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GENERAL STUDIES (TEST CODE : 876)

Name of Candidate	Tanya Singhal		
Medium Eng./Hindi	English	Registration Number	90030
Center	Old Rajinder Nagar	Date	7th Oct 2017

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	
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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	
1.	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)।
2.	There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3.	All questions are compulsory. सभी प्रश्न अनिवार्य हैं।
4.	The number of marks carried by a question/part is indicated against it. प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5.	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।
6.	Word limit in questions, if specified, should be adhered to. प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7.	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।

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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।

India ranked 130th in World's Bank's 'Ease of doing business' Index. It has taken several steps like

- 1) GST [Goods and Service Tax]
- 2) Labour Reforms - Suvidya Swayam Portal
Convert of 44 central laws into 4 codes.
Plantation Labour Act (Amendment)
Maternity benefit (Amendment) Act

3) e-governance = e-Biz portal for single clearance

4) Logistics = Port Authority Bill
Development of Inland Waterway (Jal Utkas Marg)
Sagar Mala Project

5) Schemes - Make In India, Skill India

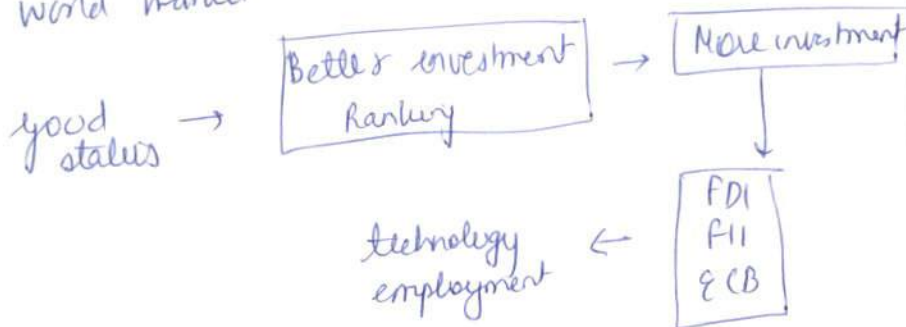
however, we need to ensure

- a) good implementation of these ~~still~~ schemes and programmes.
- b) International Market Accessibility
finalization of various free trade agreements with
RCEP, EU to give industries a good
market
- c) Backward linkages → good and educated
skilled youth especially for Agriculture
and food processing industries
- d) Rationalization of these clearances at a
fast pace [eg Environmental, land]
- e) Lots of SEZs are declared but no work
has been done, therefore development of SEZs
should be priority
- f) Steps for increasing women participation in
~~women~~ Labour force [present rate only 10%
in Manufacturing].
- g) A new industrial policy based on principles
of inclusivity and sustainable development
should be adopted. It should enhance

technology, innovation and export potential of our country.

Utility of this kind of index

- ① It helps to set up a good standard in world market.



- ② It provides scope for more development and give encouragement by giving a good strength and weakness analysis

However,

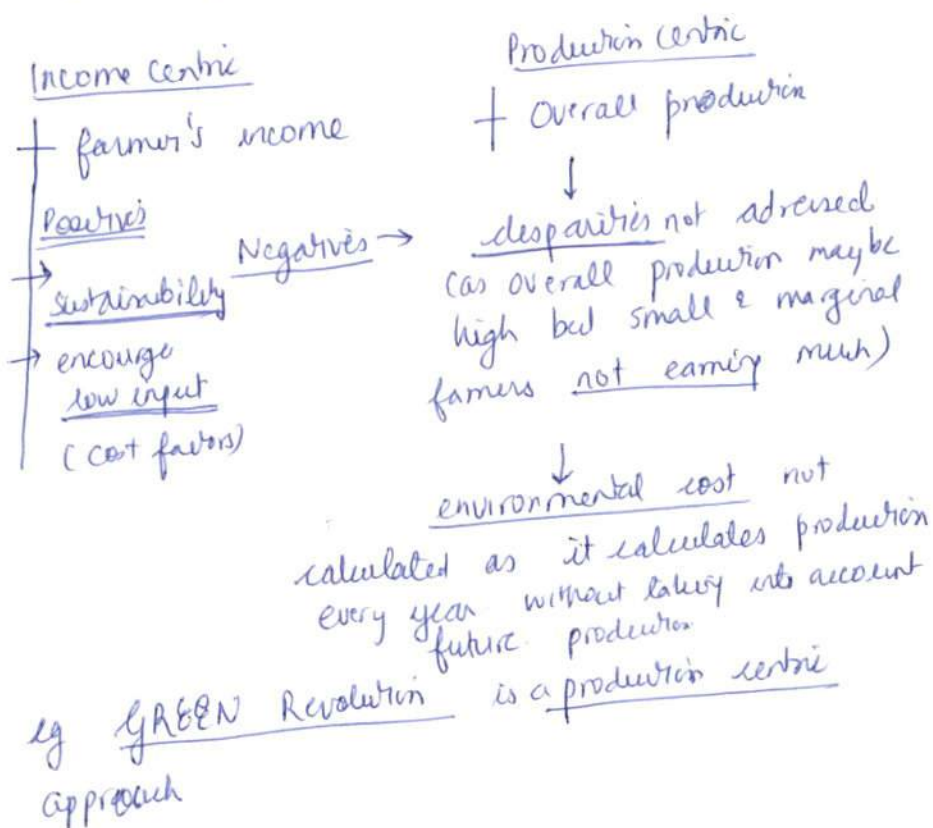
- ① Ease of doing business index is calculated only for cities like Delhi & Mumbai where in India, Andhra Pradesh and Telangana occupy the most favourable positions

- ② These indexes have uniform criteria of ease of doing business which are unfavourable for developing countries like technology use (developing countries don't have access to good technology)

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।

Income centric approach deals with individual while production-centric focuses on overall production.



