

## GEOGRAPHY, DISASTER MANAGEMENT & AGRICULTURE

Time Allowed: 3 hrs.

Max. Marks: 250

Q.	Marks	Instructions to Candidate
1.	2	<ul style="list-style-type: none"> <li>There are 20 questions.</li> <li>All questions are compulsory.</li> <li>The number of marks carried by a question is indicated against it.</li> <li>Answers to questions no. 1 to 10 should be in 150 words, whereas answers to questions no. 11 to 20 should be in 250 words.</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.	2.5	
3.	2.5	
4.	3	
5.	3	
6.	4	
7.	4	
8.	4	
9.	3.5	
10.	3	
11.	—	
12.	6.5	
13.	3	
14.	6	
15.	6	
16.	2	
17.	4	
18.		
19.		
20.		

59

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

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

*Robert Lodha*

Name C. Siva Gopal Reddy

Roll No. \_\_\_\_\_

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

Date \_\_\_\_\_

Signature *C. Siva Gopal Reddy*

# REMARKS

--

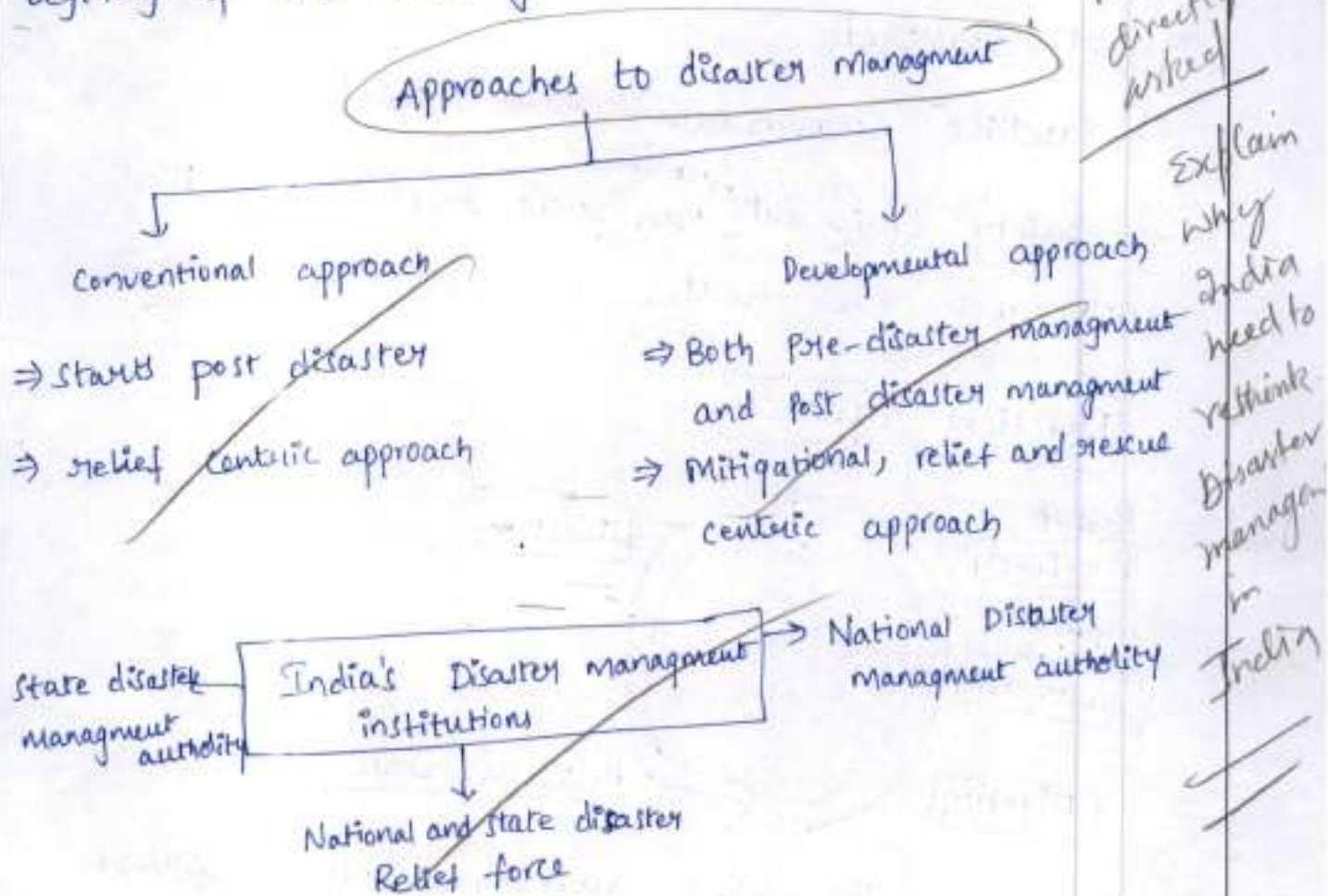
10/10/19

10

**Section - A**

Q1. There is an urgent need to rethink disaster management in India. The responses to disasters must be proactive, not just reactive. Comment. (10 Marks)

India is prone to multiple disasters such as cyclones, tsunamis, floods, droughts etc. According to United Nations risk assessment report India lost around \$34 Billion due to various disasters since the beginning of the century.



Remarks

**India's approach**

→ Till Disaster management Act, 2005, India's focus

is mainly on conventional relief-centric approach

in 2nd part of Question → Explain why the response should be broad rather than just reactive

post DM Act, 2005, it got shifted to developmental approach on paper not on practical.

**CAE report findings**

(1) National and state disaster mitigation funds were not established.

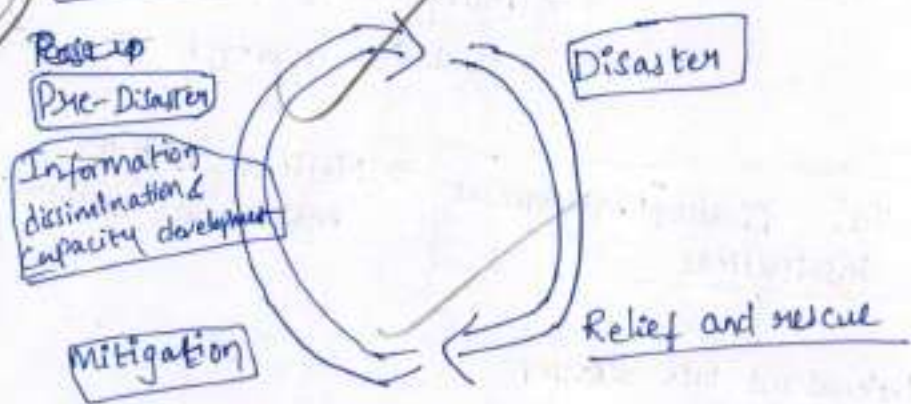
(2) Satellite communications were designed.

(3) Safety equipment, <sup>procurement</sup> man power recruitment was not upto the mark.

not relevant as per demand of Question

2

**Practical approach**



The above approach should be followed to minimize the disaster losses

Q2. It is not deficit monsoon, rather the lack of policies and mechanisms to drought-proof susceptible areas that turn the situation into a crisis. In the light of the above statement, discuss the causes of drought in drought-prone Bundelkhand region and suggest the way forward. (10 Marks)

In India most of the rain comes from monsoon.  $\frac{2}{3}$ <sup>rd</sup> of the agricultural land depends on the rain. Though because of climate change, global warming the monsoon rain <sup>in some areas</sup> decreasing or increasing the calamities due to large <sup>amount of</sup> rain in short times but because of anthropogenic cause also some areas are becoming drought.

