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GENERAL STUDIES (TEST CODE : 1153)

Name of Candidate	PRAVEEN CHAND GSS		
Medium Eng./Hindi	ENGLISH	Registration Number	3056C
Center	ONLINE.	Date	8 Sep, 2018.

INDEX TABLE		
Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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

M-1/4, Plot No-A-12/13, 1st Floor, Ansal Building, Dr. Vidya Sagar Homeopathic Clinic, 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.

1. Highlighting the issues faced in BOT and EPC models of infrastructure investment, explain how HAM can address these. (150 words) 10

अवसंरचना निवेश के BOT एवं EPC मॉडल के समक्ष आने वाली समस्याओं पर प्रकाश डालते हुए व्याख्या कीजिए कि HAM इनका किस प्रकार समाधान कर सकता है।

(A)

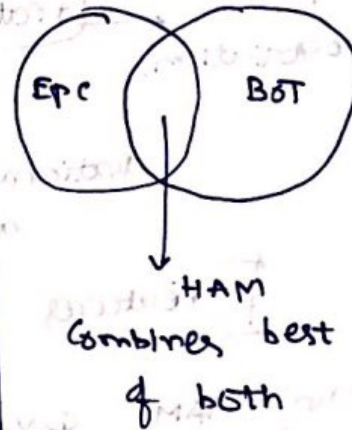
India needs \$4.5 trillion investment in infrastructure by 2040 (finance ministry). Hence the need for various models of investment arises

BOT and issues

- ✓ In this BOT investment, regulatory risks are borne by private players.
- ✓ They also have to bear risk due to tariff losses in highways and others.
- ✓ Issues of NPA's effected private investments recently. Hence equity also reduced.

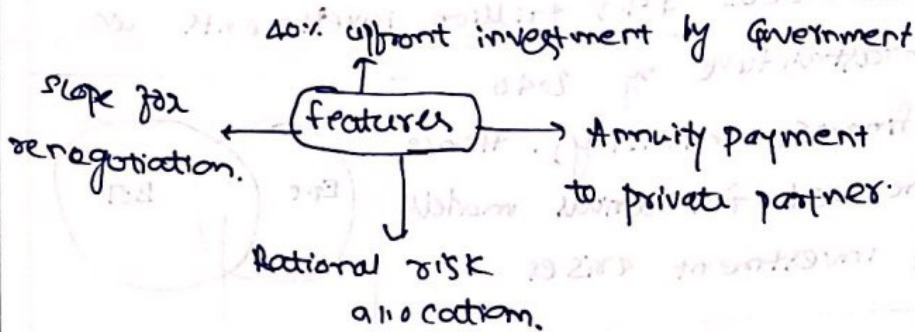
EPC and issues

- ✓ In this model government pays for contract after project completion.
- ✓ Regulatory procedures are on government.



Government.

HAM model : Mix of BOT and EPC



Features of HAM

- ✓ In HAM, government need not pay full amount like EPC. Thus helps in boosting infrastructure with all finite resources.
- ✓ Viability gap funding scope ensures project completion.
- ✓ Quality of service could be demanded from private partner due to annuity model.
- ✓ By equitably distributing risk it revives investors confidence in PPP.

To fully utilize it, capacity & monitoring part of government need to be strengthened

2. The investment rate in India has gradually declined after a historic high in the mid 2000s. Examine the reasons behind this trend. Discuss the steps required to revive investment for a sustained growth. (150 words) 10

भारत में निवेश दर, 21वीं सदी के प्रथम दशक के मध्य में एक ऐतिहासिक उच्चाल के उपरांत निरंतर घटती रही है। इस प्रवृत्ति के पीछे निहित कारणों का परीक्षण कीजिए। निरंतर वृद्धि हेतु निवेश को पुनर्जीवित करने के लिए आवश्यक कदमों पर चर्चा कीजिए।

(A) According to 2017-18 economic survey investment rate declined by 7% in last decade. out of which major component fall in private investment.

Reasons for the same are

- ① Growth Slump post: 2008 financial crisis.
 - ② Twin balance sheet: problem in banking sector. (NPA's : 11.6% in 2018)
 - ③ Regulatory issues: such as land, Environmental clearances → (cost and time overruns).
 - ④ Public investment: had to be curtailed due to fiscal prudence (FRBA Act)
 - ⑤ Lack of Ease of doing business and adequate connectivity infrastructure.
- Investments: are key for capital formation.

∴ Thus they need to be revived by following actions.

→ Ease of doing business reforms: carrying on recent push through make in India and targeting below 50 rank.

→ Recapitalization, reforms in Banking:

Strict Enforcement of prompt corrective action and capitalization scheme (₹.11 lakh crore)

→ Reviving viable stalled projects and renegotiating structures in PPP as per key committee suggestions.

→ carry out Infrastructure projects: under sagarmala, Bharatmala and stheer to facilitate capital building by government.

Recent steps like GST, Insolvency Code, etc will complement above steps in rejuvenating investments in economy

3. The measurement of the extent of formal sector and formal employment is yet an unsettled matter in our economy. Comment. Also, mention the steps which the government has taken to improve its extent. (150 words) 10
- औपचारिक क्षेत्रक और औपचारिक रोजगार के विस्तार का मापन हमारी अर्थव्यवस्था में अभी भी एक अनसुलझा मामला है। टिप्पणी कीजिए। साथ ही, इसके विस्तार में सुधार हेतु सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

(A) Since Employment is key driver of inclusive growth, we need credible employment data.

