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GENERAL STUDIES (TEST CODE : 1072)

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Medium Eng./Hindi	ENGLISH	Registration Number	30566
Center	ONLINE	Date	18 Sep, 2018.

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		<p>1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code). !" #\$(") , - / 0 1 ! / " 2 3 4 5 (" 6 7 8 /) 9 # \$ % ; # ' (" 1 0</p> <p>2. There are TWENTY questions printed in ENGLISH & HINDI F) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>3. All questions are compulsory. , ; @ # \$ % 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>4. The number of marks carried by a question/part is indicated against it. L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>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 that the authorized one. L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>6. Word limit in questions, if specified, should be adhered to. L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</p> <p>7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off. !" #\$(") , - / 0 1 ! / " 2 3 4 5 (" 6 7 8 /) 9 # \$ % ; # ' (" 1 0</p>
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Total Marks Obtained:			
Remarks:			

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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.

1. Explain why it is important to urgently address the problem of poor land records and infirmity of land titles in India. Also discuss how this problem can be addressed. (150 Words) 10

व्याख्या कीजिए कि भारत में खराब भू-अभिलेखों एवं भूमि अधिकारों के सुदृढ़ नहीं होने की समस्या का तत्काल समाधान करना क्यों महत्वपूर्ण है। साथ ही, चर्चा कीजिए कि इस समस्या का समाधान किस प्रकार किया जा सकता है।

(*) Poor land records caused severe administrative and economic issues in India.

Rural areas

- lack of credit, insurance and contract farming access.
- Non-realization of contract farming due to fear of loss of titles.
- forgoing of revenue from agriculture income of large farmers.
- Poor targeting of government agriculture policies: Fasal Bima, MSP etc.

Urban areas

- Poor land records propel corruption, extortion and land mafia.
- Urban local bodies are forgoing property taxes.
- Skyrocketing of land prices and lack of effective affordable housing.

- Issues of land acquisition and other industry related issues

Hence, need for proper land record management arises.

Suggestions

- ① Block chain based land record digitalization
eg: Sweden, Andhra Pradesh.
- ② Utilizing GIS, drone technology and space imagery for urban area property mapping.
- ③ National land authority: to deal with unused or government lands effective utilization.
- ④ National land bank creation in a cooperative federal manner.

These activities could be undertaken under National Land Record Modernization scheme (Digital India).

2. What are the special features of the infrastructure sector that make its financing a challenge? What measures have been taken to facilitate adequate amount of finance to this sector?

(150 Words) 10

अवसंरचना क्षेत्रक के वे विशेष लक्षण क्या हैं जो इसके वित्तीयन को चुनौतीपूर्ण बना देते हैं? इस क्षेत्रक में वित्त की पर्याप्त उपलब्धता को सुनिश्चित करने के लिए कौन-से उपाय किए गए हैं।

(a) Infrastructure is key for improving efficiency of factor of production.

Key features

- ① Long gestation period to recover profits.
- ② Need for inter-ministerial coordination
eg: Environment, finance, state govern-
-ments.
- ③ Lack of effective re-negotiation clause in current model concessionaire agreements
- ④ Issues of Non-performing Assets (NPAs) in our banking sector.
- ⑤ Global slowdown reduced access to external funding avenues.
- ⑥ Stalled projects meant loss of investors interest due to time and cost overrun.

Measures

- ① Creating long term financial institutions:
 - > Infrastructure Debt Funds.
 - > Infrastructure and Real Estate investment funds.
 - > leveraging bond and capital market. Eg: Masala bonds, Municipal bonds
- ② National Infrastructure Investment Fund (NIIIF) to fund both greenfield and brownfield projects
- ③ Transforming current PPP structured inline with Kejriwal panel recommendations.
- ④ Alternative investment models: like viability Gap Funding, Hybrid-Annuity Model (HAM), Special purpose vehicle (SPV) could be promoted.
India needs \$4.5 trillion funds. So, all possible avenues, including, international funds must be explored

3. Despite favourable circumstances, India's electronics manufacturing has been unable to respond to the rising demand. Discuss. What steps can be taken to address this situation? (150 Words) 10

अनुकूल परिस्थितियों के बावजूद, भारत का इलेक्ट्रॉनिक्स विनिर्माण बढ़ता मांग के प्रति अनुक्रिया करने में असमर्थ रहा है। चर्चा कीजिए। इस परिस्थिति को संबोधित करने के लिए कौन-से कदम उठाए जा सकते हैं?

(A) According to some estimates electronic imports might surpass oil imports by 2020.

Reasons for weak Electronic manufacturing are

- ① Lack of silicon chip fabrication facilities in our country
- ② Poor spending on basic sciences and research and development (only 0.7% of GDP)
- ③ Information Technology Agreement, 1997 with many countries led to flooding of imports.
- ④ Electronic system development and manufacturing (ESDM) needs
 - high capital investment.
 - huge quantity of pure water.
 - high skilled labour.

However, India lacks in these.

Digital India targets net zero electronic imports by 2022. Electronic Development Fund (EDF) and national electronic policy, 2022 also promotes ESDM.

