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GENERAL STUDIES (TEST CODE : 1244)

Name of Candidate	NUPUR GOEL		
Medium Eng./Hindi	ENGLISH	Registration Number	6667
Center	ORN	Date	11/9/19

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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11	15	
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16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
2. There are **TWENTY** questions printed in **ENGLISH**
3. **All questions are compulsory.**
4. The number of marks carried by a question/part is indicated against it.
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 that the authorized one.
6. Word limit in questions, if specified, should be adhered to.
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.

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. Discuss the need of an Independent Fiscal Council (IFC) in bringing about transparency and accountability in fiscal processes in India. **(150 words) 10**

The recent N.K. Singh committee advocated for an independent fiscal council at central level.

Issues in fiscal management
- Political populism
- Non adherence to FRBM Act, 2002
- Absence of uniform rules for states & Union
- Use of extra budgetary resources
- Bad accounting
- Poor forecasting

This brings in the need of IFC in India :-

Transparency :-
1) It'll prepare a multi-year fiscal forecast plan for centre as well as states.
2) It'll also give sustainable level of debt.
3) It'll assess the performance of govt.
4) Presence of experts in this council makes it more credible.

Accountability :-

1) check on political populism.
2) instill confidence amongst investors
→ Increase in investment.
3) Promote the culture of proper accounting.
4) The govt'll have to explain if it diverges from given laid out plan.

At the same time, this also gives much needed flexibility to fiscal management to deal with unforeseen situations in global & domestic economy.

IFC is a good measure and must be implemented soon by govt.

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2. Recognizing the potential of exports in generating employment, a number of steps need to be taken to address India's weakening export competitiveness. Analyze. **(150 words) 10**

India is witnessing huge problem of unemployment with unemployment rate rising upto 6.1%. (PLFS survey).

Herein, exports can have huge potential in increasing employment:-

1) Labour-intensive - Inds. to leather, textile manufacturing can increase employment.

2) GI-tag, brand India, Organic food etc are in huge demand in global economy. → They also develop rural economy.

3) Majority of exports through MSME which are more labour intensive.

4) Abundance of raw-material - India 2nd largest producer of fruits, horticulture etc.

5) Favourable govt policy - GST, harmonisation of tax, giving rebates to MSME, building brand India abroad.

But still, India's export competitiveness is weakening:-

1) India struck in 'middle income trap'

as said by PMEAC member.
2) Rigid labour, land laws.
3) Unfavourable tax regime - countervailing duties etc.
4) Weakening global demand.

Steps needed to address this issue :-

1) Infrastructure :- Adequate infrastructure like roads, coastal Economic zone, power, SEZ, Sagarmala, Bharatmala
2) Policy - central policy as well as state Export policy. Also coordination & cooperation amongst both.
3) Laws - Ease of land & labour laws, environmental clearances.
4) Banks - 4R by Economic survey, bank consolidation, recapitalisation to increase credit.
5) Focus on MSME & inclusive regional balanced growth.

Economic Survey 2018-19 stressed on increasing exports so as to increase employment in India.

3. Highlighting the main features of National Mineral Policy, 2019, discuss how it can help in ensuring sustainable and responsible mining.

(150 words) 10

National Mineral Policy, 2019 will replace National Mineral Policy, 2008. It is prepared under guidance of K Rajeswara Rao.

Main features :-

1) Dedicated mineral corridors to boost private sector mining areas.
2) Giving status of industry to mining.
3) Boost financing.
4) Long-term export policy of minerals.
5) concept of Exclusive Mining zones with inprinciple statutory clearance for grant of mining lease.
6) Inter-generation equity.
7) Utilisation of District Mineral Fund for welfare of mining affected people

How it leads to sustainable & responsible mining?

1) Talks of inter-generational equity.

2) Proper monitoring and evaluation of all mining areas.
3) An inter-ministerial body to ensure sustainable mining.
4) Use of renewable energy.
5) Long-term policy of exports to incentivise scientific mining processes.
6) Use of district mineral fund through people participation (Gram sabha).

Lacunaes –
1) Excludes pollution monitoring
2) EIA not universal
3) Mine closure practises not focused
4) No training provision to assess mines.
5) Privatisation may lead to reckless exploitation.

It must be aligned with local requirements so as to become sustainable & responsible.