Therefore today, India needs Income centric approach to take care of disparities among farmers, encouragement to women farmers, increasing capacity of landless labours. In this approach, lowest inputs and sustainable techniques would be preferred so that no future agrarian crises develop. (as today we witness green Revolution belts)

Double the income of farmer by 2021-22

It includes five goals.

1) Increasing production

- * Soil Health card scheme
- * Organic farming (Bringing organic farming to eastern India)
- * MSP Rationalization
- * Parampragat Krishi Vikas Yojna

2) Infusing technology

- * Pradhan Mantri Fasal Bima Yojna
- * ARYA scheme to innovate new technology by infusing young minds in agriculture

3) Price Realization

- * APMC Model Act (By Neta Ajayg)
- * Revision of Essential Commodities Act
- * e-NAM

4) Diversification of Agriculture

National Livestock Mission
Gokul Rastriya Yojna.

5) Low Inputs

- * DBT on fertilizers
- * Pradhan Mantri Krishi Vikas Yojna.

Challenges

1) Poor literacy among farmers.

Poor
literacy

- can't avail DBT, scheme's benefits
- use more pesticide & fertilizers
- can't use weather information

2) Lack of food processing and allied sectors.

3) Bad governance

- corruption, leakage in subsidy of fertilizers
- poor institutions

4) environment lost - Production increase should not compromise ecological benefits

5) Small land holdings leads to inefficiency,
poor land records, a big problem is land
digitization.

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।

FRBM Act fixes fiscal deficit targets for both center and state. While center seems to follow it more seriously, states are seen to breach the limits frequently.

[ad hoc loan waivers, NDA4 schemes are seen as reasons].

Therefore, it is essential to diffuse fiscal discipline in the states.

Recommendation of NK Singh Panel

- Exit clause in case of emergencies like wars, floods, famines etc
- Debt to GDP ratio should be fixed as it is a better indicator than fiscal deficit (Most of the agencies use this to rate investment bonds)

Fiscal discipline is essential but at the same time, India needs socialistic welfare schemes. Therefore, a judicious balance must be maintained.

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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 of state-run firms means selling of more than 50% shares of a unit. It has both positive and negative implications.

Positive

It helps government for maintaining fiscal discipline as it saves government's responsibility of bail outs in case of losses.

Private leads to better efficiency and management of sector.

better competition in market which leads to better quality products.

It is ⁱⁿ the right direction of maximum governance and minimum government vision.

however, PSUs disinvestment does not solve all the challenges. like

- a) Employees's strike will continue
- b) Disinvestment does not lead to better fiscal discipline

c) Private investor can take PSUs out of rural areas. (It will destroy the actual aim of disinvestment)

Therefore, it is essential that Public sector units must be given autonomy and freedom out of pettial areas to functions. Tax evasion should stop. Schemes of giving status (Maharatna, Miniratna) is good step.

further suggestions

- 1) Disinvestment should be carried out by proper evaluation of the ~~assets~~ assets to realize the actual value.
 - 2) Good governance must be ensured in PSUs.
 - 3) Schemes like Indradhanush reforms in Banking sectors should be replicated in PSUs.
 - 4) Technology and innovation should be promoted
 - 5) Employee should be trained and security of tenure should not be followed blindly.
- Nitish Kumar's recommendations of giving autonomy and more fiscal discipline should be followed to revive PSUs again.

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।

Shell companies are those which do not function on ground but are used for money laundering.

However, there are no objective criteria for identifying them. Therefore, it leads to sometimes penalising the ~~wrong~~ right ones.

Currently, SEBI has shut down over three hundred companies advising them as Shell companies.

This is seen as draconian step by company owners.

Moreover, it created a negative environment for investors willing to invest in India.

Therefore, an objective criteria should be evolved to identify them.

Shell companies are essential to ~~we~~ weed out as they become route for black money. But adhoc measures and rules can even worsen the situation.

