

**GEOGRAPHY - 2**

Time Allowed: 50 Mins.

Max. Marks: 65

Q.	Marks	Instructions to Candidate
1.		<ul style="list-style-type: none"><li>• There are <b>05</b> questions.</li><li>• All questions are compulsory.</li><li>• The marks carried by a question is indicated against it.</li><li>• Keep the word limit indicated in the questions in mind.</li><li>• Answers must be written within the space provided.</li><li>• Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.</li></ul>
2.		
3.		
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23.5

1. Invigilator Signature \_\_\_\_\_

2. Invigilator Signature \_\_\_\_\_

Name UttamRoll No. 57128

Mobile No. \_\_\_\_\_

Date 17 Nov 2021Signature Uttam

1030

# REMARKS

GS SCORE

5.5

CHINA  
S. H. K.  
1990  
1991  
1992

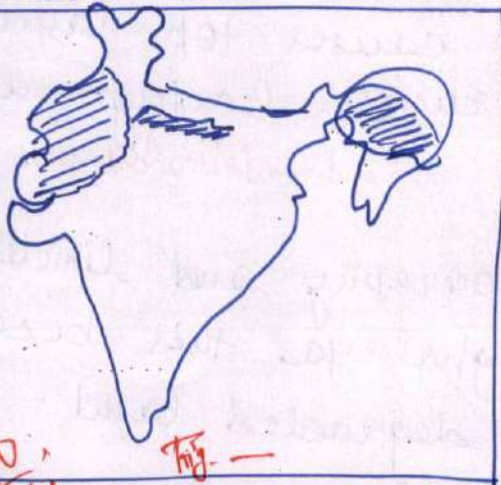
Q1. What do you understand by 'Land Degradation Neutrality'? Discuss the causes of increasing desertification in Northeastern states of India. Suggest remedial measures.

(15 Marks) (250 Words)

\* Introduce with Desertification and some reports related to it in India.

Land degradation neutrality is defined as restoration of land every year equivalent to land that is getting converted into desert/degrading. Bringing degradation of every year to zero.

Land degradation is occurring not only in India but across world.



In India - areas of Punjab, Haryana, Rajasthan, Gujarat, U.P and states in North-east India are suffering from land-degradation Problem.

Few states marked where land degradation has already occurred.

Desertification is defined as declining productivity of land. Various causes are responsible for it for North-east region:-

(1) Agricultural Practice: In north-east India Shifting / slash and burn is practised.

Remarks

Good points

Give proper defn of concept as per UNCCD.

\* Mention relationship b/w land degradation & Desertification

This is responsible for vacant and barren land in that region.

And the regions which are shifting to modern agricultural practices - due to unscientific uses of fertiliser devastating agricultural productivity of land.

(2) Deforestation: → Soil-erosion - productive layer lost

Desertification

(3) High rainfall and floods causes top layer of soil - blow in surface runoff - leaving a degraded land behind. *i.e., water erosion*

\* Include some specific keywords

eg,

- water logging

↳ Human settlements

(4) Prevalence of steep topography and limestone rocks - especially in Meghalaya this becomes predominant cause of degraded land.

(5) Lack of land reform implementation - people are not assigned any land rights. So, they drift to any parcel of land of their choice.

Causes are manifold. Solution strategy should also be multipronged. Government of India has adopted Bonn challenge and pledged to restore 26 million hectare land by 2030 under ambit of UNCCD.

