

GENERAL STUDIES

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INDEX TABLE			INSTRUCTIONS	
Q.No	Max.Marks	Marks Obtained		
1	10	04	1. Please write your Name, Email, UPSC Roll No. and Mobile number in the answer sheet 2. There are 20 questions printed in English, all questions are compulsory 3. The number of marks carried by a question or part is indicated against it. 4. Answers must be written in the medium authorized in the admission Certificate (English), which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. 5. Word limit in questions, if specified, should be adhered to. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be struck off.	
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3	10	05		
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6	10	05	Any specific message from Educrat IAS Mentors/Evaluators with respect to your copy? Mentor's Remarks: ..... ..... ..... ..... ..... ..... ..... ..... ..... ..... .....	
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19	15	07	Start Time:	End Time:
20	15	07	Mode of Examination:	Online <input type="checkbox"/> Offline <input type="checkbox"/>
Total Marks		110	TEST CODE:	Medium of Examination:

1. Discuss how inclusive growth and employment is a prerequisite for macroeconomic stability. (Answer in 150 words, 10 marks)

Macroeconomic stability refers to stable economic growth, controlled inflation and other stable macroeconomic indicators.

Good use of definition

For achieving macroeconomic stability, inclusive growth and employment are a prerequisite.

This part looks repetitive

Inclusive growth and employment for macroeconomic stability

We this part only.

### Inclusive Growth

- 1) It ensures that no section of population is dependent on government welfare exclusively thereby reducing fiscal deficit.
- 2) It allows every section to contribute to economic growth via wages.

and savings.

3) Inclusive growth leads to better human growth indicators like education, health thereby leading to growth of economy.

Employment

↳ Savings led economic growth :

Good linkage

more wages → more savings → more loans → more investment

2) Women employment can significantly contribute to GDP

You can see how the interdependency of these factors in a cyclic manner.

Measures needed

Skill development: PMA  
Kaural Vikas Yojana

increasing employment opportunities

welfare led development.

The idea of inclusive growth mentioned in Saptarishi is not only morally correct but also economically beneficial and should be pursued effectively.

2. What is the tax-to-GDP ratio? What problems does a low tax-to-GDP ratio pose for India's growth story? Give innovative suggestions to augment the tax base. (Answer in 150 words, 10 marks)

Tax to GDP ratio is the <sup>Good introduction.</sup> ratio of tax collected to total GDP generated. A nation with higher GDP should also have a wider tax base showcasing tax buoyancy.

11.7% Budgeted Expenditure 2023-24 India's tax to GDP ratio is 17% which is lower than most developed countries.

Problems due to low tax to GDP ratios for India's growth

1) Low tax revenue means lower fiscal capacity of state to spend on welfare activities → Decrease in Social Capital.

2) It points to the existence of tax evasion. It can cause issues of money laundering, black money etc.

Presence of Parallel economy

Relevant points

- 3) It can cause inflation - unaccounted money entering economy is a new form.
- 4) Low tax to GDP ratio <sup>over rate, fiscal deficit</sup> ~~water~~ leads to increasing Revenue deficit - inability to meet routine expenditure. more interest payments on borrowings.
- 5) Tax evasion ~~due~~ causing low tax to GDP ratio also leads to inequality - defeats purpose of progressive taxation

Measures to augment tax base

follow Principle of Laffer curve: tax should not be raised to such an extent that it leads to evasion

Simplify taxation regime  
eg: GST

Double Avoidment Agreement

Agreement with other nations to avoid tax evasion eg:

Allow evaders to come clean via amnesty schemes eg: Vivad se Vishwas

Limitation of Benefits

Increase in Tax to GDP ratio is can lead to enhancement in government's fiscal capacity. Early steps should be taken to increase tax base.

Rationalisation of tax process  
Setting a limit on exempted agricultural incomes.

3. In the light of recently released Foreign Trade Policy 2023 discuss how does exports contribute to the economic development. (Answer in 150 words, 10 marks)

Foreign Trade Policy 2023  
FTP) highlights the importance of exports in India's growth story.

Certain elements of FTP 2023

shift from incentive to remission

promoting tone of exports excellence

technological capabilities for easier exports.

Exports contributing to economic development

1) Exports augment forex of a nation which can be used to meet Balance of Payment crisis.

2) It creates new employment opportunities. eg: export of oil products

3) Exports have the potential

Target USD 2 trillion by 2030  
Amnesty Scheme for one time settlement  
Hand holding support to new exporters through Star exporters

Recent inclusion of 4 towns

- Exports leads to promotion of MSMEs

to correct regional imbalance eg: Towns of export excellence - allowing towns to dwell into exports.