4. Highlighting the salient features of the PM JI-VAN Yojana, analyze how it can assist in achieving the vision and goals of the National Policy on Biofuels, 2018. **(150 words) 10**

PM Jivan Yojana aims to create 2G ethanol capacity & attract investment in nation.

Salient features -

1) Production of 2G Bioethanol through biorefineries.
2) Increase in private investment in this sector.
3) enhance the blending of petrol
4) Focus on use of biofuel in transport sector.

National Policy on Biofuels, 2018 -

It aims to increase the production of ethanol through sugarcane, mollasses etc. It also aims to decrease our import dependence, employment generation & more income to farmers.

PM JIVAN Yojana leading to National Policy on Biofuels :-

1) Both focus on increase in blending of petrol with ethanol.
2) PM Jīvan Yojana gives Viability gap funding to various bioethanol projects → increase in production.
3) Increase in research & development.
4) Increase in demand of biofuels as Indian Oil, HPCL etc mandated to procure bio-ethanol.
5) More incentive to private sector to come & invest.

We need to implement this in letter & spirit so as to become a world leader in biofuels.

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5. Zero Budget Natural Farming (ZBNF) provides an alternative to capital and chemical intensive agriculture currently being practiced in India. Analyze. (150 words) 10

Zero Budget Natural Farming has recently gained high importance in national parlance as an alternative to traditional input-based farming.

Features :- No use of chemicals - fertilisers & pesticides.
- Use of local know-how as well as modern agri practices.
- Resource optimisation of all available natural resources.

Alternative to capital intensive agriculture :-

1) Less input cost
- seeds procured from earlier harvest.
- No chemicals used
- Less use of fertilisers.

2) Reduces capital on preparation.

3) Uses irrigation (micro irrigation) → less water required → less electricity consumed.

4) Mulching based moisture.

Alternative to chemical intensive agriculture:-

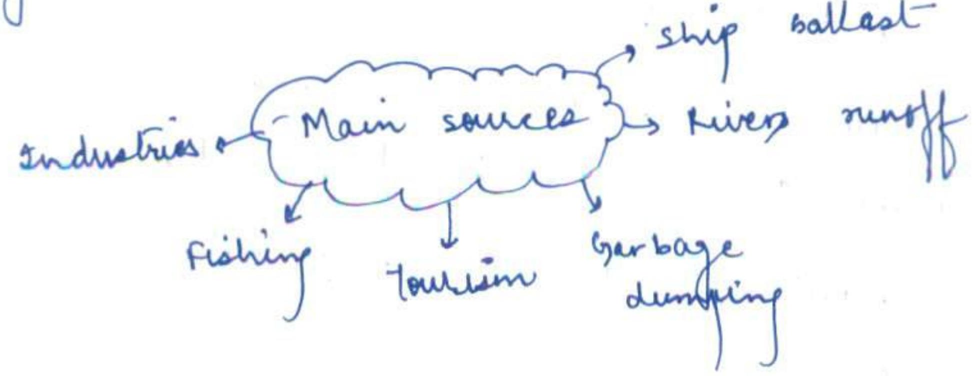
1) Using dried leaves, cow dung, urine, human excreta as natural fertiliser.
2) Using biological rodents say rats, chillies etc as pesticides.
3) Local earthworms to turn the soil, increase air quantity & organic matter.
4) Waaphasa to enhance soil health & fertility.
5) Inter-cropping, multi-cropping to maintain soil fertility.

constraints
- less awareness
- low yield
- soil accustomed to fertilisers (Punjab)
- Might give less productivity
- Can't withstand disaster

We need to overcome such constraints & increase extension services to spread awareness to mainstream ZBNF in India.

6. Marine life is facing 'irreparable damage' from the millions of tonnes of plastic waste which ends up in the oceans each year. In this context, examine the implications of plastic pollution on marine ecosystem and suggest some measures for addressing this problem. **(150 words) 10**

According to world Economic Forum, there'll soon be more plastic in ocean than fish by 2050.



Main implications of plastic pollution :-

1) On marine animals
- Entangling of plastic material in gills of fish
- Damage their digestive system.
- Bio accumulation of plastic in animals
- More diseases, also get hurt due to plastics

2) On oceans :-
- Plastic get accumulated as garbage - especially in gyres.
- Increase in carbon emissions

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3) coastal community
- Damages aesthetic value → less tourism
- May enter the food chain of human leading to bio accumulation in humans
- Impact on human health.

