

VISION IAS

www.visionias.in

GENERAL STUDIES (TEST CODE : 1248)

Name of Candidate	RAGHAV JAIN		
Medium Eng./Hindi	ENGLISH	Registration Number	262678
Center		Date	

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
11	15	
12	15	
13	15	
14	15	
15	15	
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।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi- 110009

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 संबंधित मुद्दों को रेखांकित कीजिए।

In the backdrop of increasing Non-Performing Assets (NPAs) in Indian economy, the role of credit rating agencies (CRAs) has increased manifold times.

SIGNIFICANCE of CRAs :

- 1) They help in providing a credit score which acts as a benchmark while lending practices by the banks.
- 2) Good credit score from loanee viewpoint, makes it easy to have access to cheaper credit.
- 3) It will bring quality in credit giving and hence reduction in NPAs.
- 4) It helps to establish a better credit market and enhances foreign

investment.

Issues in the working of CRAs:

- No proper detailed system of collection of data on credibility of various businesses.
- Nexus between corporates and CRAs which make latter provide 'window dressing' ratings to the former.
- Lack of skilled operators
- ~~Less~~ ~~CRAs~~ Less number of CRAs in the economy
- Deviation from international standards.

It is important for CRAs like CIBIL to enhance their operations on quantity as well as quality basis to improve further on the overall Indian economy credit rating from 'BBB' towards 'AAA' category.

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।

The concept of SEZs was introduced to boost the level of exports in the economy but till now limited success have been achieved.

Issues in SEZs:

- low land utilization - As per CAG reports, only 53% of overall SEZ land is under operation.
- Taxes - Reintroduction of Minimum Alternate tax has reduced their competency.
- Domestic market - SEZs are treaty as offshore companies and hence their products are duty imposed and hence incompetent in domestic market.
- Lack of infrastructure and investment

- Low quality of skilled labour which prevents the introduction of latest technology in SEZs

Steps Required for revival of SEZs :

- Turning SEZs into Employment and Economic Enclaves - motive should be to generate employment rather than just exports.
- Increase in Investment - to promote research and development and latest technology.
- Land utilization - disposing current land related cases and bringing them under use
- Removal of taxes - to make SEZs good competitive both in foreign as well as domestic market.
- Focus on Productive sectors and services with spillover effects.

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 चुनौतियाँ भी उतनी ही हैं। चर्चा कीजिए।

In order to boost employment and address the various economic issues, the current government is pushing the start-up ecosystem to a great extent.

Opportunities for startups :

- India has a great scope for research and development and also the introduction of latest technology to address various government issues.
- Huge Market demand for latest goods and services.
- Support from government policies with easy financing.
- Huge employment generation ~~and~~ along with multiplier effect in the economy.

Challenges :

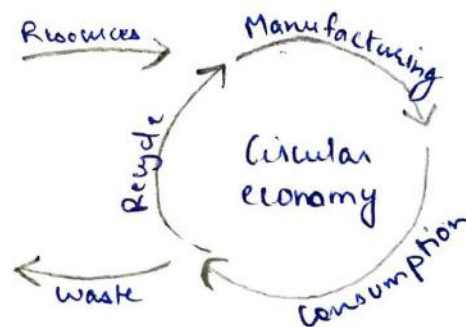
- low ~~go~~ public expenditure on research and development (less than one percent of the GDP)
- Lack of adequate infrastructure and technologies.
- low level of vocational education
- Poor quality of research institutions.
- low value culture of innovation and risk taking in the country
- Very bleak chances of success at the commercial level.

Government initiatives like startup India, smart hackathon etc are a good move but in order to get better results, it is important to improve the overall research culture and increase in the number of Atal Tinkering Labs.

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। वें कौन-से सिद्धांत हैं जिन पर यह आधारित है? भारत के लिए इसकी प्रासंगिकता स्पष्ट कीजिए।

In the backdrop of massive waste generation and its poor disposal system, the concept of 'circular economy' has emerged into picture.