4) Exports can lead to inclusive development eg: Coastal Economic zones for coastal community

5) Exports are a way to increase investment - greater export leads to greater investment opportunities

→ Sanitary and phytosanitary measures by European Nations

Issues India faces with export

too much export can lead to depreciation eg: Dutch disease

Issue of re-exporting

↓  
Dependent on supply chain system dominated by China.

India depends on imports for most of it's exports. eg: dependence on API import for pharma export

Good point.

Exports should be complemented by a policy of import substitution. India's move towards Aatmanirbhar Bharat via Make in India can promote exports and economic development.

4. Discuss the potential of the unorganized food processing sector in the Indian economy. How does the recently launched Scheme for Formalization of Micro Food Processing Enterprises (FME) aim to address lacunae in harnessing the potential of the fishery sector in India? (Answer in 150 words, 10 marks)

The food processing sector contributes to 13% of gross value added in manufacturing. However, more than 70% of the sector is unorganised.

Good introduction.

Potential of unorganised food processing sector

Unorganised sector makes up almost 70% of food processing sector. Formalising it can increase growth in this sector.

Changing consumption pattern is favour of processed food

2) It has the potential to generate employment especially in MSME sector

Lays domestic market

3) Organising food processing can allow increase in export potential after safety clearance which are absent in unorganised sector

wastage of almost 30% of grains from farm to processing facilities (on-site processing facilities)



4) social security benefits to workers especially women can lead to inclusive development.

Formalisation of Micro Food Processing Enterprise (FMFPE) scheme has been launched to formalise the unorganised food processing sector

It addresses lacunae in harnessing the potential of fisheries sector

Good points:  
- Credit availability  
- Safety of fishermen in high seas

it will allow better technology to capture fishes  
eg: shift from bottom trawling

Reduce dependence on only certain fish stocks  
eg: cultivation of tilapia fish

Settle aquaculture practices can be promoted  
eg: Biofloc farming

It will give a boost to Blue Revolution

More employment opportunities to fishermen - eg: increasing exports of gelatin

The scheme if implemented properly has potential to bring a Deal crab Revolution for development of one nation.

5. Explaining the need of public private partnership (PPP) in infrastructure projects, examine the role of PPP model in port infrastructure. (Answer in 150 words, 10 marks)

Public Private Partnership (PPP) is an agreement between private and government agencies for completion of a project according to agreed terms.

*Good introduction.*

*Good definition of various models.*



Need of PPP in Infrastructure projects

- 1) Blended finance: it allows for contribution of finance by private sector thereby reducing government burden.  
eg: HAM
- 2) Risk sharing: the onus of project completion and it's risk is on both parties, thereby promoting cooperation eg: EPC model
- 3) Private bays with itself

technical expertise leading to better quality eg: DBOT

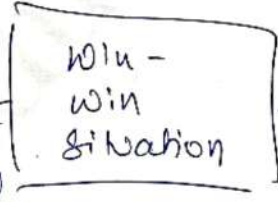
4) clear operational roles eg: government providing clearances while private focusing on management.

Role of PPP model in port infrastructure

\* ~~Lease~~ landlord model used in Vadkharan port allows risk sharing and clear delineation of responsibilities

Good example  
- Replication of success of Railway Ports.  
- Reduced turn around times.  
- Tapping the expertise of private sector in logistic handling.

government benefits as private brings with it technical expertise, upgradation facilities etc for better management



Private benefits as clearances are already provided by government - promoting ease of doing business

PPP model promotes better infrastructure development as there is participation by both sectors leading to low risk and better coordination.



6. How can the Indian Space Policy-2023 act as a catalyst for the development of a robust, innovative and globally competitive space ecosystem in India? (Answer in 150 words, 10 marks)

The Indian Space Policy 2023 provides a framework for a robust innovative and competitive space ecosystem in India.

Relevant  
Introduction.

Ways in which space policy 2023 promotes space ecosystem in India

1) Increasing private sector participation for space exploration

eg: In space promoting private participation — Skyroot launched first private rocket

Relevant  
points.

2) Engaging foreign players for better Research and Development (R&D) and commercial activities eg: Aurix focuses on foreign players

3) Promoting R&D by ISRO to Research and development.

Good Points

achieve competitive edge eg: launch of Chandrayaan 3

4) Focusing on increasing space tourism to generate revenue eg: suborbital flights

5) Increasingly collaborate between various agencies for better synergy  
eg: Def space : space defence by ISRO and DRDO.

*Conflict of interest - ISRO's dual role as regulator of work of competitor.*

Issues of space industry

increasing space debris - Kessler Syndrome

Brain drain leading to low R&D

capital intensive nature and low budget allocation

Good conclusion.

Space industry of India has already achieved great feats. It should be further encouraged via a multistakeholder approach to project India as a space leader.