Issues in Employment data

- Huge informal and unorganized sector that created data collection problems
EX: 93% informal sector (NSSO)
84% unorganized sector, that industries not registered under Factories Act
- According to Ghosh and Ghosh: Based on ESI and EPFO data ~~10~~ 1 crore jobs created last year. However, it is contested by many experts.
- On other angle, only 1.5% of Indians are tax payers (Tax associated data)
All these data only indirectly

Predicts level of job creation in our economy. Govt took some steps to solve these confusions.

steps by government

- changes in period of data collection:
Now, monthly data collection in urban areas and quarterly in rural areas
 - Appointed taskforce under NITI Aayog for data standardisation.
 - Formalization: ✓ By GST (50% growth in indirect tax payers)
✓ Demonetisation and digital economy also driving formalization.
 - Easing of labour regulations: to improve compliance and hence formalization
✓ labour codes ✓ Shrama Survidha Portal etc.
- Through timely and quality data, Jobs data can become credible to help policy decisions in robust manner.

4. Minimum Support Price (MSP) of crops is a short term solution for agricultural distress which creates long term problems. Examine. Suggest measures to overcome the the limitations of the MSP regime. (150 words) 10

फसलों के लिए न्यूनतम समर्थन मूल्य (MSP) कृषि संकट का एक अल्पकालिक समाधान है जो दीर्घकालीन समस्याएं पैदा करता है। परीक्षण कीजिए। MSP व्यवस्था की कमियों से निजात पाने हेतु उपाय सुझाइए।

(A) MSP is announced for more than 28 crops in India. It is based on CACP recommendations. It provides food security (buffer stocks) and price guarantee to farmers. Thus helping agriculture to be minimum remunerative.

however, it has various challenges, like

① Distorting of cropping patterns: that doesn't reflect agro-climatic conditions.

② Skewing of food baskets: As cereals are preferred over recently demanding pulses.

③ Benefits are also skewed: towards some small and large farmers (Shamta Kumar Panel)

④ Administrative cost: in transport, storage and distributing are huge. FCI is also

- ① Procurement guarantee is available to only few crops: sugar cane, wheat, rice
- ② over resource utilization: AS crop growers like sugarcane drains water.
- Above issues, cumulatively reduces effectiveness of MSP and in turn deprives farmers of high-value cropping patterns (horticulture).

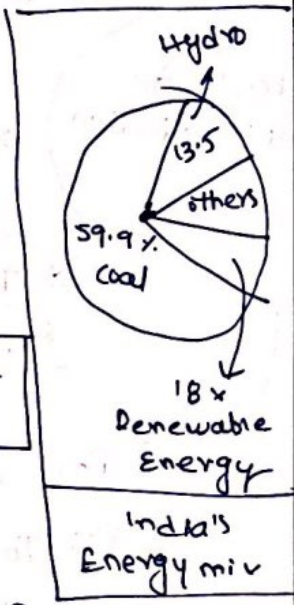
To overcome above limitations

- Localized procurement and distribution as done in M.P.
 - Price deficiency payment: which compensates farmers of losses due to distress sale below MSP. (NITI Aayog recommended)
 - Direct Income support: AS done recently in Telangana. That could benefit all farmers, particularly small and medium.
It also encourages capital investment.
 - Reforming FCI: By implementing shanta panel suggestion.
- Recent MSP rise is good for farmers, yet it need to be complimented by above changes.

5. Enumerating the factors that determine a nation's energy-mix, comment on the need for having a diversified fuel basket for meeting India's future energy demands. (150 words) 10

किसी राष्ट्र के ऊर्जा-समिथ (एनर्जी-मिक्स) को निर्धारित करने वाले कारकों को सूचीबद्ध करते हुए, भारत की भावी ऊर्जा मांगों को पूरा करने हेतु एक विविधकृत फ्यूल बास्केट के होने की आवश्यकता पर टिप्पणी कीजिए।

(4) Rising urban population and increasing of oil prices brings focus on diversifying our Energy - mix.



Factors that determines Energy mix are

① Availability of resources

- ✓ India could reap sun light for solar.
- ✓ 30% of wind energy potential could boost wind energy.

② Technology development: India was able to develop hydro, nuclear and thermal power due to technology development.

③ Sustainability concerns: SDG's and climate changes are pushing prices of renewable energy

④ Trade deficit concerns: Dependence on fossil

'Fuels imports (70% in India) could drain
FOREX reserves.

Need for diversification

- for Energy security (volatile west Asia, rising oil prices)
- To absorb Sustainable Energy Solutions.
- To gain strategic advantage eg. in exports, international alliances like solar
- For unhindered growth trajectory eg: To evade exigencies of war, disasters, etc.

Recent steps towards diversification are

- ✓ 175GW of renewable Energy target by 2022.
- ✓ Push to nuclear Energy: cabinet in 2017 approved new reactors.
- ✓ Push to Electric vehicles: through FAME Policy.

Further, need of the hour is investment in R&D of battery and Energy efficient systems

6. Air quality in Indian households, especially in rural areas, is lethal due to a number of factors. In this context, highlighting the challenges faced in improving indoor air quality, enumerate the measures that can be taken to address them. (150 words) 10

भारतीय घरों में, विशेषकर ग्रामीण क्षेत्रों में, वायु की गुणवत्ता कई कारकों से प्राणघातक है। इस संदर्भ में, घरों के भीतर वायु की गुणवत्ता में सुधार लाने में सामने आने वाली चुनौतियों पर प्रकाश डालते हुए उनसे निपटने हेतु अपनाये जा सकने वाले उपायों को सूचीबद्ध कीजिए।

(A) Good air quality is a basic human right. However, air quality, especially indoor air quality is deteriorating because:

- ① Unsustainable fuels: Like biomass burning impacts air quality as they release particulate matter (PM 2.5, 10)
- ② Poor building designs: that lack proper ventilation: These are compounded by weak law enforcement at local level
- ③ Social issues: Poverty, hunger and slums exacerbates the quality of air.
- ④ Attitudinal factors: Inertia towards changes.

~~Challenges faced in improving air quality~~

The consequence of above issue is transforming above poor quality issue

to be lethal:

→ Health issues: Poor air quality impacts human health, due to disease incidents to respiratory tract.

