

GEOGRAPHY, DISASTER MANAGEMENT & AGRICULTURE

Time Allowed: 3 hrs.

Max. Marks: 250

Q.	Marks	Instructions to Candidate
1.		<ul style="list-style-type: none"> • There are 20 questions. • All questions are compulsory. • The number of marks carried by a question is indicated against it. • 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. • Keep the word limit indicated in the questions in mind. • Answers must be written within the space provided. • Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.
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total - 77.5

Name CHANDRIMA ATTRI

Roll No. _____

Mobile No. _____

Date _____

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1. Invigilator Signature [Signature]

2. Invigilator Signature [Signature]

format should
be like this
↓

① # first mention what are
the gudian Approach towards
disaster presently
eg - Reactive
↳ Based on
3 R - Rescue
relief
rehabilitation
Approach

② # why proactive
required
↳ in the context of
events that happen
• Buj earthquake
• latest Meghalaya mining
disaster

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)

Disaster management in a climatically vulnerable country with a huge coastline like India is of utmost importance. Till now, our approach has been reactive and fragmented (silo-based).

To tackle various disasters like tsunami, floods (Assam, Kerala, Uttarakhand, Maharashtra), droughts, earthquakes etc, we need following measures —

- ① Integrated approach which is not reactive but planned and organised
- ② Reforming NDMA act 2005 and providing more funds and training to national, state and district authorities —
- ③ Training of first responders like police, army and NDRF in providing timely response.
- ④ Taking location-specific, scientific approach rather than "one size fits all"

Remarks

you wrote only aspects in your answer

(5) Adopting Sendai framework 2015-30 principles of reconstruction and rehabilitation such as "Build Back better".

(6) Mitigation and Adaptation fund

(7) Compensation

(8) Preparedness by increasing early warning systems and monitoring stations.

As disasters have many inter-related causal factors, it is imperative that we devise LONG TERM, AREA SPECIFIC strategies to cater to different form and types of disasters.

(3) We are moving towards crisis management to risk management through some provision

- eg. DM - 2003
- NDR - 2009
- NIDMP - 2016

But some loopholes are -
- there fund issue collaboration
eg. lack of interstate collaboration etc.

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)

Monsoon variability is a reality in the Indian subcontinent. What transforms a deficit in monsoon to a crisis is a mix of government policies and wrong agricultural practices adopted by farmers.

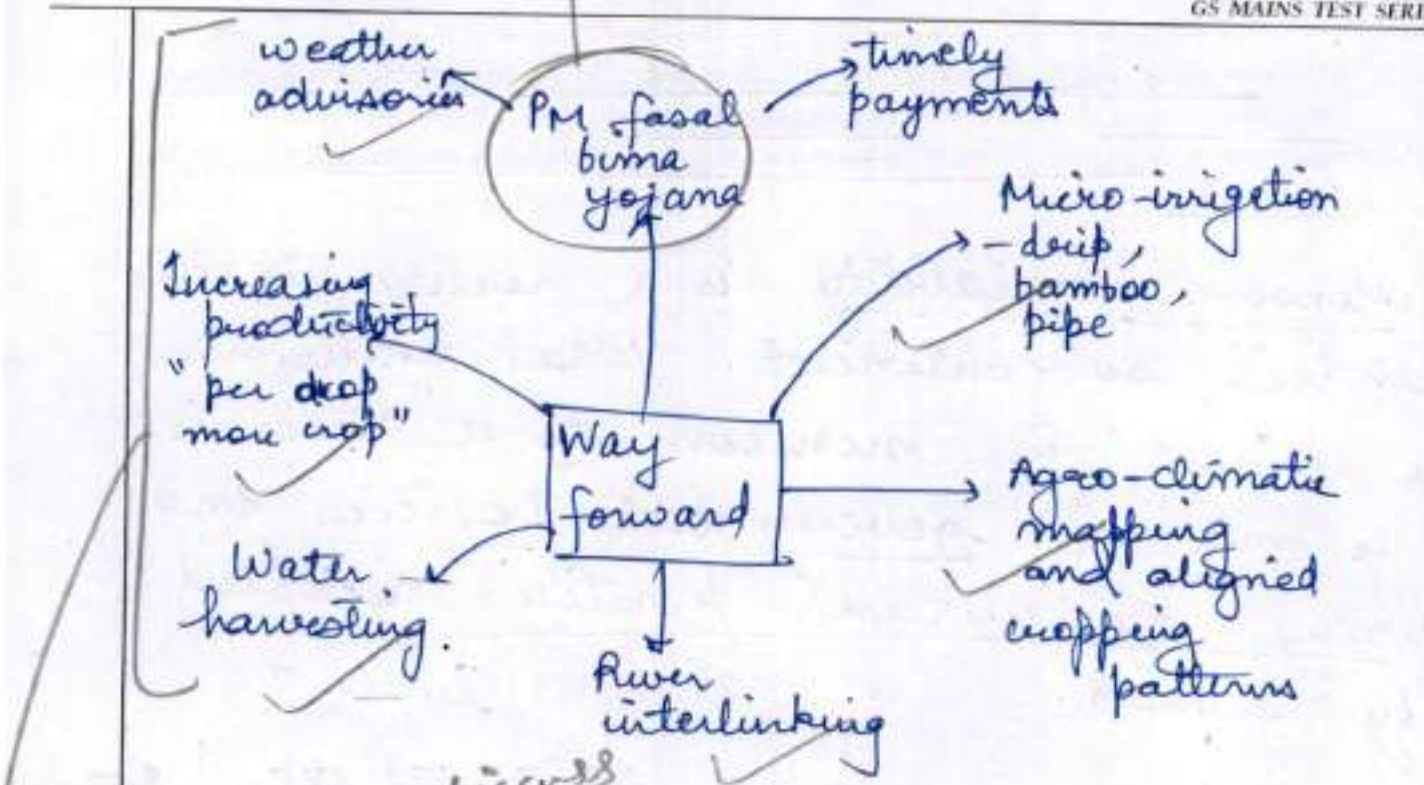
Taking the example of Bundelkhand region, we can cite following causes—