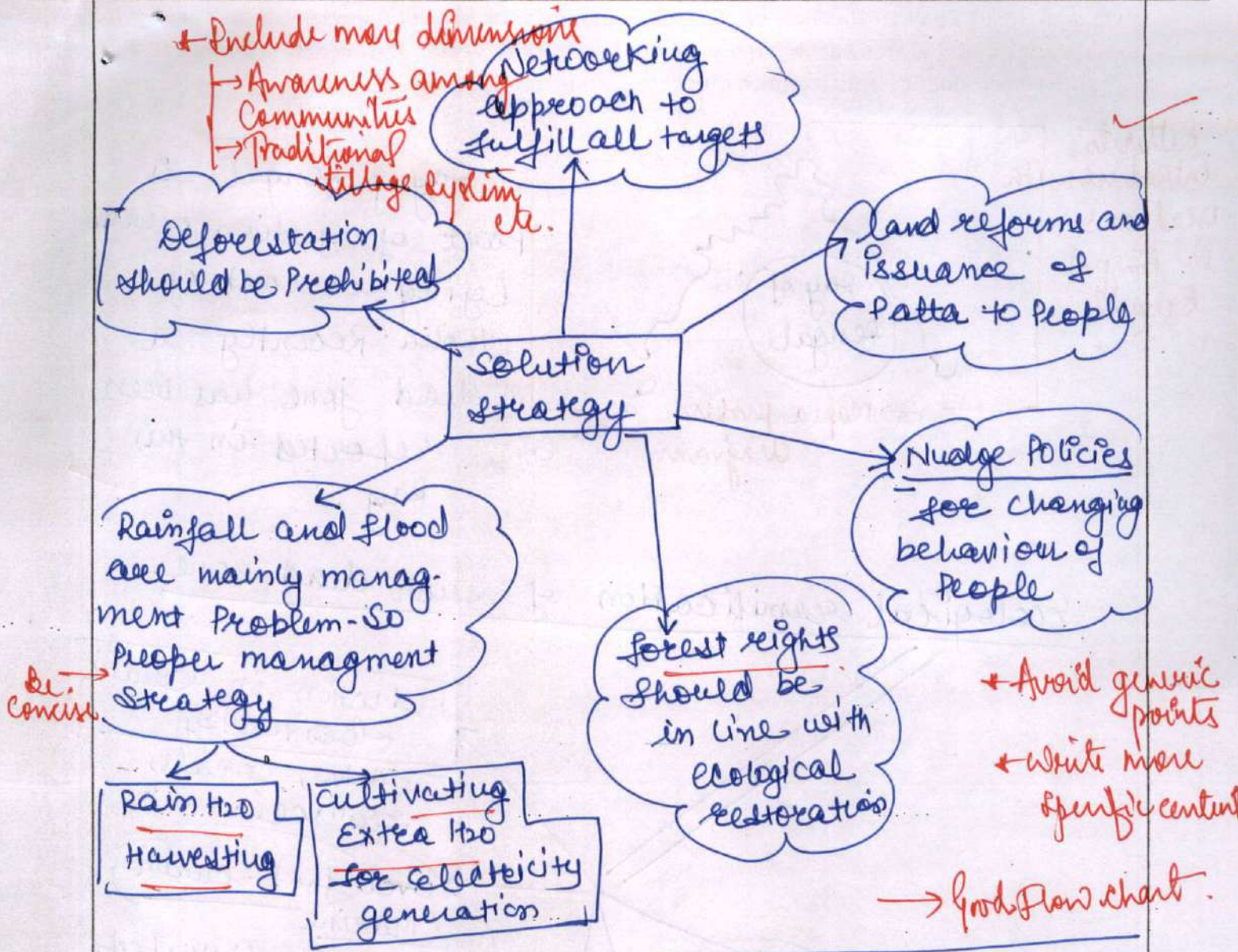


Fig: Solutions.

Tribal groups, local NGOs, village headman can be involved by influencing people. Government with TOP-down approach may bring little change but people involved with bottom up approach can bring revolutionary change.

4.5 H  
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Q2. A Dead Zone in the Bay of Bengal, nearly half the size of Bangladesh and at depths 70m and below, has been discovered in recent years. Discuss its ecological and socioeconomic ramifications. Suggest lasting remedial measures.