Further steps could be

- Promotion of cluster based electronic manufacturing, as in Taiwan.
- Encouraging ESDM startup at incubation centres and Technology parks.
- Inviting foreign capital and technology for investments and technology transfer
Eg: Foxconn, Samsung Noida factory.
- Training skilled labour in electronic sector under Skill India.
- Engaging with Indian diaspora.

Recent Modified-SIPS scheme budget is increased, a timely step. Above steps in line with digital India can achieve target of net zero imports

4. Despite registering a high growth rate in the post-reform era, India continues to witness a high incidence of poverty. Explain this paradox and suggest ways to resolve it. (150 Words) 10

अर्थिक सुधारों के बाद की अवधि में उच्च संवृद्धि दर अर्ज करने के बावजूद, भारत लगातार निर्धनता की अति व्यापकता का साक्षी रहा है। इस विरोधाभास की व्याख्या कीजिए और इसका समाधान करने के उपाय सुझाइए।

(A) From 1992-2005 poverty reduced in absolutely numbers (45.5% to 22%). yet, sizeable number of poor, still is a concern for India.

Reasons for the paradox

① Poor Inclusive growth:

- Growth don't trickle automatically.
- Proper capability building - Health, Education, Skill along with formal jobs is required to remove poverty.

② Post reform inequality has increased.
Eg: oxfam report: 1% holds 43% of wealth

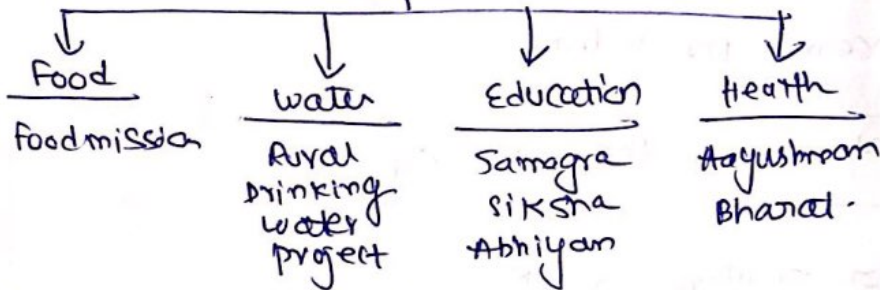
③ Exclusion and inclusion errors, along with corruption related issues.

④ Weak agriculture growth and recurring droughts: have stifled livelihoods of many poor including agriculture labour.

③ Lack of planned urbanization and increasing of slum life → urban poverty.

ways to resolve the paradox

① Quality basic needs provision



② Reinvigorating ITI'S : to train people ready for industry skills.

③ Doubling farmers income: by implementing Ashok Dalwai Committee suggestions

④ Planned urban growth and slum rehabilitation

under AMRUT, Smart city and Swachh Bharat mission.

⑤ Financial inclusion through JAM

wings of capabilities will enable poor to break shackles of poverty and inequality.

5. In light of the argument that India has entered a regime of "permanent surpluses", discuss whether the time has come to remove agricultural commodities completely from Essential Commodities Act. (150 Words) 10
- इस तर्क के आलोक में कि भारत "स्थायी अधिशेषों" के युग में प्रवेश कर गया है, चर्चा कीजिए कि क्या कृषि जिनसे को आवश्यक वस्तु अधिनियम से पूर्णतया हटा देने का समर्थन आ गया है।

Ⓚ Agriculture Economist Ashok Gulati estimate that India is entering phase of permanent surplus.

> Rising production of many staple crops, milk and horticulture produce proves this point.

this is creating challenge to ensure remunerative pricing to farmers who is marred by unfavourable export policies and middle man issues.

Argument for removing Essential Commodities Act (ECA)

① creates scope for food processing and improvement of storage, transportation and marketing.

② ~~ECA~~ would enable farmers to export goods via Agriculture export zones, currently unable to do so due to anti-hoarding rules.

③ Encouraging of contract farmers also requires liberal hoarding policies.

④ Food ~~security~~ ^{production} is not a major problem but availability and affordability is issue.

> Fluctuations can be managed through food imports.

> Affordability could be addressed through direct benefit transfer

however, removal of ECA should result in farmer's income raise. It will need proper monitoring and regulations to prevent unfair hoardings. Further, buffer stock at FCI is also needed for PDS.

while removing ECA (also recommended by Arvind Subramanian), proper regulatory mechanism need to set up. so that consumer and farmer interests are upheld.

6. The 1988 National Forest Policy (NFP) was visionary in its scope and ambition. However, there is a need for a new forest policy in the current context. Discuss. (150 Words) 10

1988 की राष्ट्रीय वन नीति (NFP) अपने विषय-क्षेत्र और लक्ष्य की दृष्टि से दूरदर्शी थी। हालांकि, वर्तमान संदर्भ में एक नवीन वन नीति की आवश्यकता है। चर्चा कीजिए।

(A) India is one of the biodiversity rich country with 4 of 35 biodiversity hotspots. To protect these environmental resources

National forest policy (NFP) seeks

- Improving forest cover to 33% of landmass.
- conservation of gene pool.
- Community development and participation.
- Ecosystem based approach to conserve rivers, lakes and forests.