Bring the context of Bundelkhand

Causes of drought in drought prone Bundelkhand region

- ⇒ Bundelkhand region situated in Northern Indian plains.
- ⇒ It usually get sufficient rainfall from monsoon and also the nearby flow of Ganga and its tributaries.
- ⇒ But the crisis is due to
  - Unscientific farming practices  
Eg - Flood farming
  - Excess ground water extraction
  - no proper structure to store monsoon water.

Wrong concept Bundelkhand gets less rainfall

- Encroachment of village ponds, community ponds.
- climate change effect increasing due to deforestation.

Way forward

line suggest from specific to Bundelkhand region

→ Using drip irrigation, sprinklers in farming increases water productivity.

Constructing village ponds and developing traditional water conservation structure as Johads in Rajasthan, Bungroo in Tamil Nadu.

→ Increasing green cover and developing soak pits

2 1/2

Q3. "India's 60% of farmers depend upon rain-fed agriculture which is largely impacted by global phenomenon such as El-Nino effect." Critically evaluate overdependence of Indian farmers on monsoon. Examine the policy bias against rain-fed agriculture with reference to rain-fed agriculture atlas released by Revitalizing Rain-fed Agriculture (RRA) Network. (10 Marks)

India's climatic zone comes under monsoon.

2/3<sup>rd</sup> of the Indian farmers depend on rain-fed agriculture and only 1/3<sup>rd</sup> land has irrigation facilities.

write briefly

**El-Nino effect**

⇒ India's monsoon rain depends upon global phenomena such as El-Nino, La-Nino etc.

According to Ministry of Agriculture report the growth of agriculture in El-Nino affected years is -2.1%.

**Indian farmers dependence on monsoon**

Monsoon rain is life-line for almost 65% of the farmers



Critical evaluation is missing

Remarks

Policy of Government

This is not asked

Since 1960's, when green revolution started government focused mostly on the areas where the productivity and availability of water resources are more

Eg - Punjab and Haryana - most benefited states due to green revolution.

The Eastern India which include West Bengal, Bihar, Chattisgarh though have favourable conditions they didn't reap the benefit due to Policy failures.

According to rain-fed agriculture atlas released by Revitalizing agriculture network when,

Policy supports  
Water surplus regions

disparities between regions increases

not-prosperous (traditional) structures

- Prosperous regions
- ✓ more mechanization
  - ✓ Advanced techniques
  - ✓ Export potential

2/2

Relate this to policy bias against the Rain-fed region  
e.g. MSP hybrid seeds  
policy oriented for wheat + rice out



Q4. "Most of the earthquake zones be it Mid-Continental Belt or Mid-Atlantic Belt are plate boundaries." Elucidate the role of plate-tectonics in identifying Earthquake prone zones. (10 Marks)

Earthquakes are the sudden shake of the earth. They may happen due to

- (i) Land slides
- (ii) Along plate boundaries
- (iii) Dam induced seismicity
- (iv) Volcanic eruptions etc.

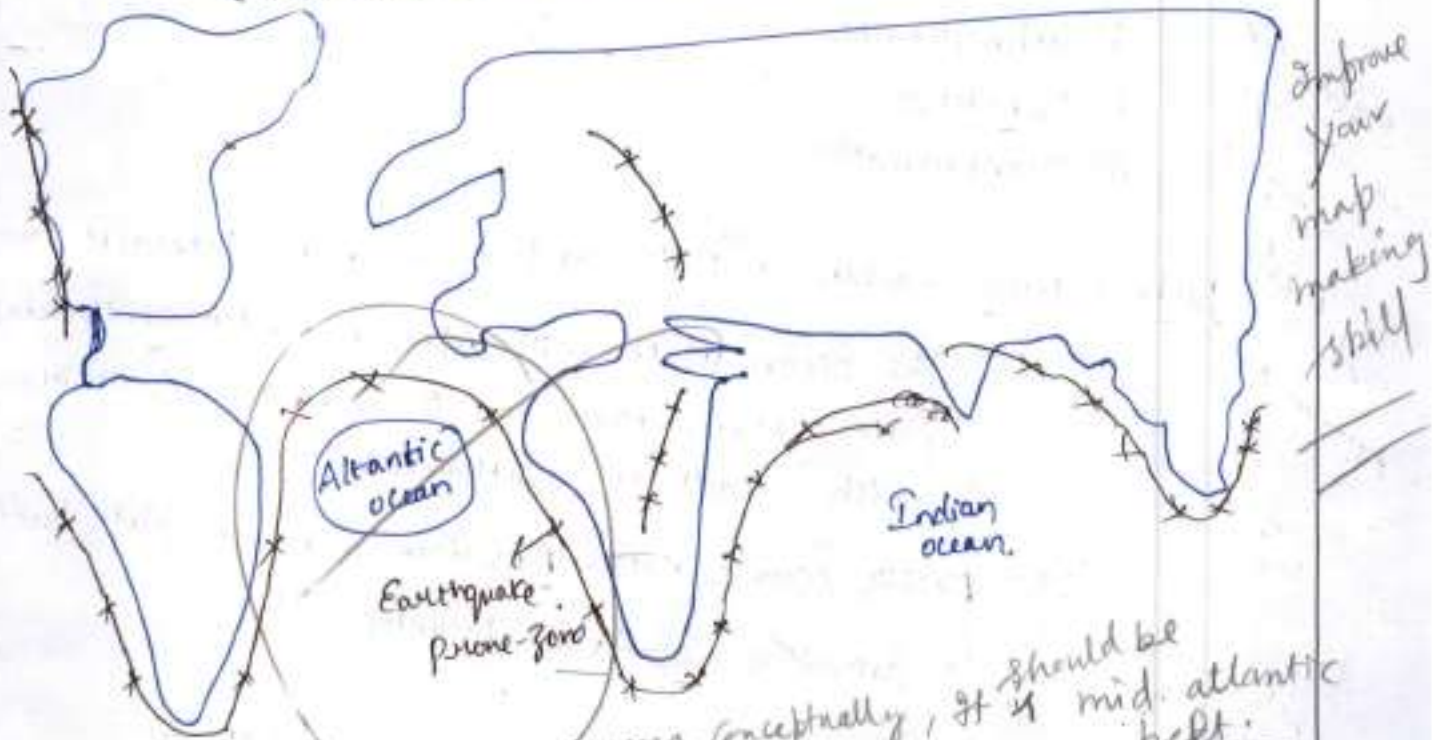


Plate boundaries are the place where two or more plates interact. When the stress built up on the boundaries it leads to earthquakes. Most of the earthquakes occur at plate boundaries, be it

Remarks

Mid-continental belt and mid-atlantic belt.

## Role of plate tectonics in identifying earthquake

### Plate zones

⇒ plate tectonic theory says that the plates are the moving bodies. when plate moves and interact with other plate there there will be three phenomenon happens

- Explain how these boundary interactions can help to predict earthquake zone region
- (i) Submergence Convergence
  - (ii) Divergence
  - (iii) Transformative.

Submergence - when a <sup>land-</sup>plate and ocean plate interact then the oceanic plate will submerge under continental plate there there is a formation of volcano which leads to earthquakes also.

Eg - Pacific oceanic plate - American Continental plate leads to formation of Andes Mountain.

3  
At the same interaction of plates at their boundaries either releases or build up stress which leads to earthquakes.

Q5. Discuss the role of albedo of ice caps in maintaining heat budget of earth. Analyze the impact of deposition of black carbon on ice caps on their albedo. (10 Marks)

Albedo is the amount of reflectiveness a substance have.

Eg - Ice, sand have high albedo and they reflect <sup>high amount of</sup> ~~the~~ solar light.

✓ Charcol (carbon) has less albedo.

