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Name of Candidate	Yadav Suryabhan		
Medium Eng./Hindi	English	Registration Number	176745
Center	ORN	Date	04/09/2019

INDEX TABLE

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

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।

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. Explain the significance of Credit Rating Agencies (CRAs) in India and highlight the issues in their working. **(150 words) 10**

भारत में क्रेडिट रेटिंग एजेंसियों (CRAs) का महत्व स्पष्ट कीजिए और इनकी कार्यप्रणाली से संबद्ध मुद्दों को रेखांकित कीजिए।

Credit rating agencies are meant for assigning credit rating to the corporate, bond, equity or any investment fund.

eg: S & P, Moody, ICRA etc

Significance of CRA:

- reflect the economic and investment ecosystem in the country
- awareness regarding the most secure investment opportunity.

- prevents from market risk failure.

- helps corporate in mobilising and gaining the investment fund.

Post liberalisation, 1991, CRA emerged to reflect the economy potential and acts as informer to investors. However, CRAs

suffer from:

(1) highly monopolised segment: due to condition such as restriction on entry barrier etc

(2) Conflict of interest: since issuer pay model is only recognised, wherein it depends on the company to fund the CRA, thus quid pro quo relation.

(3) Rating shopping: the one CRA, which awards maximum rating is only published

(4) prior consent is required for publishing information

(5) employer of CRA decide rating, rather than independent expert.

Reforms required to maintain neutrality

and impartiality:

→ do away with issuer pay model
→ regulatory authority, and to legislate law.

→ increasing private participation and increase competition.

2. What are the issues that have limited the success of Special Economic Zones (SEZs) in India? Mention some steps that can be taken to address them. (150 words) 10

भारत में विशेष आर्थिक क्षेत्र (SEZs) की सफलता को सीमित करने वाले मुद्दे क्या हैं? इन्हें दूर करने के लिए उठाए जा सकने वाले कुछ कदमों का उल्लेख कीजिए।

SEZ's were meant for special region with objective of attracting FDI, Employment generation, increase exports and increase the share of manufacturing segment

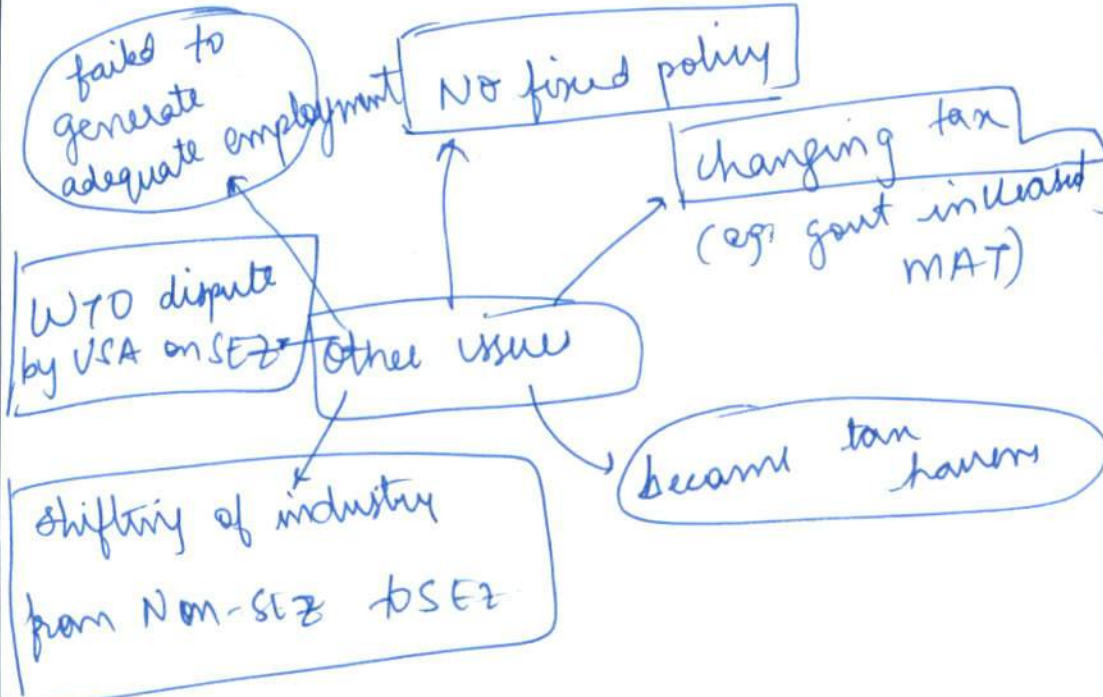
Issues : as presented by Baba Kalyani report :

(i) Multiple models such as port park, food park, textile park, National industrial manufacturing zone. etc

(ii) land hoarding: since 62% of land were only utilised.

(iii) Competition with other FTA products such as from Japan, ASEAN, Thailand, South Korea.

(iv) Cannot take any activity with regard to domestic industry



Steps required:

- (1) Rationalisation of SEZ and such cluster
- (2) dedicated policy.
- (3) do away with MAT and P.D.T. (tax)
- (4) provide liberalisation in
 ↗ labour law
 ↘ treatment with regard to other exports

changing SEZ to economic and employment enclaves could fulfill the demand and jobs growth and thus boost the manufacturing segment to 25% by 2025.

3. The opportunities for start-ups in India are immense, but so are the challenges. Discuss. (150 words) 10

भारत में स्टार्ट-अप्स के लिए असीमित अवसर हैं, लेकिन चुनौतियां भी उतनी ही हैं। चर्चा कीजिए।

Startups are newly companies relying on their skills, innovative ideas to cater to customer services-

Recently, India have been ranked with 3rd position, in number of start ups in world.

(1) Government support such as through start up India, make in India, stand up India, Udyam Abilasha, etc.

(2) Customer demand: for innovations in their service. Also increasing consumption and luxury have fuelled the startups.

- (3) Attract venture fund, angel fund etc.
 (4) Rise in higher education enrollment (26+)
 skill development, training, focus on
 creativity.

Challenges

- bureaucratic red tapism
- crackdown with regard to shell companies (unnecessary harassment)
- declining credit availability due to NPA (Mudra NPA = 7.1%)

- angel tax provision.
- one in 3 start up in Bengaluru wind up everyday
- forced to take this opportunity, owing to unemployment.

Government must ensure adequate
 availability of expertise, link experts with
 aspiring entrepreneurs to achieve the goal
 of Creative India, Innovative India.