→ Smoke and P.M could also cause diabetes and cancer [Lancet report].

→ Reduced productivity of people because of irritation of eyes, nose.

Remedies for poor air quality

① Incentivising clean fuels: Like LPG, LNG and CNG. More penetration of PM Ujjwala scheme could help here.

② Green building designs: That are designed with proper outflows and inflows of air.

③ Information, Education and Communication:

Through mass media, ~~HAHA~~ Gram Sabha and local bodies to improve awareness. These are required urgently to mitigate consequences of poor air quality.

(A)

①

②

③

④

7. Highlight the characteristics and applications of Cyber Physical systems. Also, enumerate the various objectives of the Cyber Physical Systems programme recently launched by the government. (150 words) 10

साइबर भौतिक प्रणालियों (साइबर फिजिकल सिस्टम) की विशेषताओं और अनुप्रयोगों पर प्रकाश डालिए। साथ ही, हाल ही में सरकार द्वारा आरंभ किए गए साइबर भौतिक प्रणाली कार्यक्रम के विभिन्न उद्देश्यों को सूचीबद्ध कीजिए।

(A) Advent of 4th industrial revolution led to focus on cyber physical system. These are highly interconnected devices ^(CPS) that blur distinction of physical and digital space.
eg: Embedded systems, machine to machine communication and others.

Characteristics of CPS:

① Fusion of digital, physical and biological spheres: eg: fitness bands

② Application of multiple technologies:

Such as: Internet of things, cloud computing, Big Data and others

③ Large scope for automation:

By removing device intermediary operators: eg: Driverless cars.

④ Diverse applications: in the fields of

Industry, Service sectors, Entertainment and
Government.

To gain advantage in cps, Indian
Government initiated cyber physical systems
under Department of science and Technology

objectives of this programme :

- Multi-disciplinary team to look into various
Policy and application areas related to
CPS
- Promoting human capital development,
research and entrepreneurship in
this field
- Aligning cps with national objectives in
Sectors like Education, Health, agriculture
and science. So as to use cps to solve
nation's pressing concerns.

~~For these,~~ state and central universities,
research labs and industry should work
in tandem to put cps to effective use.

8. India needs to collaborate and participate in international scientific projects in order to place itself as a major player in cutting edge research.

Discuss in the light of ongoing global mega science projects. (150 words) 10

कटिंग एज रिसर्च में स्वयं को एक प्रमुख प्रतिभागी के रूप में स्थापित करने हेतु भारत को अंतर्राष्ट्रीय वैज्ञानिक परियोजनाओं (इंटरनेशनल साइंटिफिक प्रोजेक्ट्स) में सहयोग करने और भाग लेने की आवश्यकता है। वर्तमान में वैश्विक स्तर पर जारी मेगा साइंस प्रोजेक्ट्स के आलोक में चर्चा कीजिए।

(A) As a developing country, India lacks resources to fund large scale science projects. Collaboration with international community could fill this gap:

Advantages of this

- ① Knowledge sharing: happens in these projects that can help R&D, Education, and Industry in our country.
- ② Sharing of financial burden: by collaboration between different countries.
- ③ Spill over effects of such projects in different fields like energy, water, space and national security.

Towards strengthening the international collaborations, India took steps such as

- In Nuclear: International Thermonuclear
Experiment towards nuclear fusion tech.
- Space activities:
- ✓ Telescopes: Square metre Array telescope.
 - ✓ With USA: NISAR - dual aperture
radar Satellite.
- Associate membership in CERN:
where Large Hadron Collider is
located.
- Many Indian scientists also participated
in LIGO Experiment that validated
gravitational waves.
- Funds: Newton - Baba fund with [U.K]
: Industry and Innovation funds
with Israel.
- Along with these initiatives, India also
need to launch mission mode projects
in Dark Energy, Energy system, as
suggested by Economic Survey.

9. Deployment of central armed forces in states has been a contentious issue. Mention the issues involved and suggest some remedial measures.

(150 words) 10

राज्यों में केंद्रीय सशस्त्र बलों की तैनाती एक विवादास्पद मुद्दा रहा है। इसमें सम्मिलित मुद्दों का उल्लेख कीजिए और कुछ सुधारात्मक उपायों का सुझाव दीजिए।

(A) Central armed forces work under union Home ministry. ITBP, SSB, BSF, CRPF, CISF comes under central armed forces. (CAFs)

CAFs deployment in states is contentious because:

- ① As per constitutional scheme under 7th schedule: public order and police are primary duties of state.
- ② Overdependence on Centre's protection hampers state's capabilities to quickly respond to the threats.
- ③ State police need to be self-reliant, as they are familiar with local terrain, culture and can gather ground level intelligence. However, need for deployment of

CAF's in states arises because:

- (1) under Article. 355: Union government is mandated to protect internal security
- (2) Demands from state government: to help in serious exigences like terrorism, and extremism.
- (3) Inadequate modernization of state polia

that lacks infrastructure, weapons and marred by political interference.

To deal with this situation, remedial measures could be

- Implementation of Supreme Court 2006 guidelines in Prakash Singh case to provide role clarity & functional autonomy to police
- Implementation of modernization of police forces scheme with enhanced training and budgetary support.
- Strengthening IT, intelligence by using CCTNS, big data to gather intelligence timely.

10. In what ways does the physiography of India pose a challenge to its counter-terrorism efforts? What can be done to deal with these challenges? (150 words) 10

भारत की भूआकृति किस प्रकार इसके आतंकवाद विरोधी प्रयासों के समक्ष एक चुनौती प्रस्तुत करती है? इन चुनौतियों से निपटने के लिए क्या किया जा सकता है?