7. What do you mean by metaverse? Also, critically analyse the potential of the metaverse for New India. (Answer in 150 words, 10 marks)

Metaverse is a development in the realm of extended reality (XR) by Meta. It is a virtual-physical space collaboration that allows individuals to donne new 'avatars', transcend into metaphysical reality and conduct their lives on a new platform.

Good introduction.

### Benefits of metaverse

- 1) It allows individuals to carry out daily tasks while sitting at home  
eg: conduct meetings in meta space
- 2) It allows them to break monotony of real physical life eg: new avatars.
- 3) Metaverse has potential to generate

Relevant points.

Good points

huge employment opportunities

- 4) Metaverse is useful in overcoming physical limitations imposed during pandemic - virtual space
- 5) It allows to overcome space-time limitations

Promotion of  
Inequality

Issues with metaverse for new India

cognitive  
dissonance  
emerging as  
a new threat

Metaverse is expensive to operate. Hence, a huge section of India will be excluded

can increase social isolation - physical replaced by virtual. Issue for India's demography

It uses Meta currency - potential of volatility in physical currency of Rupees.

issue of data security - data localisation norms become invalid in virtual space

issue of women's safety - new form of virtual aggression in India.

Good conclusion

While Metaverse points to a new revolution, it should be indulged in carefully and with backing of international rules for safety.



8. Explain the reasons behind increasing human-wildlife conflict in India. Discuss the measures taken by the Government to mitigate the human-wildlife conflict. (Answer in 150 words, 10 marks)

According to CAG report, 67097 human-wildlife conflicts have been witnessed in past four years.

Good use of data.

### Reasons behind human-wildlife conflict

1) Increasing human population: India is most populous country - causing imbalance in human-wildlife ratio

2) Encroachment on wildlife habitats leading to conflicts eg: Aarey forest colony

- Violation of CRZ and ESZ guidelines

3) Lack of wildlife corridors for seamless animal movement

- Highways and mineral exploration projects in forest area.

4) Domestication of animals in forest areas leads to attraction of wild animals in search of prey.



5) Creating sanctuaries, zoos etc in densely populated areas eg: animals attacked villages in Assam during floods.

Measures taken by government to reduce man-animal conflict

- Construction of Green Corridors  
- Animal Corridor  
- Elevated highway/tunnel

1) Creating buffer zones near national parks and sanctuaries

2) Increasing number of ecological bridges for seamless movement of animals

3) Listing man-animal conflict as a local disaster eg: UP

4) Odisha followed method of seed dispersal to increase forest area for wild animals.

5) Biofencing in conflict prone zones eg: REHAB : beekeeping fences.

Good conclusion.

Integrated landscape management should be adhered to in order to reduce such conflicts and promote harmony for biocentric growth.

9. Discuss the various factors contribute to the emergence of ethnic insurgencies in North East India. (Answer in 150 words, 10 marks)

North East India is a culturally and ethnically diverse part of India made up of 7 sister states.

Various groups live in this part  
Meitais / Kukis / Nagas / Mizhmi / Bodos

Good mention of tribal groups

However, this diversity has also led to ethnic insurgencies in North East India.

Reasons for ethnic insurgency in North east India

1) Ethnocentrism leading to intolerance for other cultures eg: Kuki - Meitai conflict (Manipur)

2) Demands for increasing autonomy within the state eg: Bodos demanding autonomy (Assam and related regions).

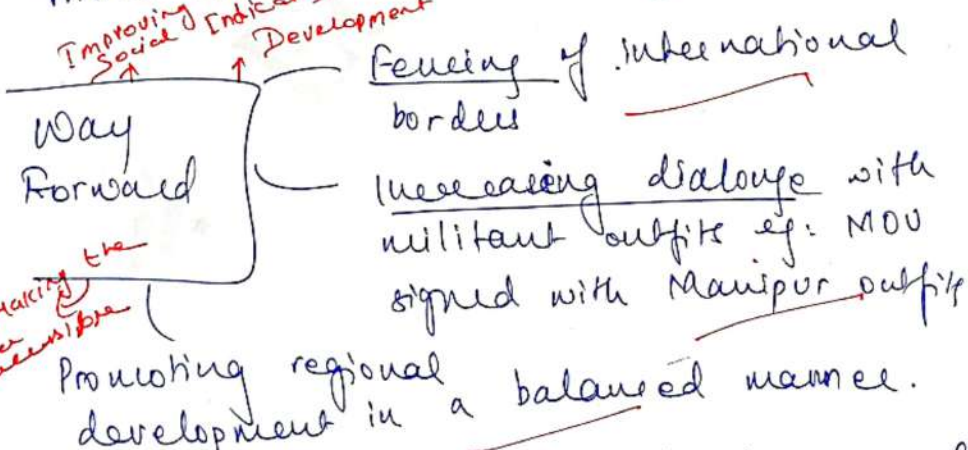
- Development deficit  
- Trust deficit among people  
- Lack of employment opportunities and inaccessibility to lower penetration of infrastructure projects

3) Increasing separatist tendencies due to rise of ultra nationalism eg: Nagas demanding own country - NCCN

4) Physical distance from mainland eg: 99% of North east borders are with international.