Measures needed :-

1) Policy - Policy for better waste management.
Eg- Extended Producer Responsibility in India.
2) Governance - better collection and segregation of waste
- better waste management rather than dumping in sea.
3) Fines for littering in coastal areas.
4) Push towards responsible & ethical tourism.
5) Increase resource efficiency
6) spreading awareness about plastic pollution.

India has already taken a vow to eliminate single use plastic by 2025.

7. Write a short note on the evolution of Bharat Stage norms in India. Also discuss the significance and challenges posed by the planned introduction of BS-VI norms in India from the year 2020. **(150 words) 10**

Bharat stage norms are the guidelines that by govt which specify the maximum limit of emissions of NOx, SOx, CO, etc that can be done by an automobile.

CPCB is the implementing authority for Bharat stage norms.

Evolution :-

2000 — Launched as BS-I, focus on SO_2, PM10 etc

2002 — BS-II, focus on NOx, PM2.5 also

2010 — BS-III

2017 — BS IV

BS-III, BS IV — fuel efficiency, PM, NOx, SOx, CO.

2020 — BS VI

Significance of BS-VI

1) To reduce air pollution
2) Climate change - decrease greenhouse gas emissions.
3) Increase in fuel efficiency
4) In tune with global standards.

- India will also be able to achieve INDC, SDG etc.

Challenges posed :

1) Skipping of BS V – BS VI is a quantum jump & seem idealistic wherein we haven't even adopted BS IV uniformly in our country.
2) Technological – Need retrofitting and calling back of a number of vehicles.
3) Huge funds required.
4) It'll make automobile costly.

Way Forward :–

14 out of 20 most polluted cities of world are in India. It is high time that we take some radical steps to tackle air pollution.

8. What are black holes? Highlight the challenges in imaging a black hole? How were these challenges overcome by the Event Horizon Telescope project? **(150 words) 10**

Black hole can be defined as 'infinite mass, infinite gravity' object in space. It is so dense & so gravitative that even light can't pass it.

Imaging a black hole means to be able to know its features, properties & core characteristics through scientific visual, thermal, IR, hypospectral techniques.

Challenges :-

1) It is so dense that even light can't escape. When light emitted can't be reflected back, our receptors aren't able to detect anything.

2) Gas & dust usually encircles it. It further impedes direct observation of black hole.

3) Formation of black hole - a rare phenomenon in universe. It is formed when a

star dies or when 2 star combines.

How were these overcome by Event Horizon Telescope?

1) It used the dust & gas encircling black hole to emit back the rays.

2) Use of multiple telescopes situated at different parts of Earth to capture black hole.

3) Used high precision instruments to cancel out any noise by atmosphere.

~~4)~~ Thus the capturing of black hole is considered a big feat by EHT project.

9. While mentioning the objectives of the Arms Trade Treaty (ATT), discuss the challenges which are hindering the utilization of the ATT to its full potential. **(150 words) 10**

Arms Trade Treaty adopted in 2013 is the first international ~~trade~~ binding treaty to control transfer of conventional weapons.

Objectives of ATT :-
1) Regulate & control the transfer of conventional arms.
2) Prevent illegal trade & smuggling of conventional arms.
3) Promotion of global peace, security.
4) Increase in transparency & accountability.

Challenges hindering utilisation of ATT :-
1) Legally binding nature impedes on sovereignty of member nations. Many nations like USA, Israel not ratified it.
2) Lack of adequate infrastructure to facilitate interstate intelligence sharing.

3) Lack of mandate to enforce its order

India's concerns :-

1) Today, we have a number of non-conventional weapons too - Treaty doesn't cover them.

2) More focus on export nations without taking into account the interest of importing states.

We need to overcome the given impediments to implement it fully on a global scale.

10. Threats to internal security of India may be posed both through the communication networks and also to the networks. Discuss. Also, highlight the steps taken by the government in making the networks more secure.

(150 words) 10

India is vulnerable to a number of attacks. The recent study put it on high vulnerability index with respect to cyber attacks.