These ^{are} ambitious goals for a developing country. However, following changes nationally and globally brings the need for revision of forest policy.

> India's INDRS committed at Paris conference.

> need to incorporate private sector
 and enterprise in better forest
 management.

> Utilizing Big data, drones, GIS and
 such developments for forest regeneration
 and improvement.

> Towards institutionalizing adaptation
 and mitigation measures against growing
 extreme climatic events.

> Integrating community rights (Forest
 Rights Act) and CAMPA funds into
 forest management practices.

> Existing forest cover is only 82%,
 didn't reach stated target under
 1988 policy.

Hence, new forest policy need to incorporate
 above changes. It could be made congruent
 with Green India mission, and National
 Action plan on climate change.

(A)

①

②

③

④

7. How does rapid urbanization increases the vulnerability to major disasters? Explaining with examples, suggest measures to develop disaster-resilient cities. (150 Words) 10

द्वत शहरीकरण प्रमुख आपदाओं के प्रति सुभेद्यता को कैसे बढ़ाता है। उदाहरणों के साथ व्याख्या करते हुए, आपदा-प्रत्यास्य शहरों का विकास करने के उपाय सुझाए।

(A) With 600 million people estimated to reside in urban areas in India by 2050, India is rapidly urbanizing. It also increases vulnerability to major disasters.

- ① Urban floods: Due to concretization, encroachment of water bodies and clogging of drains with plastic.
- ② overcrowding: may rise risk towards structure failures (bridge collapse), fire accidents and stampedes.
- ③ Risk of industrial disasters like Bhopal Gas tragedy also can't be ruled out.
- ④ coastal cities are prone to cyclones, tsunami's etc.

Recent Kerala, Chennai floods are case in the point for rising disasters with rapid urbanization.

Measures for disaster resilience

* Planned urbanization:

- Effective land-use planning augmented with technology intervention,
- coordination between urban development authorities.
- Enforcement of building by-laws,
- sustainable urban habitat development with mix of infrastructure, greenery and water bodies.

* Preparedness:

- Standard operational procedures
- Flood Early warning system.
- Community capacity building and information systems.

* Risk mitigation infrastructure: like dykes in coastal areas - financial measures like insurance for quick rehabilitation, with these 21st century cities can become disaster resilient.

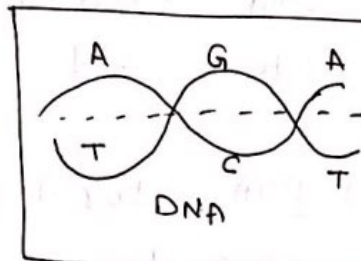
8. Explain DNA profiling and highlight its forensic application. Also discuss the significance of DNA Technology (Use and Application) Regulation Bill, 2018 in this regard. (150 Words) 10

डीएनए प्रोफाइलिंग की व्याख्या कीजिए और इसके फॉरेंसिक अनुप्रयोग पर प्रकाश डालिए। साथ ही, इस संबंध में डीएनए प्रौद्योगिकी (प्रयोग और लागू होना) विनियमन विधेयक, 2018 के महत्व पर चर्चा कीजिए।

(A) DNA [Deoxy Ribonucleic Acid] is genetic material in human bodies.

DNA profiling extracts genetic information (most accurate) for various applications.

It is done by collecting samples like blood, hair, etc.



Forensic application of DNA profiling

- Parental relationship establishment.
- Missing persons identification.
- Identification of decomposed or unclaimed dead bodies.
- Disaster affected people identification.
- Establishment of conviction in crimes.

It is well acknowledged technology world wide. Hence Indian law commission has

come up with draft DNA Technology (regulation) Bill. It's significant

- ① DNA would be allowed as evidence. This could speed up our criminal justice system and reduce under trials.
- ② DNA laboratories are ^{to be} mandatorily registered.
- ③ DNA data banks at regional and national level would be set up. They will include indices to identify missing crime related persons.
- ④ collection of DNA without consent is prohibited, hence privileging right to privacy.
- ⑤ DNA profiling board would regulate all matters related to profiling. Hence accountability is fixed.

Passing this bill would be a landmark for moving towards scientific criminal justice system.