5) Increasing migration leading to 'sons of soil' theory and violence eg: Migration of Rohingyas

6) Help from other militant outfits in neighbouring countries eg: Myanmar tribes and kuki collaboration.



North East India is marred with ethnic outfits. However, such violence has been curbed historically as well. A combination of hard and soft approach should be used to control the situation.

10.. 'Information disorder' has disproportionately increased with increasing internet penetration. Discuss the potential threats to the law-and-order situation due to it and suggest some solutions.  
(Answer in 150 words, 10 marks)

With information Communication and Technology (ICT) Revolution in India, the growth of internet has become exponential.

Benefits of internet

quick information sharing

connection with others

platform for subaltern news

Good introduction.

→ You should also mention about increased internet penetration.

However, it has led to information disorder — sharing unverified, false and private information exponentially

Implications / threats of information disorder on law and order situation

- 1) Fake news can lead to violence between communities eg: Assam exodus based on fake news
- 2) It is used as a platform for

Good points

- have speech creating law and order issues
- eg: Sellu notes
- 3) It has led to increased privacy violation eg: cyber attacks.
  - 4) Internet is being used to mobilise people for terrorist activities eg: Al Qaeda's Al Sahab
  - 5) Information disorder is specifically used to promote sub national activities eg: Khalistani movements

Defining fake news and making it a punitive offense.

Solutions to information disorder

using law to control information spread eg: Telegraph Act 1885

selective banning of militant outfits websites eg: sec 69A of IT Act

checking data before dissemination eg: PIB fact check unit

posting correct information and flagging fake news

eg: Fact Shaala.

Good conclusion.

While information dissemination is a basic right, it should be regulated.  
Freedom does not entail threat to law and order.



11. Even after the concerted efforts by the government and RBI to promote financial inclusion, millions of people are still excluded from basic banking. Discuss how the rapid adoption of new emerging technologies by the banks will be helpful in this regard. (Answer in 250 words, 15 marks)

Financial inclusion is the agenda of government and RBI to 'bank every unbanked adult'.

Both the entities have made multiple efforts to achieve the goal.

Measures

JAM  
Trinity

Jan Dhan  
Yojana

Har Payment  
Digital by  
RBI

UPI

Nonetheless, millions of people in India are still excluded.

Reason for continued financial exclusion in India.

↳ Lack of internet connectivity: as digital payments require data connectivity.

Good introduction.

Digital Payment Index of formation of PIDD

No-frills accounts.

Easing of KYC norms.

Interoperability of UPI.

Lead Bank Scheme.

Good  
Points

- 2) Low digital literacy among masses - only 20% population are digitally literate according to RBI
- 3) Profiteering by banks: eg: Banks imposing transaction fee on Jam Duan accounts.
- 4) Cash dependent economy: almost 70% of people still use cash as predominant form without using banking routes.
- 5) Perception of people: negative view on savings after certain events eg: Punjab Bank.
- 6) Dominance of black money market - causing low savings.  
New and emerging technology can be used in order to promote financial inclusion.
- 1) UPI 123 payment: it does not require internet for digital transactions. An ~~feature~~<sup>initiative</sup> for feature phones

2) Growth of fintech: fintech can ensure financial inclusion even in rural areas.

Use of Blockchain technology.

3) Providing online insurance facilities to promote financial inclusion eg: BIMA Munity

Improving efficiency of Remote banking through

4) Focus on increasing internet connectivity in rural areas for digital payments eg: using Universal Service Obligation Fund

Bank Mitra / Banking correspondents.

5) Promoting digital literacy and financial inclusion campaigns eg: chatbots

India has a vision of last mile financial inclusion in its goal of Saptarishi. Technological interventions can help achieve it in the Amrit kaal.



12. A subsidized PDS for the well-targeted groups still remains the best form of food security for the poor. Explain. What are the main problems facing the public distribution system? In what ways can its efficiency be improved? (Answer in 250 words, 15 marks)

Good introduction

PDS is a means to ensure the Right to food security of citizens. The government follows a targetted PDS — subsidised food to poor section under National Food Security Act (NFSA)

You can quote the example of COVID-19 and the importance of PM Kalyan Yojna Anna

It is the best form of food security

as:  
1) Covers BPL population : 5 kg/person/ household.

2) Ensures food security even when food prices are volatile

3) Subsidised grains make food affordable e.g. Rs 3 for rice, Rs 2 for wheat

4) It helps India meeting its agenda of welfare state.

