

GENERAL STUDIES

Full Length Test

Test - 3 (GS3 CT)

Time allowed: Three Hours

Maximum Marks: 250

ADMIN. NO.:

NAME:

MOBILE NO.:

EMAIL.:

SUBMISSION DATE:

UPSC IFS 2024
AIR-18

QUESTION PAPER SPECIFIC INSTRUCTIONS

Please read each of the following instructions carefully before attempting questions:
There are TWENTY questions printed in ENGLISH. All the questions are compulsory.
The number of marks carried by a question/ part is indicated against it. Word limit in questions wherever specified, should be adhered to. Any page or portion of the page left blank in the Question cum-Answer Booklet must be clearly struck off.

Q No.	Marks	Q No.	Marks	Q No.	Marks
Q1	/10	Q8	/10	Q15	/15
Q2	/10	Q9	/10	Q16	/15
Q3	/10	Q10	/10	Q17	/15
Q4	/10	Q11	/15	Q18	/15
Q5	/10	Q12	/15	Q19	/15
Q6	/10	Q13	/15	Q20	/15
Q7	/10	Q14	/15	Total	/250

Follow these steps to avail the facility of mentoring –

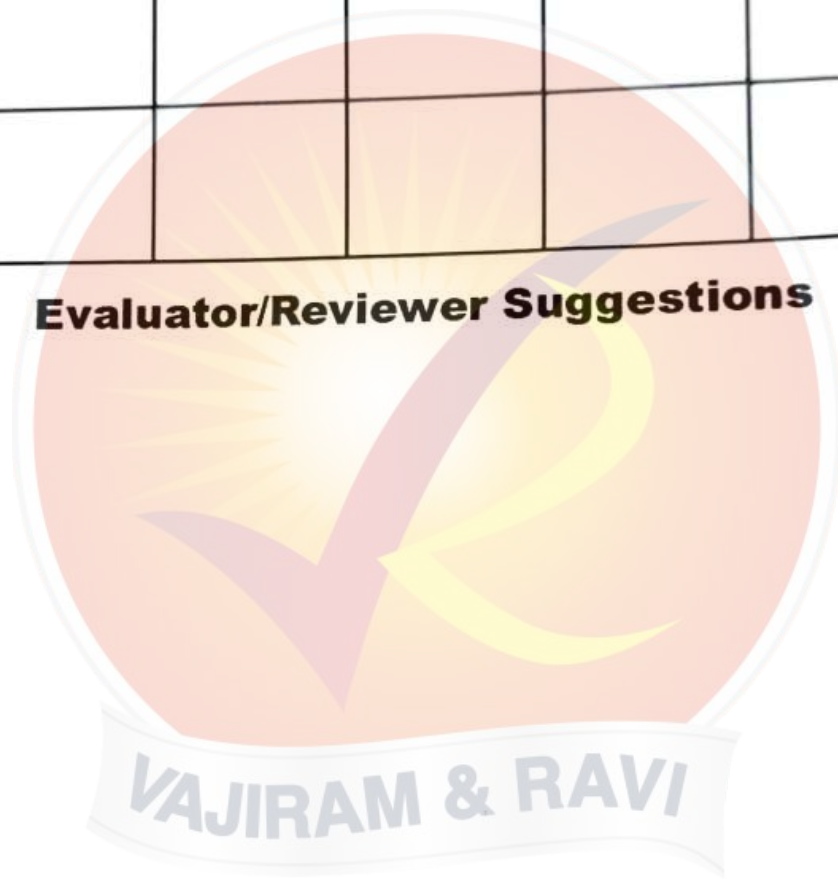
Go through the soft copy of your evaluated answer sheet and analyse all the comments and suggestions given.

Call 9717565805 between 11:00 am to 5:00 pm to fix your mentoring slot.

Please follow the mentoring appointment timings properly.

Parameters	Excellent	Very Good	Good	Average	Poor	Very Poor
Language and Articulation						
Structure and Presentation						
Conceptual clarity and Content						
Number of Attempted questions						

Evaluator/Reviewer Suggestions



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(Answer questions in NOT MORE than the word limit specified for each in the parenthesis. Content of the answer is more important than its length.)

1. What do you mean by off-budget borrowings? Discuss the various issues associated with them. (10 marks, 150 words)

off-budget borrowing refers to borrowing money from market way more than the budget had expected.

It also means borrowing by public institutions such as FICCI. These borrowings are not reflected in balance sheet of government but on the balance sheet of that public institution.

However, these borrowings are guaranteed by the government.

Various issues associated with them:

- ① Does not show true picture of

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central or state government finance

- (2) enhance real 'fiscal deficit'
- (3) lack of parliamentary scrutiny.
- (4) high off-budget borrowing leads to \Rightarrow increased interest rate.
- (5) crowding out of finance.

However, they are sometime needed because

- (1) The institution which is raising off-budget is generally autonomous public institution.
- (2) they have their own source of revenue.
- (3) Separate balance sheet.