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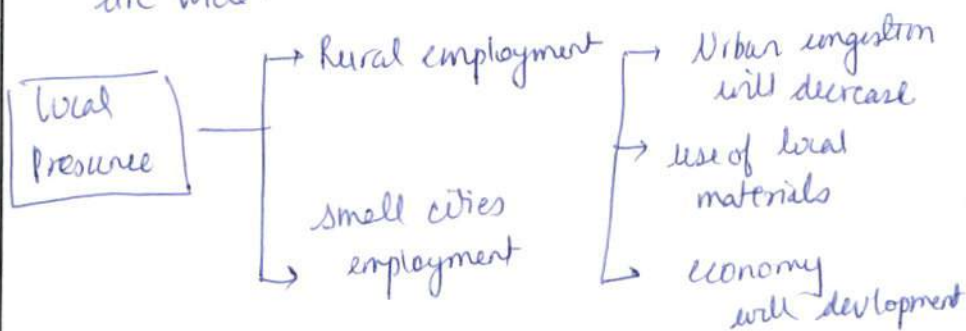
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6. If a larger population in India is to be involved in the economy in a big way, Small and Medium Enterprises (SMEs) are key. Elaborate. Also discuss the challenges faced by the SME sector in India and give an account of the measures taken by the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

SMEs provide 30% of the GDP of country and have vast potential.

- a) Their presence in tier II and tier III areas are wide.



- b) SMEs are helpful for women employment as they are flexible in tenings and skills required are less.

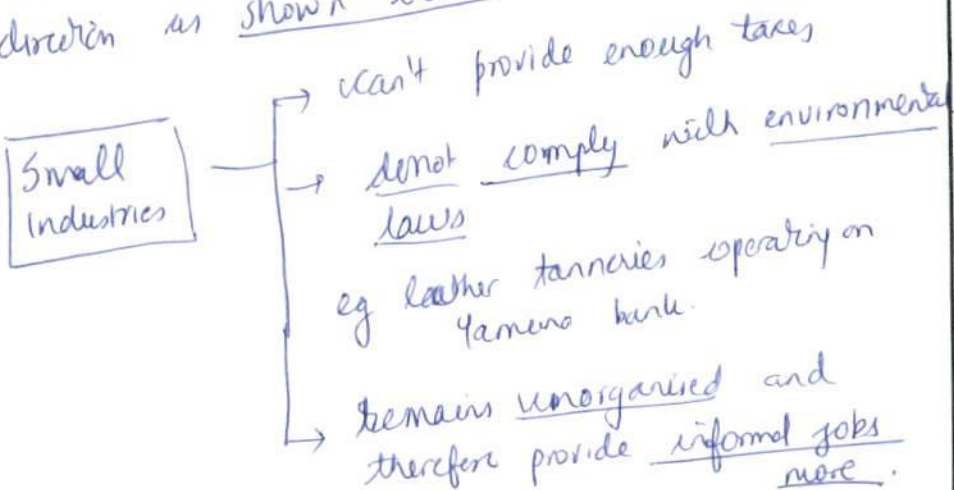
eg Beauty parlours, Boutique etc

- c) SMEs do not require high skill set, therefore essential for India due to poor skill set available (36%).

however, they face challenges like

- a) Lack of credit due to poor assets and no brand value
- b) forward linkages like marketing support, logistics
- c) They require good technology, but due to capital constraint, they can't acquire
- d) Competition from big players in domestic markets and lack of competitive edge (poor logistics) in world market
- e) Stringent labour laws and availability of skilled person in managerial skills
- f) Staic regulation of government because of multiplicity of regulators, permissions etc.

Due to the above constraints, they tend to remain ~~slow~~ small, which operates in a negative direction as shown below.



Steps taken by government

- a) Mudra Scheme
loan → tarun, aishu and kishor categories
without collateral requirements
- b) Skill India Mission
- c) Zero Effect And Zero Defect Scheme
- d) Ease of doing business by bringing GST reforms, e-biz portal etc.

However, government should also provide managerial skill to them so that they are able to scale up. Subsidized technology should be provided so that they become efficient and produce better quality products.

A new MSME policy focusing on sustainable and inclusive (women, physically disabled, rural economy) should be formulated to streamline the developments.

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।

Informalization of labour means employing labour without formal documents.

Informalization -

- No job security
- No Provident funds
- No other benefits like paid leaves, maternity leaves

Reasons for growing informalization

a) Strict labour laws

- * Inspector Raj
- * Multiple & confusing laws
- * Trade Union Act comes into force even after 7 employees
- * Anarchic laws like Industrial dispute act

Therefore, industries prefer to employ contractual labour with just one contract with the contractor.

- b) Lack of skilled labours
- c) Seasonality of industries especially in food processing sectors like sugar Mills
- d) Increasing obligations like

Maternity Benefit (Amendment) Act

Which forces industries to pay compensation for 26 weeks for a women. It discourages employer. so government should provide partial compensation

- e) More supply of labour to industries provides them choice of their monopoly.
- f) Organised sector are only 10% of economy

Issues

a) Labours

- Security of job
- No training / skill enhancement on the job
- No other benefits (like PF/Provident fund)
- Labour also feels discouraged to innovate and work hard.

b) Employer

- Donot put more money in training of employee which results in substandard products
- Save itself from labour laws
- ~~ensure~~ ensure about availability in peak seasons.

c) Government

- Lack of formal jobs
- Obligation to provide incentives to informal jobs. like Atal Pension Yojna
- Poor data base of labours and hence tax collection is difficult.

d) Society

- Youth faces problem of unemployment
- Best talent flows out of the country.
- Insecurity in household → no permanent employment
- in education, health etc

Reforms

- Rationalization of labour laws to help both employer and employee. Self certification and e-governance to save time of employers. Government should provide benefits to labours in conjunction with employers eg Plantation Workers Benefit (Amendment) Act.