Heat budget is defined as the <sup>difference between</sup> amount of solar heat received by earth and the amount of terrestrial radiation reflected by earth.

⇒ If both received and reflected are same then that is perfect balance.

⇒ Earth maintains proper heat budget otherwise it could have continuously heated up or continuously cooled down.

Ice caps are the reflective surfaces. they reflect the solar heat received by earth. there maintaining cool surfaces.

write proper introduction

Relate to the role of albedo of ice caps

good

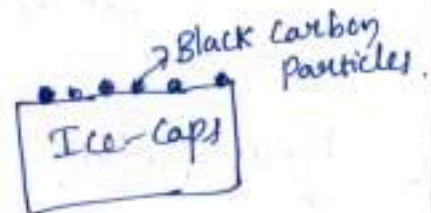
not relevant

## Impact of black carbon on albedo of Icecaps

⇒ Black carbon has high albedo. It absorbs the Solar energy effectively.

Good ⇒ When these black carbons deposited on icecaps means they can meltdown the caps by reducing the icecaps reflectivity.

⇒ When carbon particles settle on Ice caps, their surface area of exposure to sun light decreases. When the Black carbon heats up, the ice also meltdown.



Good  
But add proper conclusion  
Eg- Recently scientists have observed that the decreasing amount of ice in himalayan region is due to deposition of black carbon.

3

Q6. Identify the major parameters of public health, where India has made a marked progress. Also, discuss major public health challenges for the next decade? (10 Marks)

Public health is the priority for any government.

In India out of ~~total~~ expenditure for healthcare costs around 64%. (According to NITI Aayog), which leads to every year 1% population going to poverty.

The areas where India marked progress

→ focus should be various major parameters of Public Health. like IMR, MMR.

- (1) Decreasing ~~and~~ hungry related deaths.
- (2) Communicable diseases like TB, influenza etc. decreased.
- (3) Because of awareness and ~~free~~ better health care facilities maternity mortality and Neonatal mortality rates were decreased considerably.
- (4) Water borne diseases ~~decreased~~ like cholera, hepatitis, diarrhea etc. decreased for certain extent.
- (5) Due to vaccination programs Polio also successfully eradicated in India.

Remarks

Major public health challenges for next decade

(1) Non-communicable diseases like Obesity, heart problems, respiratory problems increasing.

Also discuss  
→ spending of GDP  
→ issue of  
accountability

(2) Due to pollution lung related diseases, respiratory disease increasing.

(3) India's ~~un~~ unscientific dietary practices

→ New  
diseases

causing increase in problems of obesity, heart-attacks etc.

(4) Road accidents are also major contributors.

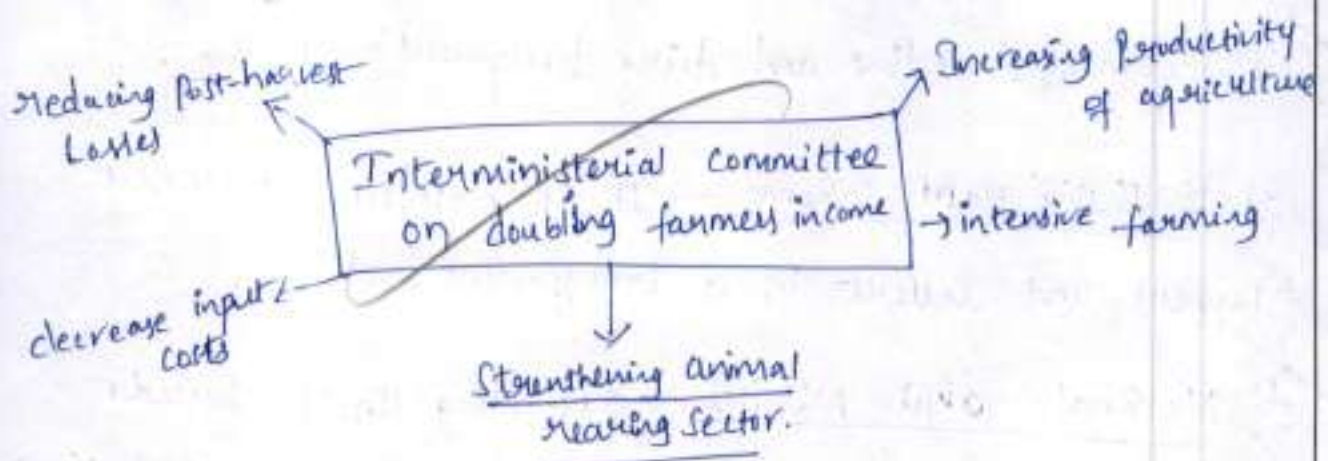
(5) Hospital related diseases.

In the last century major deaths due to health related problems were due to communicable diseases but now-a-days non-communicable diseases are increasing.

11

Q7. If we have to double the income of our farmers, we need to focus equally on animal rearing apart from traditional crop farming. Examine the steps taken by government in this regard in the last five years. (10 Marks)

Government of India's ambitious target of achieving doubling the farmers income by 2022 does not complete without improving animal rearing.



⇒ Animal rearing sector has the lot of potential to gain in India.

⇒ India has 16% of global goat population and around 6.4% of global sheep population.

⇒ Recent report found out that if uttarpradesh government did not ban buffalo slaughtering and export, then they can improve their GDP <sup>rate</sup> by 8-10%.

Remarks

## Government steps

### Various schemes

- Also examine these steps as per demand of Questions
- (1) National Livestock Mission - To provide feedstock, disease surveillance and other supports to farmers.
  - (2) Bovine Breeding and dairy development scheme.
  - (3) E-Pashu Haat scheme - It is platform to connect buyers and sellers in a transparent manner.
  - (4) National Gokul Mission - Supporting Indian breeds such as Gir, Sahiwal etc. through artificial insemination.
  - (5) Extending Kisan Credit Cards to animal rearing.

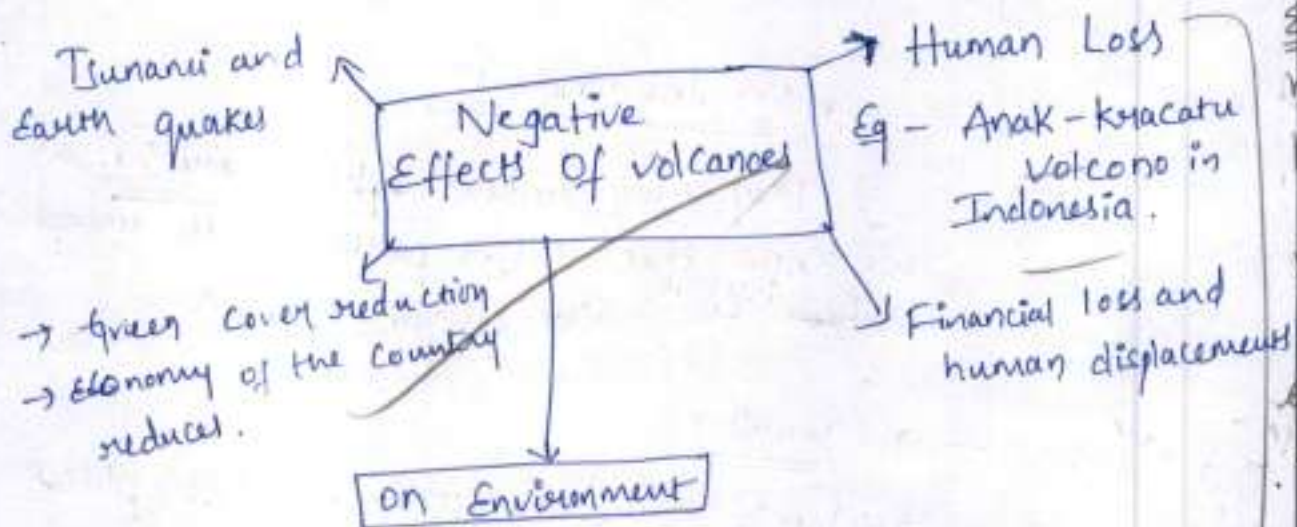
Examining of these steps is missing in your answer

India can become global top exporter of meat, milk, eggs etc. if it sustainable utilize its cattle, goat and sheep population.