Recently, government has brought many off-budget borrowing into union budget

students should not write anything inside the box

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Suggestions:

(Don't write anything in this part)

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2. Do you agree that the agriculture sector in India needs a separate budget for its transformation? Substantiate.
(10 marks, 150 words)

Agriculture sector contributes to around 17% of GDP [Economic Survey].

Need for separate budget for transformation of Agriculture sector :

- ① focused attention on raising revenue from agricultural taxation.
- ② Enhance quality of expenditure due to greater scrutiny.
- ③ Enhance focus on agricultural mechanization.
eg 40-45% mechanization of Agriculture in India [Economic Survey]
- ④ Improve quality of employment
eg over 45% workforce dependent on Agriculture [PLFS]
- ⑤ More focus on increasing irrigation coverage.
eg less than 50% agricultural area is irrigated.

However, following challenges may come if we goes for separate budget:

- ① Reduced Public investment in agriculture because presently was subsidized.
- ② Lack of revenue from agriculture sector.
- ③ May not give unified overview of government finance.

Suggestions by M.S. Swaminathan Committee

- ① Increase public investment in Irrigation.
- ② Enhance access to credit from formal sector.
- ③ Land reform

Apart from above, improving marketing infrastructure will help in ~~increasing~~ doubling farmers income, as observed by Ashok Dalwai Committee.

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Suggestions:

3. Growth of e-commerce has huge potential in revolutionizing the agriculture products supply chains. Discuss. (10 marks, 150 words)

e-NAM aims to promote e-commerce of agricultural products by bringing various stakeholders - buyer, sellers (farmers), etc. on one platform.

Growth of e-commerce: Transformation of Agricultural products supply chain:

- ① Input: farmers can buy cheaper inputs
- ② Bring economies of scale.
- ③ Expand access to market for agricultural products.
- ④ Remove need for middleman.
- ⑤ Provide direct contact between farmers & consumers.
- ⑥ More investment on cold chain storage.

Limitation of e-commerce:

- ① Lack of digital awareness.
eg) only 36% Indian families are digitally literate [Economic Survey].
- ② Lack of content in local language.
- ③ 86% farmers are small & marginal
⇒ may not have much surplus.
- ④ Regulatory cholestrol: complex & multiple laws regulating agricultural sector.

Way forwards:

- ① Enhance digitally literacy.
- ② Attract youth in agriculture sector
eg) ARYA scheme
- ③ Digital public infrastructure for Agriculture.

These steps will help in making e-commerce realise its full potential while ensuring inclusive growth & UN SDG (zero poverty).

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Suggestions:

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4. 'Water use efficiency is the keystone in the sustainable development of the Indian agriculture sector.' Examine. (10 marks, 150 words)

Almost 89% ground water extracted in India is used for Agriculture

Water use efficiency: A keystone

- ① Many districts are facing water stress [Niti Aayog].
- ② Over exploitation of groundwater reduces water availability, \Rightarrow
- ③ Adversely impact food security.
- ④ To ensure sustainable production
- ⑤ Presently our water use efficiency is around 25-30%.
- ⑥ Increasing cases of drought due to climate change demands for greater water use efficiency.

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(Don't write anything in this part)

Lack of awareness

86% small & marginal farmers

Challenges in ensuring water use efficiency

Lack of use of modern technology like precision agriculture.

flooded irrigation practice

overcultivation of rice, sugarcane which are water intensive crop.

Suggestion to increase water use efficiency:

- 1) Expand area under micro-irrigation [Ashok Dalwai committee].
- 2) Increase awareness through private-public partnership.

These steps will ensure we are not only food surplus country but also we reduce hunger in the world through our agricultural export.

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Suggestions:

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5. Robust economic growth requires a complementation between the public and private investment. Examine the statement with reference to falling private investments in the Indian economy. (10 marks, 150 words)

Economic survey 2023-24 recommends that government should encourage private investment to 35% of GDP. Currently, it is around 20%.

Robust economic growth: both public & private investment needed.

- ⊛ Public investment will ensure
 - ① ↳ quality infrastructure like roads, highway.
↳ Bharatmala, Sagarmala
 - ② Provide public goods.
 - ③ Ease of doing business.
 - ④ Removal of regulatory cholestrol to simplify entry & exit of business.
↳ promote startups.
 - ⑤ skilling the people to make them employable.
- Private investment will ensure:

↳ Exploit the opportunity due to

China plus one strategy,

② Enhance competitiveness of India inc.

③ Bring economies of scale.



Unintended consequence of public policy \rightarrow Essential Commodities Act, 1975.

Way forward

① Promote invisible market forces
[Economic survey]

② Ensure trust based governance

③ Public private partnership \rightarrow PLI

These ^{steps} ~~schemes~~ will ensure India achieve the goal of Amit Shah - strong, inclusive and sustainable growth

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6. Discuss several ways in which biotechnology can help in ensuring food security in India. (10 marks, 150 words)

biotechnology is use of living processes, system to manufacture goods to enhance humanity standard of living.