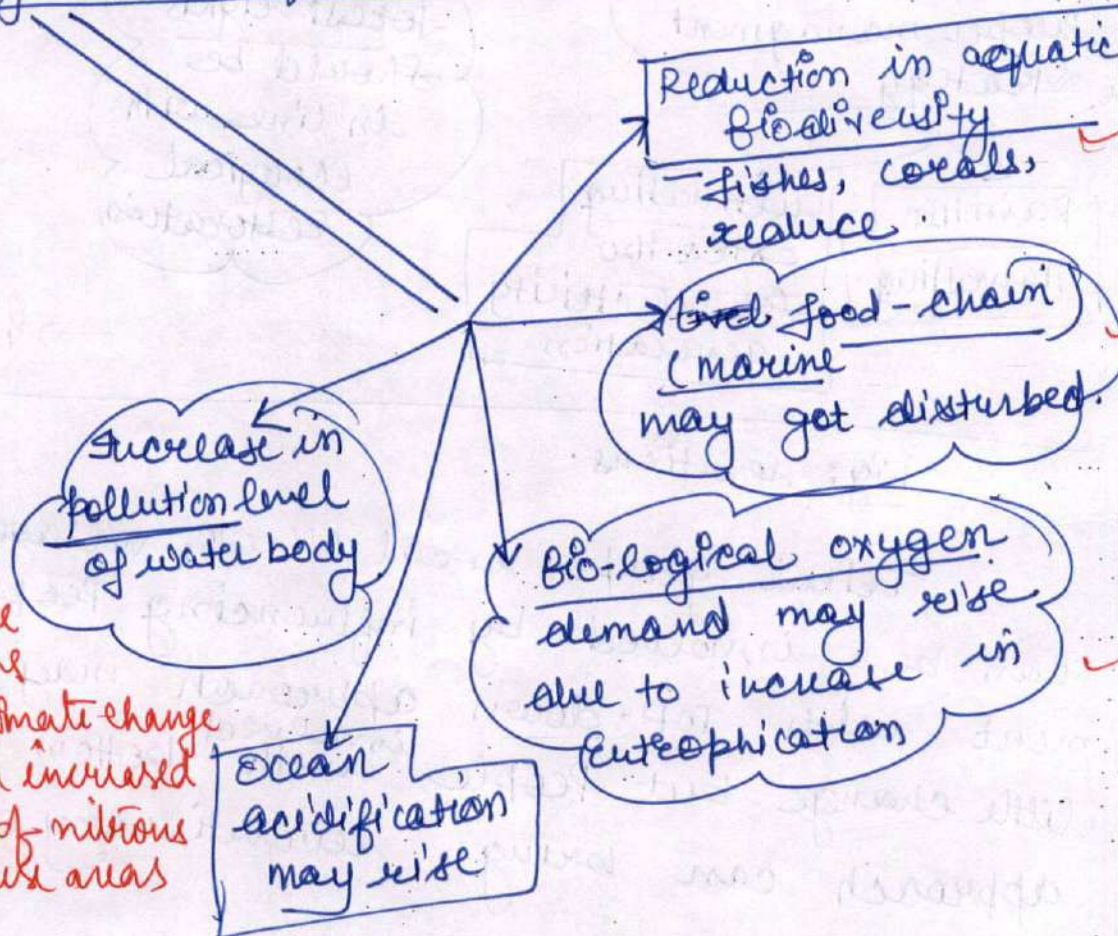
(10 Marks) (150 Words)

Better to introduce with Dead zones in Bay of Bengal



Bay of Bengal is part of Indian ocean, lying in east of India. Recently a dead zone has been reported in this Bay.

Ecological ramifications of such dead zone



\* Bring more dimensions such as climate change due to an increased production of nitrous oxide in these areas

Remarks

socio-economic ramifications

① loss of livelihood to communities like fishermen.

② loss of nutrition, food security to coastal communities.

③ Industries - like tourism (for corals), medicinal industries (sea-weed) may get set-back.

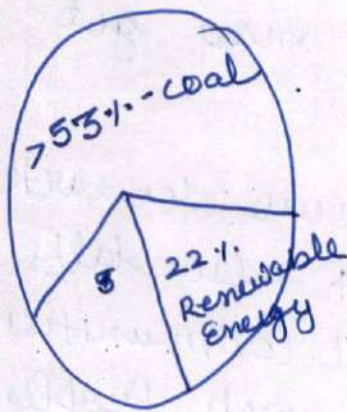
So, Sea Ocean are powerhouse for earth, these should be protected. SDG-14 also talks about life below water. Global Communities should come together to resolve such problems.