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।

Energy Policy framework applies on oil, coal, and renewable energies' production, distribution and consumption.

India needs new energy policy to deal with new developments like

* Local energy space

Need of energy in rural areas for electrification under Pradhan Mantri Ujwala Yojana (DDUGJY) and Saubhagya scheme.

Replacement of coal, fuel wood with LPG cylinder to deal with indoor pollution and women's deteriorating health. [Ujjwala Scheme]

Increasing pollution in cities. WHO Report states that out of 20 most polluted cities, fourteen belongs to India → therefore, a need to shift to renewable energy.

Increasing demand of oil for vehicles.
 Problems faced by thermal plants due to shifting
 of pivot from thermal to renewable energies
 National Action on climate change plan - 175GW of
 renewable energy by 2022.
 International energy space

→ Paris climate deal and India's INDC to
 fulfill them.

→ Disturbances in middle east (Syria) and
 price and availability of oil.

→ Neo colonialism by developed countries by
 not following principle of historical justice in
 climate issues, therefore not transferring
 funds and technology to developing countries

→ International solar alliance (India and France) to
 boost solar energy.

Keeping in mind, the today's scenario which
 need better quantity as well as better
 quality of fuel, the new energy framework
 should be formed.

Energy policy framework should focus on following points

- * Diversifying the ~~oil~~ options in oil's suppliers
(At present 100% of oil from Middle East)
- * Strategic oil storage tanks to cushion the lower prices
- * Skills should be imparted to youths for development and maintenance of renewable energy of Surya Mitras.
- * Investment in coal energy to make it more environment friendly.

* It should balance the economical aspirations as well as environmental concerns adequately.
[Economic survey has indicated that social-economic cost of renewable energy is three times of coal at present].

A judicious energy policy framework should be formulated to fulfill sustainable development goals. ~~number 1, 2, 3, 4, 5, 6 etc~~

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।

India is known to skip the manufacturing stage of development which is in contrast to their's development's trajectory. This ~~became~~ ^{became} possible due to service sector and mostly Information Technology - Business Process Management (ITBPM) industry.

Impact

India: Employment generator → in high skilled segments
Remittances from USA, Europe and Australia
Building soft diplomacy and diapora in developed countries.

Technology powerhouse and its progress is trickled to other industries.

World: cheap and good quality services availability
Better technologised products and new age of software.

IT-BPM industry is very helpful for women empowerment in both India & world. As it does not require manual labour, therefore became a huge opportunity for women. In India, it lead to migration of women to big cities, their economic & social independence and thus, overall development.

however, it do not provide substantial jobs in comparison to GDP (monetary values it creates). IT-BPM industry is also considered more stressful and more disadvantageous to health due to long working hours etc.

Challenges faced by India's IT/BPM sector

a) Protectionist policies in World, be it is USA, Australia or Britain.

India's IT/BPM industry has more market in international arena.

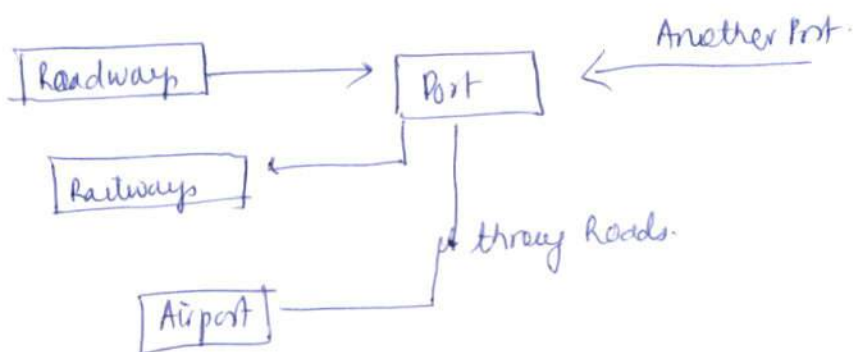
- b) India produces software but we lack in hardware products - Therefore better hardware production can provide a comprehensive solutions.
- c) Lack of skilled workers. (just 29% skilled in India)
- d) Indian Market uses pirated softwares and donot consider cyber security as a threat. Therefore, their markets remains limited in India.
- e) Glass ceiling in Indian firm for women. However, with better financial inclusion and digital economy, there are vast potential for this sector emerging in India itself. This can help IT-BPM to ~~survive~~ survive and grow.
- Beside this, government should try to use diplomatic tactics so that India's IT-BPM sector gets relaxed in international markets.

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।

Multi-modal logistics & transport sector means interoperability of various ways of transportation and better connectivity.