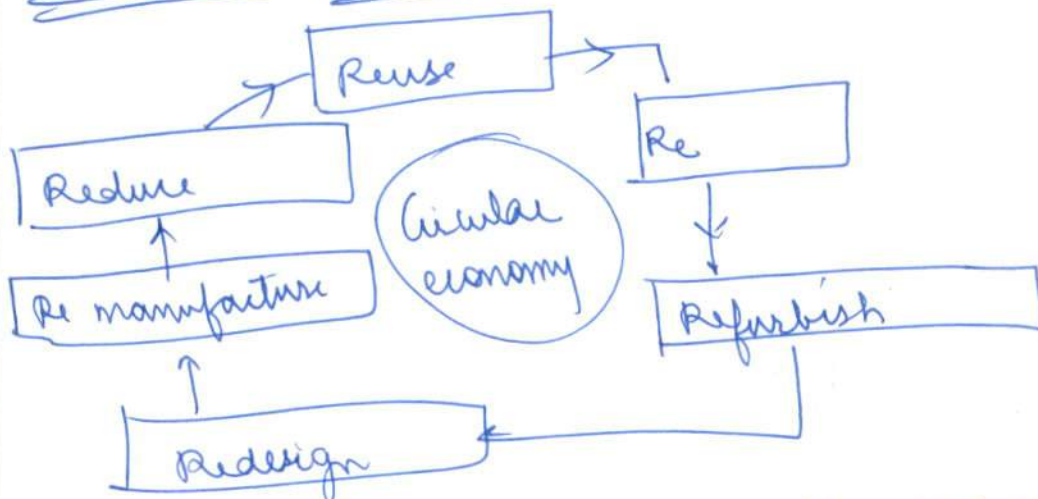
4. The term 'Circular Economy' is often seen in news. What are the principles that it is based on? Bring out its relevance for India. (150 words) 10

'चक्रीय अर्थव्यवस्था' (सर्कुलर इकॉनमी) पद प्रायः सुर्खियों में रहता है। वे कौन-से सिद्धांत हैं जिन पर यह आधारित है? भारत के लिए इसकी प्रासंगिकता स्पष्ट कीजिए।

Circular economy envisages to increase the product life by utilising upto its maximum potential.

Recent conference held by AITU Ayaz highlighted the need of circular economy:

Principles. (i) 6 - R's



(ii) departing from take - make - use - throw pattern to 6 R's.

- (iii) Resource utilisation and optimisation
 (iv) Sustainable development.

Relevance of Circular economy for India.

- (1) Minimise waste generation
- (2) Secondary raw material utilisation
 will lead to new business idea, innovation
 which will facilitate employment
generation and sustainability.
- (3) Optimum use of natural resources.
- (4) Element of "zero defect, zero effort"
 in manufacturing will complement our
 effort to combat climate change.
 Thus ~~at~~ circular economy needs
 adequate attention by academia,
 investor, entrepreneur and government. This
 could be done by awareness of the concept,
tax incentive and expert support (including
green procurement by gov).

5. Assess the performance of Pradhan Mantri Jan-Dhan Yojana in achieving its stated objective of financial inclusion. (150 words) 10

वित्तीय समावेशन के अपने निर्धारित उद्देश्य को प्राप्त करने में प्रधानमंत्री जन-धन योजना के प्रदर्शन का आकलन कीजिए।

PMJDY, also known as Digital India mission aimed at

(1) financial inclusion.

(2) digital literacy.

(3) diversification in financial services.

Along with Aadhar, and mobile, it was envisaged to be JAM trinity.

Performance of PMJDY:

(1) Improved digital literacy; through

sub mission such as PMGDISHA,

National digital literacy mission, etc.

Around 52.3 lakh have been trained under PMGDISHA.

(2) Financial inclusion: 80% of adult

are already linked with bank account. WB predicted India to be close to 80% bank account

(iii) financial services, have been made available such as overdraft facility, one time life insurance, Rupay credit card, etc. Also fintech companies have emerged. However the following issues remain

~~Gap~~ (i) gender gap, due to less smart phone with women, ~~only~~ gender gap is pegged at 18-20% regarding financial

inclusion

(2) Rural - urban gap; though reduced but remains concern

(3) Insurance and literary mission have not penetrated well in rural areas.

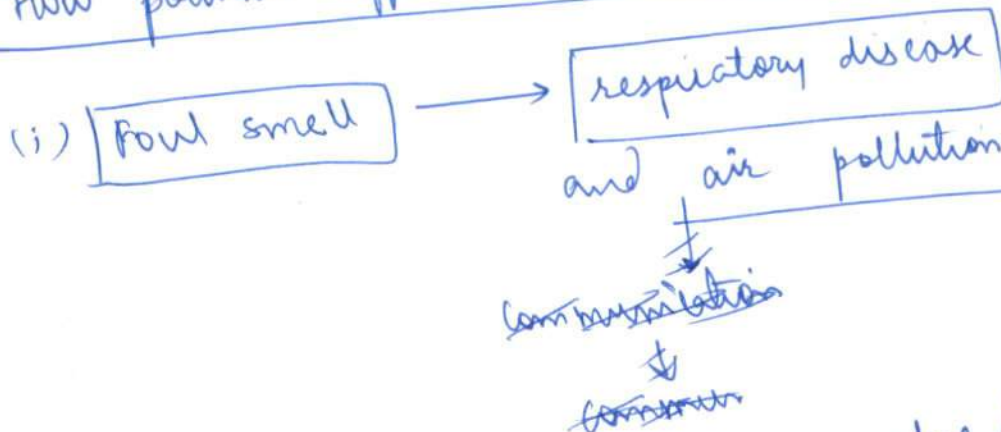
The need of hour is massive social campaign to bridge gender gap and digital literary achievement.

6. How does pollution in rivers impact the surrounding ecosystem? Explain why such pollution has not shown signs of improvement, despite various government initiatives. (150 words) 10

नदियों के प्रदूषण से आसपास का पारिस्थितिकी तंत्र कैसे प्रभावित होता है? समझाइए कि विभिन्न सरकारी पहलों के बावजूद इस प्रकार के प्रदूषण में सुधार के संकेत क्यों नहीं हैं।

River pollution is concern as highlighted by CPCB in its 2018 report, wherein it showed Maharashtra, Assam, Goa as the states with most polluted river in number.

How pollution affects surrounding ecosystem:



(ii) Ground water pollution occurs due to leakage & percolation causing jaundice, and hepatitis A

(iii) "Mixing" with rain water during flood, brings the water in contact with community

Impact on biodiversity:

- marine pollution
- fall in fish, destruction of wetland.

Shocking

why not showing results

(i) Industry not taking steps such as
sewage water treatment plant establish
ment

(ii) Lack of crackdown by CPCB on the
industry near to Ganga, due to
employment and economic concern

(iii) Govt efforts focused on Ganga and
Yamuna river basin system.

(iv) Namami Gange programme, have
limited reach.

(v) Destruction of virgin vegetation & wetland
have eroded its function to provide various
ecosystem services.

The need of hour, mobilising
people through Jan Shakti campaigns with
clear outcome of "water" as common resource,
and purified fish.

7. What is project MANAV launched by the Department of Biotechnology? Highlight the significance of this project. (150 words) 10

जैव प्रौद्योगिकी विभाग द्वारा आरंभ की गई मानव (MANAV) परियोजना क्या है? इस परियोजना के महत्व पर प्रकाश डालिए।

Dpt of biotechnology launched MANAV, to encourage the study of tissue located in various parts of body.

This project is aimed at diversifying the horizon to understand human being DNA, genome and promote tissue culture.

Significance.

(1) focus on biomedicine as subject.

(2) accelerate the research in tissue engineering and ~~manav~~ utilising this knowledge to manufacture artificial 3D tissues through additive printing.

technique.