Major problems faced by PDS in India

- 1) Open procurement policy: FC? has to purchase all grains sold to it leading to excessive supply
- 2) Low quality grains used in PDS
- 3) Diversion of PDS trucks for sale in open market. — corruption.
- 4) Lack of storage space leading to post harvest losses eg: use of bag storage predominantly
- 5) Imbalanced regional growth  
most grains procured for PDS are from Punjab, Haryana etc — Eastern India remains underdeveloped.
- 6) Use of PDS grains by LWF eg: Maosts divert trucks and sell it for higher costs.
- 7) Increased fiscal burden on government as it covers 67% of population

— Lobbied procurement policy in favour of wheat and paddy.

— Technological barrier in biometric authentication leads to exclusion error.

- Involvement of Private Sector

- Ensuring alternatives in cost of technological failures (e.g. - Seeds of Adhoy)

- Diversify the procurement policy.

Improving efficiency of PDS

To follow recommendations of Shanta Kumar committee

Increase  
cost of grains  
under PDS

reduce  
population  
coverage to 40%

Procure  
from regions  
with distress  
sale.

2) Tracking vehicles for direction  
prevention eg: RFID

3) Promoting portability of ration card  
for migrants benefits - One nation One  
Ration

4) Use biometric authentication for  
PDS disbursement to prevent leakage  
eg: the Crain ATM Annapurthi

5) Using in governance to alert citizens  
on arrival of PDS trucks

6) Better storage facility for grains  
eg: Coel and Plinth.

PDS continues to be the best way for providing food security to citizens. Structural and technological measures should be taken to reduce the issues.

13. Digitizing land records and conclusive 'land titling' will go a long way in making India a \$5-trillion economy by 2025. Analyze. Also, highlight the steps taken by the government of India in this regard. (Answer in 250 words, 15 marks)

India has the aim of achieving a \$5 trillion economy by 2025. In order to achieve this, India is shifting towards conclusive land titling and digitisation of land record.

Benefits of digitization and conclusive land titling to achieve \$5 trillion economy

\* Conclusive land titling - shift from presumptive titling. It shows exactly who the land belongs to - Mirror principle: mirrors ground reality.

Digitisation ensures land records are digitised and there is same data across all ministries.

It will ensure easy land transfer as ownership is

Relevant points.

- use of Land of collection  
 ↓  
 Easy access to formal credit  
 ↓  
 Growth of entrepreneurship  
 ↓  
 Co-funding mechanism  
 ↓  
 can act as an alternate source of income  
 ↓  
 Essential to US\$ 5 trillion economy.

- known — decline judicial burden
- 2) It will allow governments to target beneficiary for welfare eg: land ownership will help in taking benefit of PM Kisan. leading to growth in productivity
  - 3) Government can easily acquire land for development if ownership is known eg: for making bridge etc.
  - 4) Synergy between ministries due to digital land record — easy clearances
  - 5) Digitization will also ensure data safety for future purposes.
- Both the attempts can augment infrastructure clearances, easy acquisition, better scheme targeting etc — all which will help in \$ 5 trillion economy aim.

Steps taken by government in this regard

1) Unique Land Identification Parcel :

(ULPIN) : every land to get unique pin for easy digitisation

*Bhoomi - Karnataka  
DILMP - Ministry of Rural Development  
Bhuvan Portal -*

2) SVAMVITVA scheme : using drone and satellite technology to determine conclusive land titling - Ministry of Panchayati Raj

3) National Land Record <sup>Database</sup> ~~Modernisation~~ Authority : to keep a record of all lands, their rates etc.

4) National Land Use Advisory Services to help government realise potential of acquire land.

These initiatives have allowed India to ensure development and economic growth. It can pave the way for a \$5 trillion economy.

14. The development in the dairy and livestock sector of the country is directly related to a more balanced socio-economic development of the rural economy. Critically examine. (Answer in 250 words, 15 marks)

24% of Global Milk production by India

Animal husbandary contributes to 25% of agricultural GVA. India is the largest milk producer and largest bovine meat exporter.

The development in dairy and livestock sector can contribute to a more balanced socio-economic development:

1) Nutritional security: milk and meat both can contribute to curb nutrition deficiency in India

The domestic demand has exceeded supply

2) Increasing population: it is estimated that demand for milk will increase to 65 crore ltr/day. Hence it should be developed.

3) Employment opportunities: as

agriculture is seasonal in nature, both sectors allow employment throughout the year.

Good points -

4) Women empowerment: eg: Operation Flood: mostly women employed.

5) Income security: selling milk and meat in case of agricultural drought, pest attack etc.

6) Potential for export: India is the largest bovine meat exporter in the world.

7) Curbing poverty: it allows rural population to eventually overcome poverty through extra income.