Example : A multi modal port



It will make India more competitive as

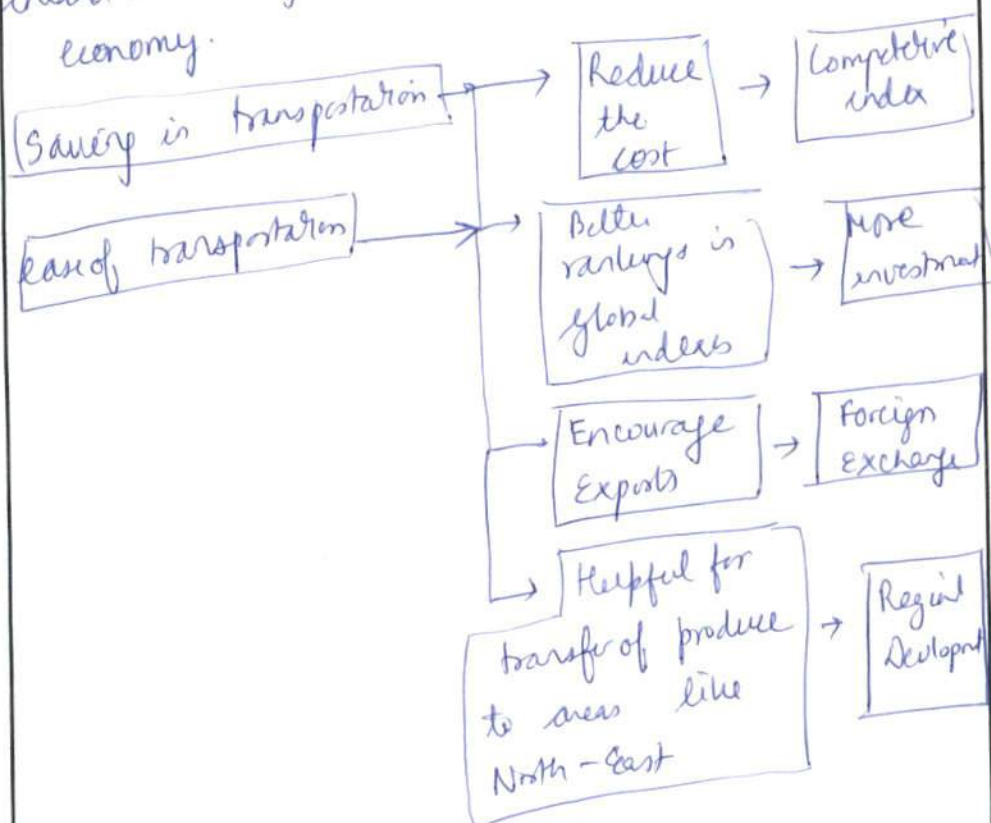
a) Multimodal will open up the choices for accessibility.

Nearby producers can use roadways while far away can use railways/airways.

b) Good connectivity will ensure timely transfer which is extremely beneficial for perishable products

c) Interconnectivity will reduce congestion on ports, stations and thus they would be able to operate at better efficiency.

A multi modal port at Sahibganj - UP for ~~water~~ inland water way 2 has potential to revive the economy.



Sy 1: Spill over effects of Multi modal logistic & transport !!

however, efforts should be done so that local economy gets boost. Therefore, it is essential to impart skills to the locals near the multimodal junction areas. This will ensure actual regional development.

In addition to these, good governance in terms of transparency, accountability should be adopted at each level.

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.

जलवायु परिवर्तन पूरे विश्व में संघारणीय 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 basically implies change in temperature and associated effects like floods, droughts, heatwaves, sea level rise etc.

It threatens in the following manner:

a) Sustainable development → disaster frequency increased
→ Agriculture and food security
→ coastal economies

b) Socio-economic development → more vulnerable are farmers, poor people, who are already vulnerable
→ small islands at more threat

c) cycle of poverty

inflation in food items → Poor can't buy
more disease (malaria) → Poor can't treat themselves
due to increase in temperature
agriculture becomes unprofitable → farmer incomes dwindle
→ cycle of poverty

Utility of Climate Risk Insurance

It can save the vulnerable sections like poor farmer against the wrath. eg Pradhan Mantri Fasal Bima Yojna protects farmers from local problems like hailstorms, flood, drought, and after post attacks like pest attack. These all have intensified more due to climate change.

It will provide security net to coastal economies as climate change is responsible for oceans acidification and subsequent reduction in fish catch.

however, there lies a lot of challenges

- * Funds requirement
- * As climate change is not directly related to any phenomenon, rather all phenomenon are manifestation of climate. therefore, obviously it is very difficult to measure.
- * vulnerable sections who require it the most, may not afford the insurance.

Climate Risk Insurance is a necessity but it should be accompanied with better and sustainable activities like traditional water harvesting, Agro climatic cropping, deep sea fishing instead of bottom sea trawlers and adoption of renewable energy by all countries.

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।

Natural disaster create a havoc for everyone by reducing the development in ~~the~~ ashes. but for women, they are more sorrowful as

- 1) Increase in crimes post disaster.
- 2) If woman becomes widow, its become difficult for her to live (especially in case of India)
- 3) Increased chance of trafficking of young girls
- 4) Due to destruction of toilets, they face problems of open defecations.
- 5) More dangerous to pregnant women (health risks), menstruating women (weak at ~~that~~ that time) and

Lactating mothers

- b) Old women can't save themselves.
7) Orphaned boys may find their way by doing odd jobs but orphaned girls don't even get menial jobs.

In spite of this, women is also the solution of effective disaster management.