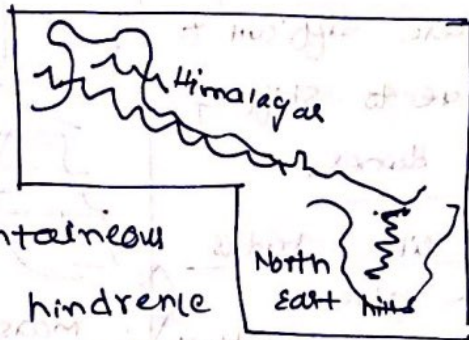
(A) India has diverse physiography. Deserts, coastal plains, Himalayas, rainforests, marshy land, etc dots India's landscape.

Challenges posed by these to counter terrorism

①

Mountains:

- Rugged and difficult mountainous terrain is a hindrance to counter terrorism.



- Infiltrations, asymmetric wars are few issues associated.

② Rainforests/forests:

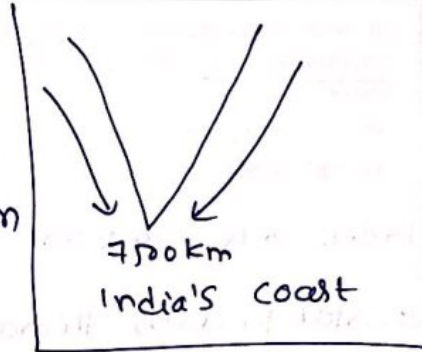
✓ They are used by Naxals, insurgents in North-East (NSCN(IM)) to establish their organisations.



③

Coast line:

- 7,100 km coast faces threats like infiltration (26/11 - Mumbai)

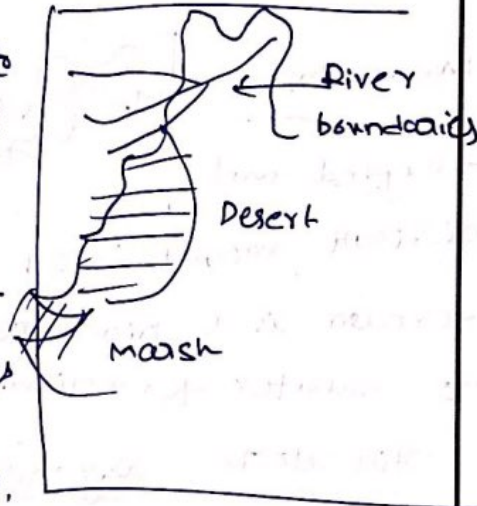


- They are difficult to guard due to difficulty in terrain and harsh conditions in some locations.

④

Desert / Marshes:

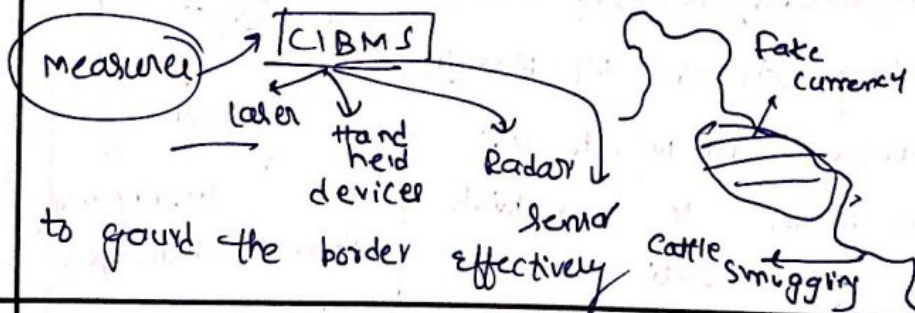
- These are difficult to fence due to shifting of sand dunes.



- Rivers like Indus in India also changes courses, thus hampering border guarding strategies.

⑤

Coastal plains of Ganga; ~~west~~



11. Enhancing private infrastructure spending and revival of stalled projects is critical to the success of Bharatmala Pariyojana. Discuss. Also enumerate measures taken by the government to revive stalled projects on National Highways. (250 words) 15

निजी अवसंरचना व्यय में वृद्धि एवं अवरुद्ध परियोजनाओं का पुनरुद्धार भारतमाला परियोजना की सफलता हेतु महत्वपूर्ण है। चर्चा कीजिए। साथ ही, राष्ट्रीय राजमार्गों से संबद्ध अवरुद्ध परियोजनाओं के पुनरुद्धार के लिए सरकार द्वारा उठाए गए कदमों को सूचीबद्ध कीजिए।

(A) Bharatmala pariyojana is a public road infrastructure scheme. Its components include improving hinterland connectivity to ports, border roads development, coastal roads improvement and others

However, in last decade private investment in economy declined by 7 basis points. Many stalled projects turned bank loans to NPA's. Reviving and sustaining investments, hence, is critical to success of the above scheme.

- private investments are needed to fund \$45 trillion infrastructure needs, under which Bharatmala has key role

- They will also provide latest technology, knowledge and efficient services.

- Reviving of stalled projects, will clear NPAs and provide scope for fresh investments

- Completion of stalled projects, will also revive investors confidence and improve efficiency in factors of production

However, challenges in this regard are:

→ Increasing of commodity prices and Rupee-dollar value increases cost of debt to private investors.

→ Lingering issue of twin-balance sheet problem.

→ Easing of business and regulations like land, environment and labour are also critical. They will guard against new projects turning into NPAs.

Nevertheless, understanding criticality of infrastructure for economy, government

initiated following measures: ^{for} [National Highways]

→ National Highway Development Authority is tasked with preparing revival plans for national highways.

→ More than 2 lakh crore investments will be attracted under Bharat mala.

→ Insolvency and Bankruptcy code to deal with NPA's.

→ 2.11 lakh crore bank recapitalization plan will improve fresh investments.

→ Government improved ease of doing business, as reflected in latest ranking (100)

focused attention on infrastructure is going on. These measures will improve quality of infrastructure in our country.