9. What is meant by the term Blue Water Capabilities? In this context, identify the key measures that have been undertaken to enhance the blue water capabilities of the Indian Navy. (150 Words) 10

ब्लू वाटर क्षमताएँ पद का क्या अर्थ है? इस प्रसंग में भारतीय नौसेना की ब्लू वाटर क्षमताओं का संवर्द्धन करने के लिए किए गए प्रमुख उपायों की पहचान कीजिए।

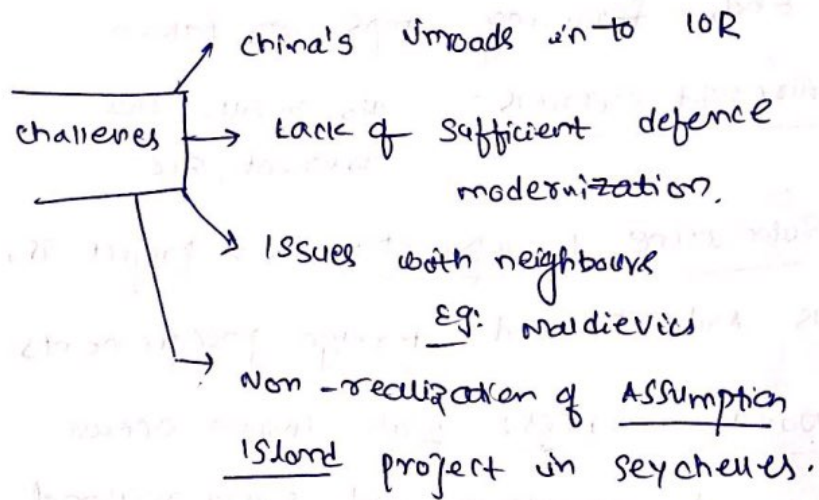
(A) Ability to operate militarily and economically in high seas for longer period is considered as Blue water capabilities.

Strong navy and infrastructure is key for blue water capabilities. Towards this end, following steps are taken

- Aircraft carriers: INS Virat, INS Vikramt, etc
- Submarine development: under project 75, INS Arihant and foreign procurements.
- Naval exercises: with Indian Ocean Regional countries and extra regional powers eg: Malabar exercises, Indian ocean Naval Symposium
- Indian Ocean Regional Association to coordinate and cooperate on security issues

- Communication capability development:
 - IRNSS, GAGAN satellite system.
- Bilateral agreement:

- LEMOA for logistics cooperation with U.S.
- COMCASA to improve interoperability between navies of India and U.S.



Given importance of IOR for region, India must strengthen its military. Simultaneously cooperating with like minded countries is key

10. Identify the factors that make India vulnerable to drug trafficking? Also discuss the key steps taken to deal with it in our country. (150 Words) 10

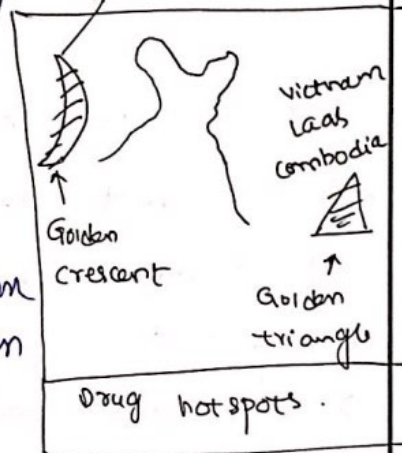
उन कारकों की पहचान कीजिए जो भारत को ड्रग तस्करी के प्रति सुभेद्य बनाते हैं? साथ ही, हमारे देश में इससे निपटने के लिए उठाए गए प्रमुख कदमों की चर्चा कीजिए।

(*)

According to UN office of drugs and crime, South Asia is key hotspot of drug trafficking. particularly, India is vulnerable to drug trafficking. Iran, Afghanistan, Pakistan, Vietnam, Laos, Cambodia.

Reasons

> Geography: wedged between Golden crescent and Golden triangle.



> porous borders along neighbourhood

eg: North East, Jammu & Kashmir

> Socio-economic issues

- Influence of global and western culture.
- unemployment and decline in agriculture growth.
- less parental care in busy world.

> Political: Nexus between politicians and drug syndicates

- > Easy availability of medicinal drugs without prescription,
- > Weakness in law enforcement (Narcotics and Psychotropic Substances Act) due to man, money resources deficiency

Key steps

- ① Supply reduction: > Tight border management with efficient technology deployment
eg: Comprehensive and integrated border management system (CIBMS)
 - ② > cooperation and coordination with bordering countries and INTERPOL
 - ② Demand reduction: - Rehabilitation centres.
 - Communication campaigns to reduce stigma.
 - Better parental care and counselling.
 - ③ Harm reduction: quality health care with sterilized equipment to reduce spread of secondary disease. (HIV)
- There by we can control drug trafficking

11. How do higher global crude oil prices affect the Indian economy? What steps can be taken to gradually insulate India from global oil price volatility in the long term? (250 Words) 15

कच्चे तेल की उच्च वैश्विक कीमतें भारतीय अर्थव्यवस्था को कैसे प्रभावित करती हैं? दीर्घावधि में भारत को वैश्विक तेल की अस्थिर कीमतों से सुरक्षित करने के लिए उत्तरोत्तर कौन-से कदम उठाए जा सकते हैं?

Oil prices in international markets reached more than \$80 per barrel of Brent crude. Reasons for this are

- Supply reduction due to sanctions on Iran.
- Cartelization by OPEC.

Effect on Indian Economy

Imports: > Will become costlier
> might inflate food due to rise of transportation costs.
> could trigger interest rate hikes, thus making credit expensive

widens current account deficit, which already reached 1.9% during last financial year.