Biotechnology in food security:

- ① make drought resistant crop
eg pm recently released 109 new varieties of climate resilient crops
- ② Enhance productivity of crop by disease resistance
eg DMH-11 Mustard.
- ③ Ensuring greater food production

BT being a:

④ Genetic modification in available strain to increase self life of crops.

⑤ Golden rice: has higher nutrition.

~~These~~ Biotechnology has potential to achieve UN SDG (No hunger).

Students should not write anything inside the box

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Suggestions:

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7. Explain the significance of the Fast Breeder Reactor (FBR) in achieving the goals of India's Nuclear energy program. (10 marks, 150 words)



(Don't write anything in this part)

8. Public awareness is primary in inculcating environmental consciousness. How does the Environmental Impact Assessment (EIA) promote environmental awareness?
(10 marks, 150 words)



(Don't write anything in this part)

9. Overexploitation strains the quality as well as the quantity of our groundwater resources. Analyze. (10 marks, 150 words)

overexploitation strain the quality

↳ water pollution

↳ water greater amount of metal pollutants

↳ pollutant magnification.

overexploitation → quantity

↳ water stress

↳ water unavailability.

eg 89% groundwater used in Agriculture

↳

(Don't write anything in this part)

10. Disinformation has become a serious threat to internal security. In the light of the statement, mention the role of the State in prevention of fake news. (10 marks, 150 words)

Disinformation → threat to internal security.

→ fake news

→ Reduce trust.

→ Increase communalization.

Role of state

① Bring laws.

② Bring policies

③ monitor the social media

④ fact check

⑤ punish the culprits.

11. 'Employment opportunities in India are experiencing a rapid transformation. In the light of the statement, discuss the preparedness of the Indian labor force to adapt to this transformation.' (15 marks, 250 words)

Rise of internet, and emergence of new technologies such as AI, big data analytics, etc. is transforming employment opportunities in India.



Preparedness of Indian labor force to adapt to this transformation:

- ① Only 5% workforce in India are formally skilled (PLFS). while in South Korea it is 96%.
- ② less than 30% youths enroll for higher education \Rightarrow need low skill job.

Don't write anything in this part)

(Don't write anything in this part)

- ③ only around 47% graduates are employable (India skills report)
- ④ Risk of AI needing regular reskilling
- ⑤ Around 47% workforce in agriculture (Economic survey) which is causing disguised employment.
- ⑥ Rising employment in manufacturing sector
for PLI ^{scheme} created 8.5 lakh new employment opportunities.
- ⑦ service sector job losses due to declining service export to developed country.

Government steps to ~~make~~ enhance preparedness of Indian labor force

① pm kaushal vikas yojna 4.0 :

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(Don't write anything in this part)

Promote reskilling in emerging technologies like AI, deep learning.

② India - active participant in WFP's reskilling revolution.

③ Improving quality of education

eg NPE 2020.

④ Public private partnership eg IIT

Way forward: → Promote low skill sector like textile which has high job elasticity.

→ Skilling to school students as well as college students [NPE 2020]

Above steps will help in realising India's goal to become vishwaguru by creating digitally empowered and employed labor force thereby achieving UN SDG 8

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12. Liberalized Indian economy expanded rapidly at the cost of social equity. Elaborate. Also, suggest measures for promoting inclusive economic growth.

(15 marks, 250 words)

According to oxfam report, top 1% Indian control 51.53% of Indian wealth, showing vast inequality.

liberalised Indian economy expanded rapidly at the cost of social equity

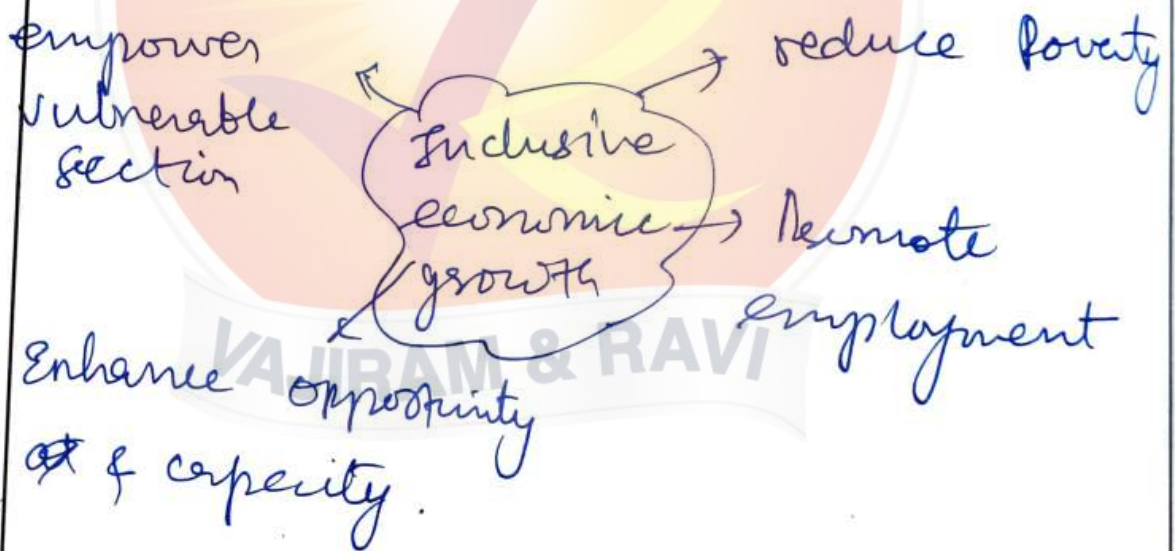
- ① LPG reforms has led to India becoming 5th largest economy in the world (world economic outlook)
- ② service sector contributes more than 50% to Indian economy.
- ③ India attracted heavily private investment [IMF].