12. In the light of increasing NPAs and frauds, the twin balance sheet problem has grown immensely. Comment on the issue and analyse the potential of the Insolvency and Bankruptcy Code to be a game changer for Indian economy's health and long-term growth. (250 words) 15

NPAs एवं धोखाधड़ी की बढ़ती घटनाओं के चलते, दोहरे तुलन पत्र (द्विवन बैलेंस शीट) की समस्या में अत्यधिक वृद्धि हुई है। इस मुद्दे पर टिप्पणी कीजिए तथा भारतीय अर्थव्यवस्था की दशा और दीर्घकालिक संवृद्धि के लिए दिवाला एवं दिवालियापन संहिता में एक गेम चेंजर होने की क्षमता का विश्लेषण कीजिए।

(A)

Assets that doesn't receive interest/
Principal payments in last 90 days are
classified as Non performing assets (NPA)

According to recent RBI report,
total NPAs stands at 11.6% of GDP in
2018. This lead to twin balance sheet
problem - Stress on bank assets and
overleveraged corporates.

Reason for such situation

- Risky lending and business practices during
boom years that preceded 2008 Global
Financial crisis (GFC)
- Lack of proper monitoring mechanism
with the bank to track loans
- deficiencies in assessing credit profile
Project prospects and lack of due

deligence.

→ Diversion of bank loans to other activities and willful defaulters. (Kingfisher, diamond merchant cases)

→ Delays in Debt Recovery Tribunal case disposals

To solve some of the issues, Insolvency and Bankruptcy code [IBC] is formulated. It has immense benefits

→ Timely case disposals: IBC cases must be disposed under 180 days.

→ Improved litigation process: Now Insolvency Professionals would help creditors and debtors to resolve the issue in professional manner.

→ Information utilities: These data banks will provide information and credit actions. Thus serves function of

transparency.

→ Insolvency and Bankruptcy Board of India
will play key role in proper conduct
of functions under IBC.

→ Recent amendment to IBC provides creditor
status to MSMEs promoters. Thus boosting
investment in this sector.

These provisions would release
stressed assets in timely manner. Thus
helping in improving investments and
consequently Economic growth.

13. Highlight the importance of MSME sector in India's economy. Also, identifying the challenges, suggest some policy recommendations to ensure their sustenance and competitive growth. (250 words) 15

भारत की अर्थव्यवस्था में MSME क्षेत्र के महत्व पर प्रकाश डालिए। साथ ही, चुनौतियों की पहचान करते हुए उन्हें संपोषित करने और उनके प्रतिस्पर्धात्मक वृद्धि को सुनिश्चित करने के लिए कुछ नीतिगत अनुशंसाओं का सुझाव दीजिए।

(A) MSME sector is backbone to the Indian economy due to following reasons:

① Employment provider: Employe more than 11 crore people.

② Exports driver: More than 40% of goods and services in Exports share.

③ For Inclusive development:

- Located in rural and backward areas.

- Employe disadvantaged and Women in large numbers.

thus serving the cause of social and economic development

However, this sector is also facing some challenges.

① Access to credit: is a big challenge. Lack of security and proper documentation

Creates further burden.

② Regulatory compliance: in registration and labour norms compliance is a concern for many MSMEs due to bureaucratization

③ Lack of timely technology upgradation: which affects their efficiency and scope for innovation.

④ Marketing problems: lack of proper resources and information about best marketing practices.

⑤ Rising cost of labour and availability of skilled labour is a worry for MSMEs.

⑥ Access to enablers: such as digital connectivity, quality physical infrastructure and energy is lacking.

Policy recommendations for this sector

① Improving and diversifying credit:

- Providing time credit through MUDRA Yojana and other SIDBI funds (ASPIRE, SMILE)
- Encouraging alternative credit schemes like peer-to-peer and crowd sourcing.

② Single window mechanism: to ease burden of regulatory compliance. Initiatives like udhyog Aadhar Memorandum (UAM) are welcoming

③ Cluster approach to MSMEs must be encouraged in order to reduce costs associated with technology upgradation and access to Enablers.

④ Digital media and Big data technology could be made available to MSMEs under Digital India. So that their market reach increases

⑤ Skilling of labour in consonance with MSME needs under Skill India.

Backbone to our Economy must be supported by all means to ensure inclusive development.

14. Going forward, the allied sectors will play a critical role in increasing the resilience and improving economic returns in agriculture. Discuss.

(250 words) 15

आगामी समय में, संबद्ध क्षेत्रक कृषि में लचीलापन बढ़ाने एवं आर्थिक प्रतिफल में सुधार लाने में एक महत्वपूर्ण भूमिका निभाएंगे। चर्चा कीजिए।

(A) Allied sectors comprises of animal husbandry, horticulture, forestry and fisheries.

This sector is crucial for agricultural growth, because

① Enhanced productivity: Horticulture is ⁱⁿ high demand and has high productivity as compared to other agriculture crops. Improved productivity leads to increase of farmers incomes and boost agri-economic growth.

② Helps in diversifying risks and income of farmers

③ Agroforestry: not just boosts growth but also rejuvenates local resources like soil, water and micro climate. Thus

creating resilience.

④ Animal husbandry: Proper mixed farming.
- Incomes from cattle rearing, piggery,
etc will help in increasing agriculture
private investments.

⑤ Fisheries: - sector is 2nd largest in the
world, and source of FOREX Earnings.
- Marine and aquaculture ~~techniques~~
can boost rural and coastal economies.

However, to fully reap them
we need to solve certain hurdles.

→ Generate awareness through Krishhi Ugnan
Kendras (extension network).

→ Improve End-to-End Supply chains: in
down stream and upstream sectors.
→ Here, PM SAMPADA Yojana can
play key role in improving value addition
and reducing wastage.

- Promoting micro-irrigation in horticulture sector.
- Encouraging farmer producer organisation in these sectors.

Government took some steps in diversifying agriculture

- National livestock mission for animal husbandry
- Integrated programme for management and development of fisheries
- National policy on Agroforestry.

Implementation of these programmes and schemes were key to economic growth and agriculture resilience lies.