- ① Lack of water harvesting structures including traditional means such as tanks, bunds, wells etc. Relevant points
- ② Wrong cropping patterns - This is incentivised by government's MSP policies which favour water intensive crops. For ex- Regions such as Bundelkhand should go for millets and other hardy crops.
- ③ Lack of land use planning - Natural sources of water are often encroached or water is polluted by industries.

Remarks

also mention some topographical reasons of Bundelkhand

How will it reduce drought??



try to discuss these points

write conclusion also

3

Remarks

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)

Indian agriculture is mostly rain-fed. It is subjected to seasonal vagaries of nature including El-Nino, southern oscillation and Madden Julian oscillation.

The recently released atlas highlights the policy bias of India against rain-fed agriculture -

(1) Many procurement policies are based on crops which require intensive irrigation such as sugarcane, wheat, rice. This excludes farmers which are rain dependent from availing benefits of MSP and other policies.

(2) PM Kishu Sanchai yojana also ignores the fact that many farmers still don't have access to any source of water.

(3) Limitation of canals - The government built canals majorly focused on developed areas of Punjab, Haryana

Remarks

Already had
a tank irrigation

and Rajasthan and ignored poor areas of south which are still outside the ambit of such benefits.

Thus, we need to formulate a holistic policy which includes all type of farmers, from all regions.

Mention RRA policy being or write in the context of Agricultural production

2.5

these are the aspects of water economics

try to start with earthquake zone

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)

The entire earth is made up of plates both continental as well as oceanic which float on the liquid magma of the mantle.

These plates are in continuous motion though very slow. These plates are related to the phenomena of earthquakes.

① Convergent boundaries - Where two plate boundaries converge, they build up pressure and finally one slides below the other leading to huge release in energy.

For ex Himalayan earthquake are is where Indian plate converges with Eurasian plate.

try to convey your points in the context of earthquake

② Similarly, mid-atlantic belt is where two plates are diverging resulting into seafloor spreading and mid-atlantic ridge. Such divergent boundaries are also earthquake prone.

explain adequately boundary
① convergence
② divergence
③ transform

Remarks


please

→ It is also an example of convergence of plate boundary

③ Another earthquake prone area is PACIFIC RIM OF FIRE where many volcanoes are also present. This also represents a plate boundary. Japan is also situated in this zone.

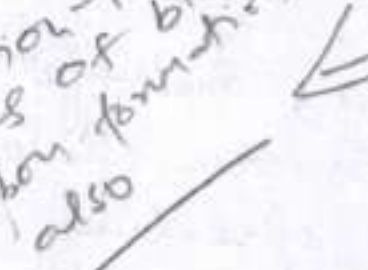
④ Various faults in the plates also lead to earthquakes such as MAUDA fault and BHIMA fault in India which resulted into devastating Bhuj earthquake of Gujarat.

→ Also give examples of transform boundary
eg - San Andreas



③

mention the reasons of black carbon formation also



try to shoot your gutso

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)

Heat budget of earth is the amount of heat that is received as insolation minus the heat which is reflected from the earth. Normally, this should be equal but due to global warming, earth's temperature is increasing owing to more absorption of heat by greenhouse gases like methane, CO₂, etc.

Ice caps play a huge role in maintaining heat budget as they act as reflectors of solar radiation. This effect is also called ALBEDO effect of ice.

But due to deposition of black carbon which is an unburnt form of carbon, the reflective capability or albedo decreases leading to warming of earth and disturbed heat budget.