You have missed the 2nd part of the question completely i.e., Remedial measures

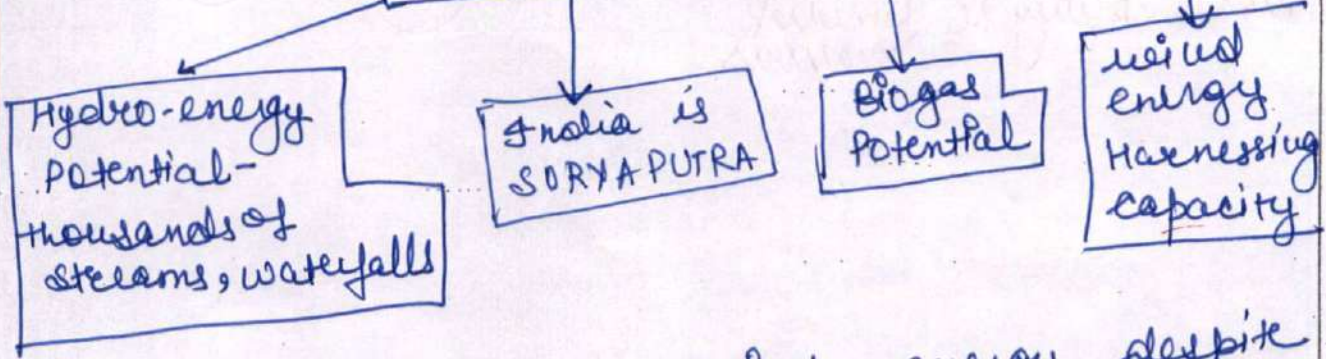
$(2.5) + 1 = (3.5)$

Q3. Despite having the huge potential for hydro power, India is still dependent on non-renewable power sources, such as coal. Explain the major reasons for this. Do you think that hydro power should be developed more aggressively to achieve energy security? (15 Marks) (250 Words)

India energy needs very similar to that of world are fulfilled from coal based thermal power plants. In 21st century when climate change is very much evident and the shift from coal to renewable energy is very much required.



Potential for India in Renewable Energy sector



solar energy and wind energy despite being latecomers have grown much more in comparison to Hydropower (≈ 100GW) area

Remarks → Explain this part briefly as Intro.



Reasons for low development of hydro Power :-

(1) Topography related challenges - It is difficult to set up a big hydro power plants in fragile ecosystem. Setting can attract a disaster e.g. recent Chamoli disaster.

(2) Policy related challenge: - Indian government has emphasised a little on this development of hydropower. (As in now for solar energy, government is promoting it not only in country basis, but on global front).

(3) Inter-state water disputes: Rivers are shared by two or more states and due to political reasons - dispute emerges and projects get stalled. For instance, Polavaram Project was stalled in past.

(4) Rivers are shared between countries: India and Brahmaputra are shared by India with other countries. So, it is a challenging task to develop dams due to opposition from other party. For instance, recently, Pakistan protested for the development of dams on Jhelum river.

Remarks

\* Please mention some reasons that discourage investment of setting up of renewable energy generation infra: -  
 → Profitability of power  
 → Resource location etc.

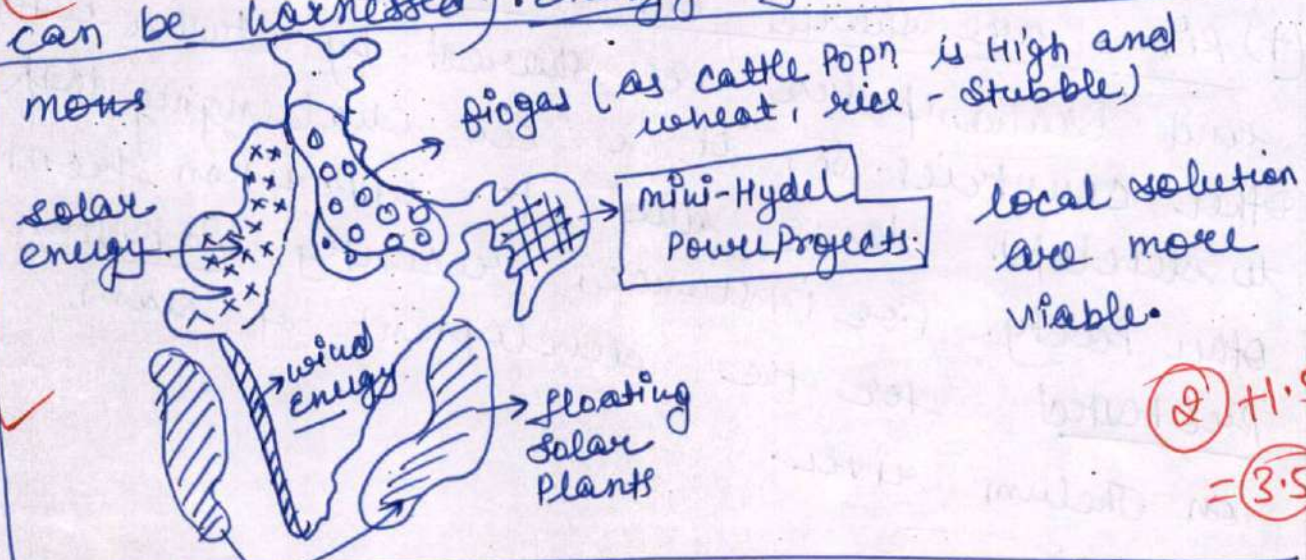
5) Technological challenges: India can develop mini hydel projects easily but low availability of technology and innovative mechanisms are