Prevention → feel choice → She would always choose a cleaner ~~also~~ cooking fuel.

Eg She would choose LPG over coal, wood.

Better Solid Waste Management → if educated and made aware [Can stop air pollution, water pollution]

Stop usage of polythene as she is involved in shopping mostly [Can help in avoid choking - main reason of urban floods]

~~Also~~

She can keep water bowl for animals & bird [reducing heat wave disaster impact on them].

Women can play a better role in resource management and thus effectively can manage disasters.

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 are announced if a certain area has more than 45°C for consecutive two days. It can be different for different areas.

Consequences

- 1) Humans: dehydration and some times fatal
- 2) Animals and birds - worst affected
- 3) ~~water~~ soil moisture is reduced - vegetation affected.

Seriousness

- 1) Climate change is a reality
- 2) Increasing urbanisation.
- 3) Most vulnerable are those people who don't have resources to have better food and health
eg Rickshawpullers and vendors, they can't opt out to go on roads due to

their incomes. While others can opt to remain inside, they have to work.

Therefore, heat waves should be dealt with seriousness as it is affecting us socially and economically.

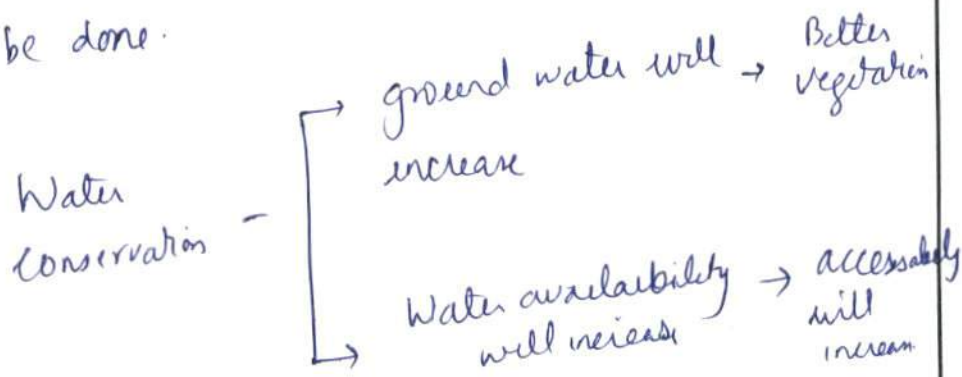
Steps taken by government

Ahmedabad has come up with a plan that encourages

- a) early warning system
- b) First Aid in hospitals
- c) Increase in number of water availability in cities.
- d) Water for Animal, birds
- e) Shed at ~~bus~~ bus stops etc.

Heat Stroke can be well managed if seen in integrity with climate change.

Therefore, Afforestation along the roads should be promoted. More open areas (to increase albedo) should be constructed. Households should be encouraged to keep water bowls at homes for birds. fountains at shows should be constructed for animals and it will also increase aesthetic value. Above all, water conservation by better rain water harvesting techniques should be done.



It is responsibility of each & everyone to stop the affect of heat strokes.

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 removal and addition of desired gene in the gene sequence. CRISPR-CAR are one of the technology for gene editing.

Potential benefits

- 1) Genetic diseases like Down Syndrome can be eliminated
- 2) Cancer can be cured
- 3) New Vaccines can be developed
eg ZIKA Vaccines is developed using genome editing
- 4) Better varieties of seeds to protect against food security.
- 5) Health of Animals (cattle) can be improved.

- 6) Bio fortification (Black rice) can be helpful for nutrition enhancement and ultimately in better health.
- 7) Bio Pharmaceuticals which are more effective in curing diseases can be prepared.
- 8) Organ donation but, it has various issues like ~~organ donation~~
- 1) Baby designing → if genome editing is successful, then babies can be designed as per choice of parent.

This will lead to rich having even more intelligent and beautiful kids while poor paying the burnt.

- 2) Man becoming mortal → gene editing can lead to production of organs in animals like recently a human organ was produced in pig

This will end immortality of men

- 3) Misuse for creating animal and man prototypes. which can be dangerous for mankind.
- 4) Gene editing involves killing of embryos of both human & animals.

Gene editing is a fasture tell it solves problem. It should be regulated internationally so that it donot become a reason of new problems.

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 have more speed of computing and this is measured in flops. Today China and USA are biggest producers of super computers.

Benefits:

1) Weather Forecasting → Disaster Management
Agriculture Management

2) Nuclear energy

3) Space Missions

- Resource Mapping
- Television & Radio broadcast
- ~~Internet~~ Internet & Global Navigations
- Security & Surveillance on Borders
- faster communication
- Telemedicine & e-education

Objectives of National Supercomputing Mission

- Capacity Building, better infrastructure in computing technology
- Supercomputers in every high educational institutions
- World power in production and development of super computers
- Using it for space mission, education and research facilities.

Mechanism

- Establishing a NKN [National Knowledge Network] which will provide adequate infrastructure.
- Funding in the institutions to foster innovation in the field.

Supercomputers can help predict disease outbreak and has potential to make India, a knowledge hub. Therefore

this mission should be pursued with zeal
and good governance.