Subsidy/cut in excise duties/VAT could

impact fiscal prudence.

- ④ cuts purchasing power of people, consequently subdued demand for goods.
- ⑤ might lead to job losses in certain informal sectors eg: transportation.

Following set steps could be taken

① short-term measures >

> Slightly reducing excise duties and VAT that were raised more than 200% in last few years.

> Cutting down on luxury good imports to balance payments.

> Preferring public mode of transportation for commuting.

② Long-term measures

- Moving towards alternate mobility options
 - * Hybrid electric vehicles.
 - * Hydrogen fuel / fuel cell based public transport
 - * shared and common mobility
- stepping up exploration of fossil fuels in our country.
- strategic acquisition of oil companies at international level.
- Improving exports and FDI to safeguard capital and current accounts

further, we need to push National mission on energy storage system in order to catchup on solar - electric vehicle technology. These could insulate India gradually from oil ^{price} spikes.

12. Critically discuss the role of private sector in skill development in India in recent years. In this context, what are the measures required to improve oversight as well as financing in the skill development sector?
(250 Words) 15

हाल के वर्षों में भारत में कौशल विकास में निजी क्षेत्र की भूमिका की समालोचनात्मक चर्चा कीजिए। इस संदर्भ में, कौशल विकास क्षेत्र में निरीक्षण और साथ ही वित्तीयन में सुधार के लिए कौन-से उपाय आवश्यक हैं?

(A)

As per NSSO Survey, only 2% of Indian workforce are formally skilled. Hence the need for comprehensive Skill development strategy.

Role of private sector

+ve's:

- Large presence in the form of ITIs
- Participation in National Skill Development Corporation (NSDC) and Sector Skill Councils (SSC) under Skill India Programme

- Quality Council of India [QCI] - a private accreditation body grades ITIs.

-ve's:

- ITIs in private sector are highly

inefficient and ineffective. [sharda prasad
Committee report].

- recent Shomayaji committee found various corruption related issues,
- curriculum, infrastructures and trainees are outdated or inadequate.
- issues in monitoring and evaluation of private sector ITIs.

Measures needed are

→ for oversight :

→ A national level body inlines of CBSF to oversee and recommend on curriculum and standards.

→ Rejuvenating National Vocational Training Board for accreditation and grading of ITIs.

→ Involving public feedback and

Employee feedback and cancelling
registration of erring ITIs.

→ For financing:

→ Providing sufficient budgetary grants
under ministry of Skill and Entrepreneurship

→ Involving CSR funding.

→ Taking assistance from multi-lateral
development funds like World Bank,
as in the case of Strive Scheme.

→ charging fee or installments once
a-trainer gets jobs.

Nation with huge youth bulge can't wait,
So we need to hasten quality improvement
in human capital formation.

13. The e-commerce sector has been booming in India for the last few years. Examine the need for its regulation in light of the recently proposed draft e-commerce policy. Further, identify the challenges that the sector is currently facing. (250 Words) 15

ई-कॉमर्स क्षेत्रक विगत कुछ वर्षों से भारत में तेजी से बढ़ रहा है। हाल ही में प्रस्तावित ड्राफ्ट ई-कॉमर्स नीति के आलोक में इसके विनियमन की आवश्यकता का परीक्षण कीजिए। साथ ही, इस क्षेत्रक द्वारा वर्तमान में सामना की जाने वाली चुनौतियों की पहचान कीजिए।

(A) According to estimate, digital economy would touch \$1 trillion mark by 2022.

This calls for regulation of this sector.

Towards this, draft e-commerce policy includes following features.

① Ombudsman: for complaint taking from consumers. There by protecting consumer interests.

② Data protection regulations: Such as

- Data localization.

- Data safety officers at e-commerce companies.

These will help in securing data and privacy of the users.

③ Curbs on predatory pricing and discounts

So as to increase profitability of e-commerce companies and also to safeguard interests of offline stores.

④ Competition Commission of India to look in to issues arising out of mergers
eg. Flipkart-walmart merger.

⑤ Promoting conducive ecosystem for the growth of e-commerce

* Skilling inline with technology changes.

* Improving digital literacy and digital infrastructure.

* Encouraging innovation and entrepreneurship
— ship

Challenges of this sector

① Profitability is low: many of making losses as they focus only on customer acquisition.

② Unfavourable taxation: Flipkart operated from

Singapore registration due to this.

- ③ Need to align technology with privacy regulations like GDPR might rise short-term costs
- ④ Security concerns: arising from cyber crimes - eg. Ransom ware attacks.
- ⑤ Logistics sector is still inefficient - that reduces productivity in this sector.

Measures taken

- Sri Krishna committee data protection law.
- Granting infrastructure status to the logistics sector.
- GST reduced check post hurdles.