Q8. "On the one hand volcanoes cause harm to life and property, displacement of people and air and water pollution, but at the same time it provides benefits to people in different ways." Elucidate. (10 Marks)

Volcanoes are the sudden eruptions of magma from ~~underneath of group~~<sup>meaning not clear</sup>. The magma under high pressure under the ground explodes when there is a weak fracture in any plate boundary of earth surface.



Explain  
negative  
impact  
of  
volcano  
with  
example

⇒ Pyroclates will disperse into the atmosphere Causes air pollution.

⇒ The black soot which may settle on ice caps causes solar dimming and ice cap melting

⇒ Sulphur, Iron and various other metals causes health problems.

## Benefit of Volcanoes

### Resources *live examples*

⇒ Volcanoes brings valuable metals to the earth surface which may contain Iron, magnesium, copper etc.

### on Land Productivity

⇒ The Volcanic ~~colled~~ lands are best places to do farming.

⇒ They are highly productive and has lot of mineral within it.

### On Environment

⇒ They may reduces global warming. as we know that ~~subax~~ <sup>increase</sup> particles in the atmosphere ~~reduces~~ the solar energy reflection.

### Tourism

⇒ volcanic erupted sites are best places for tourism activities.

⇒ Eg - Mountain Etna.

Comprehension is missing in your answer

4

write proper conclusion

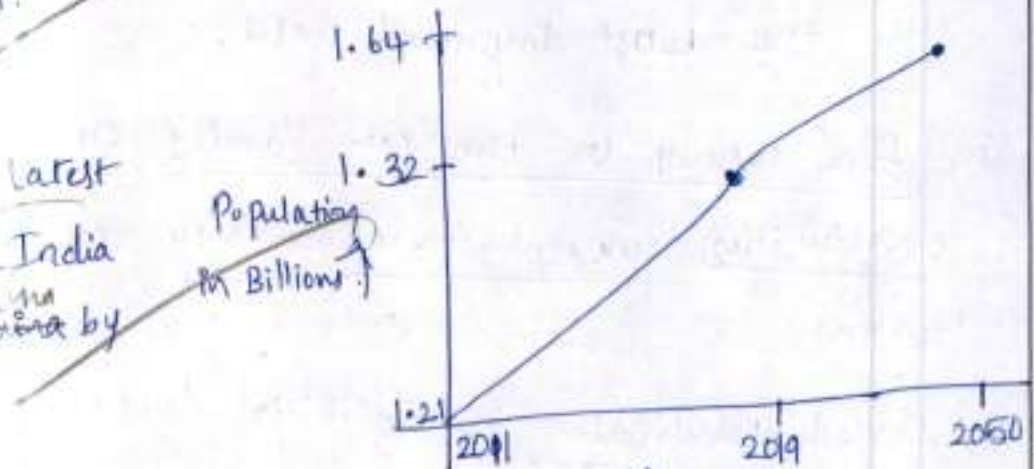
Conclusion

Q9. After more than half century, India is yet to achieve goals set by its population policy. Critically analyze. (10 Marks)

India is the 2nd most populous country in the world.

write proper introduction

⇒ According to latest UN-report India will cross China by 2024.



UN - Population projection for India

The government of India

Population policies are mainly to reduce population to stabilization rate that is to reduce total fertility rate to 2.1. But it did not achieved it because of the following reasons.

Discuss National population policy of 1976 + 2000

(i) Lack of adequate awareness among the citizens.

(ii) Free family planning → availability, accessibility and affordability is lacking

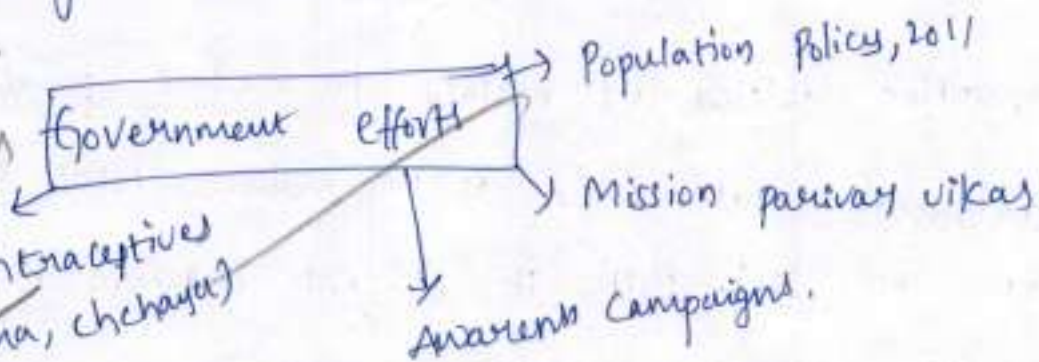
→ Discuss goals of why India fails to achieve target

Remarks

(iii) The Southern Indian States achieved the target and their TFR is less than 2 whereas the Eastern India particularly Bihar, Uttar Pradesh, West Bengal and are the least improved states.

(iv) Free labour to the poor family, Lack of economic opportunities, unemployment, poverty are some of the reasons

(v) Forced sterilization in the initial days created negative notion of sterilization among citizens, this is coupled with religious beliefs are also reasons for high population.



Government should spread the message that "child by desire and not by accident" among the citizens.

Q10. Meghalaya Mining Disaster is a shocking reminder that in a fast-growing economy such as India, life of people matters the least. Critically Examine. (10 Marks)

Recently in Meghalaya because of Rat hole mining practice of extraction of Coal disaster happened and tens of lives were lost.

⇒ This is not the first time these practices are happening since ~~1947~~ Independence, the main reasons are.

- (i) Poverty, unemployment led people to take any type of job.
- (ii) Bureaucratic negligence - ~~not~~ properly survey and attend the citizens.
- (iii) Development versus environment protection dilemma. where unscientific mining still happening.
- (iv) North-East region is least integrated part with India through lack of communication network such as rail, road etc.

Also relate it why it was a shocking reminder

Remarks

Meghalaya disaster is only one type the other forms of works which led people to give up their lives are.

(1) Manual Seavaging - where due to lack of mechanization, safety equipment every year hundreds of people losing their life.

(2) mining workers - In coal mining and other metal mining places lack of proper safety equipment and least enforceability of government regulations is also in pathetic situation.

(3) un-organized sector workers - In chemical factories, Bidi, cigarette kind of factories.

Though government passing laws to control these activities but actual implementation of ground have problems which has to be taken care of in order to see a power and developed India

**Section - B**

Q11. "Deforestation of tropical rainforests for different reasons has caused serious concern for the global community as they are called 'Lungs of the World'." Discuss in context with deforestation of Amazon rainforest and rainforests of South-East Asia.