(iii)

studying tissues helps in understand
the transpiration from skin; underst.
and human microbiome biota near it.

(iv) promote the research in dermatolo-
gist;

MANAV project is aimed at
putting India at front seat in
tissue science and exploit the potential
to address human concerns.

8. Highlighting the properties and applications of superconductors, discuss the constraints related to their practical use. (150 words) 10

अतिचालकों के गुणों और अनुप्रयोगों पर प्रकाश डालते हुए, इनके व्यावहारिक उपयोग से संबंधित बाधाओं की विवेचना कीजिए।

Superconductors are the material with extremely high conductivity. They are good conductors of electricity which have revolutionised the research in material science as domain.

Properties:

- (i) Ability to withstand high temperature (temp resistant).
- (ii) high strength
- (iii) Highly sensitive
- (iv) ~~no~~ No gap between band energy
- (v) unusual high magnetic strength

Application: (i) Space science such as in sensor, transducer to respond in short time regarding any change

(ii) Nano-material & Nano science

with nano size, alteration in property may give rise to superconductor property

(iii) Material science research; to discover new such material and study the properties.

~~(iv)~~

Constraints related to superconductor:

(i) Sophisticated instrument to study superconductor.

(ii) properties still under research domain.

(iii) lack of availability as natural resource, thus needs to be manufactured; which

again requires 'state of art' infra & technique. However, no mass scale production

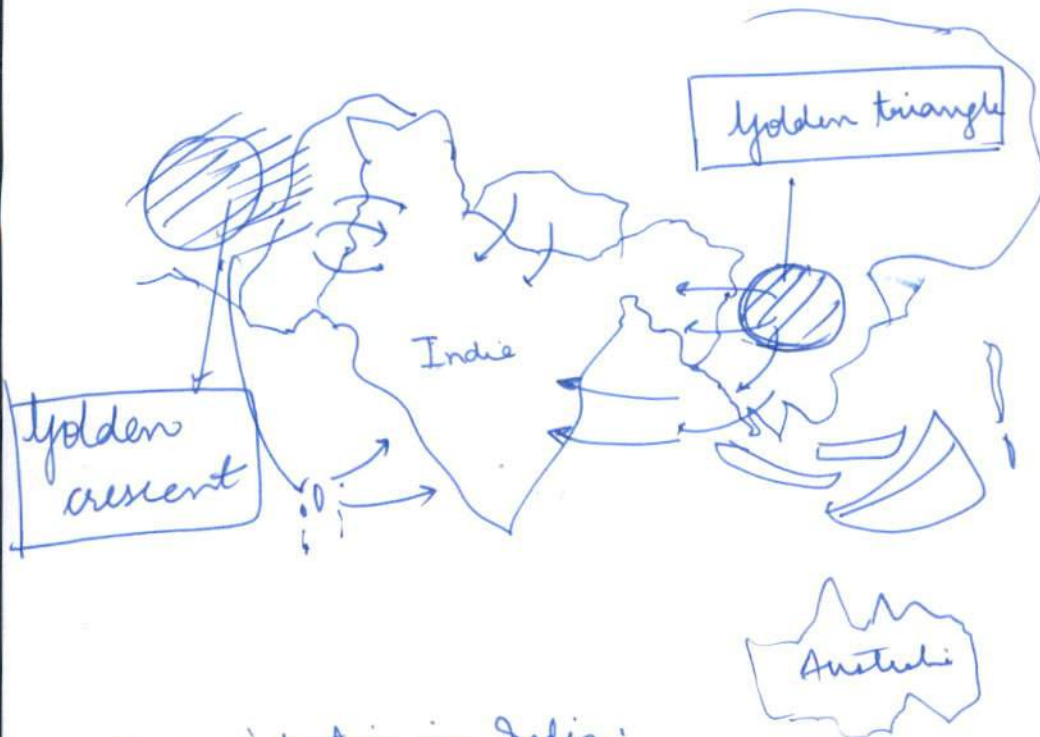
technique is being developed so far.

(iv) High cost deter the practical use

However, superconductor offer the potential to conduct research in lab and move beyond the semi-conductor oriented research

9. Discuss the reasons behind India becoming a major destination as well as a transit hub for drug trafficking in South Asia. How does this effect India's internal security? (150 words) 10

दक्षिण एशिया में भारत के मादक पदार्थों की तस्करी के प्रमुख गंतव्य स्थल के साथ-साथ पारगमन केंद्र बनने के कारणों पर चर्चा कीजिए। यह भारत की आंतरिक सुरक्षा को कैसे प्रभावित करता है?



Drug induction in India.

Drug trafficking is one of organised crime, where in trade in drugs take place through illegal means.

Reasons behind India as major destination

(i) Youth demand: peer pressure, depression, anxiety, are reasons for demand to satisfy themselves [though false satisfaction].

- (ii) Addiction - eg in Punjab - ^{ful of} drug
(iii) lack of awareness regarding harm of drug

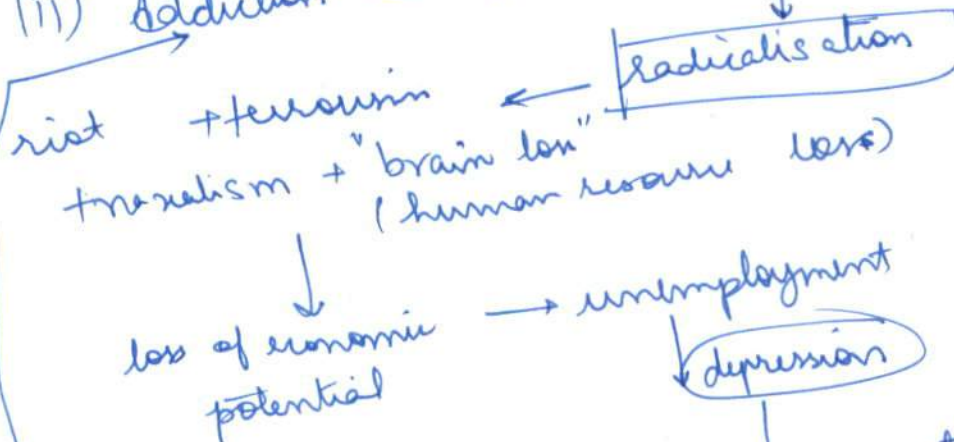
India as transit hub:

- (i) presence of two opium growing
region as shown in map: i.e. golden
crescent and golden triangle
(ii) used by narcole and terrorist to
finance themselves

India's internal security & drug
trafficking

- (i) money and terror financing

- (ii) Addiction → social disharmony



- (iii) Used by narcole to carry their activity
across the border: eg. NSCN(IM) through Myanmar.

10. The development of border areas is an important element in border management. In this context, discuss how the Border Area Development Programme (BADP) seeks to ameliorate the problems faced in border areas. (150 words) 10

सीमावर्ती क्षेत्रों का विकास वस्तुतः सीमा प्रबंधन का एक महत्वपूर्ण घटक है। इस संदर्भ में, चर्चा कीजिए कि सीमा क्षेत्र विकास कार्यक्रम (BADP), सीमावर्ती क्षेत्रों की समस्याओं में कैसे सुधार लाना चाहता है।

The element of border management are guarding, patrolling, regulation and border area development

Role of border development?