After taking stakeholder opinions, draft e-commerce policy would help in reaping benefits of digital economy

14. Explaining the importance, highlight the achievements of dairy sector in India. Examine whether over-production is the reason for the problems being faced by the dairy industry. Give some solutions to address the problems. (250 Words) 15

भारत में डेयरी क्षेत्र के महत्व की व्याख्या करते हुए, इसकी उपलब्धियों पर प्रकाश डालिए। परीक्षण कीजिए कि क्या अति-उत्पादन डेयरी उद्योग द्वारा सामना की जा रही समस्याओं का कारण है। इन समस्याओं को दूर करने के लिए कुछ उपाय सुझाइए।

(A) Dairy sector comprises of milk production and other related products.

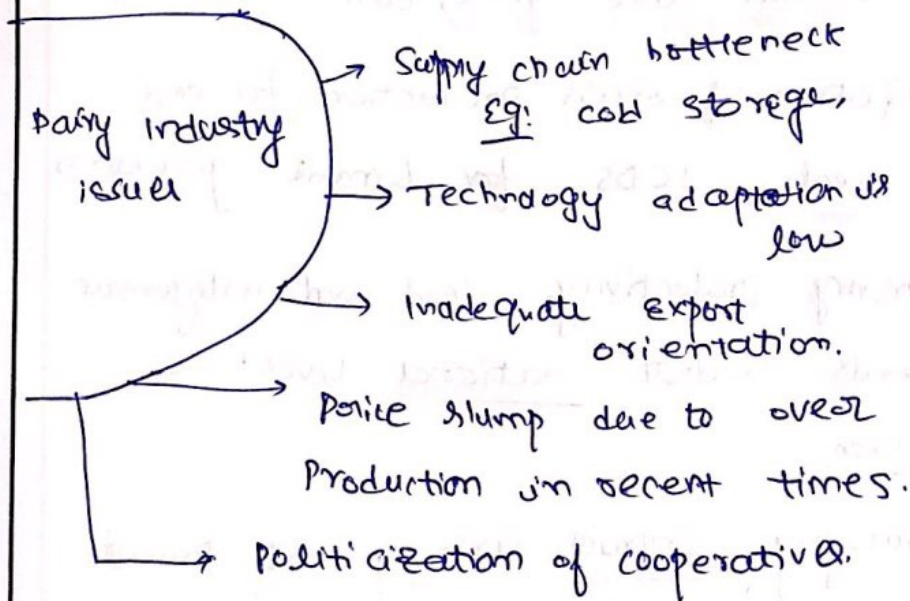
Its importance

- Additional income to rural households.
- Supports financial independence of women and empowers them [AMUL]
- Generate significant employment in up-stream and down stream sector.
- Changing diet diversity towards proteins, raises demand for dairy products.
- Animal husbandry supports mixed farming and organic agriculture.

Achievements

- Milk production increased by 3 fold since 1990.

- Cooperative led milk federations and processing units like Amul, Sudha.
- Integration of rural economy with that of urban.
- Professional and democratic management of cooperative society — roots of democracy
- Improvements in milk powder and other dairy products production.



* Over production: became problem only due to insufficient storage, processing and export capacity. It is not the

Sole reason for crises of dairy sector,

Comprehensive solutions

① Improvement of dairy infrastructure:

Dairy processing infrastructure fund was established recently.

② Export promotion policies: By improving value add like ghee, curd, butter etc.

③ utilization of excess production for mid-day meal, ICDS for demand generation

④ Improving productivity, feed and indigenous breeds under national livestock mission.

⑤ Encouraging contract farming and private Agri marketing in livestock

with these, a turn around could be expected in dairy sector.

15. There has been a focus on Textile and Apparels industry in India in recent years. Elaborate the potential of this industry and the challenges that lie in achieving it. What steps have been taken in this regard? (250 Words) 15

हाल के वर्षों में भारत में वस्त्र एवं परिधान उद्योग पर ध्यान केंद्रित किया गया है। इस उद्योग की संभावित क्षमता और उसे हासिल करने में निहित चुनौतियों की सविस्तर वर्णन कीजिए। इस संबंध में कौन-से कदम उठाए गए हैं?

(A) Economic Survey suggestion to promote textile sector and Apparel brings focus on textile and these sectors

Importance

- Labour intensive industry
- Women are employment in large numbers
- Declining of textile industry in china.
- Lower capital requirement.
- Availability of cotton producing areas.
- High exportability: Demand in Europe, U.S.

Challenges

- Rigid labour regulations

- Availability of capital is constrained.
- low technology adoption.
- Differential taxation for man made and natural raw materials in textile and leather industry.
- Logistics are inefficient: Issue of transshipment via Colombo port.
- Insufficient trade information system.
- ~~Political issues related to cattle~~
(regulation on cattle sale and slaughter)
- Issue of Enablers: Energy access and low innovation.

Steps taken are

- > Fixed term Employment is allowed
- > 6,000 package for textile sector.
- > sector specific skill councils under Skill India mission.

- > Improvement of logistics via GST, Bharatmala and Sagarmala programmes.
 - > Various conclaves and conferences to improve trade information systems.
 - > State government's took step related to
 - * Power supply.
 - * Building and construction permitsto improve ease of doing business
 - > Cluster approach scheme: in order to reduce cost of environment management, marketing and information access.
 - > Promotion of exports through Foreign Trade Policy (2015-2020), where these sectors are accorded priority.
- With these, these sectors could become job generating and usher inclusive growth.