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, क्रिप्टोकॉरेंसीने हाल ही में महत्वपूर्ण पकड़ स्थापित की है। चर्चा कीजिए।

Cryptocurrencies means the currencies which are not having any legal backing. They are mostly used for peer-to-peer transactions.

eg BITCOIN

They are seen as disruption as
1) ~~so~~ people are using cryptocurrencies and do not prefer to use traditional gateways for transactions.

Hence, reducing revenue of institutions

2) It is being used for buying drugs and money laundering activities online

3) Illegal betting is also increasing.

- 4) It may become future currency for online transactions.
- 5) It is difficult to keep track of its flow due to anonymous nature. Apprehensions are there, that they are used to fund terrorism.
- 6) Since their production needs good and strong computers, therefore only rich individuals can afford to create them. Thus creating disparity.

It is extremely essential to regulate it before it gets misused. At present, they are at nascent stages and can be effectively regulated.

International consensus is required to curb it.

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 of 1967 make the following provision

- 1) No country can militarise the space
- 2) A country would be liable for the damages, it occur on the space
- 3) Resources found in the space belongs to all.
- 4) space program should be used for humanity and not for destruction.

Along with Outer space treaty, other treaty like moon treaty, rescue treaties were also signed.

But Outer space treaty needs revision.
as.

- a) it does not have global space police to deal with the violators.
- b) They are more of a guidelines in spite of provisions.
- c) Vague words like no militarization are used. countries can take weapons and explosives in the space on the name of research and exploration.

Therefore, a list of prohibitive items and activities should be prepared.

- d) More strict regulations and framework should be used.

It should be also amended to check the emerging threats like

* Space Debris → Outer space treaty

should make countries responsible for the debris in space

* Private rockets and space programs (like Falcon, Space X) should be regulated and made accountable either with their respective governments or treaty

* Privacy concerns should be addressed. Satellites can be used for breaching privacy

Therefore, a new space treaty should be prepared.

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।

AFSPA (Armed force special protection Act) provides legal immunity to personnel of armed forces in disturbed areas.

Role of AFSPA

* Since insurgencies have turned violent in North East & Jammu & Kashmir, it is essential to empower army in order to fight

* It is essential to boost morale of army

* It creates deterrence among the insurgents

however, Jeevan committee and Neddy committee recommended government to remove it.

Negative role of AFSPA

- * Human Rights are violated which fuel the civilians against the forces.
- * NHRC also criticized AFSPA
- * Insurgents used it as a counter argument to spread violence and fear among the civilians
- * Civilians feel ~~fear~~ ~~are~~ alienated from the forces.

However, Supreme Court has asserted from time to time that there is no absolute judicial immunity to army men and thus, balanced the views. But, there is need to do more.

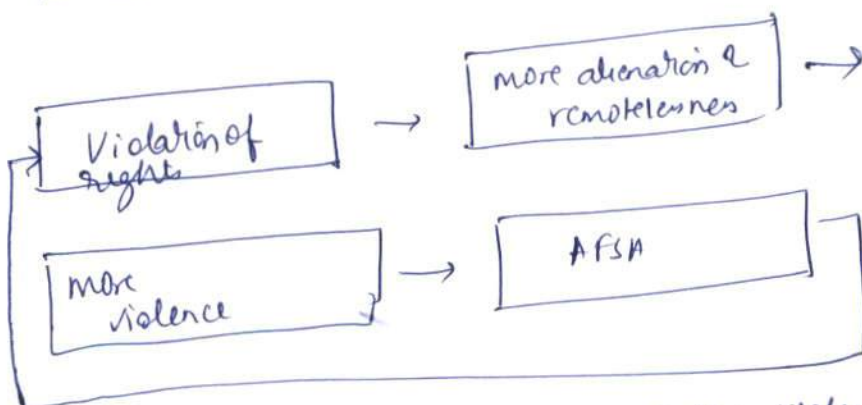


Fig 1: positive feedback due to AFSPA is violence

AFSPA, should be gradually phased out.
While Civil Societies should be strengthened
in such areas.

NGOs —
 → can serve as a link between government
and citizens
 → can be their voice (grievances)

Other non state actors like Media (both
print and social) can act like first
line of investigation.

Technological aids for better surveillance
(drones, CCTV camera) and intelligence should
be preferred to tackle insurgencies.

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.

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।

Defence productions in India provide immense opportunities like

- a) Employment to the youth
- b) Better technology and innovation
- c) Saving of foreign exchange (Russia, Israel)
- d) Security of defence plans (scraping data leaked by France)
- e) Better understanding of need of defence equipment.
- f) Potential export ~~sector~~ sector for India
- g) Diplomatic tool to lure countries for UNSC and NSG bid.

But, these can be availed only if certain challenges are overcome.

- a) Required Skills in youth
- b) Poor technology (DRDO took 40 years to make a rifle)
- c) Public enterprises' monopoly - which hampers competition and efficiency
- d) Technology transfer from developed nations is difficult
- e) Private sector is also not well ~~to~~ prepared for such big investment, therefore requires support.

Government has started Strategic Partner. Procurement Policy. According to this, a company would be selected for 15-20 years for production. This is done to ensure investment from private sector [security in contract will ensure attraction to deal]. Moreover,

long time period will ensure better innovation and technology development.