Threats through communication network :-

1) Cyber-frauds ;- cyber phishing, use of antiware, malware to disrupt our communication system.
2) Today, all critical infrastructure controlled through internet → increases the vulnerability.
3) Cyber-terrorism - 4th front of warfare
4) Online radicalisation of youth by ISIS, Al-Qaeda etc.
5) Spying into the communication of big leaders to disrupt the peace of nation.

Threats to communication network :-

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1) cyber attack on critical network.
Eg - nuclear plant -
2) Nation-state actor, state can be targetted.
3) Harming railways, airways, finance etc

Steps taken by govt :-
1) infrastructure - CERT-In to counter any cyber attack, CCTNS system for coordination among different agencies.
2) 24 X7 Online Monitoring cell in MHA.
3) cyber Kawach App to warn users of malware.
4) NTRO - to protect critical infrastructure
5) strengthening of our communication network.

We need community vigilance as well as cyber training of police personnels to deal with new threats online.

11. Highlight the importance and challenges related to integration of Variable Renewable Energy (VRE) in India. Mention some steps that can be taken for its smooth integration with the synchronized Indian grid. **(250 words) 15**

India has aim to achieve 175GW of renewable energy till 2022. It aims to have 100GW by 2022 from solar energy.

Variable renewable energy characteristic is that it changes over time. It is seasonal in nature. Examples are solar, tidal, ocean & biomass energy.

Importance of VRE :-

1) Environmental friendly - VRE doesn't cause any harm to environment.
   - No pollution.
2) India has abundant renewable energy source - Large solar power potential
   Over 7500 km coastline (Ocean energy)
3) Our import bill of oil, gas reduces.
   - This reduces Current Account Deficit & preserves our foreign reserves.
4) Large demand of power which is set to

increase (NITI Aayog).

Challenges to VRE integration :-

1) Technological - India doesn't have adequate technology to integrate them into national grid.

2) Requirement of costly battery to store energy produced - Also India dependent on China, S Korea for these batteries.

3) Lack of adequate infrastructure - Whole ~~national~~ national grid yet not operational.

4) Intra-state & inter-state linkages - Different geographical conditions - hills, plains, rivers etc.

5) Renewable energy is seasonal, unreliable - Usually the peak demand is there when VRE not there.

6) Economic - Low price of Renewable energy - High upfront cost of VRE integration.

7) Lack of adequate enabling regulatory regime.

Steps needed for smooth integration :-

1) Finance - Adequate finance to be earmarked for infrastructure building.

2) Technology - focus on research & development to have more technological innovation, making indigenous lithium ion batteries, integration transition between different sources to be made more reliable & smooth.

3) Pricing - The costs of renewable energy must be fair devoid of aggressive competition

4) focus on start-ups in this sector that can give rise to more innovation.

5) Political will - cooperation amongst states & central government.

6) strict implementation of laws on ground - focus on AT&C losses, power theft.

It is only by integration of VRE can we be able to supply 24X7 electricity to all in India.

12. There have been arguments that India could fall into a 'middle income trap'. Explaining the phenomenon, highlight the reasons behind such arguments. How can India avoid it? **(250 words) 15**

PM Economic Advisory council recently cautioned that India might fall into a middle income trap.

Middle income trap is the situation wherein a nation is unable to ~~get~~ get entry into high income league due to structural issues & also losses the competitiveness to compete with low income nations. World Bank defines it between $1000 to $12000. India remains here.

Reasons for such middle-income trap :-

1) Global → Trade war between China and USA, growing protectionism in the world – Brexit
– America first Policy of Trump
leading to economic global slowdown.

2) High dependence on imports - India importing 80% of coal - can't even replace

it.

3) Decrease in investment - both public and private investment slowing down. Our Gross Capital Formation is stagnant.
4) Lack of adequate infrastructure - Roads, power etc.
5) Rising inequality - Oxfam Report says top 1% people own 55% of resources.
6) Recent NBFC crisis (IL&FS crisis), PNB scam, NPA problem, ~~to~~ twin sheet problem
7) Rigid labour & land acquisition laws in India - Vietnam, Bangladesh having more advantage in textile sector.

Effects of middle income trap :-
1) India's competitiveness in global market decreases → less exports.
2) Less demand in domestic market.
3) Unemployment increases → leading to economic slowdown.
4) Risk of always being struck in this
5) ~~too~~ More difficult to pull our economy

out due to ~~hyd~~ deglobalisation.