Issues in these sectors

Dairy

↳ Lack of value addition eg: focus on milk but not curd etc

Livestock  
Bovine

↳ Low quality of meat eg: Indian livestock has less demand due to low meat. Mutton



- follow inflation  
- death during covid.

2) Increasing diseases  
eg: lumpy skin disease in cow

3) Lack of cold storage facility leading to milk becoming unsuitable

4) Sanitary and phytosanitary restrictions on exports.

1) Increasing cow vigilantism leading to low growth in this sector

3) No focus on indigenous breeds more focus on hybrids

4) Low sanitation in meat processing facility - low demand.

Measures taken

Good answer

National Dairy Development Board for promoting dairy industry (Operation Flood).

vaccination to livestock eg: against FMD

Rashtriya Gokul Mission and Pashu hat.

Livestock and dairy industry should be promoted as they can contribute to goal of inclusive economic growth.

15. Briefly explain the laser Interferometer Gravitational - wave observatory (LIGO). How will the establishment of LIGO - India contribute to advancing India's Scientific capabilities? (Answer in 250 words, 15 marks)

Laser Interferometer  
Gravitational - wave observatory  
(LIGO) is an initiative of NASA *Relevant introduction.*  
to detect gravitational waves  
and understand the story of our  
cosmic evolution in a better  
manner

Gravitational waves are ripples  
in time and space which was given  
by Einstein's Theory of Relativity.  
It has potential to explain:

cosmic evolution	dark energy	dark matter	universe expansion
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Working of LIGO observatory

Vacuum tunnel  
of 1 km length.  
- Producing a  
ripple

You can  
write these  
things in  
points form.

It has two cylindrical tubes  
with mirrors at the end placed at  
right angles. A light beam is  
passed through it. If there is  
nothing, the beam should reach  
the end at the same time.  
However, if gravitational wave is  
present, the time will differ. This  
will help in its detection.

Recently, LIGO India is  
established at Maharashtra.  
complementing the already 2  
observatories in USA. As gravitational  
waves are very sensitive, multiple  
observatories are needed to detect  
and confirm its findings.

LIGO - India - advancing India's  
scientific capabilities

It will allow Indian scientists to study and detect gravitational waves — a major feat in itself.

It will promote technology transfer to India

Collaboration between USA and Indian scientists will enrich India's space knowledge and policies

It can open up avenues for further such collaborations

India can learn to make its own observatories in future — increase in employment.

Space diplomacy is a great way to not only achieve scientific advancements but also helps promoting international economic growth

Enhancing knowledge of origin of universe

Knowledge about interaction of celestial bodies

e.g. — collision of Black holes.



16. The development in the dairy and livestock sector of the country is directly related to a more balanced socio-economic development of the rural economy. Critically examine. (Answer in 250 words, 15 marks)

Animal husbandary contributes to 25% of agricultural GVA in India. India is the world's largest milk producer and <sup>has</sup> one of the largest livestock population as well.

Both dairy and livestock sector can promote a more balanced socio economic development

### Dairy Industry

1) It can promote nutritional growth and lead to combating hidden hunger eg: Operation Flood

2) It is a major source of employment for women — White Revolution.

3) Increasing demand: it is estimated that demand for milk will grow to 65 crore litre/day in 2050

4) Value addition products eg: dahi curd etc can promote income

### Livestock industry

1) Export potential: India is the largest bonine meat exporter in the world.

2) Employment opportunities: as agriculture is seasonal in nature, livestock can help in rest of the year

3) Helps in draught : farming becomes easier

4) increases agriculture productivity  
eg: use of cow dung as manure.

Inferior  
to previous  
answer to  
the same  
question.

Issues with dairy and livestock sector

- 1) Increasing <sup>disease</sup> ~~test~~ attack  
eg: FMD andumpy skin disease
- 2) low sanitation facility in slaughter house
- 3) low demand for Indian meat due to low quality
- 4) Preference for hybrid breed over indigenous species
- 5) Lack of cold storage facility leading to wastefulness
- 6) Law and order issues leading to problems - low regulation.

Measures

Dairy and Development Board.

Increasing vaccination



17. Explain how flood plain zoning will help in disaster mitigation in the case of floods in India. Also, with reference to NDMA guidelines, discuss the measures to be adopted to mitigate the impact of floods. (Answer in 250 words, 15 marks)

Flood plain zoning is a process of mapping flood prone regions in order to mitigate its <sup>the</sup> impact of floods.

Good introduction.

India is a flood prone country - 10% of India's landmass is prone to it.

Flood plain zoning can help in disaster mitigation

1) Hazard mapping will help identify flood prone areas - such areas can be avoided for settlements - vulnerability assessment

Good points.