(15 Marks)

Remarks

*Remarks*



<p>1. The first step in the process of the development of a country is the establishment of a strong and stable government. This is because a government is responsible for the overall development of the country. It is the government that provides the framework for the economic, social and cultural development of the country. Without a strong and stable government, the country will not be able to achieve its development goals.</p> <p>2. The second step is the establishment of a strong and stable economy. This is because a strong and stable economy is the backbone of a country. It provides the resources for the development of the country. Without a strong and stable economy, the country will not be able to achieve its development goals.</p> <p>3. The third step is the establishment of a strong and stable society. This is because a strong and stable society is the foundation of a country. It provides the support for the development of the country. Without a strong and stable society, the country will not be able to achieve its development goals.</p> <p>4. The fourth step is the establishment of a strong and stable culture. This is because a strong and stable culture is the soul of a country. It provides the identity for the country. Without a strong and stable culture, the country will not be able to achieve its development goals.</p> <p>5. The fifth step is the establishment of a strong and stable environment. This is because a strong and stable environment is the home of a country. It provides the resources for the development of the country. Without a strong and stable environment, the country will not be able to achieve its development goals.</p>	<p>1. The first step in the process of the development of a country is the establishment of a strong and stable government. This is because a government is responsible for the overall development of the country. It is the government that provides the framework for the economic, social and cultural development of the country. Without a strong and stable government, the country will not be able to achieve its development goals.</p> <p>2. The second step is the establishment of a strong and stable economy. This is because a strong and stable economy is the backbone of a country. It provides the resources for the development of the country. Without a strong and stable economy, the country will not be able to achieve its development goals.</p> <p>3. The third step is the establishment of a strong and stable society. This is because a strong and stable society is the foundation of a country. It provides the support for the development of the country. Without a strong and stable society, the country will not be able to achieve its development goals.</p> <p>4. The fourth step is the establishment of a strong and stable culture. This is because a strong and stable culture is the soul of a country. It provides the identity for the country. Without a strong and stable culture, the country will not be able to achieve its development goals.</p> <p>5. The fifth step is the establishment of a strong and stable environment. This is because a strong and stable environment is the home of a country. It provides the resources for the development of the country. Without a strong and stable environment, the country will not be able to achieve its development goals.</p>
---	---

Remarks

Q12. Agriculture is not only sensitive to climate change, but also one of the major drivers of climate change. Critically evaluate. (15 Marks)

Agriculture sector is the most depended on climate. ~~From~~ Sunshine, rain, pest attack Agriculture sector depends on climatic factors.

Change in climate leads to changes in agriculture also in terms of,

(i) In recent years, due to climate change rainfall happens in only limited time period that too huge amount which is disastrous for farmers.

(ii) Increase in global temperatures causes certain crops not suitable in traditional areas.

(iii) Drought, Floods are frequent happenings due to climate change.

(iv) Ocean level rise causes inundation in coastal areas which leads to submergence of coastal land-forms.

(v) Survival pests which hitherto not suitable for that climate.

Economic Survey 2017-18

⇒ Because of extremities of climate Indian farmers lose around 12% of their income.

⇒ The most affected is the one who depends on rainfall

⇒ The crops which has perennial ~~water~~ <sup>water</sup> sources such wheat and rice are least affected.

good

Impact of Agriculture on climate change

⇒ Due to stubble burning and faddy straw burning leads to pollution.

⇒ Due to decreasing of forest cover for farmlands to changes in atmospheric composition.

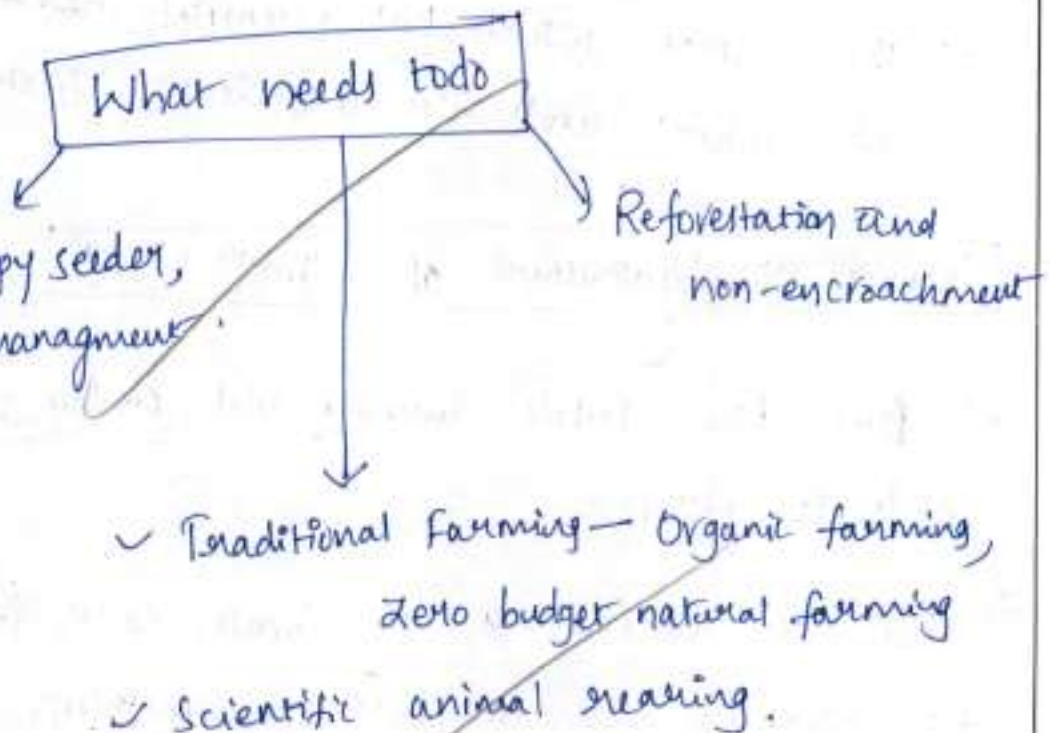
⇒ Due to overutilization of water from mines and construction of river on dams the water flow to oceans decreases then the evaporation also decreases which has effects on rainbearing clouds

⇒ The increase use of fertilizers, pesticides will change the atmospheric composition.

good

⇒ over-mechanization of agriculture utilities makes utilization of petrodiesel which leads to increase of carbon compounds.

⇒ Animals release  $\text{NH}_3$  (Ammonia) compounds



Q13. Considering India's agro-climatic zones and the extent of smaller farms, analyze how far agricultural diversification can help in achieving food security, improving human nutrition and increasing rural employment. (15 Marks)

India's highest net sowing area under agriculture. It has diverse climatic conditions deserts in western India, Thick forests in North-East India, Coastal areas in south India, hills and mountains in north India.

Coupled with these geographical variations, India has fragmented land structure.

⇒ According to Agriculture Census (2015), India has 86% of small and marginal farmers.

⇒ India's per-capita availability of agricultural land is 1.08 hectares.

India has both tropical and sub-tropical climatic condition which makes it to produce diverse set of agricultural commodities.

Briefly  
Explain  
India's  
agro-  
climatic  
zones

# Agricultural diversification

It is defined as the production different crops in same land at the same time production different set of crops in a country like India.

You need to specifically explain how agricultural diversification help in achieving food security  
② improving human nutrition  
③ increasing rural employment

India traditionally grows rice and wheat more than other crops.

→ Coupled with its different soil types, climatic conditions India can produce different crops as shown like in the figure.

→ But traditionally India is not diversified, still we are importing pulses for consumption.

Oil seeds are also not sufficient amount

Coastal areas  
Crop - Tea, Coffee, Rice etc.