Principles

- Circular economy is based on the principle of recycling of materials to the extent possible.
- It aims for sustainability of resources.
- Environmental protection is ensured through proper disposal of wastage.
- Aim is to ensure maximum efficiency.

and optimum utilisation of resources.

Relevance for India

- India generates a huge amount of waste which can be recycled to save our precious resources.
- Example - if we segregate plastic and reuse it, we not only save money but also protect environment.
- Huge municipal waste can be converted into energy through waste to energy plants.
- Circular economy can decrease the overall cost of manufacturing, save our resources and enhance better distribution to reduce regional imbalances.

SDG 12 (responsible production and consumption) can only be achieved if economic experts involve 'circular economy' principles while formulating policies.

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।

In order to facilitate financial inclusion and to improve governance, Pradhan Mantri Jan Dhan Yojana was introduced.

SUCCESS of Yojana :

- There has been a huge increase in the number of total bank accounts which means formalization of economy
- Reduction in zero balance accounts by more than 80% (Economic survey 2018)
- As per Global Findex report, more than 80% of adult males have proper functioning bank accounts
- 55% of global new accounts had its presence in India in 2018.
- Yojana has facilitated Direct Benefit Transfer and reduced leakages

- It has also led to better governance through JAM trinity

SOME LIMITATIONS

- Mere opening of bank accounts will not work till the time citizens are digitally literate in financial aspects.
- Low presence of banks in remote areas
- low quality of banking infrastructure in rural areas.
- Increase in banking frauds (cyberattacks)
- Gender gap — still according to studies, less than 2/3rd of the total women have bank accounts

In order to leverage the actual benefits of financial inclusion, government should focus on 'Indian Post Payments Bank' that have huge coverage and potential to reach to the remotest areas of the country.

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? समझाएं कि विभिन्न सरकारी पहलों के बावजूद इस प्रकार के प्रदूषण में सुधार के संकेत क्यों नहीं हैं।

In the backdrop of a worse environment,
Performance rank of 177 out of 180,
India certainly needs to focus on
pollution abatement activities especially
water pollution.

Effects of River Pollution

- Impact on biodiversity - river pollution has an adverse impact on biodiversity which impacts the movement and food cycle of marine animals.
- Impact on surrounding lands - it also deteriorates the quality of soil in nearby areas and impacting agriculture adversely.
- Impact on human health - people who

use river water face health issues
directly or indirectly through biomagnification

Reasons for bleak improvement :

- low sewage treatment plants along the rivers
- Disposal of hazardous effluents by the industries without any treatment.
- Poor government checks on the operations of polluting industries.
- Toilets not connected to sewages and fecal sludge directly goes to rivers.
- Agricultural run-offs

Only 28% of toilets in Uttar Pradesh are connected to sewage system and rest is thrown into the rivers as such.