Measures to be taken to avoid it :-

1) Competitiveness - India must move above the value-chain in exports (Economic survey 2017-18) - by New Export Policy
- setting up Coastal Economic Zone
- Rationalisation of taxes (Countervailing duties to be removed)

2) Special incentive to labour intensive sector - in ~~tab~~ leather & textile sector.

3) Having more high quality high paying jobs in economy - PM Kaushal Vikas Yojana

4) Incentivisation of private investment - Public investment to be done in capital assets, connectivity projects etc.

5) Job-givers rather than job-seekers - Start Up India scheme, Innovate India etc.

6) Banks - 4R by Economic survey 2016, bank consolidation, autonomy to RBI etc.

7)

13. Highlighting its importance, discuss the major issues that plague effective monetary policy transmission in India. Also, mention the steps taken by RBI to improve it. **(250 words) 15**

Monetary Policy transmission can be defined as the passing down of monetary policy decisions down to consumers.

Monetary Policy is decided by RBI. It does so through both quantitative & qualitative measures. Eg - Repo Rate, Open Market operations etc. When the consumer is also able to benefit from changes in such policy, it is said to be monetary policy ~~the~~ transmission.

RBI
↓
Banks
↓
Consumer

Transmission

Importance of effective monetary policy transmission are :-

1) Consumer benefit - If RBI decreases repo rate, effective transmission would decrease lending cost → Benefit to consumers.

2) RBI to be in better control of monetary situation in India.

3) More private investment will ~~can~~ be spurred.

4) Better monetary policy transmission will lead to intended liquidity & inflation in economy.
5) More predictability in policy-making.
6) More FDI as consumer's / investor's trust will increase - Better rating by credit agency.

But in India, that it is seen that there is a lag in the transmission of monetary policy.

Issues :-

1) Banks - Huge NPA (around 11.2% of total assets)
- High SLR & CRR pressure, also high capital adequacy ratio to be maintained due to basel III norms.
- Governance system is lacking in banks
- They already have high investment in govt bonds.

2) NBFC - The changes in repo rates indirectly affect NBFC sector. while they give a major share of loans to

MSME.

3) RBI - lack of autonomy to regulate all the banks to pass the benefits.

4) Unpredictability - frequent changes in monetary stances (from bullish to hawkish) also confuse the banks.

5) Usually, ~~banks~~ govt & RBI have different policies - This leads to banks taking the middle path.

Measures taken by RBI :-

1) MCLR instead of base rate to give credit to banks.

2) strict monitoring of banks through Asset Quality Review, PCA, audits etc.

3) RBI also working to clean banking sector sheets to enable them to lend.

4) Monetary Policy committee to decide on inflation - Now we role is Inflation targetting rather than growth.

5) More coordination with govt - consistency in policy-making.

6) Push to financial inclusion by PMJDY, small payment banks etc.

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14. Highlight the constraints faced by rainfed agriculture in India. Discuss some agronomic practices that can be adopted for stabilizing agricultural production in rainfed areas. **(250 words) 15**

Rainfed agriculture is the agriculture which is mostly dependent on rains/ monsoons for its irrigation purpose. Around 65% of agriculture in India is rainfed employing 80% of farmers.

Major crops are cotton, millets, pulses, coarse grains etc.

Constraints faced by rainfed agriculture :-

1) Govt Policies - Usually all the govt policies are made for irrigation-based agriculture
Eg - HYV seeds, fertilisers
↳ lack of policy on rainfed agriculture.

2) Climate change - Rainfall & droughts are more frequent due to climate change - Negative impact.

3) Lack of adequate resources - Only 15% funds earmarked for these regions.

The extension services provided is also very less.

4) Deteriorating soil quality - due to implementation of wrong seeds, cropping pattern and fertiliser. - Burn out the soil.

5) Water scarcity - Major problem - World Bank says more than 50% region will be water scarce by 2041.

6) MSP - Although the farmers are more poor in rainfed areas yet MSP is either not declared on their crops, timely. Lack of adequate procurement from these regions.

7) Lack of proper awareness about scientific method of farming due to high illiteracy.

8) Small fragmented landholding don't allow mechanisation, economy of scale [1.11 hectare average size of landholding].