Here you should give arguments for and against adoption of hydro power.

with other renewable energies to be developed. (Hydropower development can also pose a challenge of normal and animal flora, danger to aquatic life, challenge of dam and reservoir induced flood and earthquake.)

Conclusion is not specific

So, instead of solely focusing on hydro energy - India should harness the potential of solar energy, ocean thermal power, wind energy (Jet stream (blowing over Himalayas - with a suitable technological development can be harnessed). Energy from cyclones;



(2) +1.5 = 3.5

Remarks

You have not understood the demand of question. Please read the question carefully

Q4. "Our nation's inland waterways and rivers are the hidden backbone of our transport network. In the context of the given statement, analyze the problems and prospects for inland waterways in India. (15 Marks) (250 Words)

Inland waterway constitutes 1 percent of our total transport while in countries like USA, inland waterways contributes nearly 20% of their transport/trade.

India is country where rivers are spreaded in whole country like blood veins in human body. During ancient period - rivers were used as mode of transporting people and goods (in Harappan civilisation - Presence of Dockyard gave evidence to this).

Presently, government has increased focus for developing inland waterways and declared 111 national waterways. Statutory authority has also been created for management, development of inland waterways.

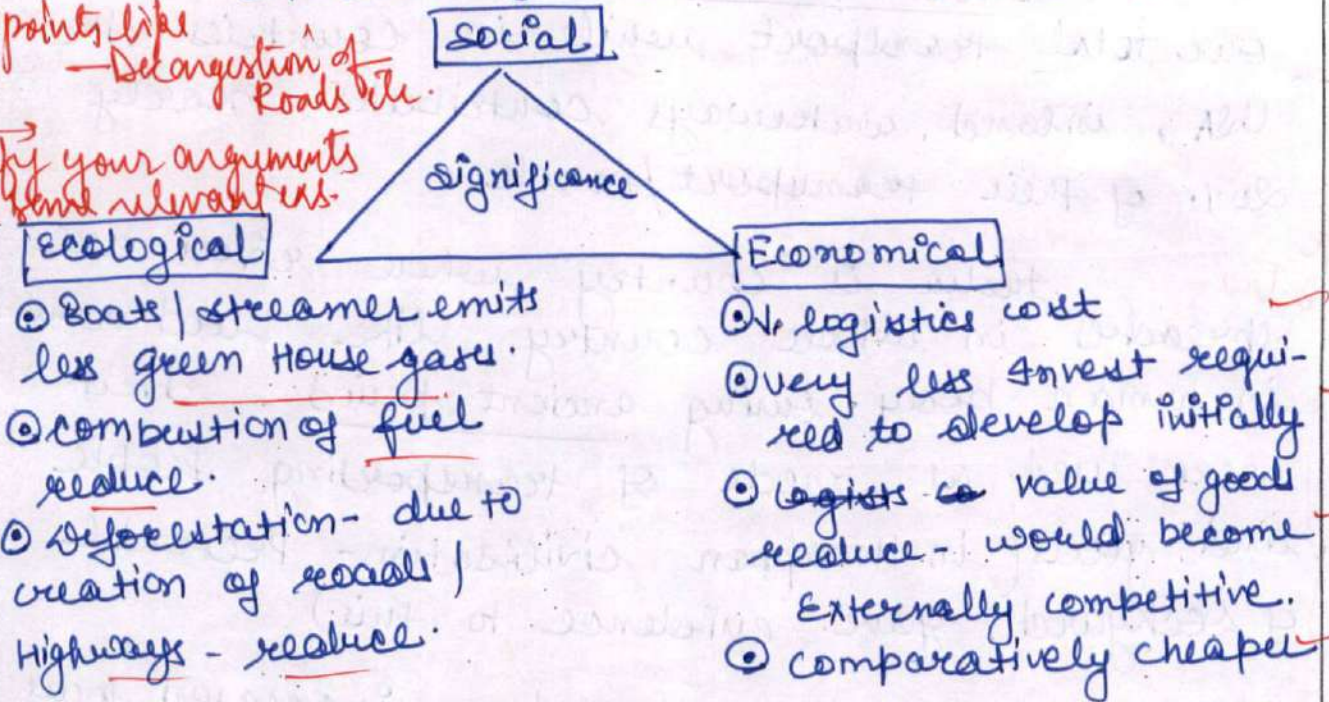
Inland waterways development have immense significance:-