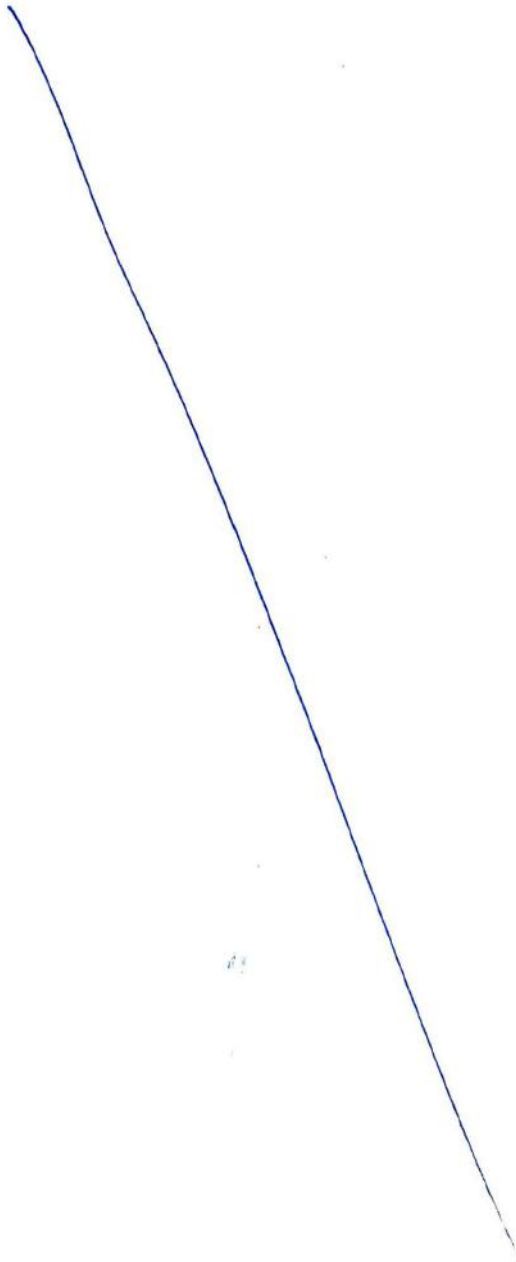
This has to be avoided through establishment of treatment plants and heavy fines for polluters.

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।

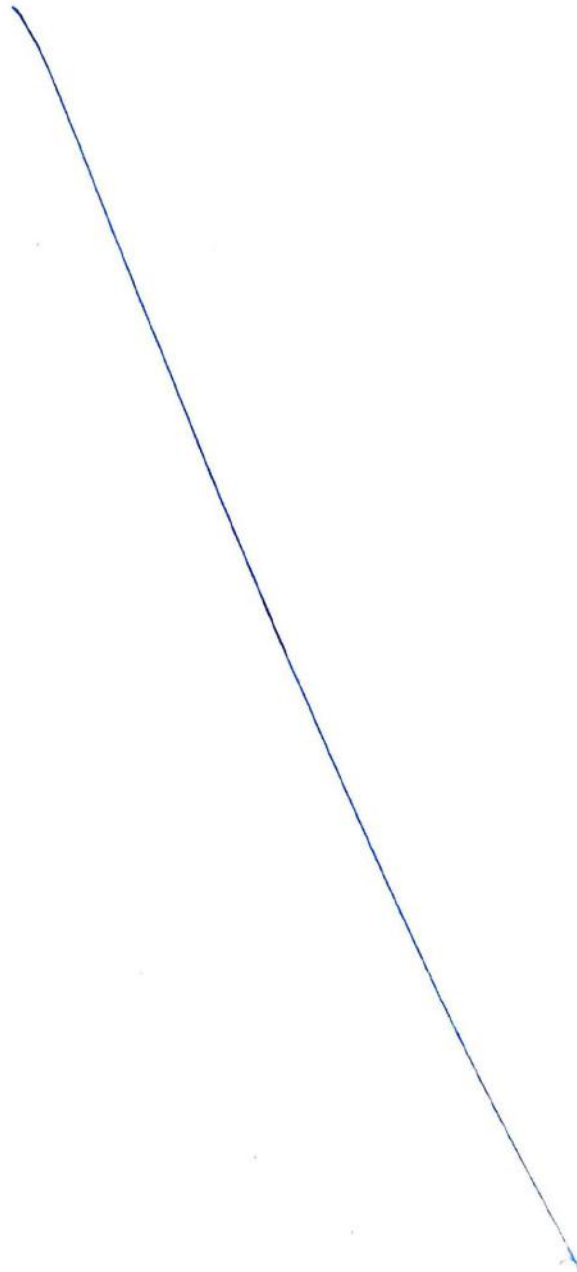
Department of Biotechnology has launched a project 'MANAV' to gain insights into humane genome to get the following benefits:

- i) better disease prevention
- ii) cure diseases like cancer.
- iii) precise drug deliveries.
- iv) understanding of humane genome
- v) Data analytics and policy formulation



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 में संबंधित बाधाओं की विवेचना कीजिए।



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 स्थान के साथ-साथ पारगमन केंद्र बनने के कारणों पर चर्चा कीजिए। यह भारत की आंतरिक सुरक्षा को कैसे प्रभावित करता है?