The agronomic practises that can be adopted

1) Focus on mixed farming, Inter cropping & multi-cropping.

2) Use of micro-irrigation techniques - Drip & sprinkler irrigation, solar pumps for pumping water (KUSUM)

3) Focus on increasing public investment -
- Increase in research activities
- crops, seeds suited to rainfed areas (GM crops)
- Extension services.

4) consistent, overarching agricultural policy of rainfed area - having focus on bee keeping, livestock farming to increase the farmer income [Ashok Dalwai committee].

5) cropping pattern to be suited to its agroclimatic conditions rather than cultivation of rice & wheat.

6) Better usage of water available - Mihir shah committee focused on judicious & responsible use of groundwater.

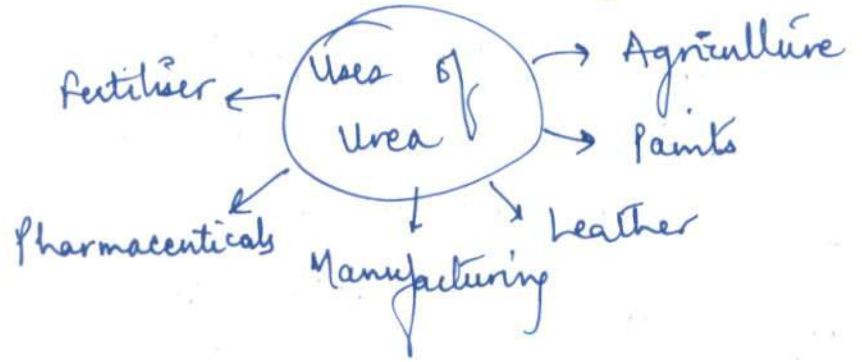
7) shift to organic farming, zero budget natural farming etc.

We must make our farmer empowered to lead us to sashakt Bharat.

15. Despite the steps taken by the government in recent years, a number of problems continue to persist in the urea sector in India. Discuss. What reforms should be taken to address the persisting problems?

(250 words) 15

India is one of the largest manufacturer, and consumer of urea fertiliser in the world [Economic survey 2015-16].



There have been many steps taken by govt in recent years like

1) Neem coated urea to be used in agriculture.
2) ~~Neem~~ Urea Policy.
3) soil Health card scheme
4) Export - Import Duty rationalisation of urea.

Despite these, a number of problems continue to persist in this sector:-

1) Pricing - Urea is heavily subsidised to be used in agriculture.
→ Black - marketing
→ Diversion of agri-urea to other sector.
→ Even its under pricing leads to smuggling to Nepal, Bangladesh etc.

2) Governance - Import - substitution practised.
- Import canalisation by 2-3 companies
- Leakages in transportation.

3) Rich farmers - account for 80% of benefits while poor can't access the subsidy
- Huge leakages in subsidies.

4) Climate change - source of greenhouse emissions → global warming.

5) Soil Quality - gets declined due to its over-use and rampant misuse by farmers (Punjab, Haryana).

6) Import-dependence with lack of research and development in urea sector.

Reforms to be taken :-

1) Economic survey 2015-16 recommended

bringing urea under Nutrient based subsidy plan.

2) Deregulation of prices of urea like petrol, diesel → Fair pricing of urea.

3) Soil Health Card, Extension services, to be given to farmers for its judicious use – Kisan channels, AIR.

4) Governance – Plugging loopholes by integrating it with Direct Benefit Transfer, integrating it with Aadhaar, giving more benefit to poor farmers.

5) Competition in urea sector – Incentivisation for private sector to come & invest,

6) Decanalisation of urea imports.

6) ~~Foist~~ Increase in research & development, encouraging start-ups in this area.

16. What is Access and Benefit Sharing? Explain how it aids in sustainable use of biodiversity. Also, mention the different global and national level mechanisms for ensuring Access and Benefit Sharing. 3 **(250 words) 15**

Access & Benefit sharing are the principles or ruled laid out to guide how bio genetic resources can be accessed, used, research & development and how its benefits are to be shared amongst all stakeholders.

It focusses on equitable sharing of biodiversity for benefit of all.

Importance of Access & Benefit sharing :-

1) Clear laid out rules
- incentivises more research & development
- more cooperation amongst govt, scientists and people

2) Less litigations in court.