- ⊙ Lower strata people with low investment can start business.
- ⊙ Underdeveloped areas like in N.E got development
- ⊙ Historically unconnected areas got connectivity

\*You missed imp. points like

- Decongestion of Roads etc.

Justify your arguments with some relevant exs.



Significance with development of inland waterways.

This development very similar to other one is double edged sword. Problems.

① Depth of river - For running steamers river should be deep, so continuous dredging cost would nullify the economic aspect.

② Ecologically it would be more harmful

ⓐ would kill the aquatic animals (striking with steamer blades etc.)

ⓑ Pollution of water (oil spill).

Remarks

→ Please provide some data/facts to strengthen your arguments

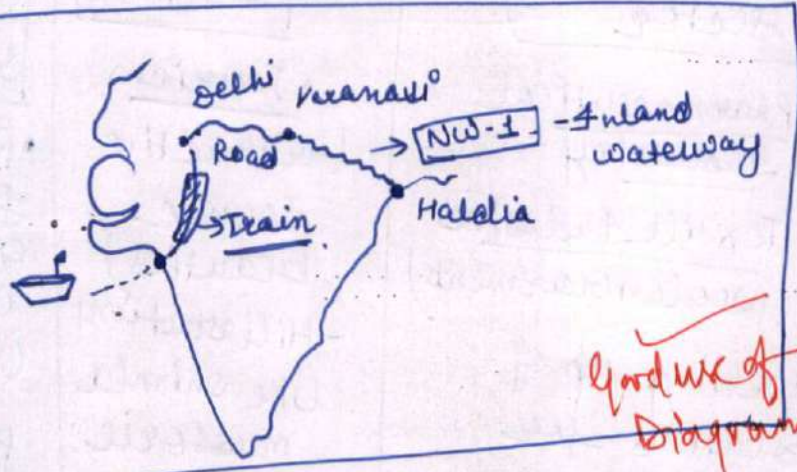
So, idea of Nirmal dhara in India would get vanished.

③ Rivers are not connected with major ports or major economic centres of country.

④ Decreasing water-levels in rivers.

⑤ Rivers are used by people to

India for developing a better transport system can't rely on single mode of transport. (So, multi-modal transport would provide bank to India.) due to its topography, geography and economically conditions



Good use of Diagram.

Pictographical representation how India by using different modes can reduce its logistics cost.

\* You have missed proper way forward e.g.

\* Then, you should conclude suitable

(S.S) +1.5  
= 5

Physical Infra.  
→ Promoting passenger transportation by tourism &  
→ Promoting cargo-transport through inland waterways etc.