Major Reasons behind India as a destination and a transit-hub for drug-trafficking :

- i) Porous borders - which facilitate illegal ~~per~~ infiltration of people and drug dealers.
- ii) Close proximity to golden triangle (Myanmar, Laos, Thailand) and golden crescent (Pakistan, Afghanistan, Iran)
- iii) North-east insurgency - which hampers governance and favours such organised crime.
- iv) Local demand for source of income of extremists or other organised criminals.

Affect on Internal security

- Such drug-trafficking creates problems in governance.
- Tool to radicalize youth and engage them in extremists activities
- Cross border infiltration can lead to terrorists entering Indian soil.
- Can be related to other organized crime like human trafficking or illegal supply of arms.
- Can hamper stability and favours insurgency further more.

Organised Crime should be curtailed so as to ensure terrorists financing. Institutions like 'Financial Intelligence Unit' have to play a greater role in this.

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 major problem India is having with all its neighbouring countries is low level of border management in the form of no demarkation and infrastructure to check cross border movements.

Problems:

- Demarkation of borders
- Low infrastructural development
- Infiltration
- Organised crime
- Improper use of technology
- Poor checking on borders
- Poor road development
- Bureaucratic hurdles

Borden Area Development Program to seek solutions :

- Focus on road development so as to enhance easy supply or transport of combat and non-combat materials.
- Reduced bureaucratic hurdles due to automatic clearances (100 km in LAC requires no forest clearances)
- Financial autonomy to spend money as per the requirement
- Use of technology like Comprehensive Integrated Border Management System (CIBMS) and BOLD-AIT along with smart fences.
- Integrated Check Posts to keep a look on cross border movements.

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।

In the process of bringing ease in labour reforms and enhance employment, government recently came up with amendments in fixed term employment.

Fixed Term Employment and Ease of Doing Business :

- It allows the employers to hire workers for a specific period and ensures flexibility in human resource practices.
- Quality of workforce can be maintained through firing of incompetent workers.
- Doesn't involve too many social welfare laws for the workers and decrease in red-tapism.

- It ensures low cost as employers don't have to pay expenses like Provident Fund contribution, thus increasing cost competitiveness.

Job Creation :

- With the rise in culture of Gig economy, fixed term employment can surely increase job creation.
- Employees have an option to change their jobs frequently as no long term bonds are signed (Flexibility)
- It also gives leverage to employers to change the scale of workforce without facing the disadvantaged costs related to permanent jobs and ~~hence~~ hence are more able to generate employment.

Labour Welfare

- Labour welfare exists for only those who are keen to diversify their profiles
- Factory workers who want security of tenure will be left vulnerable.
- There is no guarantee of recruitment once the fixed term is over.
- There might be chances of poor working conditions (as against article 42 of Constitution).

In order to enhance genuine benefits of this law, government should keep a check over maintenance of worker's rights and ensuring that they have some security of work in one establishment or the other, through generation of large employments.

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।

In the backdrop of agricultural distress, it is now important for farming community to look for alternate options and move towards an Integrated Agricultural Practices culture.

Reasons to focus on livestock :

- Indian agriculture is rainfall dependent and with increase in Climate Change related ~~activity~~ disasters, it is important to have livestock for security of income.
- High level of livestock supply erodes the problem of raw material.
- It can help farmers to get out of their debt trap (escape poverty)

- Diversifying activities can reduce the overall risk factor.
- It can generate extra employment eliminating the issue of disguised employment in agriculture.
- It can surely augment income as the growth of livestock sector is higher than agricultural growth.

SOME Related Facts

- According to last year's economic survey, the share of livestock has increased from 4% (2005) to 13% (2015) in total agricultural income.
- Only 15% of dairy products are processed in India which gives a great scope to generate employment through livestock related processing units.