Remarks

→ Also these black carbon are also heat absorber. This is the cause of melting of ice.

mention of fresh snow at 8 of

This can have other effects too —

- ① Melting of ice caps
- ② Sea level rise
- ③ Floods, coast submergence
- ④ Wildlife habital destruction

Thus, it is imperative that we identify the sources of black carbon and ensure usage of air pollution inhibitors such as catalytic converters etc.

Please discuss the strategies to control emission of black carbon
 eg - adopt free fuel for use domestic use etc

3.5

→ good start

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 an important area in a large country like India where many communicable diseases are prevalent.

There are many parameters where India has made a considerable progress —

- ① Reducing infant mortality rate and maternal mortality rate
- ② Reducing diarrhoeal deaths by Suachh Bharat mission and introducing vaccination.
- ③ Immunisation under mission Indradhanush
- ④ Polio eradication
- ⑤ Community prevention and counselling using anganwadis, auxilliary nurse midwives.
- ⑥ Ayushman Bharat initiative
- ⑦ Tuberculosis national strategy countering multi-drug resistant bacteria

provide information

you wrote some In general points.

→ discuss these with long term progress and long term initiative eg - TFR in 2005-06 is 2.7 but now in 2015-16 became 2.2

Remarks
July

In the context of Non-communicable diseases. Concern about the dash. IPR 40/1000

yet even after all these achievements, recently we came across mass deaths in UP owing to Japanese encephalitis and in Bihar due to public health officials negligence.

The challenges that still remain are —

- ① Inadequate infrastructure
- ② Lack of personnel which is adequately trained
- ③ Poor diagnosis
- ④ Preventive failure as poor hygiene, malnutrition still prevalent.

Thus, government should strengthen community health centres (CHCs) and ensure prevention which is always better than cure.

first mentioned where we are lacking eg Health investment of 60% is 12% of GDP to be done to improve public health facilities
What need to be done to improve public health facilities
Conclude with this aspect

1.5

Remarks

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)

To double farmers income by 2022, we need to diversify the agriculture by including animal rearing which would provide income in lean season.

Animal rearing includes various activities -

- 1) Animal husbandry - cow, goats, buffalo
- 2) Beekeeping (Apiculture)
- 3) Silkworm rearing (Sericulture)
- 4) Aquaculture - fishes, prawns, crabs
- 5) Pig rearing
- 6) Poultry farming

good understanding

The government has taken various steps in last 5 years -

- ① Rashtriya Gokul mission - Under this, government is also establishing gokul grams to increase indigenous varieties of livestock and promote good breeding practices.
- ② Establishment of fisheries and infrastructure development fund (FIDF) to align with the goals of creating blue economy.

Relevant points

Remarks

3) DIDF (Dairy and infrastructure development fund) to promote milk processing facilities and white revolution in the country.

4) Export promotion of Indian silk varieties such as mulberry, eri and mega.

Thus, it is a work in progress and new research and development activities are being undertaken.

→ Performance Analysis also required.

3.5

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 outlets / outward openings which are connected to magma chambers below the earth. They are of different shapes and sizes such as composite volcanoes, caldera, cinder cones etc.

Volcanoes have some negative as well as positive benefits —

NEGATIVE

- 1) Air and water pollution as ash clouds are formed in the sky.
- 2) Displacement of people in surrounding areas due to lava flows.
- 3) Property losses, loss to lives.
- 4) Might lead to heat imbalance, affecting wildlife.

POSITIVE

- 1) Brings various important minerals to surface of the earth like pyroclastic material.
- 2) Useful for scientific exploration to understand the structure of the Earth.
- 3) Might release pent up pressure under the Earth which otherwise would lead to earthquakes.
- 4) Abode of various thermophilic bacteria and

Remarks

try to use these concise points

Please give some examples

Mention
- Great Islands the
degassing earth
etc

give an
examples
of these
points

small microorganisms
which are resistant to
high temperature, thus
important for research

s) source of hot springs
and lakes nearby.

e) aesthetic value.

3.5

Thus, volcanoes offer as a variety of
benefits despite being unpredictable!

Recently, Mt Etna of Italy and the
one in Bali, Indonesia erupted causing
world interest in their research.

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

India's population policy of 1970s entailed achieving replacement rate of 2.1 and promoting a culture of family planning before going for reproductive choices.

1.3 Currently India's national average rate is 2.3 but we see huge variability among the states —

1) Developing states of Tamil Nadu, Kerala, Himachal Pradesh, Karnataka have already achieved rates well below 2.1.

2) On the other hand, states such as Bihar, UP still lag behind in achieving their goals.

The economic survey 2018-19 mentions that by the time the developed states will have large ageing population, the lagging states with their young numbers can be transferred to ~~old~~ developed states to fill the demand.

This would maintain ^{an} balance in the country.

Remarks

first discuss and Advant see
NPP-1976
tell about it
& loophole in the context of population
Contest

100%

Hence, India is going through a phase of democratic transition and policies need to be aligned to suit such demographic changes.