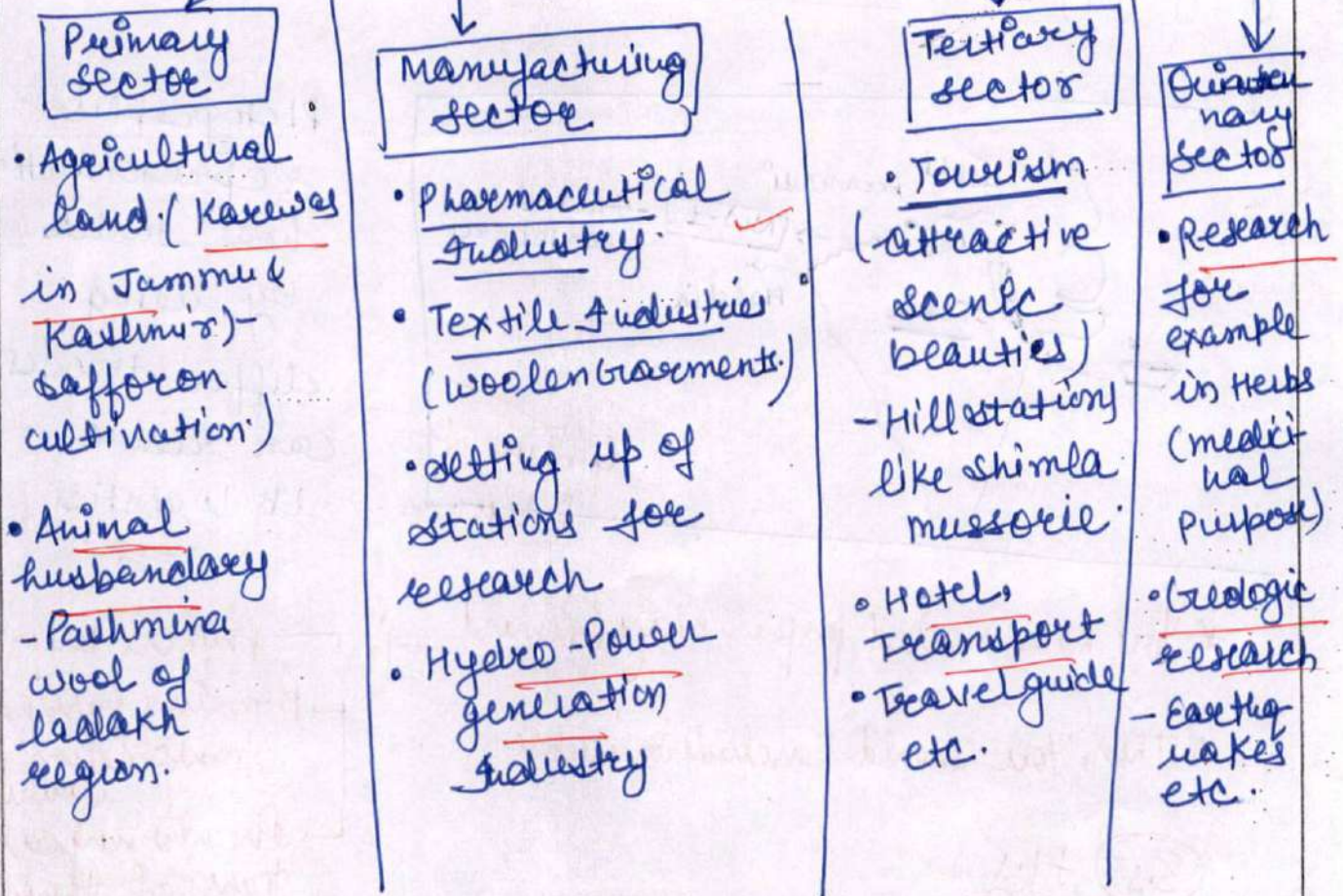
Q5. "India can utilize the vast natural resources of Himalayan region in the form of minerals, herbs, shrubs and tourism to boost its economy". Critically analyze with reference to economic opportunities and sustainable utilization of resources of the fragile Northern Mountain Complex. (10 Marks) (150 Words)

\* Describe topography and economic viability of Himalayan resources in Intro.



Himalayan Mountain System of India: Himalayas endowed India with great economic opportunities.

Economic opportunity



Remarks → Include more specific dimensions → Biodiversity → Minerals → Cultural heritage etc.

Himalayas has provided immense potentiality for economic development but significant challenges are also present.

Unstable topography - for creating the dams for hydel power - mountains need to be cut - which may cause landslide, avalanche Uttarakhand faces such disasters year on year basis.

\* Glacier Retreat due to global warming  
Due to increase in tour and travel, Himalayas are facing problem of degradation, pollutions levels are rising, plastic has reached even upto top of Mount Everest.

Sustainable development is a key to solution of these problem. Needs of human being should be balanced with capacity of nature. Himalayas which acted as climatic barrier, protective shield from attack to India should not exploited to level that it become cause for increasing disasters in India (2013 Uttarakhand floods, Chamoli disaster)

Conclude with significance of Himalayas & what should be done to protect them.

(3)+1=(4)

... Himalayas was ... massive ...  
... but ...  
... also present.

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