(i) to integrate border areas into nation development process; inclusiveness, ensure their value, vote and participatory development

(ii) to check they don't engage with hostile neighbour, thus maintain external security

(iii) ~~etc~~ ameliorate their sense of alienation.

Problems faced by border area:

— isolation, rugged terrain, mountain [e.g. North east]

- governance issues such as lack of motivation to work in extreme areas
- poor connectivity
- developmental deficit
 - less school, education & health
 - court at center of state
 - hostile neighbour, thus no connectivity
 - disproportionate focus on cities

BAPP seeks to address the insecurity in 17 border state through pumping funds, developing infrastructure, increasing connectivity, ensuring government schemes reaches to the corner, regular monitoring, building of school and health facility etc.

- efforts such as:
- (i) Morh-Zokhawah highway in Manipur as part of trilateral highway (I-M-T)
 - (ii) GSAT-29: to provide communication services
 - (iii) building of pool such as Dhola-Sadiya, etc.

11. Examine whether Fixed Term Employment will be able to achieve the objectives of ease of doing business, achieving labour welfare and job creation. (250 words) 15

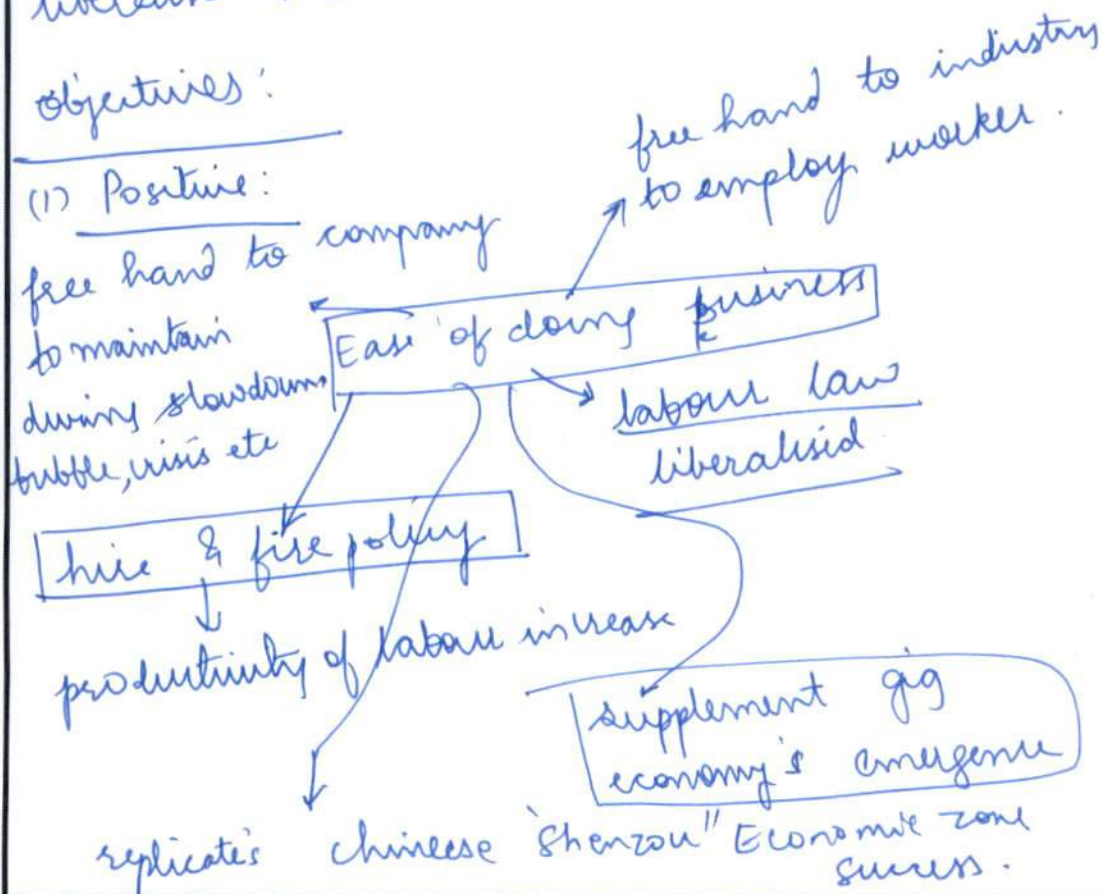
परीक्षण कीजिए कि क्या नियत अवधि का रोजगार, ईज ऑफ़ डूइंग बिज़नेस, श्रम कल्याण और रोजगार सृजन के उद्देश्यों को प्राप्त करने में सक्षम होगा।

Recently government have notified, fixed term employment to be applicable to all industries.

In FTE, company is allowed to terminate the worker without giving special notice. Thus it is meant to liberalise labour law.

Objectives:

(1) Positive:



How it threatens ease of doing business

- frequent strike, protest
- informalisation and contractualisation
- volatility in labour market, regarding demand and supply

Labour welfare → included under social security (not EPF)

→ company will allow all benefit such as statutory ones

→ FTE rule will increase job generation, thus address unemployment

How it is against labour welfare

- not under EPF/PP
- hire & fire policy → no security of tenure
- subjectivity to company
- informalisation, contractualisation

job creation :

- help company meet temporary needs.
- thus depending on demand, employment generation takes place.

PTE rule seems to give upper hand to company, and thus there is need to balance the rights by following SC directive:

- (1) PTE only during seasonal activity and dependent industry.
- (2) for a worker with 7 year working, should retain permanent status.

12. A growing livestock sector augurs well for the low income households to augment their income and escape poverty. Discuss. Further, suggest some strategies for ensuring sustainable livestock sector growth in India. (250 words) 15