Adverse cost on social equity:

- ① 22.89 crores Indians are still multi-dimensional poor [UNDP].

(Don't write anything in this part)

- ② High prevalence of hunger.
eg India ranked 107/117 countries on Global Hunger Index, 2023.
- ③ Bottom 60% Indians control just 4.89% of Indian wealth [Oxfam].
- ④ Almost 48% workforce still dependent on Agriculture.
- ⑤ ~~job losses~~ growth due to technological adoption.



Measures for promoting inclusive economic growth: (Economic Survey)

- ① skilling, reskilling of unemployed disguised employed people.

- ② Improve public logistic infrastructure to promote EOOB.
eg Bhenatmela, Sugamala.
- ③ Trust based governance
- ④ Public private partnership.
eg PLI scheme.
- ⑤ Decentralization of power, finance to local level.
- ⑥ convergence of scheme, collaboration between various stakeholders & Competition
eg Aspirational district programmes
- ⑦ focus on provision of basic services
eg PM Awas Yojna, Jal jeevan mission, etc.

As rightly said, "A nation is not its territory. A nation is its people. When people progress, the nation progresses". Above steps will ensure people's progress.

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13. Livestocks play a key role in improving the socio-economic conditions of the rural masses. In this light, discuss the potential opportunities for the livestock farmers in India. (15 marks, 250 words)



14. What are the objectives of the Production Linked Incentive (PLI) scheme? Analyze its role in the growth of indigenous semiconductor industry.

(15 marks, 250 words)

PLI scheme is a public-private partnership. It provides financial support to companies for increasing production, addition of new technologies.

Objectives of PLI schemes:

① Enhance investment.

eg → 1.8 lakh crore rupees invested under it [Economic survey 2023-24].

② Under PLI government provides financial support.

③ Increase export.

eg → 4.00 lakh crore rupees worth increase in export

④ Rescind employment

eg → over 8 lakh new jobs created [Economic survey].

- ⑤ Make India manufacturing powerhouse of the world.
- ⑥ Exploit China plus strategy.
- ⑦ Promote inclusive growth.

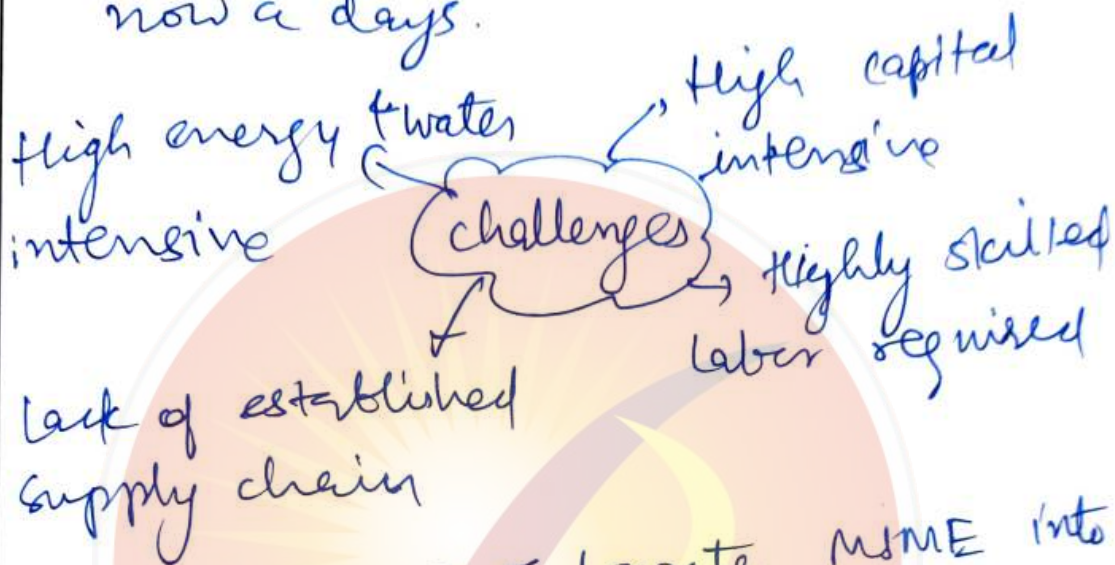
Growth of Indigenous Semi-Conductor manufacturing: Role of PLI Scheme.