3) Focus on sovereignity by giving rights and control over nation's genetic resources.

4) Better global level coordination.

5) Better resource optimisation - More

scientific use.
6) More research & development leads to
- better mitigation to climate change
- food security.
7) Better understanding of life on earth -
Preserves traditional knowledge with
modern scientific knowledge.

Global Mechanism for Access & benefit sharing:-
1) Convention on Biological Diversity, ~~2000~~
- fair & equitable sharing of access & benefits.
2) Nagoya Protocol - special clause for ABS.
3) Food & Agricultural Organisation leading global agency to implement it.

National-level Mechanism :-
1) National Biodiversity Act, 2002 - based on CBD. It aims for conservation of biodiversity, its sustainable use & ABS.

2) Expedient filing for ABS applications – e-governance.
3) changes in IPR policy to be in tune with this ABS.
4) India also a signatory to Nagoya Protocol.

But still, we need to take a no. of steps for sustainable use of our biodiversity. There must be more focus on research & development in this sector. International collaborations can also be done.

17. Stating the significance, discuss the challenges in achieving disaster resilience of infrastructure. Suggest some ways for mainstreaming it in the development paradigm. **(250 words) 15**

Around 70% of India's landmass is prone to one disaster or another. There are many disasters which can happen

Natural
- Earthquake
- Cyclone
- Flood
- Draught
- Tsunami

Man-made
- Urban fire
- Forest fire
- chemical accident
- Industrial Hazard
- oil spill.

In this, we need a disaster-resilient infrastructure. This type of infrastructure will be able to not only withstand disaster but ensure minimum loss of life & property.

Significance :-

1) Reduce the loss of life & property.
2) Integral part of disaster preparedness
3) Made up of local resources by integrating traditional know-how (Eg National Disaster Policy, 2012)

4) Better able to respond to disaster. Increased effectiveness of prevention, rescue, relief & rehabilitation.
5) Increase in local employment - push to economy
6) signatory to Sendai Framework for Disaster Risk Reduction 2016 - this kind of infrastructure a critical part of it.
7) Better coordination amongst govt & people in face of a disaster ∵ as communication network, power network still intact → less resources required for Build back better

Challenges :-
1) Different disasters - North India can witness landslides, earthquake, floods & man made disasters etc - All require different infrastructure.
2) Huge resources required - social, human, technological, financial.
3) Lack of technological knowhow in building of this infrastructure.
4) Lack of political will & people

pressure from below.
5) It would require dismantling of a number of structures - huge sunken cost.
6) It requires cooperation across party lines, states govt difficult to achieve.

Ways to mainstream this in development :-
1) Disaster Management to be an core part of all Master plans for cities & rural planning (sendai framework)
2) Focus on research & development in disaster resilient infrastructure in India - Also integrating it with Green Building code
3) Incentivisation of private sector to invest in DRI.
4) Gram sabha, District Magistrate to pass a new building plan only if it is disaster resilient,
5) ARC II asks for vulnerability zoning of every local area. This'll aid DRI.
6) Focus on disaster as well as environmental sustainability.

18. Highlighting the significance of data localization for India, discuss various challenges associated with data localization. **(250 words) 15**

Data localisation can be defined as storage, usage, processing of data generated by a nation within the national boundaries.

In the globalised world a advent of ICT Revolution, we see a spurt of global big companies which serve the consumers all over the world. this has increased the demand for data localisation. Even B N Srikrishna committee focussed on this.

Significance of Data Localisation :-

1) Data is the new oil [Economic Survey 2018-19] - can be misused by MNCs - Facebook's Cambridge Analytica case.
2) Right of a nation as it comes under its sovereignity.
3) Better prevention of citizen's interests and it also reduces the foreign interference in domestic affairs.

4) Use – The enormous data generated can be used by domestic startups for serving the local population ⇒ Innovation ↑ [Increase]
5) Gives a level playing field to all
– Even European Union's GPDR also focusses on data localisation.
6) Balance between privacy and commercial interests.
7) It'll also ensure national security by giving access to Indian investigating agencies. Also evidence based policy making.

Challenges associated :-
1) Huge costs involved for storing data locally – Might hamper the profit margins – this'll lead to Ease of Doing Business in India getting affected (World Bank).
2) Might lead to more deglobalisation, protectionism,
3) Bilateral relations – USA already having issues with India over this clause.

