheme, Jal Vikas Marg
project to ensure development
of inland water transportation,
are right measures to boost
connectivity to make economy
more productive. A effective
policy should ensure
environmentally safe, affordable,
last mile connectivity based
multimodal transportation.

11. Climate change threatens sustainable development, impairs socio-economic development and reinforces cycles of poverty across the globe. In this context, discuss the utility of climate risk insurance as an instrument within a comprehensive climate risk management system. DM, London.

जलवायु परिवर्तन पूरे विश्व में संधारणीय विकास को जोखिम में डालता है, सामाजिक-आर्थिक विकास को क्षीण करता है और गरीबी के चक्र को मजबूत बनाता है। इस संदर्भ में, व्यापक जलवायु जोखिम प्रबंधन प्रणाली के अंतर्गत एक साधन के रूप में जलवायु जोखिम बीमा की उपयोगिता पर चर्चा कीजिए।

Climate change endangers development planning and reinforces poverty in myriad of ways:

Disproportionate and discriminatory impact on poorest sections

eg: farmers, coastal communities whose livelihood dependent on nature.

Increased natural disasters

eg: Uttarakhand floods due to heavy rainfall destroyed years built infrastructure and investment.

Rise of climate refugees

Gender justice: In India, climate change increases water

stress → means greater hardship
to women to collect water
and firewood

(eg) Denganamal village in
Maharashtra where concept
of water wives prevalent.

Utility of climate risk insurance

The debate is rising in
global forums such as
loss and damages paid to
Pacific islands, creation of
green climate fund to provide
provide adaptation and mitigation
support to developing countries.

Arguments for such mechanisms

- climate change is a reality
and effects are visible
- historical responsibility of

developed countries

- Support to developing countries
who have double challenge of
eradication of poverty as well

However,

rather than insurance mechanism/
efforts need to be for
disaster risk mitigation, building
resilience and adaptation. This
is due to:

- developed countries opposition for
technology and fund transfer
(US withdrawal from Paris treaty)
- Prevention is better than cure

Therefore a TWO PRONGED STRATEGY
where focus on risk mitigation through
measures like agro climatic planning,
watershed management and decreasing
fossil fuel consumption along with
insurance in case of damages/
adaptation fund way forward.

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.

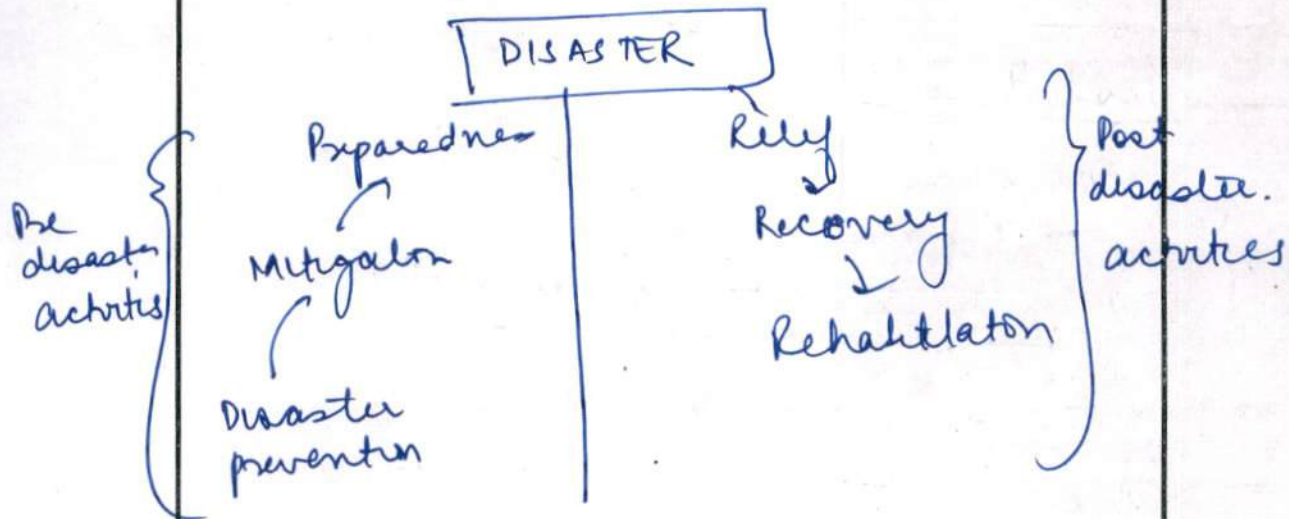
प्राकृतिक आपदाओं के प्रभावों के प्रति महिलाएं विशेष रूप से सुभेद्य क्यों होती हैं? साथ ही, समुचित उदाहरणों के साथ विश्लेषण कीजिए कि किस प्रकार महिलाएं आपदा जोखिम प्रबंधन चक्र में अधिक प्रभावी भूमिका निभा सकती हैं।