Plains  
wheat, rice, millets, Jute

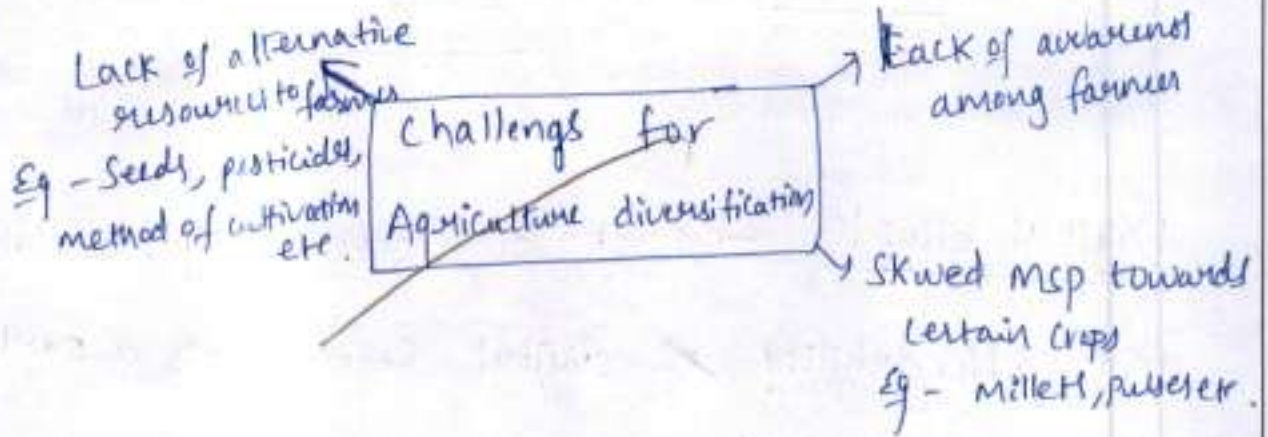
Deccan trap  
Oil seeds, millets, coarse grains

Hilly areas  
⇒ oranges, horticultural, tea etc.

Potential of different areas

Remarks

This should be your main focus



⇒ Agriculture diversification makes country not food sufficient but food security country status.

⇒ when farmers shifted (diversified) from agriculture sector to non-agriculture sector it leads to double benefit for farmers and for even economy.

⇒ Diversification towards animal rearing, fishing, horticulture crops benefit alot.

⇒ Producing pulses, oil seeds leads to decreasing imports  
So, that saving of precious FDI

⇒ when food basket is diversified and provided to farmer all needs means their dietary practices improves leads to their health status improvement.

Agricultural diversification is the need and government should do it.

You need to explain specific benefit of Agriculture diversification

Q14. The phrase "digital divide" refers to the unequal and disproportionate pace of development in societies in having access to digital infrastructure and services. Analyze the extent of incidence and prevalence of digital divide in India. List in measures taken to bridge this divide. (15 Marks)

Digital divide - Lack of accessibility, availability and affordability of digital services to a particular section over others.

In India 100 crore mobile sets are in use and it is even increasing.

Why Digital divide happening

We can divide it into Absolute digital divide and relative digital divide.

Absolute digital divide - People not know about digital services and they didn't access to it.

⇒ This phenomena has reduced drastically in recent decades in India.

⇒ Most of the people are using digital services in terms of telephones, smart phones etc.

If there is a divide in this category means people are illiterate, unaware and have negative attitude towards it.

Eg - Tribal people.

Remarks

to prove your argument

Explain the extent of incidence and prevalence of digital divide with facts & figures



## Relative digital divide

⇒ People in urban areas have better access to networks, internet and various technologies compared to village people.

⇒ Younger generation has more knowledge about digital services.

eg - People are using Amazon, Flipkart, Paytm etc. and hardly no one knows about Facebook, Youtube etc.

⇒ The penetration of internet services in southern and western India are comparatively better than Eastern and north India.

unavailability of digital services in local languages

not user friendly

Reasons for "digital divide"

Lack of e-literacy

Lack of awareness about its benefits

No availability of networks

Entertainment and rural affected areas  
eg - Jammu and Kashmir, Chattisgarh etc.

Government services like e-NAM, e-Kuisi-samvad, Mee bhoomi in AP, e-Choupal in Rajasthan are not accessible to citizens because of the above listed reasons.

- Benefits of e-services
- Reduces corruption
  - Reduces delays in service delivery.
  - no physical appearances and exploitation
  - access from any where
  - increases transparency

### Measures to bridge digital divide

(i) Digital information Kiosks can be established in rural areas.

→ Add Bharatnet  
→ Digital India  
→ Indigo Campaign

(ii) When farmer, and other person visits government office he has to be taught about e-services.

(iii) Increase of DBT transfer and JAM Trinity to the extent successfully digitalized.

(iv) Increasing penetration of fibre cable, Network tower

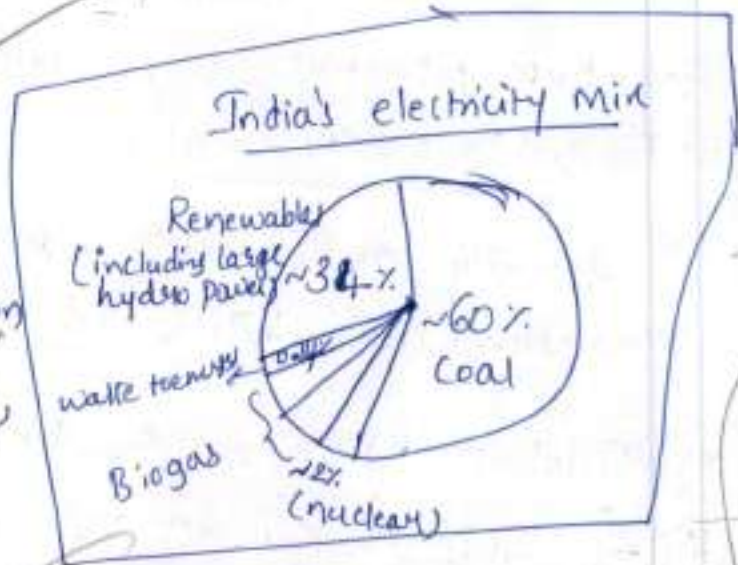
To achieve the target of "Digital India",

We should aware, awake and inform the citizen about Digital Service.

Q15. Can India modernize its manufacturing economy and supply electricity to its growing population without relying heavily on coal and other related fossil fuel basket? Examine. (15 Marks)

60% of Indian power supply comes from coal based power plants. In order to develop India has to strengthen its manufacturing sector for that it has to consume more and more oil resources and different types of energy resources.

⇒ India imports 80% of its oil resources. For a growing population, the increase of vehicles, manufacturing base, home needs needs more diversified and stable energy resources.



good

stick to the context of Question

India can diversify its fuel and electricity basket, the following are the available options.

(1) Renewables - India's share in renewable energy is increasing significantly. Especially Solar power basket is increasing.

⇒ The Commitment under International Solar alliance to contribute \$100B by 2030 makes this process quicker.

⇒ other renewables includes Wind power - India has huge potential in the states of Tamil Nadu, Gujarat and Andhra Pradesh coast.

⇒ Recently government also launched offshore wind power generation and India's wind power potential atlas.

Tidal energy can be harnessed from Gulf of Kutch, Gulf of Kambath and Sunderban delta region.

(2) Solar vehicles -

Government of India has a ambitious target of running 30% of all vehicles in India by 2030 through electricity.

⇒ For this proper infrastructure of electricity

Relate this with the context of

Can India become a manufacturing economy

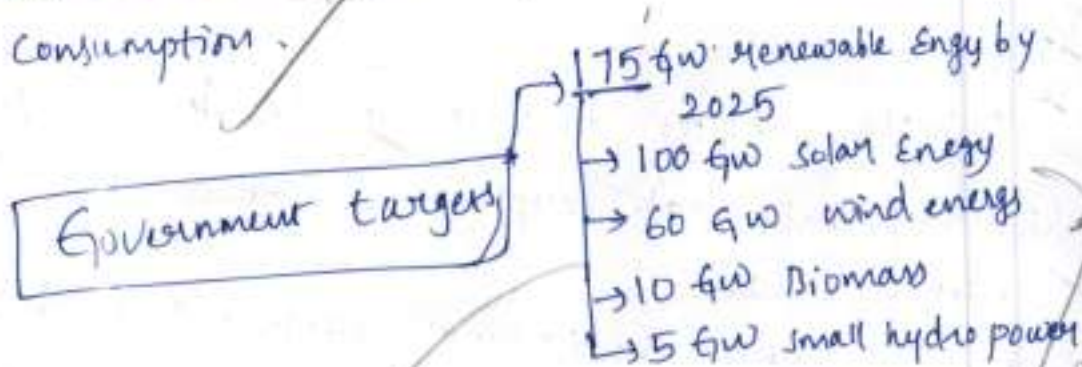
recharge stations, battery technology is must.