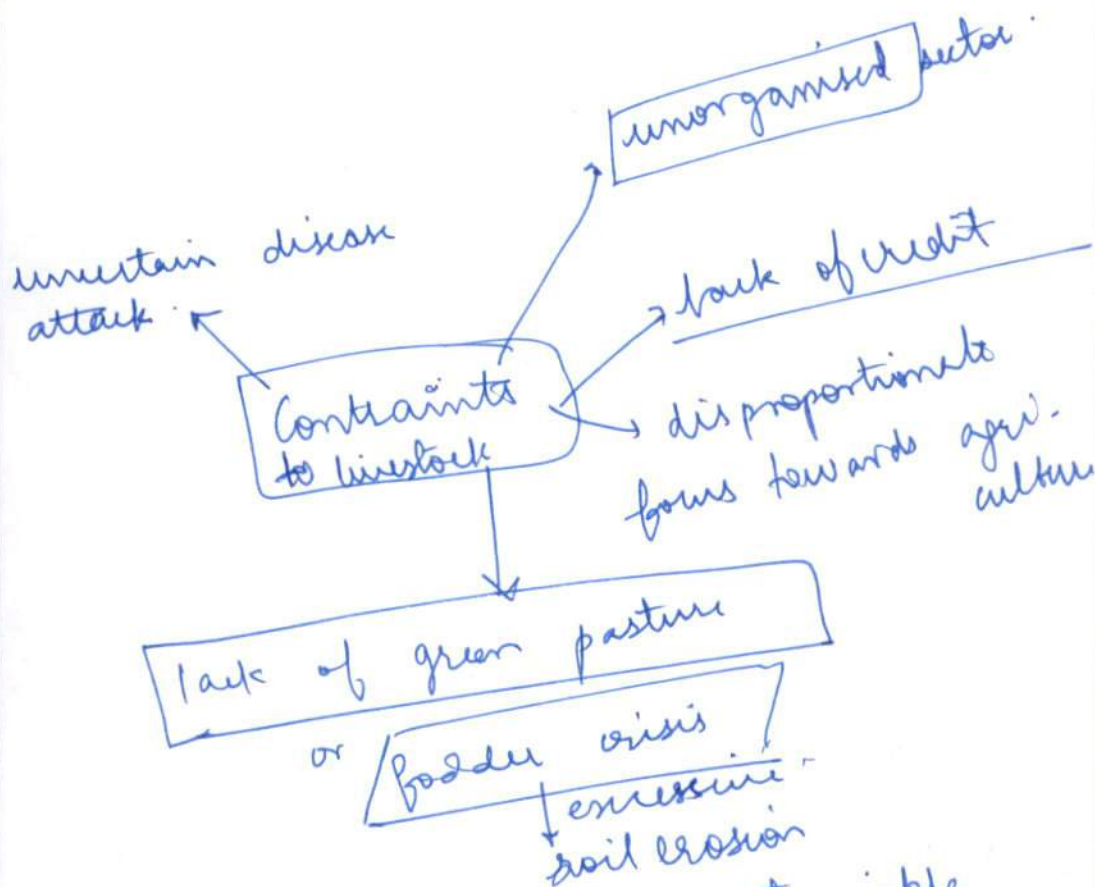
एक वृद्धिशील पशुधन क्षेत्रक निम्न आय वाले परिवारों के लिए अपनी आय में वृद्धि करने और गरीबी से बाहर निकलने हेतु शुभ संकेत है। चर्चा कीजिए। इसके अतिरिक्त, भारत में पशुधन क्षेत्रक का संधारणीय विकास सुनिश्चित करने हेतु कुछ रणनीतियों का सुझाव दीजिए।

Livestock sector includes
cattle rearing, dairying, meat, flesh
trade, hides, (skin), draught etc.
How it supplements low income
household:

- (i) Income security: , during drought,
or crop's destruction, livestock appears as
side business.
- (ii) food security: , through meat,
dairying, poultry, poor household
can satisfy their food demand.
- (iii) Nutrition security is ensured through
diet diversification such as milk, eggs,
meat etc.

(iv) cattle trade, hide, skin also helps to get short term money by selling.

(v) Braught ensures access to power, in absence of electricity and mechanised means.



Strategies for ensuring sustainable livestock sector growth:

(1) Science & technological intervention:

- Developing high productivity breeds.
- Increasing efficiency and productivity

(2) Credit access through dedicated fund, financial inclusion drive, insurance sector penetration etc.

(3) For fodder: declaring community area, sustainable grazing.

(4) Promoting awareness regarding schemes such as Integrated farming method, Dairy planning and entrepreneurship development scheme.

(5) educating farmers, ensuring organised and including under formal sector, promoting co-operative, contract farming etc. (including veterinary services)
To double farmer income, diversification on farms is also required, where the livestock has immense potential to contribute.

13. Examine whether the time has come for India to usher in full liberalisation of the Capital Account. (250 words) 15

परीक्षण कीजिए कि क्या भारत के लिए पूंजी खाते के पूर्ण उदारीकरण की शुरुआत करने का समय आ गया है।

Capital account convertibility
means the ease with which the
investment flow occur across the
country.

Presently India has partial
capital account convertibility in form of

(i) 20-1. capping that single FPI can buy

companies share.

(ii) restriction of external commercial borrowing

(iii) no floating of sovereign bond: this

(iv) limitation on flight capital outflow

Jarapore committee in 1997,
have studied the issue and thus
recommended, to do ~~capex~~ on basis of
following parameter.

- (1) low fiscal deficit: presently 3.4%.
- (2) low NPA: presently at 15.6% for PSB, which is certainly high.
- (3) low external debt: ^{presently} around \$103bn. / 3.8% of GDP.
- (4) low CAD: presently around 3.4% of GDP.
- (5) market stability:

However the issues are:
(Argument against)

- (1) Unstable market due to.
 - increasing oil price
 - uncertain US foreign policy
 - recent slowdown in economy and
 - FPIs removing their fund.
 - currency crisis, trade war, protectionism
- (2) high NPAs of 15.6%.
- (3) crowding out, financial repression etc.

Argument for capital account liberalisation

- promote competitiveness at global scale
- increasing inflow of FDI, since India's ease of doing business has improved.
- diversify the sources of foreign funding.

Argument againsts

- instability / indolence
- India has chosen stability over high growth in past 2-decade. The need of hour is gradual liberalisation and ensuring competitiveness in economy

14. Highlighting the challenges to agriculture extension in India, discuss how ICT can help in addressing them. (250 words) 15

भारत में कृषि विस्तार के समक्ष चुनौतियों पर प्रकाश डालते हुए, चर्चा कीजिए कि इन्हें दूर करने में ICT से कैसे सहायता मिल सकती है।

Technological intervention in the past has ensured the green revolution, white revolution, yellow etc. Thus science & technology is sine qua non for addressing the concerns

Challenges to agri-extension

- (1) Poor awareness, literacy, poverty etc
- (2) focus on male farmer, rather than all.
- (3) quality of service is doubtful, last to last year MP failed to detect the rainfall pattern.
- (4) "One size fits all approach" has negative repercussions.

(5) Lack of information, lack of forward linkage deters the farmer to get the benefit.

(6) Poor digital literacy, poor intervention such as ICT entrepreneurs rarely reach to farmer.

However the government has initiated ARYA, Krishannati yojana, etc as ~~means~~ Krishi vikas Abhiyan, e-Kisan biotech as means to expand the agriculture.

How ICT can help :