STRATEGIES :

- To ensure sustainable livestock,

it is important to make farmers aware of technical aspects of the industry through Krishi Vigyan Kendras.

- Formulating proper policy on the basis of market demand and supply.
- Use of technology (VSATs) or radios to increase livestock knowledge.
- Role of NGOs like 'Sanjeevani' to ~~make~~ make farmers aware and promote such practices.
- Focus on indigenous species

Government initiatives like 'Rashtriya Gokul Mission' ~~with~~ can bring great success if knowledge is penetrated especially in rainfed areas, where the scope of livestock is even more.

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।

In order to become a global economic giant, the debate has begun whether full liberalisation of Capital Account should be done or not.

- Liberalisation of Capital Account means putting no restrictions in the exchange of local and foreign currencies for capital investment.
- Tarapore Committee, much earlier, recommended for capital account liberalisation for various economic gains.

CONDITIONS required for capital account liberalisation :

- i) High foreign exchange reserves
- ii) low level of inflation.

- iii) low level of non-performing assets
- iv) Strong Capital Market.

Benefits of liberalisation :

- It can increase the flow of foreign exchange into the country.
- Ensures ease of doing business.
- Option for domestic investors to diversify their portfolios, by investing in foreign markets.
- Makes India appear as a global economic giant (geoeconomic advantage)
- Ensures better confidence amongst foreign investors.

Disadvantages of liberalisation

- It can bring volatility in capital market.

- It can result in excessive capital outflows.
- Variability in forex reserves ~~and~~
- Low stability in inflation rates.
- Concerns over economic sovereignty also

India is still facing the problem of NPA's and government major objective is to contain inflation to protect poor.

Till the time internal economy develops, India should not go for capital account liberalisation totally especially considering the fact that many sectors ^{already} have 100% FDI Policy (Pharmaceuticals, DTH etc).

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।

In the backdrop of adverse climatic changes, it is now important for Indian agriculture to be more data and knowledge based as a part of mitigation strategies.

Challenges to agricultural extension :

- low penetration of extension services in far away remote areas.
- Lack of awareness on the part of farmers ~~to~~ about such services.
- low government initiatives in this regard
- Lack of use of civil society or NGOs to provide extension services.

- low level of investment and low usage of technology to provide adequate information.
- Poor data collection and forecasting systems.

Use of ICT

- Information and Communication Technology has the potential to reach remote areas through Village Resource Centres (VRCs) where actual experts can't reach.
- It can facilitate the spread of best available information onsight without any need for physical travel.
- ICT along with technologies like Artificial Intelligence and Big Data

Analytics can improve forecasting.

- ICT can be used by government through various NGOs (Vasudha Foundation) to reach far fledged areas.

SUCCESS STORY - Microsoft came up with an artificial intelligence application which guided farmers on seed sowing, chemical nutrients, timing of sow etc. It was used in Andhra Pradesh and Karnataka and resulted in 20% - 30% increase in yields.

Extension services are a key to agricultural success as data based policy and farm practices can only lead to sustainable agriculture.

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 with the objective of a single tax ^{structure} in the whole country and to bring 'ease in doing' business

SUCCESS OF GST :

- Formalization of economy - more than 48 lakh enterprises registered under GST during the first year only
- Increase in indirect taxes - After its introduction, there was an increase of 12% indirect tax revenue collection.
- Direct Tax collection - Due to

formalization, direct tax to GDP ratio was 5.98% which is highest in the last one decade.

- Removed cascading effect of taxes
- Ease in doing business through 'Composition scheme'. ~~and~~

Limitations

- It is believed that GST has led to decline in GDP growth rate which according to latest estimates has gone to around five percent.
- Delays in input tax credits - hampering working capital flows.
- Multiple tax slabs - 5%, 12%, 18% and 28%.
- Not under GST - alcohol, electricity

and petroleum which accounts for approximately one-third of the total indirect taxes.