⇒ E-vehicles reduces India's depends on oil imports and saves our FDI along with increasing energy security.

(3) Biomass based plants - Biomass based energy generation can be used for households purpose or for energy generation. Good

(4) Nuclear power - India has rich monazite reserves which can be used to produce nuclear energy

(5) waste to energy - plants of waste-to-energy can be established in each city to produce electricity for city consumption.



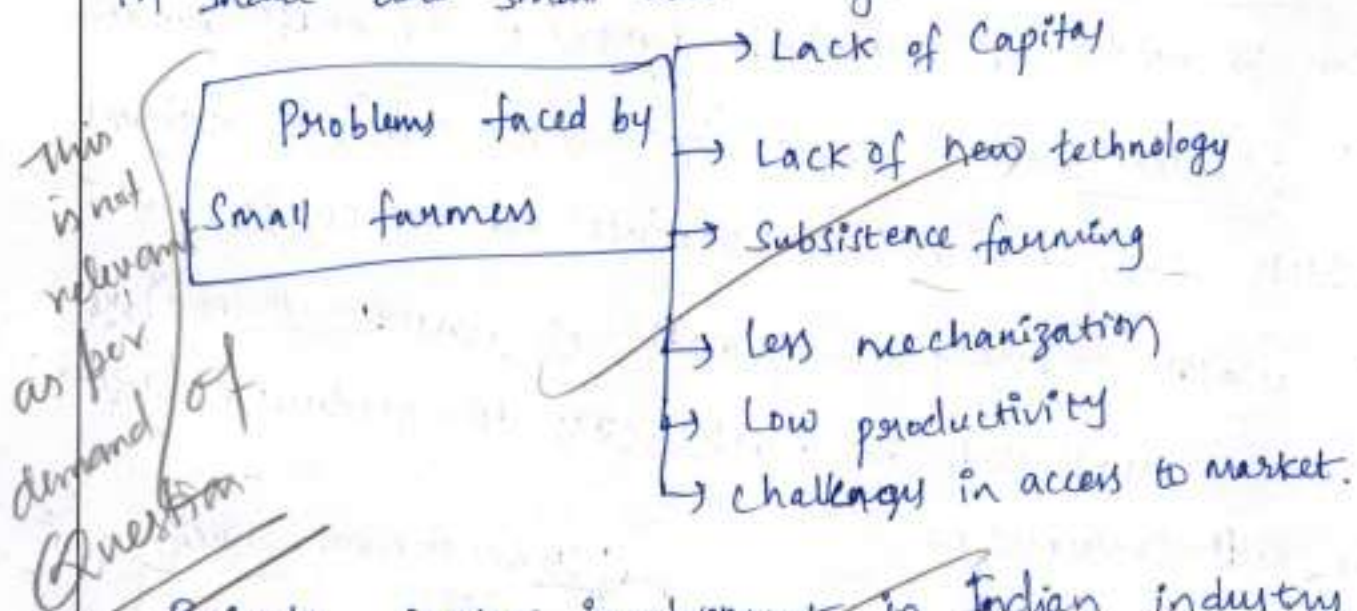
In order to build strong manufacturing base and to become as global power India must attain the status of energy security by diversifying it's energy basket.

Discuss  
we  
can  
move  
gradually  
towards  
renewable  
resources  
but  
in stage

6

Q16. About 85 percent operational holdings are small and marginal lacking access to capital, technology and market for growth. Also, there is a lack of mutually supportive agriculture - industry symbiotic linkages. In this context, examine prospects and challenges of Agro-Industrial sector. (15 Marks)

According to Agriculture Census 2015, released by ministry of Agriculture 85% of the farmers in India are small and marginal.



Private sector involvement in Indian industry is very minimal. Except some companies which engaged with farmers.

First explain the prospects of Agro-industrial sector

Eg - Pepsico with potato and tomato farmers  
FRESH Supermarket in Hyderabad with farmer.

Remarks

**Benefits of Industry  
farmer Symbiosis**

- Farmer can reduce market risk
- Farmer can access better technology
- credit availability to both  
Farmer and industry increases
- industry can procure the items  
without any upward linkage problems

But because of the inmate problems in Indian agriculture it didn't got on to practices.

The challenges are

There are general challenges of Indian Agriculture

- (1) Fragmented Land holding.
- (2) The fear that the Corporates may monopolise the Production may get the farmer into debt burden.
- (3) Lack of proper policies.
- (4) Reduce the choice to farmers and they have to sell the product to Corporate even the market prices are high.
- (5) Corporates may utilize excess fertilizers, weedicides, and water which makes the farmlands barren.
- (6) Subsidence farming of farmer is disturbed.

You have not written Challenges of Agro-Industrial sector

Recently government proposed model contract

Farming act, the provisions are

(1) ~~A~~ contract farming (development and promotion) authority will be established.

(2) Corporates have to register the contract with the authority.

(3) Corporates have to buy the pre-determined full crop.

(4) Rural contract farming group can be established to settle disputes between farmers by locals itself.

These are the good moves on the part of government. ~~But~~ due to fragmented structure