- # Also mention How HPP-2000 fill the gaps of NPP-1976
- # Explain Have we succeeded what steps should be taken? eg - Regional centric Approach etc.

(1.5)

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)

Meghalaya mining disaster highlights the prevalence of inhumane practice of rat-hole mining even after Supreme court had declared a ban on it.

This has been going on to fulfill the vested interests of capitalists and politicians who want to capitalise on the region's vast mineral resources. This also undermines ecological conservation and sustainability.

The fact that small children were employed to enter into small caves to extract coal is worrisome as it violates various fundamental rights enshrined in constitution.

In India, we see such practices in various industries such as firecracker, bangle, textile and other hazardous industries where children are employed, jeopardising their health and future.

This picture highlights various loopholes in government's policies —

Remarks

Instead of these points
 clearly mention it is shocking reminder
 → why in fast growing countries
 eg - old incidents
 - Admin failure
 - rescues.

- ① Poor implementation of child employment rules.
- ② Weak inspection of industries.
- ③ Weak labour laws.
- ④ Rampant exploitation of workers.
- ⑤ Exploitation by MNCs as they find cheap and vulnerable labour in India.

Thus, it is imperative for government to ensure that new Codes on labour include stricter penalties for such violators and strong deterrence must be created.

→ please discuss
 → life of people matters
 the least or not??
 In the context of
SC/NCT Guidelines

1.5

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)

Tropical rainforests are one of the most biodiversity rich areas on our planet giving them the epithet "lungs of the planet". They are mostly located within 15° - 20° north and south of the equator and are characterised by high rainfall throughout the year, dense tree cover, species and plant diversity and also house various indigenous tribes and communities.

Unfortunately, today they are fast deteriorating due to natural and anthropogenic causes. While natural causes are climate variability, forest fires, etc. but they allow the rainforests to grow back.

Anthropogenic causes are more damaging and irreversible as they damage the entire ecosystems of tropical rainforests.

1) Deforestation - It is one of the most common cause of destruction. Tropical rainforests harbour various trees like redwood, mahogany etc which have high

Remarks

Relevant points

→ try to mention causes of deforestation of both rainforest in separately.

demand in the global community.

Various plants are also used for medicinal purposes hence they are exploited for human's utilitarian objectives.

PALM industry is also fast becoming a culprit as it is limited to only some countries of the world like Brazil, Indonesia, Philippines, Thailand etc. Palm oil is derived from palm trees and hence various companies have exploited these rich resources of developing world.

Deforestation also occurs due to local industries demand for timber.

Another factor is need for space for the growing population of the world. As cities become congested, new places for developing housing are being constructed at the expense of such natural heritage.

Tourism is another aggravating factor. Humans have encroached pristine rainforests by constructing hotels, resorts etc thereby interfering with natural processes.

Remarks

Please concise
your points

These rainforests serve a host of purposes besides being the largest carbon sink after oceans. They can mitigate pollution levels and can purify the air (LUNGS of planet)

Hence, any destruction is directly linked to the future of humanity as well as wildlife.

it rightly said -

"The more you play with nature, the more nature will show you her fury"

Thus, it is time to stop our exploitative ways and establish harmonious relationship by following the principle of "Vasudhaiva Kutumbakam" (world is our home).

→ DISCUSS ^{more better}
eg - Nutrient cycling & soil formation
- Rain formation
- Regulating climate & air quality etc

mention some initiative to bring back these forests.

4.5

61% is depended
on Agriculture not
employed

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

Agriculture is the most important economic activity for our food and nutrition security. In India, it employ more than 50% of people and contributes 17-18% to GDP.

Agricultural practices and techniques directly affect our immediate environment while also being affected by the environment including weather conditions.

The climatic factors that affect agriculture are —

① Weather — Rainfall predictability impinges on agricultural output. As most of the area in India is rainfed, it becomes all the more important. Recurring cycles of droughts in Vidarbha, Marathwada and Bundelkhand show the sensitivity of agriculture to weather phenomena.

On the other hand, hailstorms, ~~at~~ storms can also damage the standing crops.

② Soil Health — As soil is affected by climatic factors, it affects agriculture too in terms of moisture availability, soil pressure etc.