It can't be denied that GST has made the concept of 'single uniform market' a reality and also multiple rates are due to ground realities to facilitate poor.

Future actions should focus on bringing electricity and petroleum under GST so as to bring transparency in these areas also.

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।

With the increase in green house gases in the atmosphere and worldwide efforts to reduce their negative effects, the concept of carbon capture and storage has been introduced.

- Carbon Capture and Storage (CCS) is a technique to catch carbon components in the atmosphere and to bury them under the earth for indefinite period.
- CCS is done through the use of various minerals to make carbon compounds that can be stored afterwards.
- Other techniques include storing

Carbon in deep wells or within
rocks and soil.

Benefits of CCS :

- It can tremendously reduced the carbon content in the atmosphere and hence GHGs.
- It is sustainable in nature as it can store carbon for indefinite period.
- It ~~can~~ ~~be~~ doesn't lead to utilization of productive resources in the process.

Challenges

- : Such techniques have not been deployed at a large scale.
- The success percentage is still not guaranteed.
- new research and development on CCS.

- Can have multiplier negative effect if done wrong. ~~the~~

There is a further extension of CCS in the form of 'Carbon Capture and Storage Utilization', which involves the use of carbon for further productive activities e.g. drilling oil out of deep interiors.

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।

During any disaster, women community is always more vulnerable to men community and hence disaster policies should consider this aspect also while formulation.

Gender Specific Challenges

- low physical strength amongst women to rescue themselves from tough situations (trapped in building).
- Dignity issues amongst women that can be compromised when the disaster comes.
- low financial independence which can create issues for women if displaced ~~of~~ due to disasters.

- For men, it can be working in dangerous factories (mining) against which they are more vulnerable

DISASTER CYCLE AND GENDER SENSITIVE

- Pre-disaster - government should make arrangements and regular check ~~for~~ on disaster proof housing where women are usually present during disasters.

Steps should be taken to enhance more disaster related insurance coverage amongst women community.

- During Disaster - Women and children should be rescued first as they have low physical capabilities and are more prone to disaster adverse effects.

- Post- Disaster - Rehabilitation for women community and involving NGOs to ensure that they are not exploited due to their adverse conditions.

Also, local government should provide employment and sources of livelihood for women who lost family in the process.

It is important for government to bring gender sensitivity in disaster planning to make it more sustainable.

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?

Science achievers in various fields are usually known to be men in India, although the overall literacy rate of women is higher.

Reasons for low achievements in science amongst women :

- i) Low proportion of higher education amongst women.
- ii) Domestic responsibilities which erodes their further career prospects.
- iii) Low enrolment in STEM programs.
- iv) Requires large gestation period for success in a scientific field which women generally are not able to afford.

GOVERNMENT STEPS :

- Initiatives like 'KIRAN' scheme to increase the involvement of women community in scientific fields.
- Scholarships through 'UDAN' program to allow merit women to carry on higher studies.
- Emphasizing upon enrolment of women in STEM programmes.
- More investment in overall research institutions and introduction of 'Atal Thinking Labs' to enhance the overall culture of innovation.
- Other schemes like 'IMPRESS' and smart city hackathon to encourage youth especially girls

to contribute to scientific development

→ It is important to leverage
the mental capabilities of women
community so as to introduce
women in the list of legends
like C.V. Raman, APJ Abdul Kalam
etc.

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।

The government has introduced amendments in NIA act and UAPA act in order to keep a check over all growing radicalization and terrorists activities

AMENDMENTS

- Provisions to declare an individual as a terrorist.
- Power to NIA to look into terror cases without approval of state government.
- Seizing of assets of the person declared as terrorist.
- Use of police force for investigation by NIA rather than just DSP

SIGNIFICANCE

- The amendments aim to empower terror fighting institutions and hence it will lead to better planning and implementation of policies against terrorism.
- It can chance better as well as quick investigation as local police is more known to ground position.
- It will solve NIA's problem of not having adequate staff to carry investigations.
- It will bring in efficiencies and clear jurisdictions as prior approval of states will not hamper the

proceedings.