- ① Government has allocated over \$10 Billion worth of subsidy to promote indigenous semi-conductor manufacturing.
- ② It has attracted Micron - leading US semi-conductor manufacturing company to invest in India.
- ③ MOU for establishing semi-conductor manufacturing ^{plant} in Gujarat & Assam signed.
- ④ Promote establishment ancillary industry.

Don't write anything in this part)

⑤ Semi-conductor is new oil.

⑥ semi-conductor is importance for almost every electronic goods now a days.



Suggestions → ① Integrate MSE into global semi-conductor supply chain (UK Singh committee)

→ ② Reskilling

→ ③ Simplification of procedure

→ ④ single window regulatory clearance

Above steps will ensure India's economic sovereignty while ensuring industry

Students should not write anything inside the box

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Marks:

Suggestions:

(Don't write anything in this part)

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15. Delays in infrastructure projects create massive cost overruns. Elaborate the major causes of delays and potential solutions for timely project execution. (15 marks, 250 words)

India's logistic sector cost is around 14-15% of GDP. This is showing need for greater investment in infrastructure projects.

Major causes of delays:

- ① Regulatory chokespot: Complex law & regulation
- ② Delay in getting necessary approval
- ③ ~~Delay~~ Delay in EIA assessment on forested area.
- ④ Lack of co-ordination between centre & states.
- ⑤ court cases: Huge delay in resolution due to high pendency. ~~4.7~~ 4.7 cases are pending before judiciary.
- ⑥ Delay in land acquisition due to protest

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(Don't write anything in this part)

- ① High cost of land
- ② Delay in raising finance from banking sector.

Steps taken for timely project execution:

- ① Project monitoring cell in cabinet secretariat.
- ② Group of secretaries to speed up the approval process
- ③ e-technology

Potential solution for timely project completion:

- ① Single window clearance
- ② Simplification of rules & regulations.
- ③ Co-ordination between government.

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banks and private sector to ^{ensure} influence timely credit availability

④ Government should offer projects ~~from~~ to private sector after taking all regulatory approvals.

⑤ Hybrid annuity model of investment

⑥ Investment in digital public infrastructure as public goods by governments.

⑦ India's state model.

⑧ Public sector leading in investment that crowd in private investment

[IMF's world economic outlook]

These steps will ensure robust economic, Industrial growth thereby achieving UN SDG 8.

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16. The Indian Space sector exhibits huge growth potential. Analyze the opportunities for the private sector in the Indian space industry. (15 marks, 250 words)

currently, Indian space sector has 2% of Global space economy. It can grow to 10% by 2030 [Minister of state for science & tech].

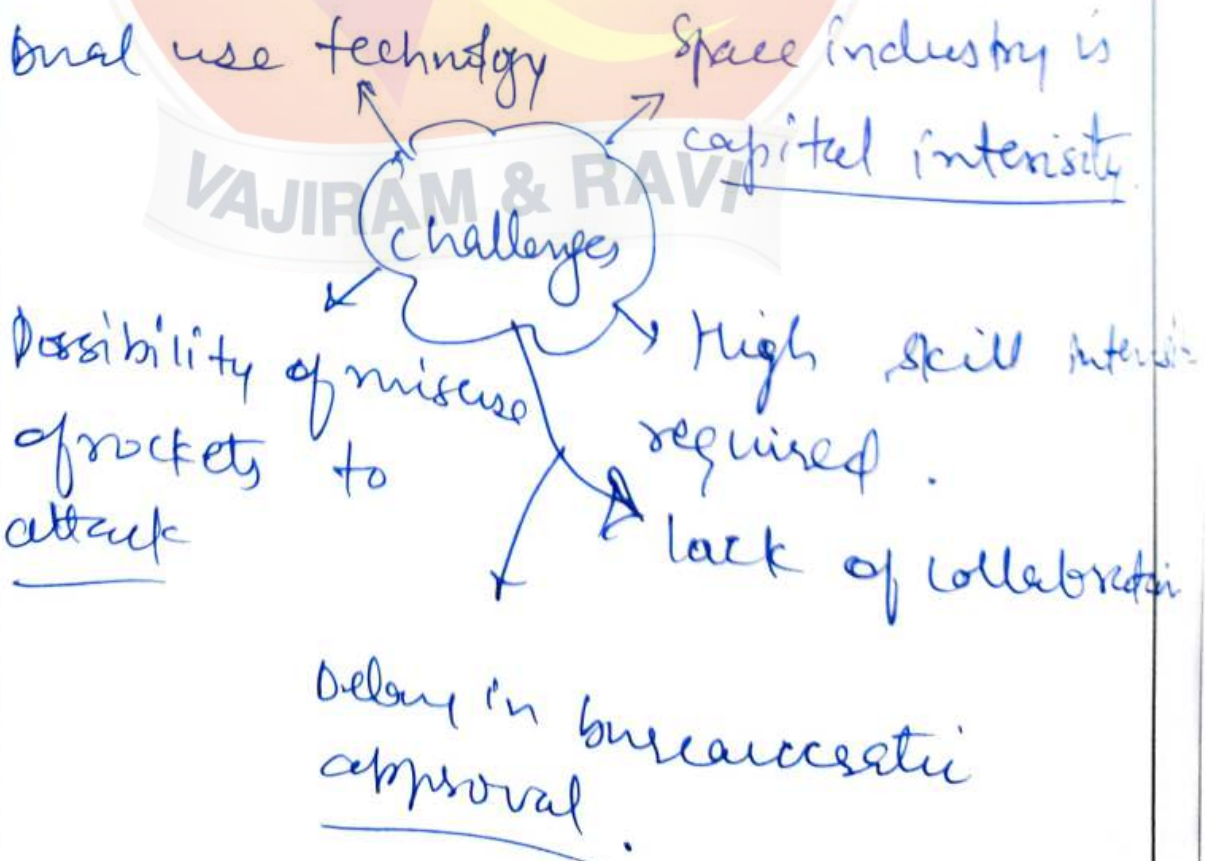
Opportunities for the private sector in Indian Space Industry:

- ① Government has opened the space sector for private investment.
- ② Rising potential of space tourism.
- ③ ISRO is transferring some technology to eligible private companies.
- ④ Recently, INSPACE A regulator

(Don't write anything in this part)

for Indian space industry set up.

- ⑤ Inspace has been tasked to promote orderly growth of space industry
- ⑥ Increased collaboration between ISRO & Indian private sector.
- ⑦ Availability of skilled manpower
 → IIT graduates.



way forward

1. Viability grant funding from government
2. Promote Angel investment
3. Simplify the approval process while balancing national security concerns.

" Startup India scheme has led to many startups in Indian space sector which is increasing ~~public~~ employment, investment thereby achieving UN SDG (Quality work).

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Suggestions:

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17. Plastic waste has become (near ubiquitous) threatening (ecological stability) Explain. Also, discuss various measures taken by the government to contain further environmental degradation by plastic wastes. (15 marks, 250 words)

According to CPCB more than 15,000 tonnes of plastic wastes are generated in India daily.

Majority of plastic waste is dumped in landfill, outside environment, water bodies. A very small proportion of plastic is recycled [CPCB].

Plastic waste threatening ecological stability:

- ① Micro-plastic become part of food chain.
- ② Micro-plastic causing various diseases
- ③ Bioaccumulation
- ④ Bio-magnification

- ⑤ soil pollution due to plastic waste \Rightarrow death to micro-organisms
- ⑥ water pollution due to plastic & nanos plastic.
- ⑦ Plastic has tendency to accumulate harmful metal, carcinous substance
- ⑧ Reduces quality of habitation,

Measures taken ~~by~~ government:

- ① Banning single use plastic
- ② Promoting alternatives like cloth bag.
- ③ Developing Recyclable plastic.
- ④ Increasing ^{Public} investment on R & D for alternatives

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5. polluter pay principles.
6. plastic waste management rules specifies roles of various stakeholders
7. Participatory governance to reduce plastic waste generation
8. Mission Litter promotes 'no plastic' initiative.
9. CPCB has been tasked to take measures to reduce plastic waste.
10. Narmada Ganga Programme aims to reduce plastic waste in river banks

Reducing plastic waste generation can help us in ensuring sustainable development.

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Suggestions:

18. Elaborate the disaster vulnerability of Indian coastal cities with examples. Examine the relevance of Sendai Framework in disaster management of coastal regions.