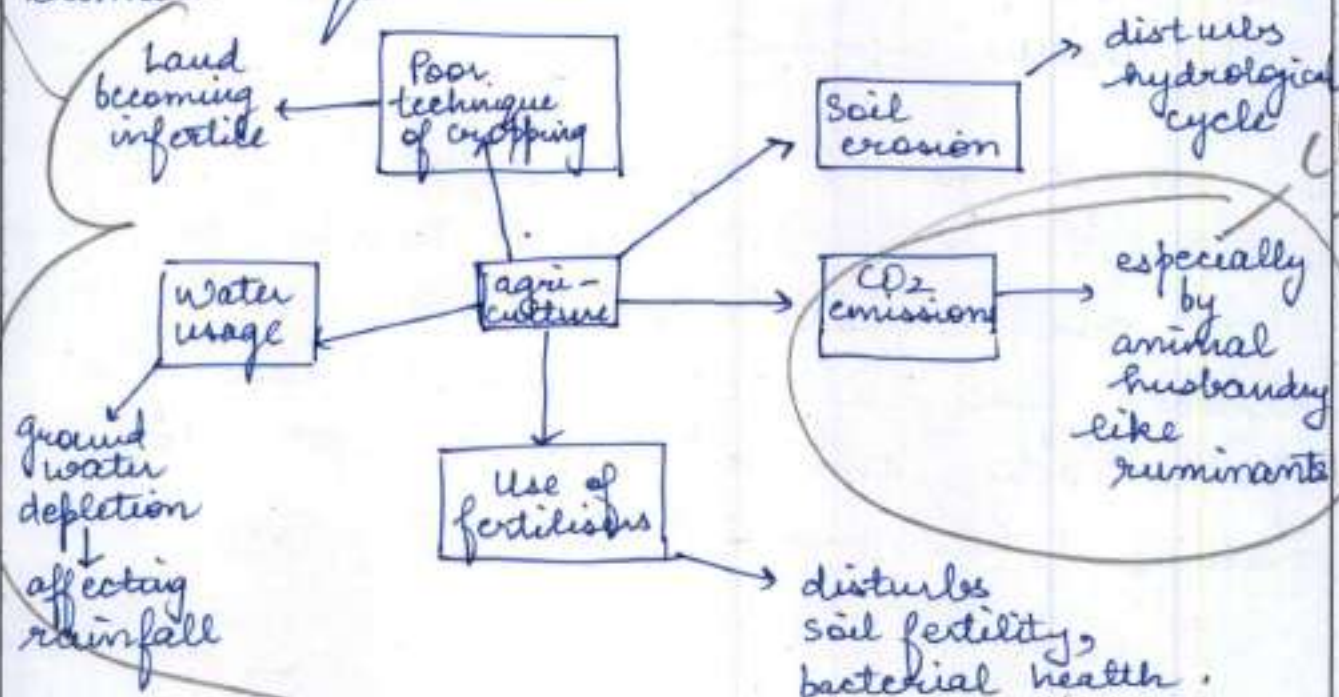
Remarks

→ Relevant points

Please discuss these points properly

mentioning of role of HYV seeds

While we see the vulnerability of agriculture to climatic factors, agriculture also disturbs climatic equilibrium -



Thus, the relationship between ~~soil~~ agriculture and climate change is a 2-way street.

To ensure that agricultural practices are aligned with climatic factors, we should take following steps -

① Cropping as per agro-climatic zones -

Water guzzling crops like rice, sugarcane should not be planted in water scarce areas.

It is to said that sugarcane farming is the main cause of draughts in Maharashtra.

Dry areas should go for pulses and oilseeds.

② Timely advisories to farmers - Krishi Vigyan Kendras can be employed so that farmers can crop plants as per weather alerts and soil health information.

As consumers of food, we need to understand that our food habits directly affect our climate. Hence, we should reduce food wastage and increase food productivity and efficiency to cater to needs of future generations.

→ Conclude
well

5.5

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)

The increasing unviability of Indian agriculture due to fragmented and small landholdings and obsolete agricultural practices is leading to acute farmers distress in the countryside.

India is a diverse country with varied climatic zones and a range of soils suitable for the growth of variety of crops. It is due to government's selective procurement policies (MSP) for wheat and rice and unavailability of export opportunities for fruits and vegetables that farmers all over the country stick to staples and avoid food diversification.

The absence of food processing and storage facilities for perishables like cold chains also hinder the diversification of agriculture.

Thus, to increase farmers income by 2022, we need to diversify the Indian agriculture.

Diversification will act as a force multiplier and will have manifold benefits-

Remarks

first define
 Agricultural diversification
 diver sitication
 eg - cropping
 mixed
 poultry
 API culture
 etc

① On food security - Diversification into pulses, oilseeds, millets will increase the production of these crops and ensure food security, both for farmers as well as citizens.

Government needs to incentivise the production of these hardy crops so that farmers get options ~~while~~ cropping the land.

② On Nutrition - It is a well known fact that Indian diet is far from balanced. Many of our pregnant women and children are anaemic and prone to stunting/wasting.

In this situation, diversification of crops would ensure a balanced intake of various nutrients. Thus, pulses, fruits and vegetables need to be promoted. It is known that while fruits and vegetables contribute 30% to GDP, they are grown on only 13% of the land area.

Government can introduce procurement of diverse crops for its various schemes such as ICDS (Integrated child development), Poshan Abhiyan and PMMSY (Matritva Sahyog).

Remarks

→ Understanding of Agricultural diversification required to discuss these aspects.