15. What do you understand by Seed Replacement Rate? Explaining the concept of breeder, foundation and certified seeds, highlight the major policy initiatives taken in order to address the challenge of quality seed availability to farmers. (250 words) 15

बीज प्रतिस्थापन दर (सीड रिप्लेसमेंट रेट) से आप क्या समझते हैं? ब्रीडर, फाउंडेशन और प्रमाणित बीजों की अवधारणा की व्याख्या करते हुए, किसानों के लिए गुणवत्तापरक बीजों की उपलब्धता की चुनौती का समाधान करने हेतु की गई प्रमुख नीतिगत पहलों पर प्रकाश डालिए।

(A) Seed replacement rate refers to ^{ratio} number of certified seeds used ^{to} per number of saved seeds used.

Better seed replacement ratio improves chances of higher productivity and returns to farmers.

(2) Breeder seeds: are seed used to produce foundation seeds. These forms root of seed development

Foundational seeds: Breeder seeds are further improved to produce foundation seeds. These are viable for sowing

Certified seeds: Seeds that are granted certification by government/private agencies are referred as certified seeds

Major Policy Initiatives

- ① National seed policy: Provides framework for improving seed quality and replacement ratio
- ② Seed village scheme: To improve local resilience in seed development
- ③ Rashtriya Krishi Vikas Yojana: Focuses on quality seed development to increase agriculture growth
- ④ Research and developmental activities:
under Indian Council of Agriculture

Research, State Agriculture universities and private labs.

Challenges

- ① Lack of capital/awareness among farmers.
- ② Slow pace of new seed development.
- ③ Staggered agriculture R&D investments.
- ④ Lack of land-to-lab connectivities.
- ⑤ Poor extension support network.

National mission on plant materials need to be revamped. Startups and Entrepreneurship could be encouraged in seed development.

16. While overcrowding in public places cannot be wished away in India, what we need are better infrastructure and more effective crowd-control measures. Comment. Also, briefly enumerate NDMA guidelines for crowd management. (250 words) 15

यद्यपि भारत में सार्वजनिक स्थलों पर अत्यधिक भीड़भाड़ को कम नहीं किया जा सकता है, तथापि हमें बेहतर अवसंरचना और अधिक प्रभावी भीड़-नियंत्रण उपायों की आवश्यकता है। टिप्पणी कीजिए। साथ ही, भीड़ प्रबंधन के लिए NDMA के दिशानिर्देशों को संक्षेप में सूचीबद्ध कीजिए।

(A)

Due to space constraint and high population (1.2 billion) overcrowding can't be wished away altogether.

overcrowding challenges }
- Stampedes
- Sanitation and hygiene.
- Disease spread.

Addressing these demands better quality infrastructure:

→ Physical infrastructure: Road, railway and bridges for seamless movement of people.

→ Barricades and Structural measures during crowd gatherings. (Public meetings, religious congregation)

→ CCTV and Command Centres for
periodic monitoring of flow of crowd.

Combining these with effective crowd
management is key:

- ① understanding crowd behaviour and
training officials in this regard
- ② Ensuring information flow in case of
large congregations like Kumbh mela.
- eg: Setting up ^{help} desks, creating Apps to
provide information.
- ③ Ensuring proper outlet and inlets.

NDMA guidelines for crowd management

- > surveillance of areas prior to event.
- > Involving local community in preparing
crowd control strategies.
- > safety precautions: fire Extinguishers

and oxygen supplies to prepare for exigencies.

- > Constant review and monitoring from command and control rooms.
- > SOPs for immediate response and rescue operations.

By taking effective preparedness measures - both infrastructure wise and control wise; casualties and occurrence of such stampedes could be controlled.

17. Processing and safe disposal of garbage must replace the current model of landfills in order to transform our cities to being 'smart'. Elucidate. In this context, analyse the reasons for failure of waste management policies in India. (250 words) 15

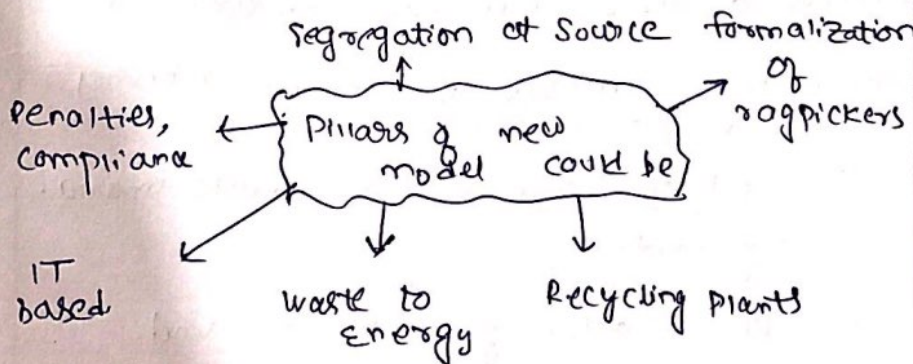
हमारे शहरों को 'स्मार्ट' बनाने के लिए भूमिभराव (लैंडफिल) के वर्तमान मॉडल को अपशिष्ट के प्रसंस्करण और सुरक्षित निपटान से प्रतिस्थापित किया जाना चाहिए। स्पष्ट कीजिए। इस संदर्भ में, भारत में अपशिष्ट प्रबंधन नीतियों की विफलता के कारणों का विश्लेषण कीजिए।

(A) Growing Urbanization (~31.9% population - 2011 census) is posing challenges of solid waste management. (SWM)

Issues with landfills — SWM

- ↳ Environmentally polluting
- ↳ Limited land availability.
- ↳ Threatens human health — (Particulate matter)
- ↳ Incineration releases toxic gases to Environment.

hence the need for new model:



Recently selected, Solid waste management states (2016), plastic, Bio-medical and e-waste management states gives push to above pillars.