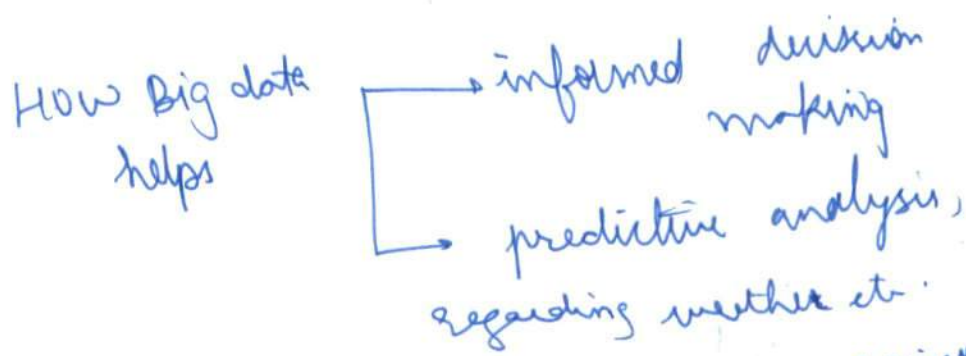
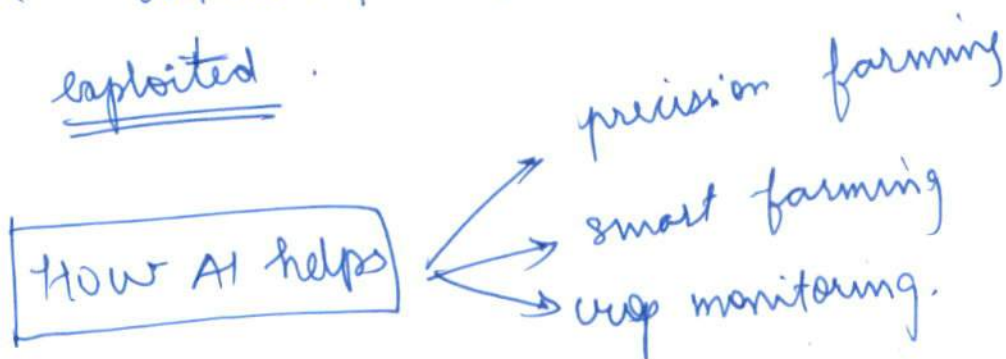
The success of e-choupal can be replicated to ensure good returns.

(i) Information dissemination;

(ii) linking producers with directly to consumers,

(iii) can get better return for products.

- (v) financial inclusion, will be achieved -
- (iv) value addition of will be promoted.
- (vi) commodity & spot market can be exploited.



Thus ICT has potential to revive the agri sector, address distress and one of means of intervention to double the farmer's income

15. Now that it has been two years since introduction of GST in India, do you think the system is on the path to achieve its intended objectives? Support your answer with relevant facts. (250 words) 15

अब जबकि भारत में GST को लागू हुए दो वर्ष हो गए हैं, क्या आप मानते हैं कि यह प्रणाली अपने अपेक्षित उद्देश्यों को प्राप्त करने के पथ पर अग्रसर है? प्रासंगिक तथ्यों से अपने उत्तर की पुष्टि कीजिए।

GST was introduced as indirect destination based tax on 1st July 2017.

Aim of GST:

- "tax rationalisation"
- improve the GDP
- reduce the cascading effect
- ~~tax~~ one - nation - one tax principle.

Objectives achieved:

(1) Tax rationalisation: since only

4 rates are there 5, 12, 18, & 28.1...

(2) Reduced the taxes: since earlier

service tax was around 14.5-1.4
excise around 12%... now the most of

products are under 18% slab.

(iii) Increased the revenue by 9-11%.

(iv) increased the tax payer from 6.5 lakh to 1.2 crore. Thus increment of 85%.

(v) Reduced tax evasion due to GSTN, and e-services.

(vi) consumer goods (basic), mostly attract either 0% or 5%.

(vii) Data accountability is ensured, better forecasting, predicting etc.

objectives not achieved:

(i) 4 tax rates: undermines one

nation one tax principle.

(ii) products left out such as alcohol, tobacco, power, ATF, etc

(iii) fiscal federalism & cooperation

Federalism: since state revenue have fallen, and autonomy taken away, thus state cannot expand their expenditure and state deficit have risen to 24.1. (2018) from 18.1. (2015).

(iv) violation of separation of power,

since the GST council is executive body and it dictates the order.

(v) Reduced GDP growth: recently

report released ~~are~~ said Q1 growth rate (2019) was just 5%, since year low.

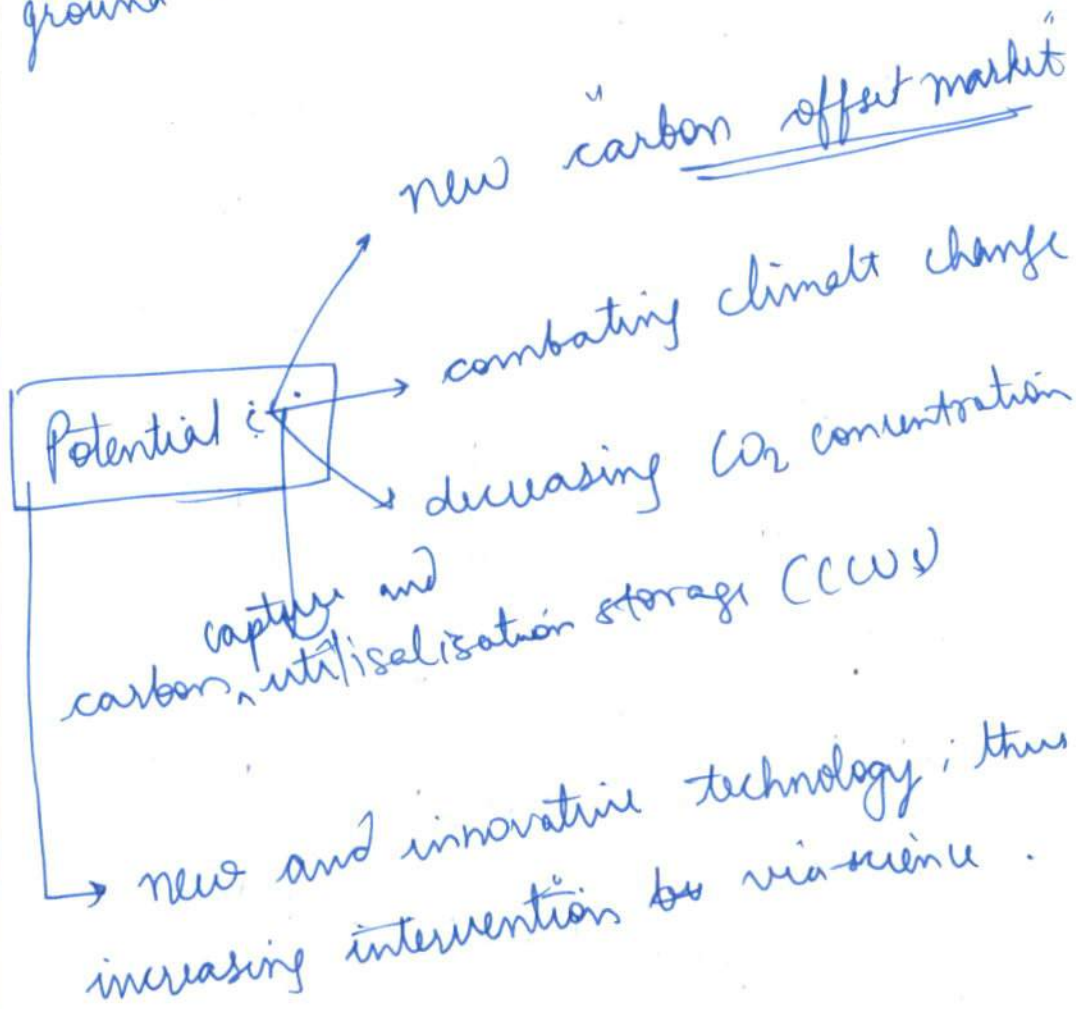
GST, introduced to address the taxation issues, have partially attained success in ~~provision~~ steps such as

appellate tribunal, Anti-profiteering authority have worked in public favour to address their concerns.