16. How do transportation corridors in biodiversity rich areas impact the wildlife? Examine the current policy framework in this regard. Also, suggest measures to minimise the negative effects while balancing the need for development. (250 Words) 15

जैव विविधता से समृद्ध क्षेत्रों में परिवहन गलियारे वन्य-जीवन को कैसे प्रभावित करते हैं? इस संबंध में वर्तमान नीतिगत ढांचे का परीक्षण कीजिए। साथ ही, विकास की आवश्यकता को संतुलित करते समय इसके नकारात्मक प्रभाव को न्यूनतम करने के उपायों का सुझाव दीजिए।

(A) India is a biodiversity rich country with diverse landscapes and wild life presence.

However, some developmental activities like transportation corridors affect biodiversity rich areas through

- > Fragmentation of habitats.
- > Pollution of water, land and air resources (vehicular movement and eotourism)

> Introduction of alien species through these corridors leads to resource competition for existing species.

> overexploitation of resources
eg: fishing activities, Jhum cultivations.

These often result in man-animal conflicts, as well as leaving wildlife with little resources.

Current policy framework

framework

Issues

①

Environment Impact
Assessment (EIA)

marred by issues
of

- violations
- Non professionalism
- low awareness

②

Convention of biodiversity,
National and state
Biodiversity Authorities.

✓ People's biodiversity
registers are poorly
managed
✓ lack of monitoring
of schemes and
outcome evaluation

③

Specific programmes like:
Project Elephant, integrated
wild life habitat improvement
programme

✓ Problem of funds
✓ Trained manpower
✓ low coordination
with local communities

④

CAMPA funds by diversion

✓ these remained

Some measures could be

- ① EIA and SIA need to be professionalized
by training cadre of experts.
- ② Technology solution to minimize fragmentation
 - ↳ underground, over bridges constructions
 - ↳ minimizing of vehicular movement during night times.
- ③ Community capacity building and participation
for sustained ~~and~~ improvement of biodiversity.
- ④ Monitoring and Evaluation of Commitments
related to Conventions on Biodiversity
and Sustainable Development Goals.

A prosperous life requires both development and Environment, we need to carefully balance both of these.

17. The potential of technology to aid farmers in increasing productivity as well reducing susceptibility to climate change remains underutilized. Identify the reasons for the same and suggest measures to improve technological penetration in agriculture. (250 Words) 15

उत्पादकता में वृद्धि के साथ-साथ जलवायु परिवर्तन के प्रति सुभेद्यता को कम करने हेतु किसानों की सहायता करने के लिए प्रौद्योगिकी की क्षमता का पूर्ण दोहन नहीं हो पाया है। इसके कारणों की पहचान कीजिए और कृषि में प्रौद्योगिकी प्रसार में सुधार हेतु उपाय सुझाइए।

(A) According to world Bank report on 'South Asian hotspots' climate change impacts agriculture substantially.

Hence the need for technology and solutions:

✓ they can improve better predictions, sowing periods and monitor crop health
eg: precision agriculture.

✓ By better prediction — they can reduce susceptibility to crop damages.

Reasons for underutilization of these

(B) cost of investments: for small and medium

- ③ Low skill and awareness of farmers.
- ④ Low land-lab connect, (like state agriculture universities' poor performance).
- ⑤ Reluctance of farmers to change or adopt to latest technological practices.
- ⑥ Lack of departmental coordination: between revenue, agriculture and science and technology.
 Poor adaptation of climate resilient technology can pose risk due to the extreme weather events and pest damages.

Following measures could be considered:

- ① one time grant payment to farmers to adopt micro-irrigation systems along with installment credit for remaining amount
- ② connecting land-lab - Krishi Vigyan Kendra for better technology penetration

③ Training farmers: - By adopting best methods of Israel and Tanzania dry land farmers. eg: Drone usage

④ Utilizing ICT technologies to enhance information access
eg: Kisan TV, Kisan App, etc.

⑤ Entrepreneurship related to technology rental. (eg: precision systems, surveillance systems)

⑥ interdepartmental coordination and fixing accountability.

Given, the need to double farmers incomes by 2022, we need to adopt technology in order to minimize climate change effects.

18. What is Intelligent Transportation System (ITS)? Explaining the need of ITS in India, identify the challenges in deploying it. (250 Words) 15

कुशल परिवहन व्यवस्था (इंटेलिजेंट ट्रांसपोर्टेशन सिस्टम: ITS) क्या है? भारत में ITS की आवश्यकता की व्याख्या करते हुए, इसके परिनियोजन में आने वाली चुनौतियों की पहचान कीजिए।

(R)

Intelligent Transportation system (ITS)

is technology based logistics, fleet and transport management.

Gps sensors, command and control systems and real-time applications are key components of ITS.

eg: updates on public transport systems, parking space management.