③ On Rural employment - Diversification into horticulture, floriculture, fisheries, animal husbandry, apiculture, sericulture, pisciculture etc would not only provide additional income to farmer during lean season but also provide employment to rural youth.

It would diversify the rural economy and promote exports and value addition.

Thus, given the myriad benefits of diversification, government needs to ensure that farmers are aware about these new avenues and also are equipped with requisite tools.

In this context, government needs to adopt recommendations of ASHOK DALWAI committee on doubling income by 2022 and also ensure that new agriculture export policy 2018 is implemented in letter and spirit.

Somehow
 Basic understanding
 problem about
 the demand.

(3)

Start with the definition of digital divide.

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 India initiative of the government aims to bring digital revolution by ensuring that every person is connected to the internet, thereby taking advantage of myriad benefits of connectivity to the world.

India has the third largest user base of internet in the world amplified by mobile phone revolution and ICT growth.

Yet, we can see a digital divide between urban and rural areas and also a divide between digitally literate and illiterate.

Thus, bridging digital divide entails two components —

① Digital infrastructure — Connectivity to remotest parts.

② Digital literacy

A third component of accessibility or affordability can also be added.

To bridge this divide, government has adopted various measures —

Remarks

Elaborate this segment adequately in the context of tele-density, use of internet, etc.

Apart from these schemes
 what should be done
 eg - Digital literacy in
 school syllabus

- ① BharatNet programme - This aims to connect 2.5 lakh gram panchayats to internet by optical fibres.
- ② PMGDISHA - (PM gramin digital Sakshata abhiyan). This has been started to improve digital literacy among rural youth. It entails that at least one adult member of any household should learn to use internet.
- ③ CSCs (Common service centres) - This is an initiative by MeiTy and promotes e-governance in rural areas. CSC kiosks are set up to provide digital services like form filling etc.
- ④ Promotion of digital payments - Launching of BHIM, UPI, Phone Pe has promoted usage of digital platforms even in rural areas.

The government is thus pushing for digital connectivity in all spheres as it reduces the following concerns -

- 1) Less corruption as no personal interface
- 2) Transparency
- 3) Educational benefits to youth
- 4) Access to important information
- 5) Empowerment of rural folks

Present well

⑥

6) Efficient and fast delivery of services -

Thus, we need to speed up our efforts so that we can achieve last-mile connectivity and no person should be prevented from availing the huge benefits of digital revolution.

Remarks

Start with current energy mix

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)

India is fast growing and its power and industrial needs will shoot up in near future. India is also a fossil fuel dependent country with its large oil imports from gulf and coal based thermal power plants.

Also discuss extent of growth.

Power or electricity is required for both industries and consumers. While India cannot ditch fossil fuels altogether, it has been fast moving towards more share of renewable energy -

- (1) In 2015 Paris climate change agreement, India pledged to reduce its carbon footprint by 30% by 2030. India also launched International solar alliance (ISA) with France.
- (2) India's NAPCC (National action plan for climate change) 2008 puts a focus on renewables.
- (3) India's goal is to reach 175 GW of renewable energy by 2022, out of which 100 GW is solar.
- (4) India is promoting e-vehicles and pushing

Remarks

you wrote only initiatives & goals towards clean energy. mention what case is the way to adopt it.

eg - Lacking of technology
Convergence rate is poor
etc

(5) for 30% electric vehicles by 2030.
India also jumped from BS-IV to BS-VI in NCT area and the entire country will shift to BS-VI by next year.

Hence, India is taking incremental steps to reduce dependence on fossil fuels owing to import burdens and causing climate change.

To promote industrial adoption of renewables, India is pushing for PAT (Perform, achieve, trade) scheme which allows trading of ESCs (Energy saving certificates). Also, owing to dearth in coal supply, many power plants are shutting down. This calls for rationalising the pricing of renewables in association with DISCOMs so that more consumers and industries are attracted towards it.

For consumer segment, various schemes have been started to promote renewables

① KUSUM for farmers - Kisan Ujja and samman athan mission → promotes solar water pumps and generation of solar energy.

- ② UJALA - Promotion of LED lights
- ③ Power for all - It also promotes energy saving activities.

India is also exploring other new options such as geothermal energy, wind energy, hydrothermal energy etc. to reduce dependence on fossil fuels.

→ Include drastically shifting towards clean energy not possible due to lack of technologies etc we have to move towards it in phased manner.

③

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)

2004
Ashok Dalwai Committee on doubling farmers income by 2022 has recommended that agriculture should be made an enterprise, adopting industrial linkages and also FORK to FARM approach.

Given the small landholding size (< 2 hectares) and lack of access to capital, technology and market, there is a need to transform agriculture by linking it with value addition and industry.