To further boost above, certain policies^{are} also initiated by government, like

→ Urban Compost Scheme: Converting waste to fertilizer

→ Scientific Solid waste management under AMRUT and Smart cities

Eg: Pune.

→ National Biogas initiatives: Gobarjan, etc.

→ Banning of plastic in certain Indian states [Maharashtra]

Success of these schemes depends on correcting failures of earlier schemes.

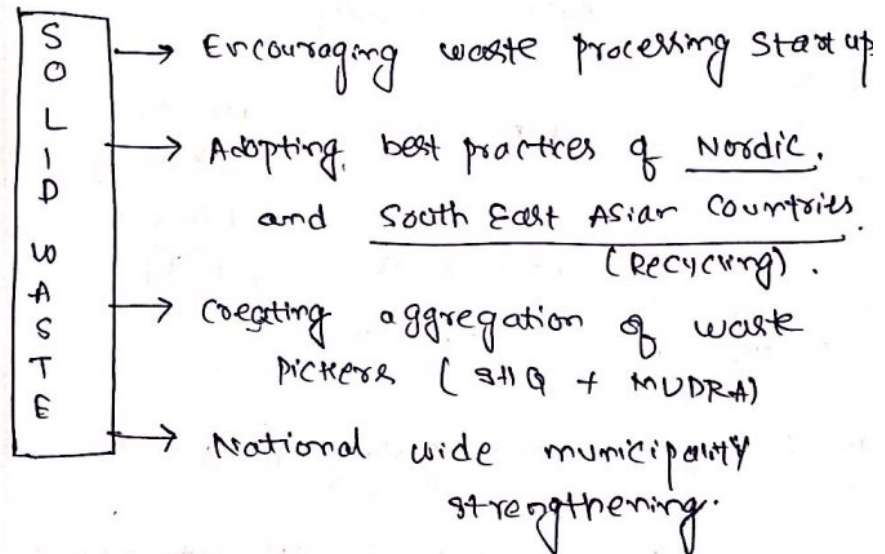
- ① Lack of end-to-end waste management.
- ② Privatization of collection and

disposal didn't result in improvement.

③ Lack of effective capabilities and know how of best practices in Local bodies.

④ consumer attitudinal changes are important to encourage Segregation at source.

Further, steps could be



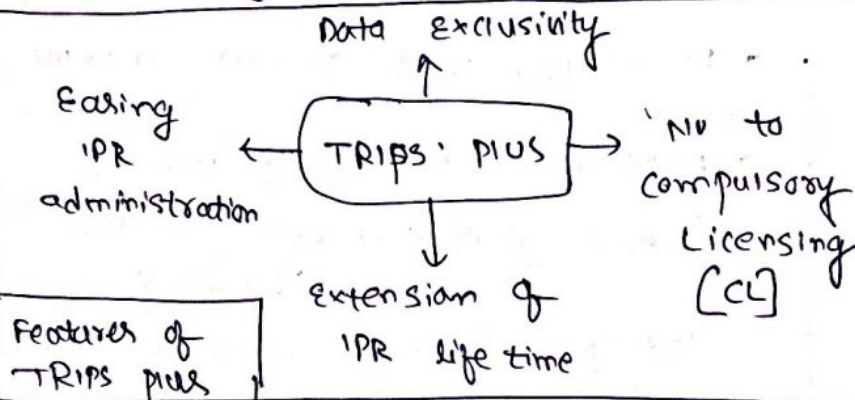
Eliminating landfill based systems and adopting better scientific systems is the key to sustain engines of economic growth.

18. What do you understand by TRIPS plus provisions being advocated by developed countries outside the WTO based TRIPS agreement? Do you think India should show some flexibility and incorporate certain TRIPS plus provisions in its IPR regime? (250 words) 15

विकसित देशों द्वारा WTO आधारित ट्रिप्स (TRIPS) समझौते से बाहर अनुशंसित किए जा रहे ट्रिप्स-प्लस प्रावधानों से आप क्या समझते हैं? क्या आपके विचार से भारत को कुछ लचीलापन दिखाना चाहिए एवं अपनी IPR व्यवस्था में कुछ ट्रिप्स-प्लस प्रावधानों का समावेश करना चाहिए?

(A)

TRIPS agreement under WTO deals with Intellectual Property Rights [IPR]. TRIPS plus extends these rules to make them more stringent.



Why developed countries pushing for these?

- ① WTO gave balance between IPR Enforcement and public interest — Doha outcome.
- ② Push from business community in those countries.

- ③ Factors of re-engineering of china and some other countries.
- ④ To sustain industrial competition from emerging market economies (India's generic sector, for instance).
- ⑤ Lack of effective IPR regimes in developing countries.

Should India show flexibility
in IPR

Pros	Cons
* Gain access to <u>latest technologies</u> and <u>FDI's</u> will get <u>boost</u> .	* India need to forgo billions of dollars in <u>royalty payments</u> .
* In long term, having such policies could promote <u>innovation</u> and reduce <u>brain drain</u> .	* IPR stringency alone is not barometer for <u>creativity</u> .
* Commercialization of IPR will boost growth.	* Public interest might affect <u>eg: medicines</u> .

* India can effectively
fight against piracy
of traditional knowledge
and others.

* we lack in documenta-
tion of our grass root
innovations. Hence benefits
are uncertain.

However, as displayed in western
countries, IPR plays good role in promoting
creativity and innovation.

Due to this, our National IPR
Policy (2016) also pitches for IPR Commer-
-cialization, enforcement, awareness and
easing of administration.

Some flexibility will also help us
pursue better diplomatic ties (U.S.A)

Yet, Data exclusivity and patent
term extension might harm public good.
So dropping these and incorporating other
TRIPS plus policies (in line with IPR policy
and Doha declaration) would be way
forward.