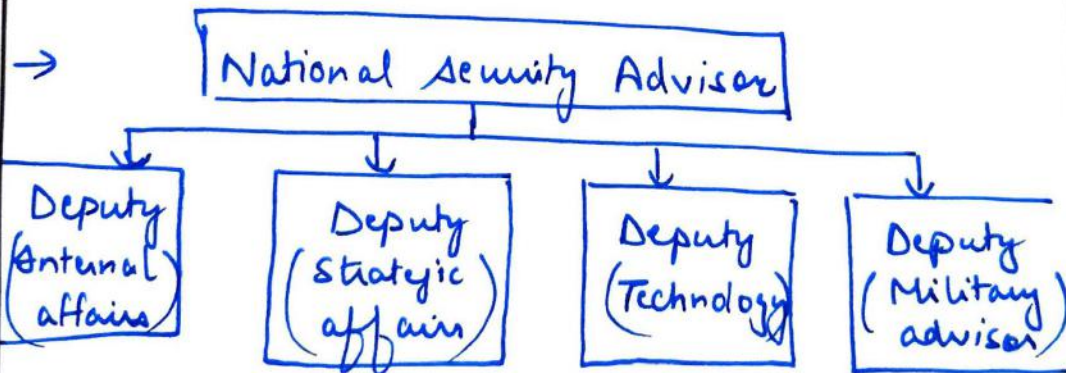
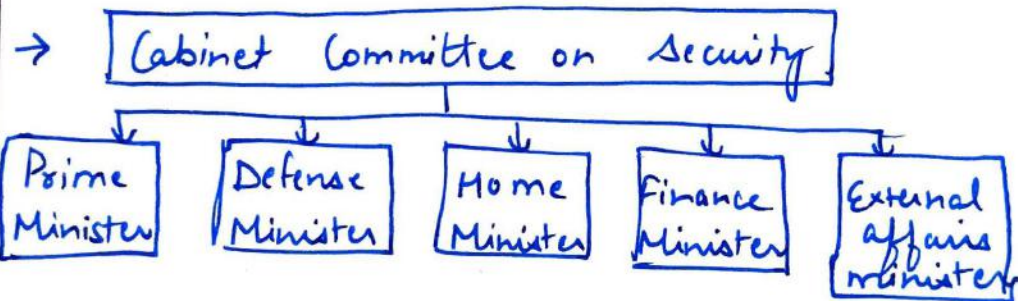
- It will raise India's position in international terror fight arena as earlier we were accused of not stating individuals as terrorists but demanding the same at international level.

Though there are concerns on federal structure due to more powers to central agencies, but national security should always be kept at high stake and these amendments are a good move to ensure that Pathankot and Pulwama incidents are not repeated in future.

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।

In the backdrop of increased national tense threats and lone wolf attacks, Indian government has brought changes in National security architecture.



→ Strategic groups under NSA consisting of secretary of finance, defence and

home ministry along with chiefs
of all three defence forces.

MODERNISATION

- Cabinet committee on security to take quick and expertise decisions on defence planning and strategies.
- Introduction of military advisers to enhance border protection.
- Defence Planning Committee for procurement of necessary defence equipments.
- Focus on local production through 'Indigenously Designed Developed and Manufactured'.
- Defence corridors in Tamil Nadu and Uttar Pradesh.
- Chief of Defence staff to bring coordination in all three defence forces.
- Initiatives like Operation Rakshya

Gyan' and Technology Development Fund?

- India ~~needs~~ a should focus on cross platform recruitment of experts from different fields like social media, technical intelligence and terror fighting.
- A 360° degree approach can be a great step involving better investigation teams and intelligence agencies along with diplomatic measures to control terrorism in the subcontinent.