* PROSPECTS -

- ① Raw material for industries - Fibre, crops, food seeds, honey etc.
- ② Additional income to farmers
- ③ Promotion of contract farming
- ④ Value addition leading to growth in employment.
- ⑤ Food processing clusters around rural areas leading to rural economy's growth.
- ⑥ Diversification of agriculture
- ⑦ Elimination of middlemen in APMCs

Remarks

The prospects are not clear by these points. Try to elaborate in this points in the context of demand

Though the prospects are immense, there are also challenges —

- ① Agri-logistics not upto the mark.
- ② Storage chains - cold chains, warehouses, processing facilities etc.
- ③ Lack of awareness among farmers
- ④ Credit shortage - One way could be industries sponsoring production as per output.
- ⑤ Might lead to exploitation of gullible farmers.
- ⑥ Lack of incentives from government.
- ⑦ Technology upgradation is a challenge.
- ⑧ Quality of food production

Rather than too much points. please convey clear your statement in the context of demand

Agro-industrial linkage provides a huge opportunity for overall development of rural economy. It can lead to growth in rural consumption as well as range of agricultural products. Food processing would also increase nutrition and increase consumer demand.

try to write

Government should fast track implementation of various reforms —

- ① SAMPADA yojana for food processing
- ② Industrial clusters in the lines of Mega food parks.
- ③ Farmgate buying and selling and improving price discovery by keeping a check on exploitative activities.
- ④ NFI Aayog's Model land leasing law.

"Only through keeping farmer at the centre" of any policy can we really change the reality of Indian agriculture.

⑤

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)

Tourism as an industry is fast changing with many tourists preferring serene, peaceful environments as opposed to fast track city life and busy spots.

In this context, rural tourism is fast emerging as a favourite as people get first hand experience of local life, traditions, cuisines and simple living close to nature.

Rural tourism can change the economic and developmental trajectory of rural areas in following ways -

- ① Generating employment, thereby reducing poverty
- ② Growth in local industries especially handicrafts which also leads to cultural promotion.
- ③ Community development as rural people are acquainted with diverse cultures of outside, they themselves grow mentally. Social cohesion and cultural solidarity / pride also develops.
- ④ Improved infrastructure, basic amenities

Remarks

and thus increased standard of life.

- ⑤ Conservation is also addressed as the essence of rural tourism is simplicity, living closer to nature and grassroots. Villages preserve their natural landscapes to attract tourists. These could range from sacred groves, forests, wetlands, temples and wildlife protection.

For example - Bishnoi community is famous for protecting Chinkaras in Rajasthan.

Government is promoting tourism given its high importance in creating a brand new image of our country, thereby increasing soft power.

- ① Swadesh Darshan scheme - Under this scheme, various circuits have been identified like buddhist circuit, Ramayana circuit, rural circuit etc. to offer range of experiences to tourists, both domestic as well as foreign.

② PRASAD scheme

③ Adopt a heritage scheme

④ Incredible India campaign

Remarks

Recently, our prime minister participated in a televised show of Man vs Wild featuring Jim Corbett National Park of Uttarakhand. This is also seen as a step in creating a positive image of India's wildlife heritage to attract people all over the world.

India's ancient adage of "Atithi Devo Bhava" and its deep rooted village life is telling of immense opportunities to transform our tourism sector for overall prosperity of the country.

Also mention what challenges ^{rural} tourism face presently.

(6)

44 → first introduce China's one child Policy

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)

Economic Survey in its chapter "Demography at 2040" mentions that India has already passed through demographic transition with many developed states having fertility rate lower than replacement rate of 2.1.

Only some poor states such as Bihar, UP, Madhya Pradesh, etc. remain high on fertility levels.

A report by UN population fund suggests that India will become the most populous country by 2050. Recently, our prime minister, on the occasion of independence day, suggested to reduce the number of children and perform great national service by doing so.

* There are many negative fallouts of a large population —

- Heavy burden on limited resources.
- Poor quality of life
- Scarcity of services such as doctors, teachers etc.
- Environmental degradation
- Poverty

Remarks

→ try to avoid this point

try to
Concise
Please
check
your
fact

Our neighbouring country China adopted the drastic measure of one-child policy with violators being punished aggressively. This type of policy is not suitable in Indian context as —

- ① India is a democracy and right to reproductive choice and planning is available to everyone.
- ② The memory of forced sterilisations during the emergency period still evoke resentment and government should not repeat such a step.
- ③ Any punitive policy can backfire and create public disaffection leading to protests.

good
higher-
starting

Hence, we can look for other effective alternatives more suited to Indian context —

- ① Awareness campaigns such as "Humdo Hamare do"
- ② Counselling by anganwadi workers in rural areas
- ③ Availability and affordability of contraceptives as well off
- ④ Development and education of families usually restrict the number of children they desire.
- ⑤ Making family planning a part of public

Remarks

Instead of these points please mention various options in control. Population in present eg - Pre-natal & intra-uterine etc

debate and discussion, to highlight its benefits ..