2) It will lead to better planning of industrial setup - avoiding industrial development : Risk management



You can also explain the process of flood plain zoning

- 3) Better measures can be taken to reduce flood impact in such areas  
eg: flood proofing.
- 4) Structural changes can be brought about only after floodplain zoning.  
eg: using bioshields in such areas.
- 5) Certain activities can be allowed  
eg: floodplain rice cultivation.
- 6) Floodplain zoning can ensure timely relocation of vulnerable communities.
- 8) It allows for developing better communication system in such areas.  
eg: iFLOWS app.

All this can only be done after flood plain zoning. Thus it reduces impact of the disaster.

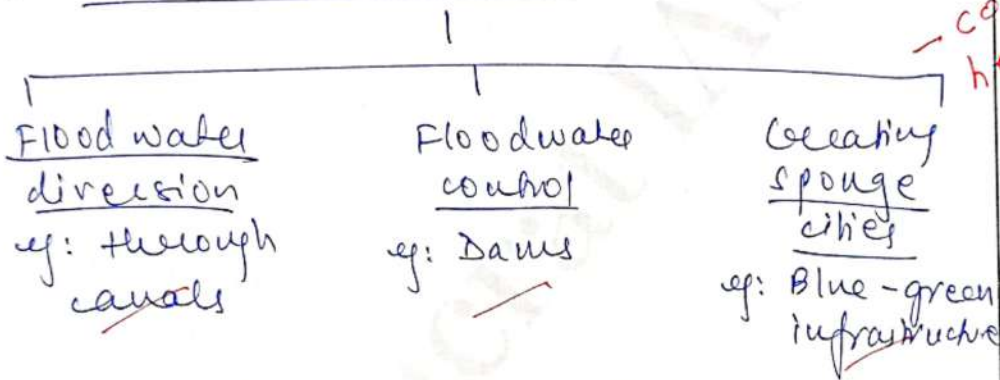
NDMA guidelines to <sup>mitigate</sup> impact of floods

↳ Develop early warning systems in flood prone zone eg: iFLOWS

2) Hazaed mapping and vulnerability assessment.

3) Preparing emergency measures  
eg: inflatable motor buses

4) Structural measures:



5) Non structural measures

eg: Flood proofing: creating elevated shelter houses

6) Conducting disaster preparedness through mock drills.

While it is not entirely possible to prevent floods, its impact can be mitigated to a great extent. A multivector action is the need of the hour.

- Early warning system.  
- Information dissemination centres.  
- community help guidelines.

18. Biodiversity underpins the health of the planet and has a direct impact on all our lives. Discuss the extent of biodiversity loss and its impacts. What steps have been taken at the national and international levels to arrest biodiversity loss? (Answer in 250 words, 15 marks)

Good introduction

Biodiversity includes the environment, flora and fauna surrounding us which is necessary for the homeostasis of our ecosystem.

Biodiversity has a direct impact on our planet's health and our lives

Good depiction of impacts.

it ensures a balanced climate eg: plants taking in CO<sub>2</sub>

it allows for stability in food cycle  
(food chain and food web)

it provides us with ecosystem services  
eg: food, recreation etc.

However, biodiversity loss has increased to such an extent that it has become part of Evil Quartet

Extent of biodiversity loss

- 1) Loss of species eg: Emperor penguin to become extinct by 2100.
- 2) Increasing animals and plants under endangered category.
- 3) Desertification is on the rise eg:  $\frac{1}{3}$ rd land in India degraded according to Land Atlas.
- 4) Invasive alien species are a major threat according to Global Risk Index Report eg: Katana Camara.

Relevant points.

Impact of biodiversity loss

- 1) Climate change: increase in temperature due to deforestation and low CO<sub>2</sub> sequestration.
- 2) Ocean acidification due to increased algal blooms.
- 3) Decline in soil productivity eg: Desertification in Sahel region.

Good points.

- Increase in zoonotic diseases.

- Increasing Human-wildlife conflict.

- 4) Increasing pest attacks causing crop failure and low food security eg: locust attack
- 5) Increasing poverty eg: loss of forests leading to loss of livelihood.

Measures to arrest biodiversity loss

National

International

- ESZ and CRZ guidelines  
- Wildlife Protection Act.  
- Environment Protection Act  
- Integrated Wildlife Habitats Development

- 1) Protected areas - National Parks etc  
2) Biodiversity Reserves eg: Nilgiri  
3) Forest Rights Act to prevent deforestation  
4) CAMPA fund : for afforestation  
5) Environment Impact Assessment

- 1) MAB by UNESCO protecting biosphere reserves  
2) 30 x 30 goal protect 30% land and ocean by 2030  
3) Declaring Marine Protected Areas to protect biodiversity  
4) IUCN Red List to assess danger levels  
5) CITES, CMS etc to protect species.

UNEP  
UNCBD

As biodiversity loss is a major threat, global approaches are needed to protect it and shift from anthropocentric to biocentric approach.