19. The UNODC (United Nations Office on Drugs and Crime) has pitched for the need of an integrated approach in order to address the difficulties in preventing, detecting, investigating and prosecuting Transnational Organised Crimes (TOC). Elaborating on these difficulties, discuss how an integrated approach can help in tackling TOCs. (250 words) 15

पार-राष्ट्रीय संगठित अपराधों (ट्रांसनेशनल ऑर्गनाइज्ड क्राइम्स: TOCs) को रोकने, पता लगाने, जाँच करने और अभियोजित करने में आने वाली कठिनाइयों से निपटने के लिए UNODC (यूनाइटेड नेशंस ऑफिस ऑन ड्रग एंड क्राइम्स) ने एक एकीकृत दृष्टिकोण की आवश्यकता पर बल दिया है। इन कठिनाइयों का सविस्तार वर्णन करते हुए, चर्चा कीजिए कि किस तरह एक एकीकृत दृष्टिकोण से TOCs से निपटने में सहायता मिल सकती है।

(A)

Crimes that spread across many countries are regarded as transnational organized crimes.

Eg: Trafficking in arms, drugs, human.

UNODC has highlighted challenges associated with such crimes.

① Prevention:

> Lack of effective monitoring on arm manufacturing and their movement.

> Existence of poverty and inequality leading to human and drug trafficking.

> lack of proper management of opium and such crops.

② Detection:

- > Inefficiencies in generating local level intelligence. weakness of police and security forces.
- > Lack of integrated approach among various intelligence agencies:
- > challenges emerging due to Encrypted Communication. eg: whatsapp, Bitcoin

③ Investigation and Prosecution:

- > specialized training is lacking to collect evidence from diverse sources.
- > lack of effective transnational Extradition and mutual legal cooperation.
- > Delays in prosecution and destroying of evidence.

organized crime drains national wealth, threatens rule of law and creates insecurity among citizens.

Hence, the need for an integrated approach arises

→ Prevention: ✓ Inclusive developmental approach

is needed to combat root of human trafficking, drug and arm trade.

✓ Effective border surveillance to prevent entry of drugs from Golden crescent and Golden triangle.

✓ Cracking down on illegal arms manufacturers.

→ Detection: NATGRID to collate, analyse and disseminate diverse sources of information.

→ Generation of actionable intelligence using Multi Agency Centres (MACs)

→ Specialized training to intelligence units

→ Prosecution: • training legal experts and police in evidence gathering related to TOCs.

• Mutual Extradition and legal cooperation treaties under UN and multilateral fora.

20. The Government has adopted a holistic approach built around simultaneous implementation of a security agenda, developmental activities and promotion of good governance to address the Left Wing Extremism in India. Comment. (250 words) 15

सरकार ने भारत में वामपंथी उग्रवाद (लेफ्ट विंग एक्सट्रीमिज़्म) से निपटने के लिए सुरक्षा एजेंडे, विकास संबंधी गतिविधियों और सुशासन के प्रचार-प्रसार के समकालिक कार्यान्वयन के चारों ओर निर्मित एक समग्र दृष्टिकोण अपनाया है। टिप्पणी कीजिए।

(A) Left wing extremism is regarded as grave threat to India's security and sovereignty.

→ It seeks to overthrow democratic government.

→ Life and property loss due to violence.

→ Fear among citizens.



Reasons for LWE - [to eliminate root causes]

↳ Social injustice - Denial of justice, dignity

↳ Inequalities: Related to land and property.

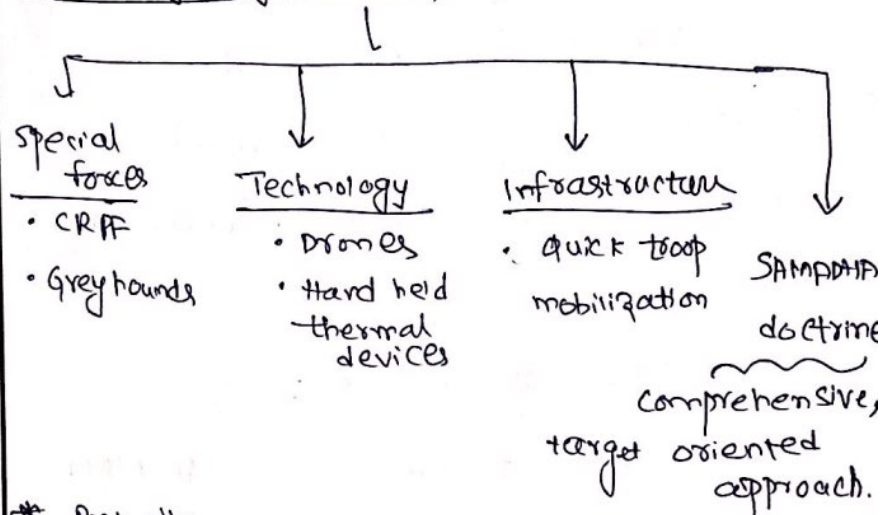
↳ Lack of good governance: that denies people's rights and welfare.

Slowly this agrarian movement spread among

tribal and disadvantaged areas.

Hence government has adopted a multi-pronged approach.

① Security agenda: >



* Priority to strengthening local police
under fortification of police station, police modernization schemes.

* NTRD is providing effective technology component to multiply security strength

② Developmental Efforts >

> Priority to basic needs to fulfill human needs. eg: Education, food security and nutrition.

- > Targeted schemes like Roshini to develop skill and local leadership
- > Infrastructure development under
 - Road requirement plan "
 - Telecom connectivity using universal service obligation fund.
- > Perception management: through effective information strategy: (community radio)

③ Promotion of good governance : >

- Legal rights : provided under PESA Act and Forest Rights Act, 2006.
 - Van dham yojana : to provide access to minor forest produce & marketing.
 - Effective implementation of MGNREGS, PDS.
 - Sensitivity training to government employees.
- With effective implementation and monitoring threat of LWE could be eliminated for ever.