Thus, India needs more democratic ways of reducing family size. This can be achieved by ensuring proper education facilities and health and other social services. As economic prosperity would lead to reduced family size, we should focus on bigger picture of development.

→ Conclude well

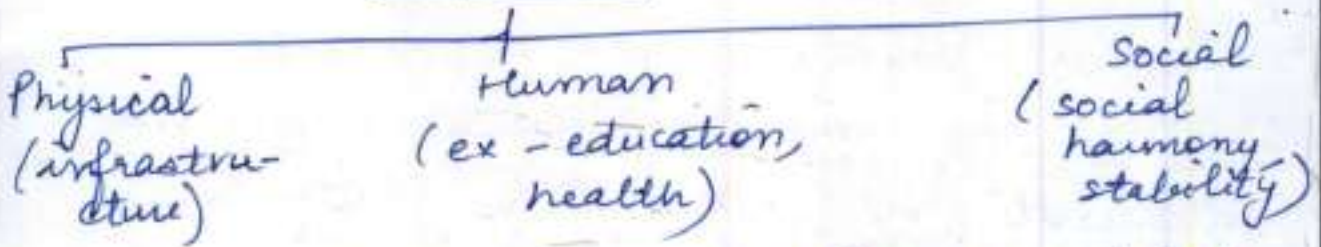
(5.5)

→ good start

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)

Capital is a resource which is used in an advantageous and productive way.

Capital



Social capital is thus linked to societal and interpersonal relations between people, groups, communities etc. Social capital is the basic prerequisite of peace and development of any region.

- The benefits of social capital are —
- ① Stability in society with less conflicts, protests etc.
 - ② Less animosity between different groups, feeling of brotherhood and harmony
 - ③ Equal access to services as there is no discrimination.
 - ④ Promotes social justice.
 - ⑤ Development of minorities.
 - ⑥ Importance to values of equality, dignity

Points are relevant

please explain

Remarks

Also mention its role in

- ① Health
- ② Education

- ③ environment conservation etc

and fraternity.

Thus, we can see that social capital reinforces human development of a region by ensuring that no man/woman is left behind from fruits of development.

In our society, we see incidents of lynching by cow vigilantes, murders of rationalists by conservative outfits, atrocities against dalits, honour killing etc.. All these incidents point towards decreasing social capital in our society, disrupting harmony and peace needed for development.

In such a scenario, communities grow further apart and trust is eroded. It also leads to income inequalities and differential treatment of citizens on the basis of race, caste, sex, gender etc.

Hence, it is imperative that laws are brought into force to deter such anti-social elements which disturb the social harmony of the society. The panel

Remarks

→ try to
concise this
part

constituted, by home minister on lynching should bring its recommendations in a time bound manner.

Recently, Rajasthan became the 2nd state after Manipur to frame a law on lynching giving death penalty as the highest offence. Similarly, a law on Honor killing has also been brought.

Other states must take a cue from this and ensure that no hindrance comes in the path of economic and human developments of their regions.

~~#~~ Also mention its Negative impact

PLEASE CONCISE

5.5

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)

Oceanic currents are flows of water in large volumes around the world. They maintain the equilibrium of climate and world heat balance. This can be seen as cold currents flow from polar regions to equator (Labrador current) and hot warm currents from equator to poles (gulf stream).

Oceanic currents affect the climate of a place in following ways -

- (1) Along the coast, they determine whether the region will face wet or dry conditions. Cold currents usually border deserts while warm bring rain.
- (2) Ocean thermoregulation - Ocean's aquatic life and phytoplankton growth is dependent on warm and cold currents.
- (3) Mixing of cold and warm streams creates foggy conditions such as in USA's Newfoundland. Such areas are extremely rich in fisheries as mixing waters are ideal for phytoplankton growth.

Remarks

→ Canada

(4) Gulf stream when reaches Europe provide warm mediterranean like conditions and hence these coasts are world famous as picnic spots.

Antarctic circumpolar current is a continuous current in the Southern Ocean with no breaks as southern hemisphere lacks landmasses in the polar region.

Global warming has changed the temperature equilibrium of the world leading to displacement of currents around the world. Their flow has become erratic and prone to climate variability.

Antarctic circumpolar current has shifted its course too owing to global warming and this might affect polar icecaps as now they are more exposed to water currents leading to their faster melting and breakdown.

This does not bode well for the Earth as it could lead to —

1) Increase in sea levels — leading to floods, coast submergence.

2) Antarctic wildlife like polar bears, seals, penguins also are in danger as their habitat is being affected by global warming.

3) Disturbances in heat balance of earth leading to erratic atmospheric circulation leading to extreme events of cyclones, hurricanes, vortex etc.

Thus, we need more scientific understanding of this issue alongwith urgent actions to stop greenhouse gas emissions.

Relevant points

(7)

Remarks