16. Write a brief note on Carbon Capture and Storage. Mention its potential benefits and discuss the challenges that need to be addressed for its wide-scale deployment in India. (250 words) 15

कार्बन अभिग्रहण और भण्डारण पर संक्षिप्त टिप्पणी लिखिए। इसके संभावित लाभों का उल्लेख कीजिए तथा भारत में इसके व्यापक पैमाने पर परिनियोजन में आने वाली उन चुनौतियों की विवेचना कीजिए जिन्हें दूर किए जाने की आवश्यकता है।

carbon capture and storage
means to capture ~~so~~ carbon from
the ambience and store it under-
ground.



Benefits: of Carbon capture & storage:

- ~~revers~~ undoing the climate tipping, thus ensuring climate justice.
- utilise ^{stored} carbon for manufacturing of industry: eg in oil industry, has been used for extraction.
- implemented the INDC target to increase the capacity to 2.5bn tonnes of carbon storage.

Challenges:

- capital intensive technology
- lack of research, awareness and promotion.
- so far no economically viable project have been developed
- "storing underground" doesn't yield anything and is simple waste of

effort; rather carbon utilisation is the
right focused approach
→ earthquake prone zone & hydraulic pressure

→ Misplaced focus rather than

listen might lead to again release

The immiability of carbon capture

and storage and long term gestation

period for fruitful research demands
the need to combat climate change

through biochar mining, afforestation
and using renewable, but simultaneously
not losing sight from such technological
development.

17. Highlight the gender specific challenges faced during disaster management. In this regard, discuss how the disaster management cycle can be made more gender sensitive. (250 words) 15

आपदा प्रबंधन के दौरान सामने आने वाली लैंगिक विशिष्ट चुनौतियों पर प्रकाश डालिए। इस संबंध में, चर्चा कीजिए कि किस प्रकार आपदा प्रबंधन चक्र को लैंगिक रूप से और अधिक संवेदनशील बनाया जा सकता है।

Women and children being
vulnerable section, suffer disproportionately during disaster.

Gender specific challenges:

(1) women being more emotional; thus emotional intelligent needs to be embedded and practised.

(2) Lesser women can swim during floods.

(3) Good touch and bad touch is indistinguishable during such events, thus women are hesitant to get support from male NDRF dominated force.

(4) clothes worn by women, deter them to take help of force; such as sarees are uncomfortable during helicopter lifting.

(5) "Hygiene" menstruation ~~esp~~ among women demands better sanitation facility; while the demand so far is food and medical aid based. Also toilet needs to demarcated to ensure women privacy.

(6) weaker immune system due to anaemia, undernourishment demands medical aid

strategy to ensure gender sensitive disaster management.

(1) availability of female helper and female NDRF force. Thus women needs to be inducted

(2) availability of sanitary napkin during disaster.

(3) women friendly clothes to improve the efficiency of operation

(4) values of ethics, gender sensitisation, emotional intelligence needs to be embedded during training of force.

(5) women friendly equipments of rescue need to be made available.

(6) women themselves must learn to swim, through community programmes. gender sensitive disaster management requires empathy value to

understand the situation and act accordingly. It has potential to increase the efficiency of such operation.

Finally, SHGs such as Kudumbashree can be taken as participant for resettlement and rehabilitation post disaster.

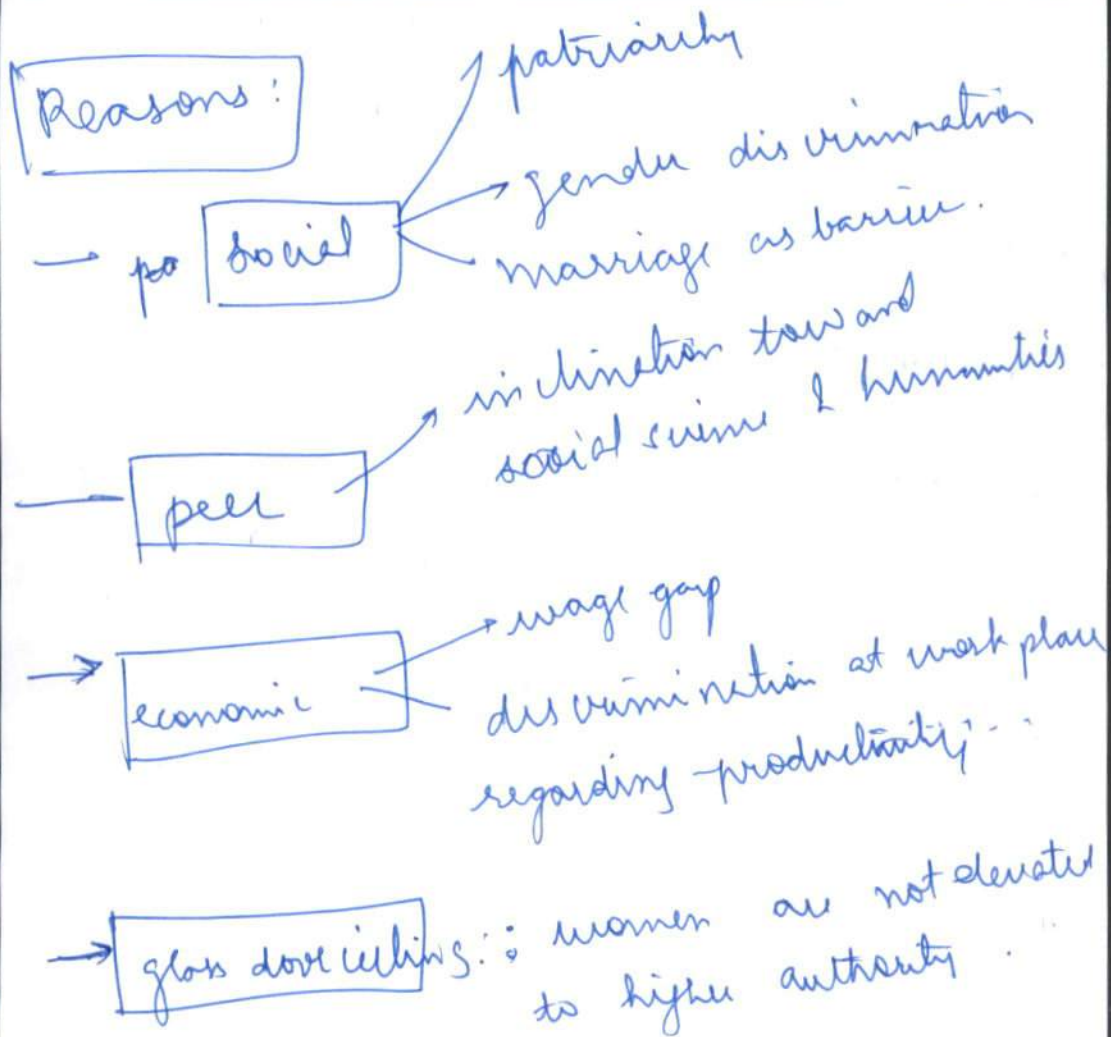
18. Though there are some notable individual achievements, the overall participation of women in scientific research has been abysmally low. Examine. What steps have been taken by the government in this regard? (250 words) 15

भले ही, कुछ उल्लेखनीय व्यक्तिगत उपलब्धियाँ हों, लेकिन वैज्ञानिक अनुसंधान में महिलाओं की समग्र भागीदारी अत्यंत निम्नस्तरीय रही है। परीक्षण कीजिए। इस संबंध में सरकार द्वारा क्या कदम उठाए गए हैं?