19. Despite commonalities and synergies between money laundering and tax crimes, leveraging anti-money laundering (AML) measures for tackling tax crimes presents political, legal as well as operational challenges. Discuss. (Answer in 250 words, 15 marks)

Money laundering is the crime of presenting illegal black money as legally earned through placement, layering and integration.

Good introduction.

Tax crimes on the other hand are a wide range of crimes which include tax evasion, non reporting of assets, delays in filing returns etc.

There are many commonalities between the two:

Relevant points.

- 1) Tax crimes include money laundering as one of its aspects
- 2) Tax evaded may be used via money laundering

3) Both may be used to support other organised crimes.

Anti money laundering laws (AML) can be used to deal with both the issues as they have synergy, and are often interrelated.

However, there are certain legal, political and operational challenges

Differences in the nature of consequences

Money laundering is often linked with crimes like terrorism, narco etc while tax crimes may not be linked. Thus it is not feasible to use the same law.

2) High case burden: Enforcement Directorate (ED) cannot handle all cases related to both issues alone. It will lead to imminent delays.

3) Money laundering often requires international collaboration while tax crimes may not need it.



Hence, it can cause confusion.

4) Proportionality of punishment:

property seizure which is part of TML cannot be used in tax evasion cases — it is not proportional.

Flaws of Lokpal  
- Permission from speaker in case of Ministers/MP.

5) Political targetting: AML provisions can be used to target opposition even in petty cases.

Need of the hour

clearly define money laundering and tax crimes

promote synergy between ED and other departments of taxes for collaboration

- You can mention about PMLA, FEMA etc.

use of AML provisions only when tax crime and money laundering both were involved.

In order to curb such crimes, government should adopt stringent provisions while keeping proportionality of application in mind.



20. The geographical proximity to both Golden Crescent and Golden Triangle, major opium production regions of the world, puts India in a very precarious position. Assessing the vulnerabilities, discuss the challenge of narcotics trading in internal security. Suggest a way forward to curb the menace of Drug trafficking. (Answer in 250 words, 15 marks)

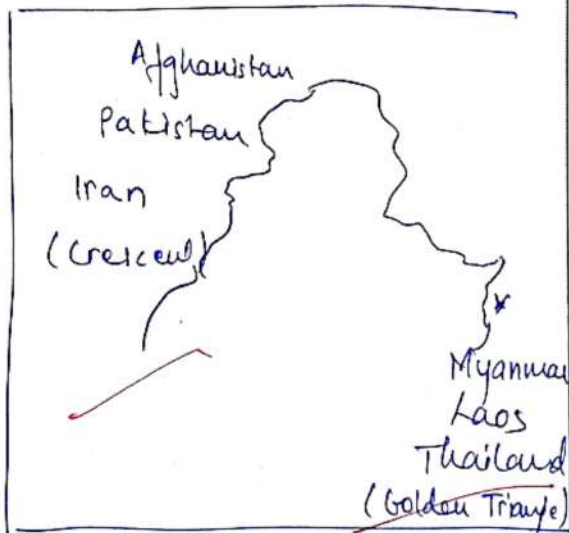
Good introduction with report

India is the world's largest opiate market according to UN office on drugs and crime.

One of the major reasons for this is India's geographical proximity to Golden Crescent and Golden Triangle which are major opium producing regions.

Vulnerabilities in India

- 1) Geographical proximity to the region
- 2) Huge population of India
- 3) Increasing



mental stress creating dependence  
on drugs

4) Lack of clear demarcated borders  
— increasing drug transport

— Peer pressure  
— Eroding societal  
values and impact  
of movies/songs

Challenges of narcotics trading in  
internal security

1) Narcotics trading is promoting  
narco terrorism in India eg: In  
Punjab.

2) It leads to dampening our demographic  
dividend eg: in Kashmir, every 12  
minutes one addict walks into an OPD

Good  
use of  
data.

3) New forms of technology makes it  
difficult to control narco trade  
eg: using drones for drug supply

4) Narco trade is a source of  
finance for Left wing groups eg:  
in Odisha - Maoist group

Good point.

5) It increases separatist demands  
due to government's inability to

control the menace eg: in Punjab demand for Khalistan.

In order to curb drug menace, the following can be done

- 1) Strengthening fencing in border regions eg: laser fencing
- 2) Promoting one border - one force for better surveillance eg: Assam Rifles in Myanmar.
- 3) Crackdown on overground workers
- 4) Awareness among people on issues of drug abuse eg: Nasha Mukh Bharat Abhiyan
- 5) Creating stringent legislation to crackdown on the menace eg: NDPS Act
- 6) Agreement with neighbouring nations to prevent smuggling eg: Myanmar.

Good  
Conclusion.

India should strive towards a Drug free society in order to reap both social and economic benefits of a young population.