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4) Might lead to less competitiveness in Indian IT industry.
5) similar data localisation in other nations will hurt our companies there.
6) Decrease in FDI (FDI in ITes largest this year) - less investment.
7) Authoritarian state - Might lead to unlimited control over citizens [Edward Snowden case]

India is moving towards Digital India. So, it must ensure a delicate balance between e-governance and national interests. It must be decided by a multistakeholder approach

19. Money Laundering as a socio economic offence is a menace especially for developing countries like India. Comment. What measures have been taken at the domestic and international levels to deal with this menace?

(250 words) 15

Money laundering is the method of converting illegal / black money to legal money. It can be done by hawala transactions, p-Notes, Round tripping, shell companies etc.

Black Money → Placement → Formalisation → Integration → Legal Money

It is regarded as a socio-economic offence as :-

SOCIAL :-

1) Funding to terror organisations, organised crime.
2) Exploitation of poor as increase in human trafficking, smuggling.
3) Decrease in govt revenue - Less welfare activities for poor.
4) Tax evasion promoted → social contract theory says this leads to weakening of

democracy.

5) Increase in money supply → increase in inflation.

6) Increase in inequality - chaos, indiscipline, riots etc

Economic :- 1) It decreases the legitimacy of govt.

2) Establishes a parallel economy in country

3) Incentive to others to evade taxes

It is a menace for developing countries like India :-

1) Huge black economy in India - Around 20% to 120% according to different studies.

2) Increase in illegal activities like kidnapping, terrorism, trafficking etc.

3) Threat to internal security. It also fuelling LWE according to IB Report.

4) governance problems - difficulty for police, ED, tax officials etc.

5) Increase in poverty & marginalisation of already weaker section.

Measures at domestic level :-

1) Legal - Passing of PMLA, 2002
- TADA, PODA Act have provisions of money Laundering.

2) Institutional - setting up of Enforcement Directorate, strengthening CBDT & CBEC.

3) Governance - Regulation by RBI, SEBI
- NGO under FCRA route.
- RTI, KYC norms.

4) Various DTAA agreements signed with Mauritius, singapore, cyprus etc.

5) Tightening norms against shell companies.

At international level :-

1) G-20 - has adopted Base Erosion & Profit sharing mechanism.

2) Intelligence sharing among various nations.

3) UN convention against Money laundering. ~~passing~~ focus on passage of CCIT in UN

4) cooperation amongst various financial units ~~of~~ different nations to share details.

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20. The primary motive of terrorism differs from that of organised crime but there exists a symbiotic relationship between the two. Discuss.

(250 words) 15

The 21st century world is suffering from terrorism as well as organised crime.

Although there is no definition of terrorism, but its main motive is to spread fear amongst the society. Both terrorism & organised crime are done against society but there are some differences:-

Terrorism	Organised crime
Main objective - Fear	Main objective - profit through illegal means
can be done by organisation (Al-Qaeda) or a single individual (New Zealand attack)	usually done by a network of people
can be local or transnational	Transnational in nature
Power & control primary motive	Finance / Material benefit primary motive
will deploy violence	May or may not deploy violence

Example - 9/11 USA attack, 26/11 attack	Eg - Smuggling, human trafficking, money laundering etc.

But inspite of differences, there exists a symbiotic relation between both of them:-

Terrorism ~~leading~~ using ~~to~~ OC :-

1) Funding to terror attacks come from networks of organised crime.
2) Depend for meeting daily requirement for food, travel as well as functionary.
3) Safe haven to terrorists given by OC.
4) Also helps in recruiting more militants.
5) Access to arms & weapons.
6) They help them in evading from various police agencies.

OC using terrorism :-

1) Terror organisations giving protection to the leaders of syndicate of organised crime.
2) Terrorists themselves involved in OC. Eg - ISIS in Syria - oil smuggling.

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3) Terrorists lead to instability → This leads to favourable situation for organised crime.

Thus, in order to prevent one, we need to take action on both.

Measures :-
1) Strengthening our intelligence agencies & policing to take action against them.
2) Global legislation - Faster adoption of convention on International Terrorism by UN.
3) Breaking nexus between them through consistent efforts -
4) Spreading awareness amongst people.