Need for ITS

- Urban population is predicted to rise to 800 million by 2046 (UNPFA)
- Reducing congestion and environment pollution.
- Improvement of human productivity and environment sustainability (less pollution)
- mitigation of rising number of road accidents

- Generating revenue and Jobs through mobility business models eg: uber, ola.
- moving towards common, shared and connected mobility linked with digital economy.

challenges

- ① Redevelopment of existing infrastructure.
- ② costs involved in adopting smart technologies in older vehicles / government services.
- ③ Ensuring safety of data and privacy as ITS is highly data driven.
- ④ lack of capacity to adopt and monitor at city and urban local body level.
- ⑤ Affordability to urban poor has to be ensured for inclusivity.
- ⑥ Accessibility for differently abled and elderly is also a challenge.

Measures

- Recent Global mobility summit organized by NITI Aayog came up with various suggestions and models.
- PPP mode of deployment in selective cities for validation and feedback
- Standardization of technology and designs in ITS by bureau of Indian standards along with stakeholders
- Infrastructure development
 - Smart grid
 - Smart city
 - charging stations for EVs.
 - Bicycle pavements and walkers pavements
- Strengthening and building capacity at the local bodies.

21st century cities needs, ITS that is safe, inclusive and accessible to all.

19. Explain the concept and significance of Data Localisation. Also discuss its limitations in strengthening law enforcement efforts in the context of Srikrishna Committee report and the draft Personal Data Protection Bill, 2018. (250 Words) 15

डेटा लोकलाइजेशन की अवधारणा और महत्व की व्याख्या कीजिए। साथ ही, श्रीकृष्णा समिति की रिपोर्ट और ड्राफ्ट पर्सनल डेटा प्रोटेक्शन बिल, 2018 के संदर्भ में कानून प्रवर्तन प्रयासों को सुदृढ़ करने में इसकी सीमाओं की चर्चा कीजिए।

(A) Data Localization means storage and processing of data where data is generated and significantly used.

Significance • Protection of citizens data

- Privacy of citizens (fundamental right after K.S. Puttaswamy case)
- Protects key affairs related to national security and sovereignty.
- Generates employment and business in storage, processing sectors.
- Access for the purpose of security related analyses and intelligence generation would be easier, as they will fall under local jurisdiction.
- Data is also key for 4th industrial revolution. Those who own the data are

Said to own future industries.

Data protection bill, 2018

- features**
- Data minimization.
 - users consent is mandatory.
 - user can ask to modify or remove data.
 - Data protection officers in each corporation.
 - National data protection officer.
 - Hefty penalties in line of GDPR (General data protection Regulation)

Limitations

- ① Most of the social media platforms are operated from outside (U.S). They are resisting data localization.
- ② weakness in human resource capabilities related to cyber security. many provisions

3

4

5

of national cyber security policy, 2013 are not fruitified, yet.

③ Lack of proper digital literacy (only 8% of rural Indians - NSSO data).

④ Need to standardize protocols and technology system from within the government to protect citizen data.
Eg: Aadhar, BHIM ecosystem.

⑤ Strict data protection regime might handicap security and ~~information intelligence~~ banks.

Hence, need to strike balance between promoting digital economy, citizen's liberty and nation security. Justice Sri Krishna Committee report rightly strikes that balance.

20. What is the link between illegal immigration and national security? In this context, critically discuss the exercise of creating a National Register of Citizens in Assam. (250 Words) 15

अवैध आप्रवासन और राष्ट्रीय सुरक्षा के मध्य क्या संबंध है? इस संदर्भ में, असम में नागरिकों के राष्ट्रीय रजिस्टर को तैयार करने की क़वायद की समालोचनात्मक चर्चा कीजिए।

(A) Illegal migration refers unauthorized entrance of non-citizens to Indian territory.

It is closely linked with national security

* Demographic changes often leads to depletion of social harmony.

eg: Assam movement (1979-85)

* Depletion of local resources might affect access to citizens of their basic needs.

* Illegal immigrants, some, may be part of terrorist, Extremist infiltrators.

may also act as sleeper cell and informers. eg: Jammu Kashmir

Insurgency
* Illegal migrants gaining political authority may affect sovereignty of a country

National Register of citizens

- It was part of Assam Accord to identify illegal migrants those who came after mid night of March 25, 1971.
- This exercise is carried recently, at the instance of apex court in Assam.
- 40 Lakh people were left out of the NRC records. Many of those may be illegal migrants.

Implications of NRC

- NRC without deportation agreement may become a diplomatic tangle.
- Hence relation with Bangladesh may affect.
- National security issues! Communal riots and terror strikes should be guarded against the NRC process.
- NRC may render many people stateless. Hence need to deal on humanitarianism.

Paris till permanent solution emerges

→ This might stand similar demands from other parts of the country.

As illegal migrants usually don't reside at one place. This could again become a political issue.

Way forward

- Transparently finishing NRC, with all due legal resource to appeal at various levels (District, High and Supreme Court)
- Negotiating a friendly deal with Bangladesh as a long term measure
- Giving one time amnesty to long time settlers could be debated.

NRC is a contentious issues, which need to be tackled with maturity. In long term India could consider a permanent refugee policy for a consistent approach.