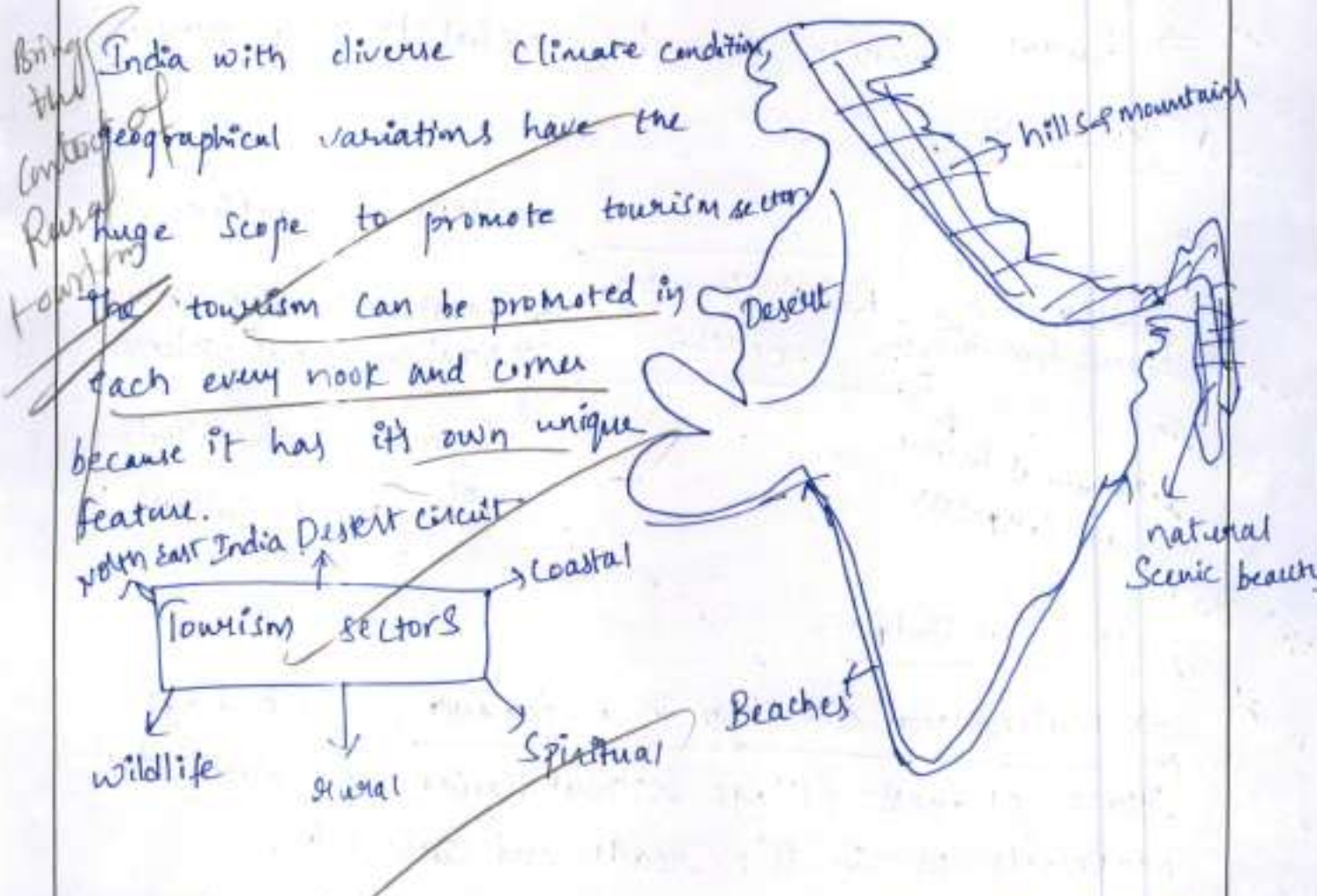
of land is a big hindrance for this. So

Amul type of cooperative farming is best suitable

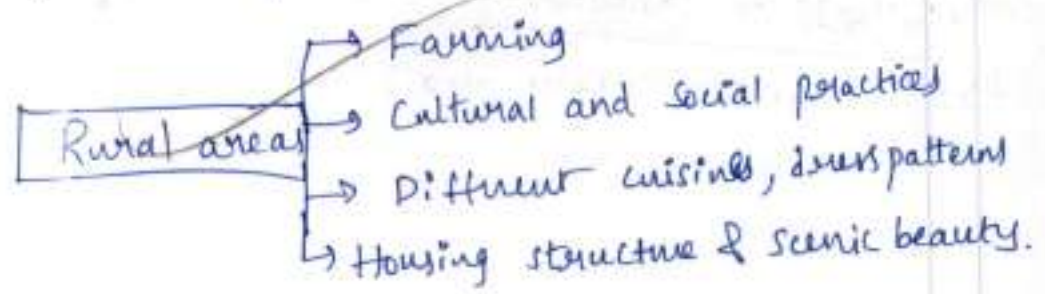
in India and the next step is corporate contracts



Q17. Analyze the role of rural tourism in facilitating community development, poverty alleviation, boosting cultural heritage, and conservation. Also explain the steps taken by the government to augment this sector. (15 Marks)



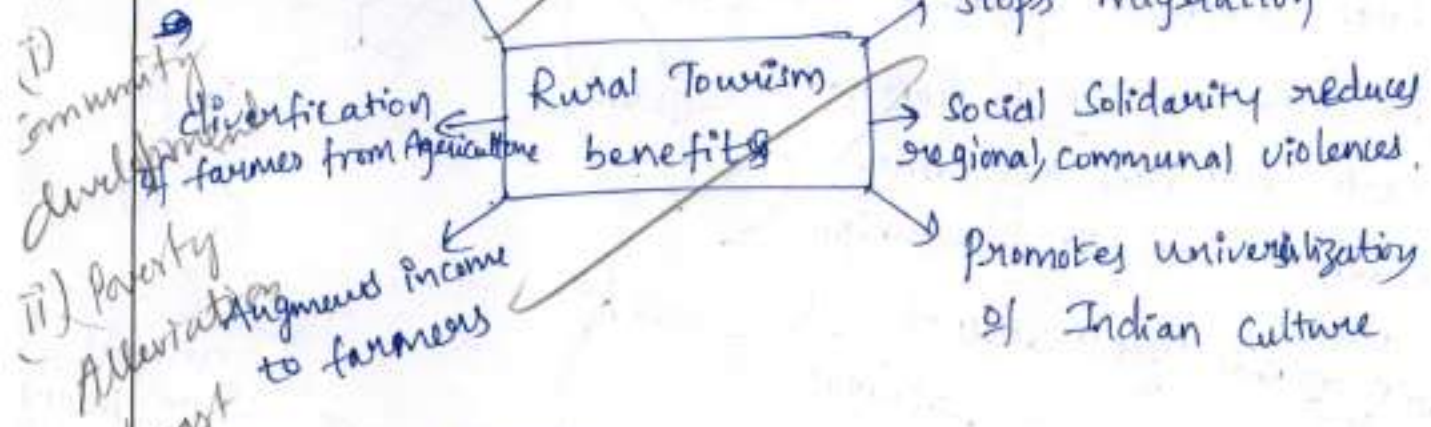
"India is combination of village. The beauty of India lies in its villages," said by Gandhiji. It perfectly shows the potential of rural tourism in India.



Remarks

## Elaborate Rural Tourism

Rural tourism ⇒ Rural Tourism can be useful to employment generation.



### Some Case Studies:-

⇒ Mylenwang ~~is~~ village in Meghalaya, which bags Asia's Cleanest village without having any waste, dust materials on in its roads and surroundings.

⇒ The Bhuj and Kutch region of Gujarat where traditional huts are built and ~~farm~~ tourist see the scenic beauty there.

⇒ Pollachi in Tamilnadu where the scenery attracts the tourists every year

Remarks

Government of India in order to support tourism various schemes are implementing they are.

- (1) Swadesh Darshan Scheme by ministry of tourism where various cultural circuits has been developed and they are promoted.
- (2) Arrival on visa to many countries extended by India <sup>good</sup>
- (3) Dekho apna desh scheme where the NRI's <sup>citizens</sup> are attracting to visit India. <sup>Also add</sup>
- (4) Iconic monuments development where different <sup>Rural</sup> ministries collaborations developing different iconic <sup>circuits</sup> places to attract tourists. <sup>development</sup>
- (5) Road connectivity, rail connectivity, Cleanliness and Tourist guides skill development and some of the facilities improving by government. 4
- (6) "Incredible India" campaign.  
Tourism sector has multiple dimensions like health tourism, wildlife ~~exp~~, and himal sectors. These has to be augment to attract FDI and develop life of rural form.

Remarks

Q18. Though China's one-child policy has been criticized as against human dignity and rights, it has improved and controlled the nation's population by a possible 400 million people. Can we also adopt a similar approach, although not so drastic and punitive? What are various options to control population in India at present? (15 Marks)

*[Faint, illegible handwritten text, likely bleed-through from the reverse side of the page.]*

Remarks :

*Remarks*

*Remarks*

Q19. "Social capital can be described as a resource which focuses on social relations that have productive benefits". Discuss the role of social capital in determining the human development of a region. (15 Marks)

*Remarks*

*Remarks*



Remarks

Q20. Oceanic currents play significant role in determining climate of a place. Elucidate with certain examples. How has global warming impacted Antarctic Circumpolar Current and how can it impact Antarctic icecaps? (15 Marks)

Remarks ↓

*Remarks*

Remarks