Women are more vulnerable to the impact of natural disasters
as

- (i) Reduced coping and adaptation capacity due to lack of economic/social dependence, low skills and education
- (ii) Increased risk of harassment and gender violence in disaster
eg: During Uttarakhand floods, incidents of gender violence reported
- (iii) Dependence on natural resources
eg: feminisation of agriculture, responsibility of collection of firewood, water in households
(Eg) Water wives in Denganamal Maharashtra.

(iv) Special Women needs
such as pregnant women,
need of water for sanitation,
menstruation makes them
vulnerable.

Women can play active role in
disaster management cycle



HOW EXAMPLE:

In Pre disaster management activity
- since women are dependent
on natural resources
(water collection, firewood
collection - can

ensure sustainable
utilization of natural
resources

(eg) Chipko movement in Uttarakhand

feminisation of agriculture -
focus on sustainable agriculture

Post disaster:

- In event of flood, proper care
of children by protecting
from consumption of ~~the~~ unclean
water
- Through SHGs focus on building
back better

Therefore like every avenue,
women role need to be
recognised in the
disaster management cycle -

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.

हीट वेव (ग्रीष्म लहर) और उसके परिणामों की गंभीरता के आलोक में, एक प्राकृतिक आपदा के रूप में इससे निपटने हेतु अधिक ध्यान दिए जाने की आवश्यकता है। हाल के घटनाक्रमों और संबद्ध सरकारी निकायों द्वारा उठाए गए कदमों के संदर्भ में विश्लेषण कीजिए।

Heat waves refer to when average temperature is greater than 3°C for 3 consecutive days than maximum temperature or greater than 45°C for 3 days.

Heat Waves are increasing due to climate change, weather patterns, urban heat island effect.

It needs to be dealt as natural disaster due to chances of stroke, dehydration and possible deaths and loss to cattle.

Recently,
more instances of heat waves
are seen in Central India
such as AP, Telangana,
Orissa, etc.

Heat Wave as
a natural
disaster?
requires both
pre and post disaster
interventions.

Pre disaster interventions

- Increasing green cover to
ensure coolness in temperature
- Local ponds and wetlands for
microclimate ~~regat~~ regulation
- Properly equipped hospitals
and centres for handling
emergency
- Proper plan of action being laid

out in advance light by the
role of various stakeholders —
health sector, transportation,
local bodies, ~~etc~~, schools, biz units

Post disaster intervention

- early warning systems and dissemination
- Public outreach regarding awareness precautions to be taken
- Sheds and water availability for rickshawpullers
- Advancing the timings for schools and offices
- Water for animals

therefore, heatwaves which have
high potential for damage
to ~~loss~~ and life and
animals hence need to
be handled with PRE + POST
event interventions.

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

जहां, जीनोम एडिटिंग स्वास्थ्य सेवा के क्षेत्र में बहुत अधिक लाभ की संभावना प्रस्तुत करता है, वहीं इसके उपयोग के संबंध में काफी आशंकाएं भी मौजूद हैं। चर्चा कीजिए।