The notable women achievement includes the ISRO's scientist who conducted mangalyaan, Kalpana Chawla etc.
Facts declaring women being abysmally

low:

- (i) 15-16% women interested in science,
- (ii) 10-12% women faculty at IITs, ISRO, IISc.
- (iii) only 3% children interested to pursue science
- (iv) In past 61 years, only 20 awards given to women [Shanti Swarup Bhatnagar award].



Steps taken by govt.

- (1) Relaxing age for JRF/SRF by 5 years.
- (2) Women scientist scheme; to attract to at position of scientist.
- (3) Ramalingaswamy women entry fellowship to pursue research in biotechnology.

(4) Vigyan Kendra: to ensure women (young girl) interaction with women scientist (9, 10, 11, 12 - standard)

(5) Reservation of 3% in IITs.

(6) KIRAN scheme

→ CURIE scheme for women and to break barrier of marriage-residence

etc.

(7) Indo-US - joint fellowship for women in STEMM.

above efforts by government, show the determination for women-led science & research and harnessing the untapped potential.

19. Discuss the significance of the recent amendments made in the NIA act and the UAPA Act for countering terrorism. (250 words) 15

आतंकवाद का मुकाबला करने हेतु NIA अधिनियम और UAPA अधिनियम में हाल ही में किए गए संशोधनों के महत्व की विवेचना कीजिए।

Recent Amendment in NIA and UAPA were made to give more teeth to NIA & for conducting investigation.

Amendment under NIA:

- to arrest for possessing literature.
- 6 month arrest without any warrant
- address collaboration with CBI, and give power to regarding cross border terrorism.

Amendment under UAPA:

- definition of unlawful act widened
- NIA given power to confiscate, seize property
- undertake action regard terror funding

significance for countering terrorism

- addresses power for cross border terrorism
- wherein any intelligence agency
- to ~~take~~ consider "finance"; as part of terrorism
- can undertake tapping of phone, under sect 69 A of IT Act.
-

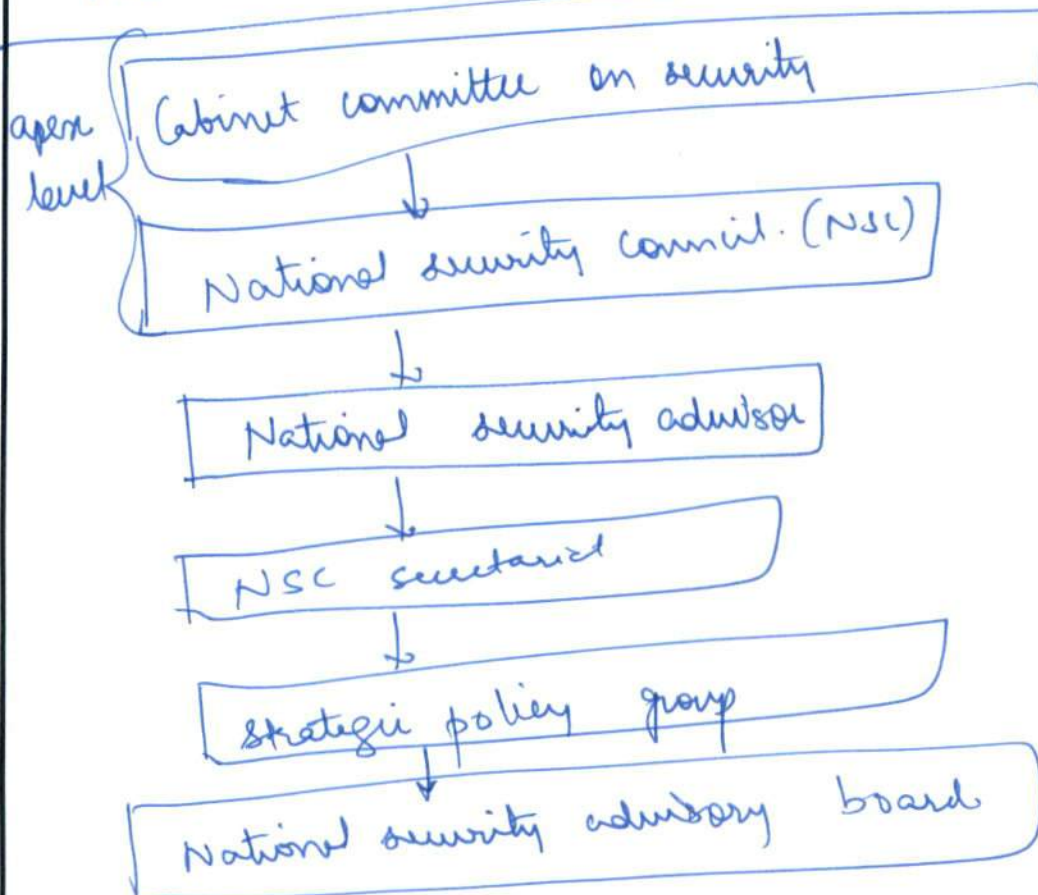
20. The national security architecture needs to be robust enough to deal with present and evolving threats. Elaborating on the statement, discuss the recent steps taken for modernisation of the national security architecture.

(250 words) 15

वर्तमान और भावी (उभरते) खतरों से निपटने के लिए राष्ट्रीय सुरक्षा संरचना को पर्याप्त सुदृढ़ करने की आवश्यकता है। इस कथन का सविस्तार वर्णन करते हुए, राष्ट्रीय सुरक्षा संरचना के आधुनिकीकरण हेतु हाल ही में उठाए गए कदमों की विवेचना कीजिए।

National security architecture refers to institution responsible for enforcing and insuring both internal and national security.

India's National security architecture



National security architecture, to be robust must have elements of

- ① apex level civilian leaders, advised by experts to take action
- ② must act on basis of actionable intelligence.
- ③ include intelligence officer, defence officer, PM, HM
- ④ must have common members, in the different institution. eg: in Cabinet Committee on security & NSC.
- ⑤ take decision, which is final and final.

to ~~take~~ tackle evolving threats:

- must ensure gradual modernisation
- address cyber security threat and space threats (space warfare).
- coherence among intelligence agency
- develop cyber virtual information system.

→ privacy, confidentiality, assessment based and regular monitoring of activities -

Recent steps taken:

- (1) Defense procurement committee, to ^{advise} ~~take~~ defense procurement
 - (2) Chief of defense staff appointment, to ensure coherence among 3 wings
 - (3) 3 sub-National security adviser for decentralised approach.
 - (4) For intelligence: ~~establishing~~ NATGRID, ~~Multi agency center~~, National Counter Terrorism Center.
- To conclude; modernisation is necessary to be in sync with global trends & monitor the two hostile neighbours.