However, government is stucked on question of using cost plus approach (endorsed by Defence Department) and competition based approach.

Cost plus approach leads to corruption in defence procurement. Therefore competition based Strategic Partnership should be adopted well in time to ~~be~~ realise

Make in India with indigenoues defence equipments.

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।

In Mumbai attack [Taj Hotel], it is due to the lack of coordination between civilian bureaucracy [Marine Police] and armed forces [NAVY and India's Coastal Guard], that terrorist were able to enter Mumbai.

Therefore, an effective and cordial relationship is essential.

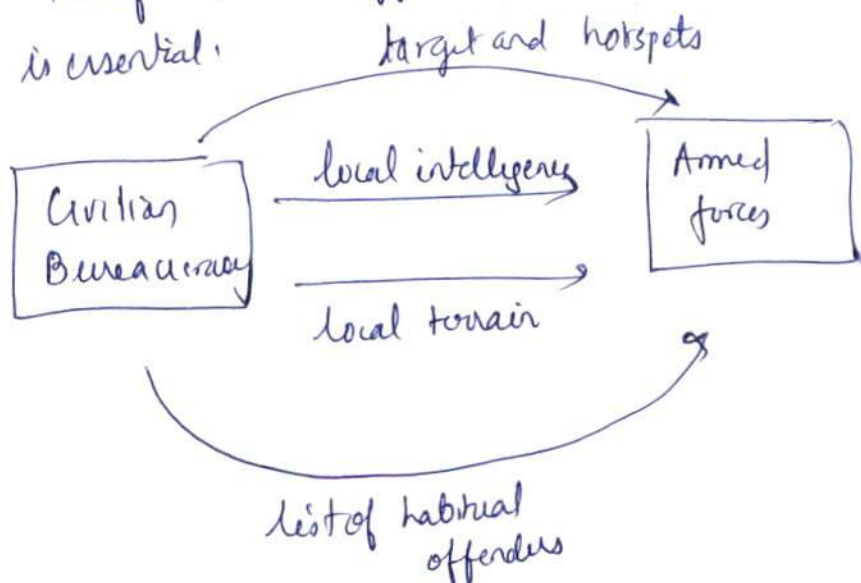


fig 1: Input by civilian bureaucracy.

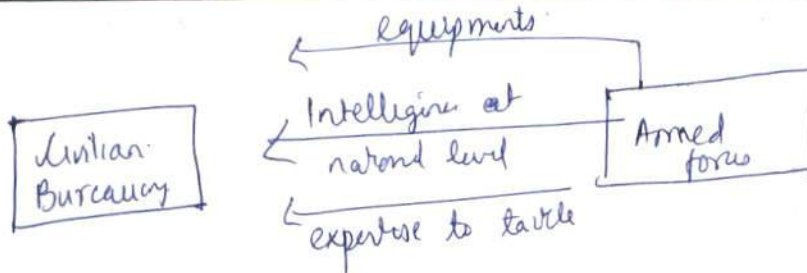


fig 2: inputs by Armed forces

By both these figures, it can be understood that both can act as a complementary side to each other.

In today's world, the problems have changed like cyber terrorism & warfare; and moreover, today intelligence and expertise is required more than the physical power.

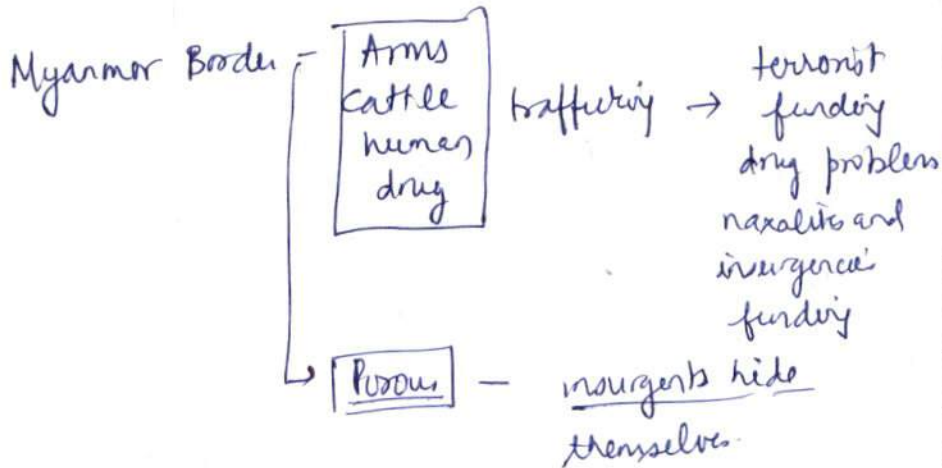
Earlier Problems

Wars
terrorist
internal -
naxalism.

Now

Cyber warfare
Nuclear warfare
Communal riots
radicalisation
insurgency
naxalism.
money laundering.

All the threats have their roots in borders.
While they culminate in exterior.



Therefore, internal problems and external issues
both are interlinked and cannot be separated.

To ensure clear-cut strategy of security should
be made after establishing a good network of
information sharing between various forces.