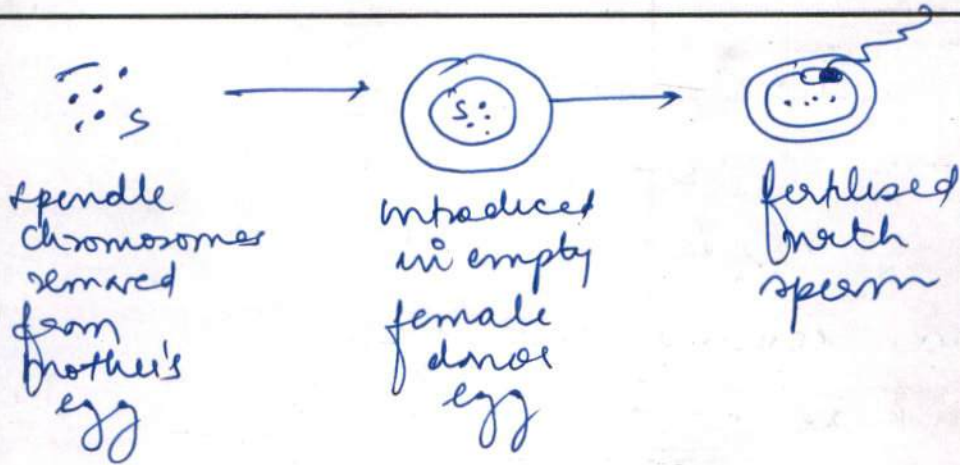
Genome editing refers to editing the genome/gene sequence in a living organism for potential benefits.

Benefits in healthcare sector

① gene therapy: where a gene is introduced in a body to take over the functions of a non functional gene
eg. in Parkinson's disease

② Mitochondrial replacement therapy

where a portion of DNA is introduced by female donor to treat mitochondrial disease in mother



③ Treatment of genetic disorders
and other diseases eg:
diabetes, cancer etc.

Concerns related to genome
editing:

- ① May lead to 'designer babies' - commodisation of babies
- ② Undesirable/unfortunate changes in future generation by manipulation of genes which can be carried forward by future generations.

In light of these problems
~~got~~ ICMR - Indian Council
of medical research
has issued guidelines
where no germline editing
will be allowed. Also
prohibition on ~~to~~ gonadal
gonadic cells and editing
on haemopoietic cells for
clinical purposes only.

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.

उन विभिन्न तरीकों पर चर्चा कीजिए जिसके माध्यम से विगत वर्षों में सुपर कंप्यूटरों ने मानव जाति को लाभान्वित किया है। इसके साथ ही राष्ट्रीय सुपरकंप्यूटिंग मिशन के उद्देश्यों और इसके कार्यान्वयन के तंत्र को भी सूचीबद्ध कीजिए।

Supercomputers are special computers with high analytical and data processing capabilities.

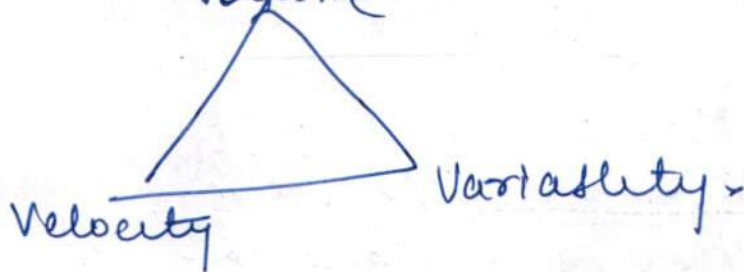
Benefit of supercomputers :

supercomputers have evolved over the decades where initial supercomputers only provided faster calculations and processing.

Now supercomputers are providing many special capabilities.

Integrated with Artificial intelligence and deep learning, their capabilities have exceeded human mind e.g. Alpha Go computer where it has defeated the best players. Supercomputers with high processing are also benefitting

in the era of big data
which is characterised by
volume



even in areas of satellite communication, disaster management, weather prediction where real-time analysis is required, supercomputers are beneficial

Super Computing Mission

Objectives

- To boost supercomputing abilities and achieve world class speed in analytics and processing
- Use of supercomputing in various

areas specially socioeconomic
challenges eg. weather
prediction, agriculture management

mechanism for implementation

- greater government spending
in supercomputing and dedicated
~~at~~ missions in selected
universities - Development of
both offensive and defensive
capabilities in supercomputing.
Development of a trained workforce
and ensuring adequate
infrastructure.