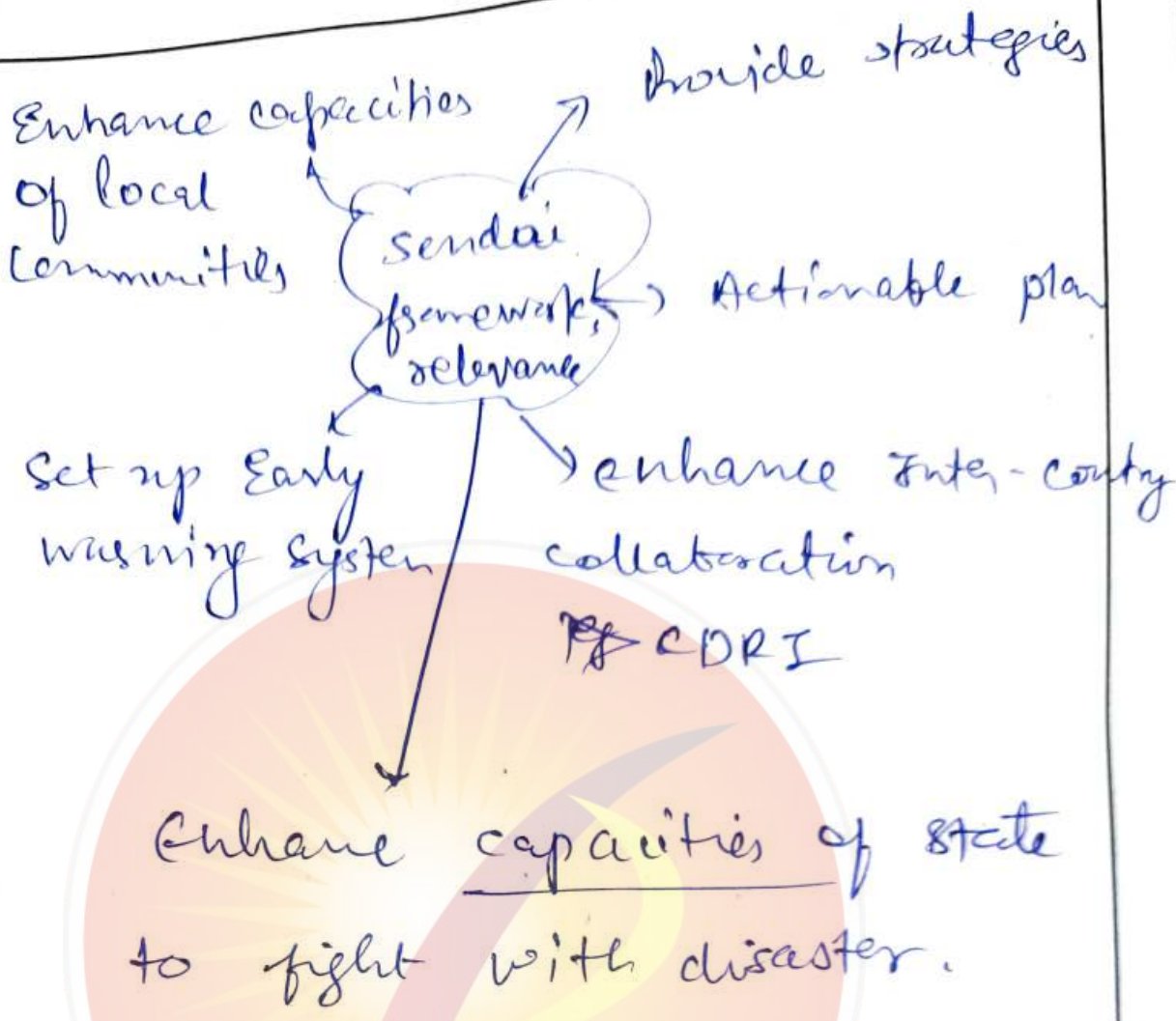
(15 marks, 250 words)

Disaster occurs when hazard and vulnerability meet together.

Disaster vulnerability of Indian coastal cities:

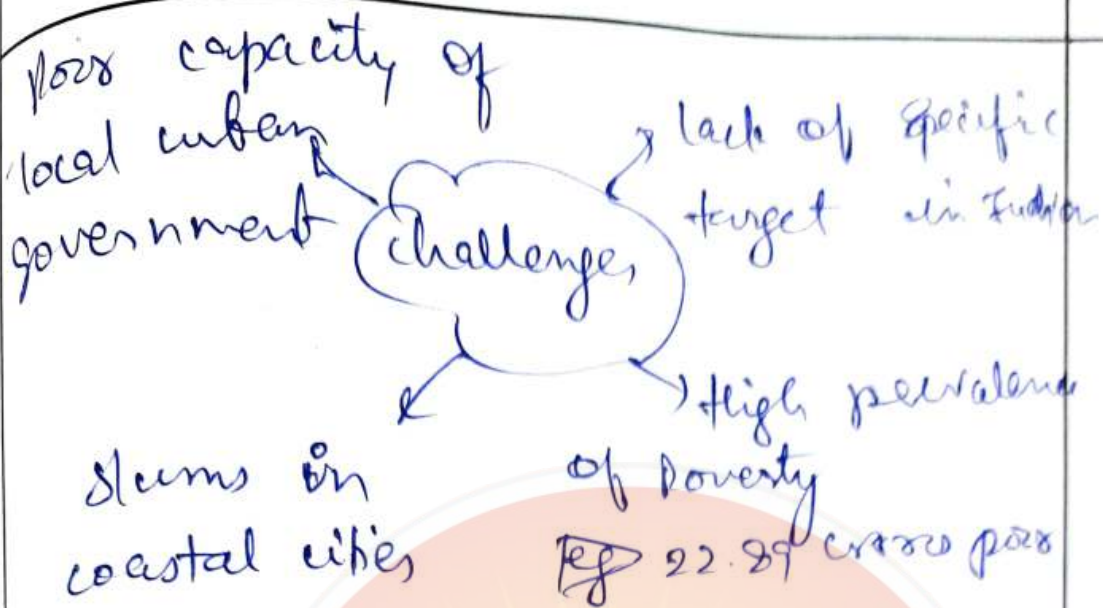
- ① Cyclone: Almost 8% of India's landmasses is vulnerable.
eg. Visakhapatnam vulnerable to it.
- ② Flooding: Recent flooding case in Mumbai and Bengaluru.
eg. Pune flood case.
- ③ Water stress: Lack of availability of water.
eg. Bengaluru water crisis.
- ④ Drought: Chennai water crisis.
- ⑤ Industrial disaster.