~~The~~
Focus on enhancing ~~to~~ supercomputing
will lead to positive synergies
in various fields such as
DIGITAL India, make in India,
automation, internet of things.

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.

पारंपरिक बैंकिंग और वित्तीय संस्थानों के लिए व्यापक रूप से व्यवधान के रूप में देखी जाने वाली, साथ ही विश्व भर में नियामकों के लिए एक नियामकीय दुःस्वप्न का निर्माण करने वाली, क्रिप्टोकॉरेसी ने हाल ही में महत्वपूर्ण पकड़ स्थापित की है। चर्चा कीजिए।

Cryptocurrency refers to a digital financial asset uses cryptography as medium of exchange and creation of additional units.

It was started in 2009 by Satoshi Nakamoto and

presently many cryptocurrencies - Bitcoin, Dogecoin, Pecoin are in existence.

It has disruptive impact on financial and the banking sector with both positive and negative fallouts.

POSITIVE FALLOUTS:

(i) can be used for enhancing financial inclusion

- (ii) Based on blockchain technology
can ensure transparency in
payment regime.
- (iii) can supplement various
mediums of online transactions
eg. Aadhar enabled payment
system, UPS.
- (iv) New DEVCOINS: can help
in social development where
government can announce
social challenge with
quantifiable targets and
achievement can ensure
generation of devcoins,
(social entrepreneurship)

CRYPTOCURRENCY	BANKING (TRADITIONAL)
• uses anonymous <u>blockchain channel</u> (distributed ledger) • inexpensive	• network uses a centralised system • expensive due to infrastructure and

transaction
costs

Regulatory challenges

- Potential for misuse by antisocial elements
eg: Terrorists, Naxalites
- Used for speculation -
wide fluctuations
- Lack of institutional set up.
makes regulation difficult

Way forward

India cannot afford to be blind to the development. Various countries eg: Japan has recognised as medium of exchange and China, UK as asset. Similarly policy guidelines and clear framework needs to be evolved to ensure proper regulation.

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.

1967 की बाह्य अंतरिक्ष संधि को मजबूत बनाने हेतु एक अंतरराष्ट्रीय बाध्यकारी समझौता वांछनीय और साथ ही एक आवश्यकता दोनों है। इस क्षेत्र में पारंपरिक और उभरती हुई चुनौतियों के आलोक में विश्लेषण कीजिए।

Outer space treaty 1967 was announced by the General assembly ~~in~~ after the launch of Sputnik to ensure 3 main objectives:

- peaceful use of outer space
- no sovereignty claims on space
- use and exploration for the peaceful uses and benefit to mankind.

emerging challenges in space:

- Space weaponisation
- threat of anti satellites (ASAT), missiles which can harm satellites of another country

(Eg) China developing antisatellites

program DN-2, DN-3
for space weaponisation

- Privatisation of space exploration

Private companies are
increasingly funding presence
eg: TESLA's Elon Musk
planning colonisation of MARS

- Increase in space debris
which enhances the risk
of Kessler syndrome: and
damage to the nearby
satellites and spaceships

- New technologies —
Quantum Satellites

- CubeSats - tiny satellites
can enhance
space debris

Role of new Outer space treaty

⑩

~~These~~ A new treaty needs to be brought in which caters to the emerging challenges such as weaponisation, debris, clear policies for private involvement

Also focus on PAROS treaty -

Peaceful regulation of space to prevent any armed race in space squared.

Similarly, India too needs to develop a clear space policy in the light of these challenges.

18. Even after nearly 60 years in existence, AFSPA remains at the centre of debates with respect to countering violent insurgencies, role of the states and local communities. Discuss.

अस्तित्व में आने के लगभग 60 वर्षों के बाद भी, हिंसक उग्रवाद का मुकाबला करने और राज्यों व स्थानीय समुदायों की भूमिका को लेकर AFSPA वाद-विवाद के केंद्र में बना हुआ है। चर्चा कीजिए।

Armed force special powers Act (AFSPA) was enacted in 1956 to provide special rights and immunities to the armed forces such as

- legal immunity for action taken
- shoot after warning
- search and seizure.

Debate regarding whether AFSPA to continue or not keeps continuing.

Arguments ~~in~~ for
against AFSPA

- excessive immunities granted to Armed forces has made them insensitive

and led to human right violations

- even after 60 years of implementation it has failed to bring in stability
- The human right violations erode people faith in democracy leading to a vicious cycle of instability.

Arguments in favour:

It is required to ensure the morale of armed forces in disturbed areas and to help them to bring in ~~efficiency~~ stability of law and order situation.

Recently, Centre gave freedom to Assam and Manipur to decide on the revocation.

of AFSPA.

Way forward:

As per recommendations of
Justice Verma commission,
the need is to humanise
AFSPA and SC's directive
that no blanket immunity
on ~~the extra judicial~~
encounter killings by army.
To ensure balance accountability
and the special powers to
army to bring in stability
and people trust in
democracy.

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. (DPR)

भारत में रक्षा उत्पादन के स्वदेशीकरण की दिशा में निहित चुनौतियों और अवसरों का विश्लेषण कीजिए। साथ ही, उन उपायों की भी पहचान कीजिए जिनके माध्यम से रक्षा उपकरणों का स्वदेशी निर्माण सरकार द्वारा प्रोत्साहित किया जा रहा है।

India is the 3rd largest importer of defence equipment sourcing 60% of its ~~import~~ needs from ~~the~~ imports.

OPPORTUNITIES of indigenisation:

① SOVEREIGNITY: to aspire for global power status India needs to be dependent on itself for its defence needs.

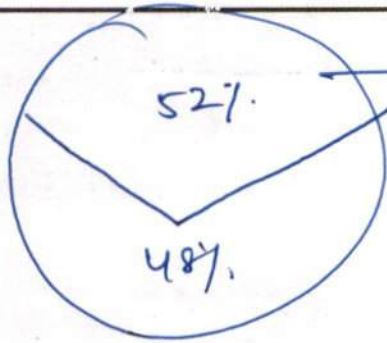
② MAKE IN INDIA
huge potential to boost manufacturing in India.

③ Job creation of direct and indirect employment ranging to one lakh jobs.

- ④ Saved foreign exchange
- ⑤ Reduced dependence on imports will lead to reduced problem of Maintenance, Repair, Overhaul
- ⑥ Exports: eg Brahmos ~~missile~~ missile to Vietnam can help in strengthening diplomatic relations.

Challenges

1. Lack of technology
2. Process mired with numerous clearances and delays
3. Overbureaucratisation of defence procurement
4. Lack of skilled talent
5. Lack of funds



52% of
allocated
budget used
for committed
liability
while only 48%
for capital.

Government measures:
government has brought in
~~the~~ reference procurement policy
2016 with focus on
promoting IDDM category -
indigenously designed, developed
and manufactured.

Along with it Strategic Partnership
model for choosing domestic
private player for manufacturing.

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.

भारत द्वारा एक सुस्पष्ट रणनीतिक दृष्टि का अनुसरण करने की क्षमता वस्तुतः सशस्त्र बलों और सिविल नौकरशाही के बीच संस्थागत सहयोग और समन्वय में सुधार करने की क्षमता पर निर्भर करती है। चर्चा कीजिए।

With rising challenges such as China Pakistan nexus, changes in nature of threats eg: cybersecurity, conventional and non conventional security issues such as terrorism, a synergy between armed forces and civilian bureaucracy is required. The need is:



China Pakistan axis

By dealing with this threat now require coordination between army and diplomats as multipronged strategy. Seen in surgical strikes in

Pakistan, Doklam standoff

Defence acquisitions

India is critically low in modernisation and defence equipments - the reason being dominance of civilian bureaucracy in the acquisition process ✓

PARAMILITARY FORCES

which are under Ministry of Home affairs need proper focus in terms of working conditions, service status as grievances rising (eg. the recent video uploaded by the BSF jawan

Emerging challenges

such as cybercrimes

Way forward

- Reviews in the defence acquisition process
- Appointment of CDS -
chief of defense staff as per
recommendations of Kargil
Review Committee to ensure
jointness in decision
making

And implement the latest
recommendations of
Shekatkar committee has
called for integrated
threat commands need
to reviewed to ensure
security and coherent
response to challenges