(Don't write anything in this part)



Benefits of Sendai framework :

- ① India has established
 - National disaster management Authority (NDMA)
 - SDMA @ state level
 - DDMA at district level
- ② NDRF force.
- ③ NDRF fund.
- ④ cyclone proof communities in Odisha



Way forwards!

1. Provide specialised assistance to local government to adopt preventive, proactive steps against disaster (Finance Commission).
2. Enhance disaster proofing
3. Rebuilding of disaster.

These steps will ensure India become disaster resilient as expected in DM Act, 2015

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19. Alarming rising trend in cyber attacks endangers national security. Explain with examples. Elaborate the need for establishing a dedicated cyber security force to deal with the issue. (15 marks, 250 words)

According to NCRB, cyber attacks are rising exponentially in India.

cyber attack endangers national security:

- ① Remote terrorism
- ② Exploit innocent people, business
extortion.
- ③ Sometimes lead to suicides.
- ④ cyber attack on business
discourage ease of doing business.
- ⑤ Health insecurity: Leakage of sensitive patients data.

⑥ Reduce trust in online system
eg) Repeated issue.

Need for establishing dedicated cyber security force:

To protect economic interest



Require specialised human resource due to complexity, technical nature of cyber attack

Rising case of cyber terrorism [CERT-IN] Need focused attention due to rising cyber attack

20. Socio-economic functions across the Indian border makes its management more complex. Discuss with suitable examples. (15 marks, 250 words)

India has around 15,000 long land border and around 7500 km long coastal border.

Socio-economic functions across the India border making border management complex:

① Roti-Beti ka rishta

eg India - Nepal.

② Open border.

eg India - Bhutan.

③ High people to people contact

④ Poverty in border areas especially in Bangladesh side of border.

⑤ Communal violence against minorities in neighbouring countries.

⑥ Poverty causing gangs to engage in organised crimes in Border region.

Way forward

① One border one security force.

② Greater co-operation between border guarding forces.

③ Enhance intelligence gathering and sharing.

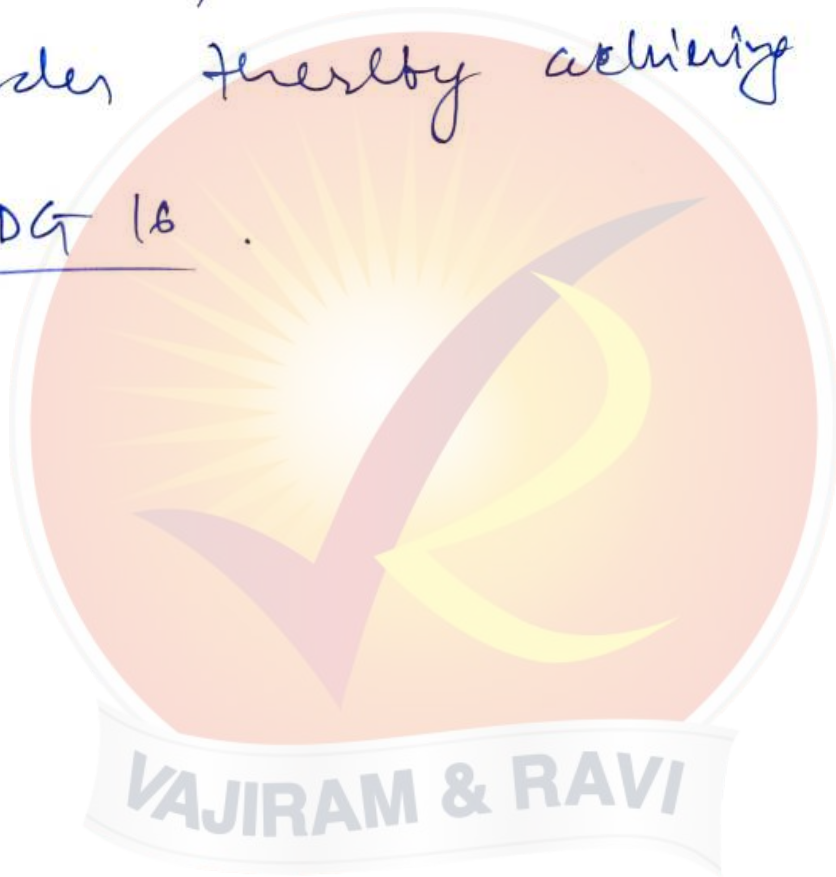
④ Promote border haats.

⑤ Promote youths engagement

in border areas.

These steps will ensure sustainable, peace and security in border thereby achieving

UN SDG 16



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Suggestions: