

GSSCORE

An Institute for Civil Services

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AIR 113

CSE 2023

GEOGRAPHY



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52264**GS SCORE**

R5

Cpa

Geography

Mock - 2 Paper - II

GEOGRAPHY

Time Allowed: 3 Hrs.

Max. Marks: 250

Instructions to Candidate

- Please read each of the following instructions carefully before attempting questions.
- There are EIGHT questions divided into TWO SECTIONS and printed in ENGLISH.
- The candidate has to attempt FIVE questions in all.
- Question Nos. 1 and 5 are compulsory and out of the remaining, THREE are to be attempted by choosing at least ONE question from each Section.
- The number of marks carried by a question/part is indicated against it.
- Answers must be written in the medium authorized in the Admission Certificate which must be stated clearly on the cover of this Question-cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in a medium other than the authorized one.
- Word limit in questions, wherever specified, should be adhered to.
- Illustrate your answers with suitable sketches/maps and diagrams, wherever considered necessary. These shall be drawn in the space provided for answering the question itself.
- Attempts of questions shall be counted in sequential order. Unless struck off, the attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.

Name RISHENDRA SINGH

Mobile No.

1. Invigilator's Signature _____

Date

2. Invigilator's Signature _____

Signature Rishendr .

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GEOGRAPHY

Time Allowed: 3 Hrs.

Max. Marks: 250

SECTION - A

1. Comment on the following into 150 words:

- (a) On the outline map of India provided to you, mark the location of all of the following. Write in your QCA booklet the significance of these locations, whether physical /commercial /economic /ecological /environmental /cultural, in not more than 30 words for each entry. (20 Marks)

- (i) Tawang (M^g)
- (ii) Spiti Valley (H^P)
- (iii) Tadoba Andhari Tiger Reserve (Maharashtra)
- (iv) Agatti Island (Lakshadweep)
- (v) Dzukou Valley (N) - (Assam) - N - Manipur
- (vi) Sandakphu
- (vii) Agumbe (Karnataka) - Agumbeghat
- (viii) Kalapathar
- (ix) Mawlynnong - Meghalaya
- (x) Munsiyari

(b) Investigate the impact of the energy crisis on India's economy and enumerate the strategies adopted to address energy shortages. (10 Marks)

(c) Trace the evolution of industries in India and their contribution to the country's economic development. (10 Marks)

(d) Discuss the significance of dry farming in water-scarce regions and its potential to enhance food security. (10 Marks)

2. (a) Assess the availability and utilisation of land, surface water, and ground water resources in India, and discuss the challenges of sustainable management. (15 Marks)

(b) Describe the spatial relationship of India with its neighbouring countries and how it influences regional interactions and geopolitics. (15 Marks)

(c) Discuss the formation and characteristics of different physiographic regions in India, and their significance in terms of natural resources and land use patterns. (20 Marks)

3. (a) Discuss the importance of forest and wildlife resources in maintaining ecological balance and the measures taken for their conservation. (15 Marks)

(b) Discuss the growing importance of ports in enhancing both national and foreign trade and their impact on India's economic growth. (15 Marks)

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- (c) Analyse the role of irrigation infrastructure in increasing agricultural productivity and the challenges in its implementation in different regions of India. (20 Marks)
4. (a) Discuss the environmental pollution challenges in India, such as air pollution, water pollution, and solid waste management, and the strategies to mitigate them. (15 Marks)
- (b) Analyse the concept of Special Economic Zones (SEZs) and their role in attracting foreign investment and promoting export-oriented industries. (15 Marks)
- (c) Analyse the complementary roles of road, railway, waterway, airway, and pipeline networks in fostering regional development in India. (20 Marks)

SECTION - B

5. Answer the following questions in about 150 words each:

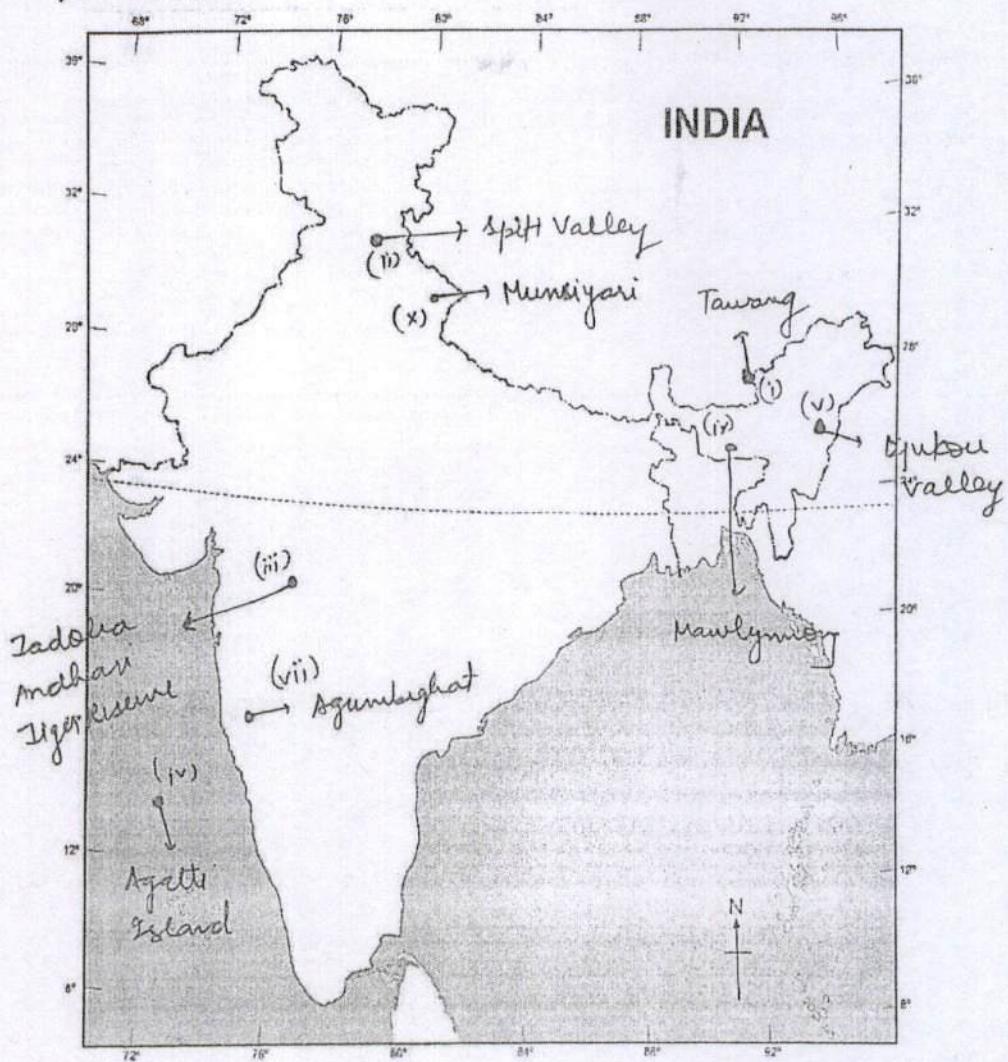
- (a) Analyse the role of the Indian space programme in various sectors, such as communication, weather forecasting, and national security. (10 Marks)
- (b) Evaluate the concept of cultural regions in India and how they are defined based on various cultural elements. (10 Marks)
- (c) Analyse the growth, distribution, and density of the Indian population and the factors contributing to regional variations. (10 Marks)
- (d) Discuss the importance of sustainable urban development in addressing the problems of urbanisation in India. (10 Marks)
- (e) Analyse the concept of Integrated Rural Development Programmes (IRDP) and its role in addressing rural poverty and backwardness. (10 Marks)
6. (a) Analyse the challenges faced by religious minorities in India and the measures taken for their protection and integration. (15 Marks)
- (b) Evaluate the experience of regional planning in India, highlighting its successes, challenges, and lessons for future development initiatives. (15 Marks)
- (c) Discuss how advancements in information technology have facilitated the growth of various industries in India, such as IT and Business Process Outsourcing (BPO). (20 Marks)
- (d) Assess the effectiveness of Command Area Development and Watershed Management programs in enhancing agricultural productivity and water resource management in India. (15 Marks)
- (e) Analyse the historical context and consequences of state reorganisation in India and the emergence of new states. (15 Marks)
- (f) Discuss the demographic attributes in India, such as sex-ratio, age structure, literacy rate, workforce, dependency ratio, and longevity, and their implications for the country's development. (20 Marks)
7. (a) Analyse the principles and importance of environmental impact assessment and environmental management in sustainable development projects. (15 Marks)
- (b) Discuss the factors contributing to regional consciousness and inter-state issues in India and their impact on national unity and integration. (15 Marks)
- (c) Analyse the ecological issues faced by India, including landslides, earthquakes, tsunamis, floods, droughts, and epidemics, and the measures taken for disaster management. (20 Marks)



Section - A

1. (a) Locate these map entries on the map and write about 30 words: (20 Marks)

- (i) Tawang
- (ii) Spiti Valley
- (iii) Tadoba Andhari Tiger Reserve
- (iv) Agatti Island
- (v) Dzukou Valley
- (vi) Sandakphu
- (vii) Agumbe
- (viii) Kalapathar
- (ix) Mawlynnong
- (x) Munsiyari



Remarks

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Remarks



- (i) Tawang \Rightarrow westernmost district of Arunachal Pradesh
 \Rightarrow A world famous Buddhist Monastery
 is here
 $1\frac{1}{2}$ \Rightarrow Regular Chinese incursion occurs here
- (ii) Spiti valley \Rightarrow strategic location in Himachal Pradesh
 \Rightarrow Connected to Manali by Rohitang Pass
 $1\frac{1}{2}$ \Rightarrow A popular Tourist destination
 \Rightarrow Or route \rightarrow Rohitang Pass connecting
to Ladakh
- (iii) Jaldole Andhari TR \Rightarrow famous TR of Maharashtra
 $1\frac{1}{2}$ \Rightarrow Rich Biodiversity
 \Rightarrow Constituting 12 tigers (Recent estimation)
 \Rightarrow Also a zone of elephant corridors
- (iv) Agatti Island
 \Rightarrow eastern island of Lakshadweep group.
 \Rightarrow Majority Moplah Muslims present
 \Rightarrow Coconut monoculture occurs
 \Rightarrow Desalination plant (OTEC energy)
 is also here providing fresh water.

Remarks

(v) Dzukou valley → At border of Nagaland & Manipur

① → Recent fire incident continued for several months

→ Rich Biodiversity → Anur falcon transmigration route

(vi) Sandakphu -

(vii) Agumbe → situated on western ghats in Karnataka

① → famous pass - Agumbeghat situated here

→ connects Ratnagiri to Satara.

→ Tourist destination -

(viii) Kalapathar -

(ix) Mawlynnong - situated in Khasi district of Meghalaya.

② → popular Tourist destination

→ situated near east of Nokrek Biosphere Reserve

(x) Munsiyari - Uttarakhand

Remarks

1. (b) Investigate the impact of the energy crisis on India's economy and enumerate the strategies adopted to address energy shortages. (150 Words) (10)

Start by addressing Impact
 India's energy demands largely exceeds the supply produced from local resources requiring 70% coal and 30% oil imports to curb the shortage.

Impact on Indian economy

1. strain on the Foreign Exchange Reserve
 (FOREX) - 60% of India's imports constitute energy fulfilment → investigate further
2. geo-economic constraints and strategic challenges - e.g. cult region = 60% of oil & 75% of gas imports
3. significantly impacts the GVA of the manufacturing sector (e.g. just 15% of all) → Justify
4. Impacts the multi-modal connectivity ⇒ results in increase in logistics cost (14% of GDP)
5. Hinders capital expenditure and promotes import

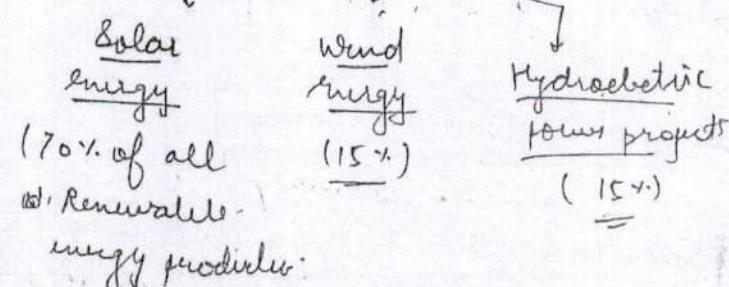
Remarks

based on borrowings.

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Strategies adopted to address shortage

→ Shift towards Non Renewable



Club
Marked
heading

→ Capital investment in new resources

⑨ ₹ 19,000 crore investment in National Hydrogen Policy

→ Shift towards electric vehicles - reducing energy consumption by oils (petrol & diesel)

→ UDAY Scheme (Ujjwal DISCOM Assurance Scheme)

to ensure adequate functioning of the distribution sector

Other schemes such as PM-KUSUM & FAME

are also used to ensure energy security. Timelines concept of building technology to increase resource utilisation should be the way forward.

? Valid

Remarks

1. (c) Trace the evolution of industries in India and their contribution to the country's economic development. (150 Words) (10)

Indian industries, slow to start due to British "Unilateral free trade" & "industrialisation" created numerous lacunae in India's growth but eventually post-independence the Industrial sector has emerged from the ashes.

Focussed
intro

Good
start

Evolution of Industries :

- 1. from "importing capital goods" to "manufacturing capital goods" (q) "Make in India Scheme"
- 2. Labour intensive to sustained mechanisation
 - (q) Cotton based industries
(Handloom → Powerloom)
- 3. Raw - material based to assembly, testing and manufacturing (q) Indian automobile sector
- 4. Market dependent (q) from Raw material (source) dependent
 - (q) oil refineries in India
- Factories industries → (q) IT Sector, Diamond (Kupra)

See
through
Geography
of
India

Me
cont

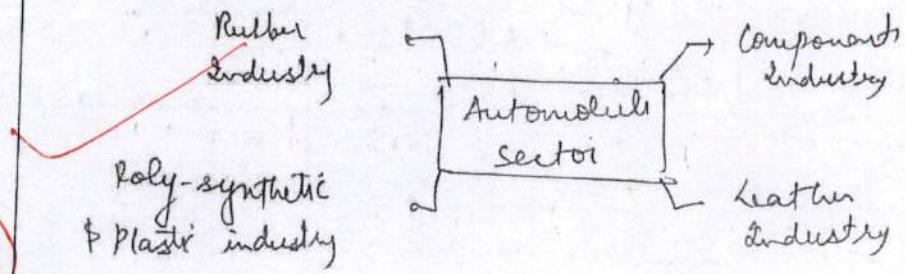
Climate
Soil

Rock

Remarks

Contribution to Nation's economic development

1. gross value added (GVA) - 17% of the GDP
2. employment at large scale - (e.g. Automobile sector, Coal Mining & Power generation & Manufacturing of leather (Kanpur))
3. creation of auxiliary industries acting as propulsive industries. (e.g. Turroux's model of growth pol)



4. Increase consumption & better the per capita consumption of the nation.

Thus these industries play an increasingly important role. Jobless growth experienced in 1990's needs to be tackled by investing in the Manufacturing sector. Schemes such as PLI and Make in India's are a good step forward for India's "SONALI ADHYAY".

Remarks

1. (d) Discuss the significance of dry farming in water-scarce regions and its potential to enhance food security. (150 Words) (10)

In short establishes relationship b/w dry farming & water scarce regions

Dry farming is the process of irrigation / cultivation in the areas receiving rainfall $< 75 \text{ cm}$ and experiencing extreme weather events causing unsustainable weather related cropping disaster.

OR
List

Scholar

features of water scarce region

significance of dry farming in water scarce region

1. sustainable cropping pattern

(i) Hardy crops - millets would get above

2. sustainable use of existing water use.

(ii) local techniques

Johads, phads, tanks, etc

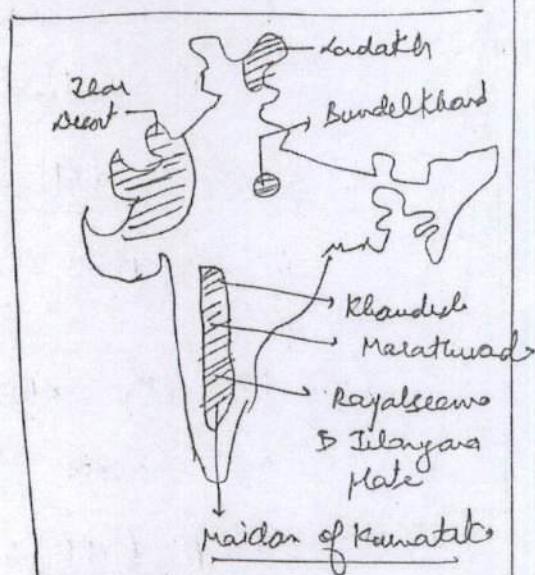


Fig: Dry farming probable Region

3. Livestock dependent & nutritional source would rise for people of such areas.

4. Will have unwarranted migration due to nature's vagaries

5. Create social bond & feeling of love for nature

(iii) Bishnoi tribe & love for khejri trees

Remarks

Potential to enhance food security

1. Increase production of locally sustainable crops. (Jowar, Bajra, Maize)
2. Ensure nutritional security of the people
3. Better fodder availability for livestock
(ensure cattle productivity - extra food & nutrition (poultry, dairy))
4. Prevent distress migration. (Transhumance in Ladakh - Cuijars & Bakarwals)
5. Promote storage techniques of local plains with
6. Reap full benefits of fertile regions in such water scarce areas
(Rabi plains (Sirow & Malidat Day))

(5) Such technique must be holistically clubbed with Integrated watershed development & Khadak Matri Kisan Sanchai Yojana - to ensure 'Har Khet Ke Pani' & adequate extension services to prevent agri-dishess

Remarks

in water scarce region

Little discussion needed
Discussion mean telling Why / How
You Opinion

Well attempted

2. (a) Assess the availability and utilisation of land, surface water, and ground water resources in India, and discuss the challenges of sustainable management.
(200 Words) (15)

At Least 50 words
50 - 100 words
Answer

Remarks

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Remarks



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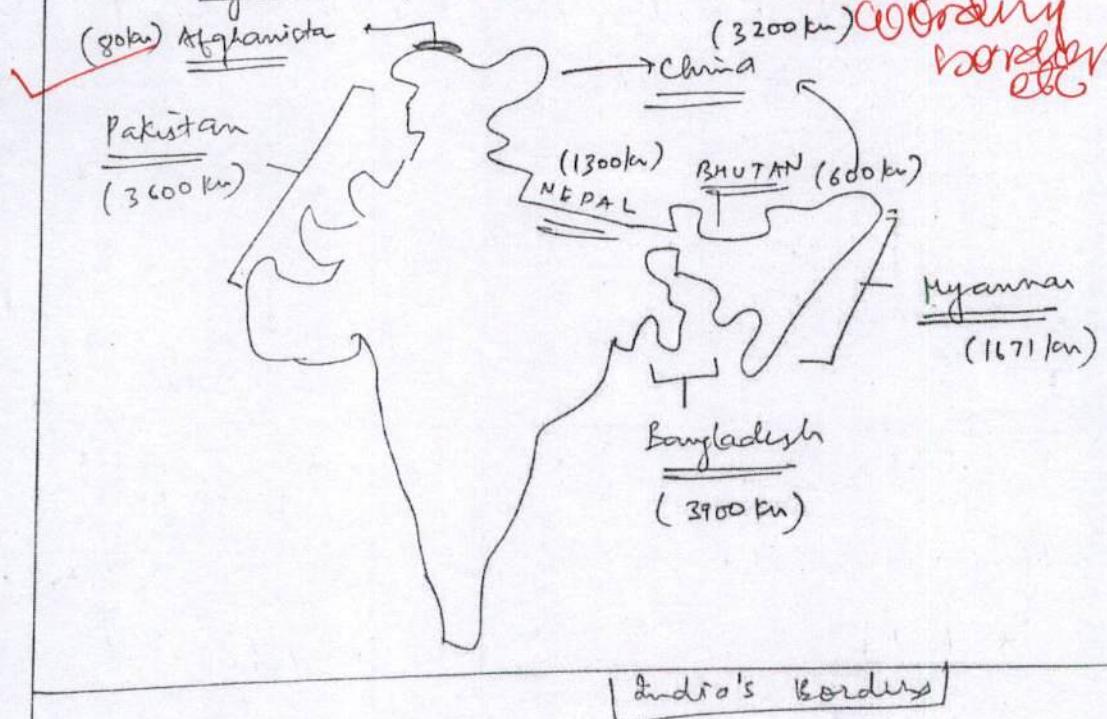
Remarks



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2. (b) Describe the spatial relationship of India with its neighbouring countries and how it influences regional interactions and geopolitics. (200 Words) (15)

India has border length of 15200 km which is shared with 8 nations having different spatial relationship with India & influence on region & geopolitics which can conflict confronting ordinary border etc.



India's Borders

Spatial Relationship

1. Zone of Uncertainty - along Northern & eastern borders with China. (④ Infiltration, Attacks and armed incursion - (Doklam, Arunachal, Tawang))

Remarks

2. Zone of Insecurity: with Pakistan in western border.

(i) smuggling of arms & weapons

(ii) Drug Trafficking (Golden Crescent)

(iii) infiltration of Terrorists and radicalisation of people

Both China & Pakistan constitute majority of border related challenges with India.

China

Golwa (Aksai Chin)

Arunachal

Pakistan

Kashmir (PoK)

Sir Creek

Siachen glacier

3. Zone of ethnic disputes along Myanmar

due to infiltration of Chin refugees facilitated

by Kukis. + armed insurgency & local instability in Myanmar (Military Rule)

4. Zone of cooperation along Nepal & Bhutan

Hydroelectric potential & agreement protocols.

Threat of human trafficking (Maaheshvis) persists.

Also refer
Q10
role of
Geography
of
India

Remarks

5) Tone of smuggling - cattle, trade & textiles along Bangladeshi borders
However, recent cooperation due to recharge of nuclear (100th constitution act) Kushiyar agreement - 2015 & mutual nuclear cooperation (plant) @ Kopur. has a elevated the ties

- 6) Tone of Somaniav of India - along the maritime boundary due to various initiatives in the regn. | this is logical
- Vaccine matri (Maldives)
 - Handholding (SLA) - due to economic break
 - SAGAR initiative
 - Regional cooperation - IORA, IONS

Thus India's borders are hotly contested and have regional importance for a better future of South Asia. Associations such as SAARC & BIMSTEC should be effectively utilised.

Remarks

2. (c) Discuss the formation and characteristics of different physiographic regions in India, and their significance in terms of natural resources and land use patterns.

(250 Words) (20)

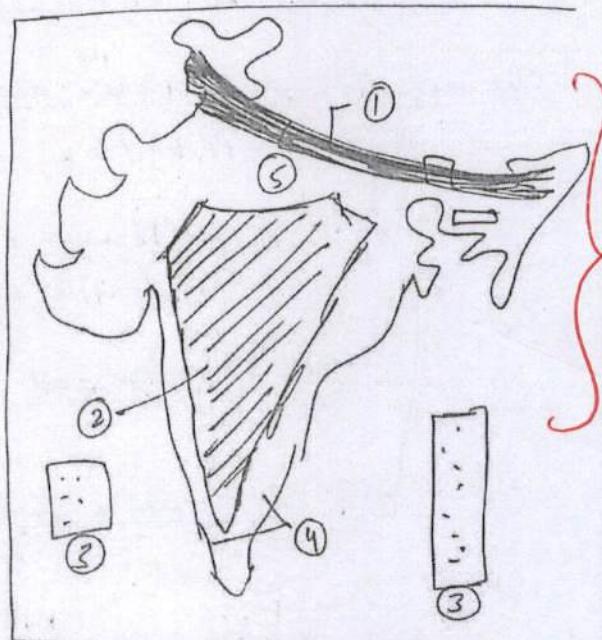
India has been blessed with plethora of various socio-economic and geographical significances. Do not write if call justify

According to E.C. Burrow: (Physiographic divisions)

- ① - Himalayas
- ② - Peninsular plateau
- ③ - island groups
- ✓ ④ - Coastal plains
- ⑤ - Northern plains

I Himalayas

Formation:



✓ Various theories such as

Physiographic divisions

Geosynclinal Theory & Plate Tectonic Theory used to explain it but PTT most useful is detailed

- ✓ 1) Geosyncline (Zethys) situated on plates
- 2) Northward movement of Indian plate led to

Remarks

You can discuss even Timeline wise.

PP > HM (s) 4P

subduction of it beneath the Indian plate

- 3) Simultaneous rise of 3 parallel ranges in Eocene, Miocene & Pliocene period i.e. S. Himalaya (S. Himalaya), Himaadri (M. Himalaya) & Shiwalik (N. Himalaya)

— Discussion Required

Other

from Geographer's Perspective

Perpective

Hogback topography.

Steep southern & gentle Northern slope

Characteristic → complex geological structure.

(Rocks from as clear to Aryan group)

fossiliferous & other Non-fossiliferous (Shiwalik)

Nanga Parbat

Nawacha Banwa

3-parallel ranges - Northern - continuous

(avg. ht. 6100mtr)

South

Middle

upto S. Himalaya

Broken (avg ht. 4100mtr)

(Nepal) avg. (3800mtr)

Significance

Natural resources

- ① Abundant flora & fauna
- ② coal & lithium reserve (Rasoi)
Kalakot Salat-Hamand

Land use pattern

- ① Mostly left barren
- ② terrace cultivation
- ③ forest cover (73%) of Himalaya

Remarks ① Solar & geo-thermal energy

② Transhumance is practiced.

② Plains :

formation: aggradational characteristic + largest tract in the world with such fertility

→ R.Suess's - foredeep theory (crustal wave blocked)

→ Burrard's - Rift valley hypothesis.

But most acceptable is PTT

where Northward movement of Indian plate led to upwarping of himalayas & simultaneously coralline of downwarping ⇒ Resultant Indo-Gangatic plain.

Good

Later this plain filled by sediments from River.

Characteristics	Ecological significance				
<ul style="list-style-type: none"> ✓ aggradational from Indus delta to Ganga delta highly fertile Numerous characteristics ① Bhabar Belt ② Siwalik Belt ③ Khadar ④ Bhansar ⑤ Chos ⑥ delta. 	<table border="1"> <thead> <tr> <th>Natural Resources</th> <th>Land use patterns</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> ① Lack of mineral & energy resources ② Rich in fertility (soil) ③ High potential for being the granary of the world </td> <td> <ul style="list-style-type: none"> ① Land cleared for agriculture ② Crop rotation of 7 year cycle ③ Monoculture (Rice-wheat) ④ Sugarcane cropping </td> </tr> </tbody> </table>	Natural Resources	Land use patterns	<ul style="list-style-type: none"> ① Lack of mineral & energy resources ② Rich in fertility (soil) ③ High potential for being the granary of the world 	<ul style="list-style-type: none"> ① Land cleared for agriculture ② Crop rotation of 7 year cycle ③ Monoculture (Rice-wheat) ④ Sugarcane cropping
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has high population density

Remarks

Peninsular Plateau

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Formation: oldest landmass of India created due to Deccan Basalt flow & Lava exposure. Various features formed due to northward shift of Indian plate.

Characteristics

- ① Covered by Lava
- ② Various features such as plains, plateau hills
↳ larges form its part
- ③ Ticks from $W \rightarrow E$
- ④ River flowing on it = graded

(IV)

Coastal PlainsDO A Analysis
listing

Formation: due to rivers flowing on either side.

East coast

Created due to
delta of
rivers.

West coast

Subduction due to
great Natural fault

Characteristics:West Coast

- ① Narrow
- ② No delta
- ③ Sandwiched between ocean & Western Ghats
- ④ Numerous spurs present

East Coast

- ① Wide
- ② Delta
- ③ Broken hills are present due to rivers.
- ④ Numerous fishing sites present

(suitable for port)

(V)

Island Territories:Formation:

ASTN

10

Volcanic origin: due to extension of Aarakanyawa Mts

Sedimentary

Coral origin
is prominent
(Atolls)

Characteristics

- ① Coral islands
- ② Rich environment
- ③ tourist destination
- ④ Strategic location
- ⑤ primitive tribes inhabit
- ⑥ Ongi, Sentinel, Taiwan and Moplahs.

Well
structured
Keep it up
little
Analysis
reserved

Remarks



Section - B

5. (a) Analyse the role of the Indian space programme in various sectors, such as communication, weather forecasting, and national security. (150 Words) (10)

Recently rolled out National Space Policy 2023 has vividly increased R&D role of ISRO and boost private participation in Space sector to ensure multi-sectoral benefits to the nation through space services.

Role in communication

- 1. Develop IRNSS - inter connected satellite system for regular connectivity
- 2. security & Civil Services (⇒ GAGAN satellite system (conglomeration of 7 satellites))
- 3. disaster communication when tower connection does not work (satellite based communication) (⇒ METEL's one well)
- 4. Create GPS data to ensure border surveillance & quick CAPF & army communication to ensure counter-operations (⇒ Balakot Air Strike)

Remarks

**Make it
Geographic
Answer**
1
use
Geographic
Principles
+
Geography
of
India

Role in weather forecasting

- Ten-day forecast of anomalies in weather pattern. ⑨ Earth observation satellites
- Alert regarding disasters / potential hazards
- ⑨ Cyclone Biparjoy - fatalities due to early warning capability
- ensure extension services to farmers for better yield & informed decisions
- ⑨ Kisan Call centres

Role in National Security

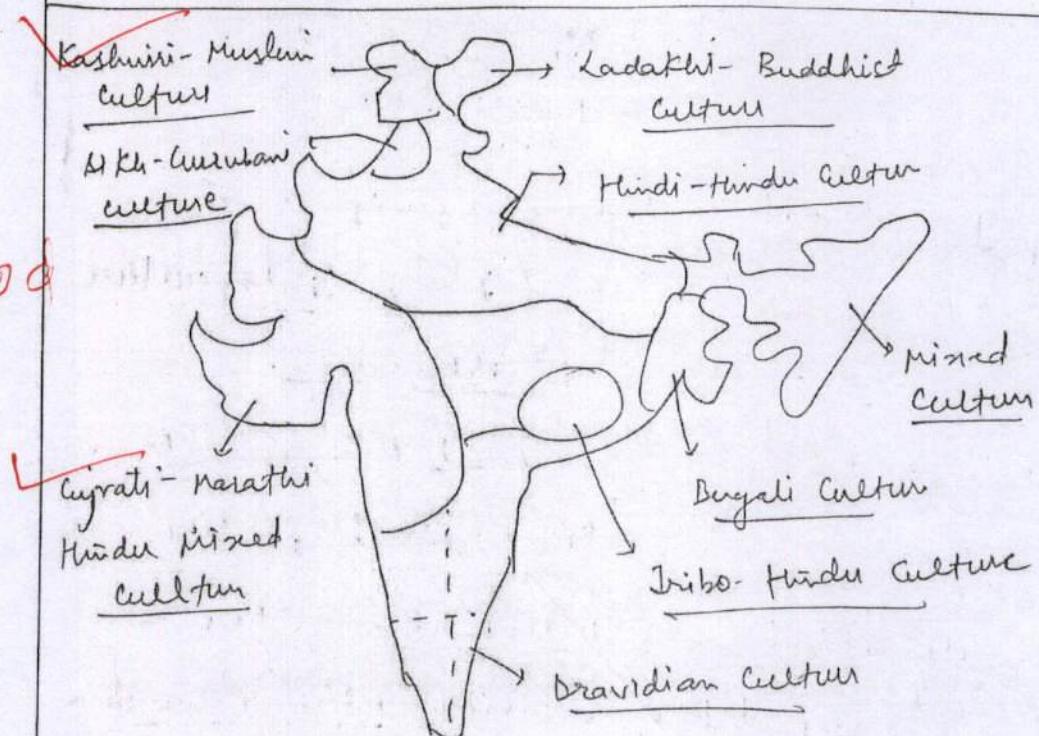
- ensure cross-border surveillance & check on infiltration. ⑨ Operation SUNRISE with Myanmar based on satellite data
 - ensure full proof information system.
 - ⑨ GSOMIA with USA
 - Create hazard mapping & hotspot surveillance
 - ⑨ Kashmir, Poona & Baranulla date
- Thus India's space sector's crucial improvement & increased operational capabilities ensures multi-functional role in growth of India as a VISHWAGURU.

Remarks

(5)

5. (b) Evaluate the concept of cultural regions in India and how they are defined based on various cultural elements. (150 Words) (10)

Cultural regions of India according to J.S. Mill denotes the similar socio-linguistic characteristics possessed by a region which separates it from a region and imparts a unique identity.



cultural realms of India (J.S. Mill)

concept of cultural regions:

- 1. Unique Identity (Homogeneous population)
- 2. Heterogeneous spatial sphere

Remarks

2. Separate language - Linguistic multiplicity
 & role in creation of bonding social capital
 (Bengali realm) (K.S Putnam's concept)

3. Ethnic identity - creates strong homogeneous bond

(200 ethnic identities in North-East)

Tuki Meitis Nagai Bodos, etc
 (Numerous tribes)
 Culture within the tribes

4. Geographical contiguous regions - creates separate cultural identity (Tibetan culture in Ladakh region & Sikkim region).

5. Contact with local food & dress customs create new multi-functional identity.

6. Globalisation \Rightarrow Metropolitan culture is being imparted with culture, adhering modern techniques (Delhi & Mumbai).

Thus cultural regions in India are classified on the basis of above mentioned concepts. Using globalisation - leading amalgamation of P materialization of race & Spiritualism of race.

Remarks



5. (c) Analyse the growth, distribution, and density of the Indian population and the factors contributing to regional variations. (150 Words) (10)

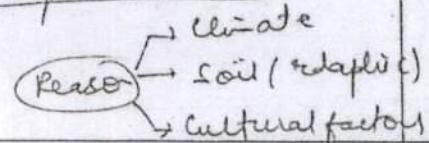
Growth of Indian population →

- ↗ slowed in comparison to previous 2 census results (1991 & 2001)
- Reason
 - result of family planning measures
 - adopted by the nation
 - empowerment of women & better outcomes (Health & contraception)
 - Right to bodily autonomy (K.S. Puttaswamy judgement - 2017)
 - Improved educational outcomes leading to reduced Birth rates.

Exactly what is required

Distribution of Indian population :

- 60% Indian population situated in 30% of area (UP, Bihar & MP)
- Geographically isolated & tough terrain. less population distribution.
- Patches exist with high distribution.
- (e.g.) Kashmir, Northern valley, Bihar, Bengal, Kerala.



Analyse
mean
sea
Gaus and
Consequence

Remarks

Density of Indian population

- Highly developed areas all having low density

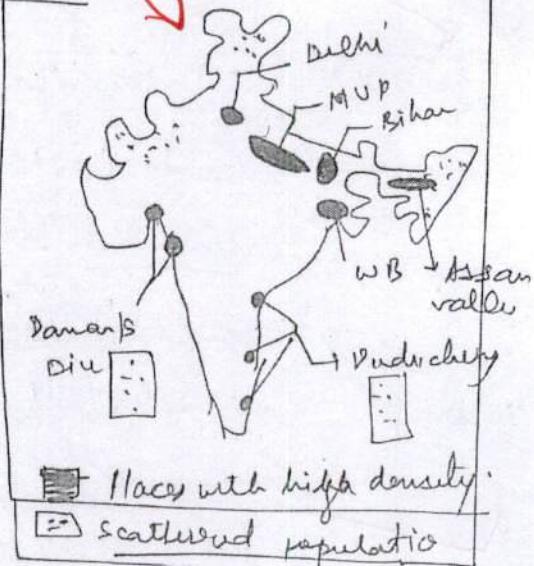
(q) Kerala, South India

- India's population density

Delhi - 1100 p/sq km

UP - 860 p/sq km

WB - 920 p/sq km



- metropolitan cities have high density due to vast national migration (Pull factors) - employment scenario

factor contributing to regional variation

(5.5)

→ geographical isolation - (q) Ladakh & Sikkim (low density)

→ cultural bonds - (q) ethnic & linguistic ties

→ regional developmental imbalances - (q) Bihar, UP & West Bengal

→ National centres - employment hubs
(q) Delhi & Mumbai

→ segment occupancy of wealth lesser

→ "Topophilia" of Yu-fu Yuan

(q) Varanasi, UP
create
regional
variation
Son of Soil Theory

Remarks

Conclusion is important always

5. (d) Discuss the importance of sustainable urban development in addressing the problems of urbanisation in India. (150 Words) (10)

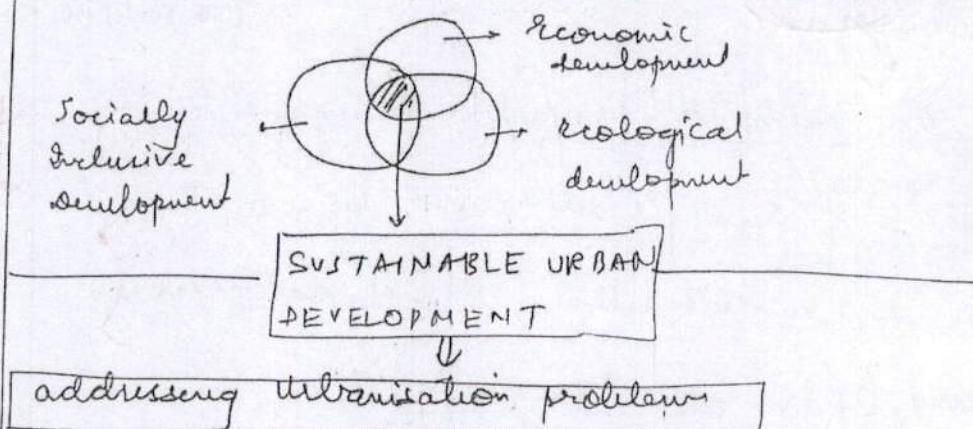
India has adhered to fulfil the goal of SDG-11.2 of sustainable cities by 2030 by creating sustainable urban cities & catering the problems of urbanisation in India.

**Talk about
Importance**

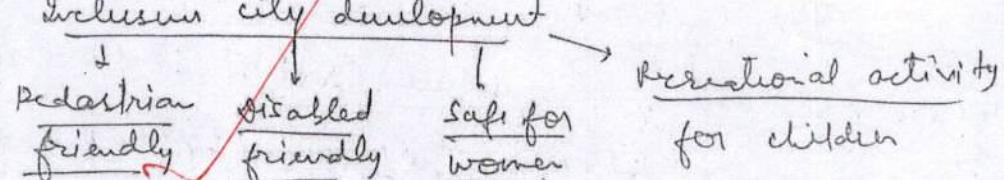
Problems of Urbanisation

1. Urban floods, Heat Island Effect, (⇒ Delhi's unplanned development)
2. Air pollution & Noise pollution (⇒ Smog and construction noise)
3. Unsustainable migration → Slums, ghettos and Squatter settlements (Dharavi, Maharashtra)
4. Rise of crime against marginalised sections (⇒ Children, Women)
5. governance and administration challenges
(Roads (potholes), city planning (Maps of houses))
6. Sanitation, hygiene & disease spreading in urban areas.

Remarks



1. Planning & Stakeholders discussion led master plan. (Delhi Master Plan 2045) ⑦ Arkadag (Turkmenistan)
(ideal city)
2. Creation of separate drains for sewage & storm water drain (⑦ Netherlands model)
3. Reclamation of green spaces (Garden city concept)
4. Following Burgess model of city growth where 4th layer is green belt adjusting green space.
5. Inclusive city development



They adequate consultation with global stakeholders is must to ensure the India specific model to achieve 'Sustainable Urban Development'

Remarks

5. (e) Analyse the concept of Integrated Rural Development Programmes (IRDP) and its role in addressing rural poverty and backwardness. (150 Words) (10)

Integrated Rural Development Programmes (IRDP)
was planned in 1950's for holistic development
of the then 80% rural India.

Analysis of Concept of IRDP & its utility

- ① inclusive development - ensuring growth of all stakeholders
- ② creating agricultural friendly infrastructure
- ③ ensuring social security through creation of education rules.
- ④ promoting 3-tier model of Health system with lowest tier catering large population bank. ⑤ PHC & CHC model
- ⑤ create growth hubs by introducing food processing industries in the rural areas.
- ⑥ Better targeting of needy population for the

Remarks

welfare schemes

- (7) PM - NFSA - 2018 (Right to food)
- (8) PM - MNREGA - 2005 (Right to work)
- (9) RTE Act - 2009

IRDP addressing Rural poverty

- remunerative agriculture
- ensuring more realisation & adequate provision for distress sale prevention
- create alternative source of income
- promote ecologically - sensitive methods
- (7) Agroforestry & social forestry
- increase livestock farming & horticulture

5.5

IRDP tackling backwardness

- 1 "Social inclusion"
- 2 Education & caste discrimination elimination
- 3 Ensuring the uniting strength of Gram Sabha

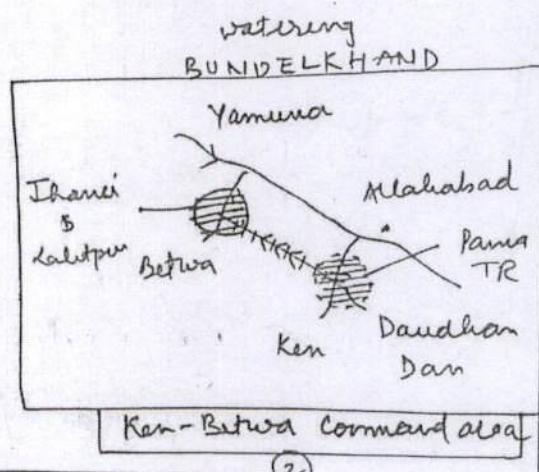
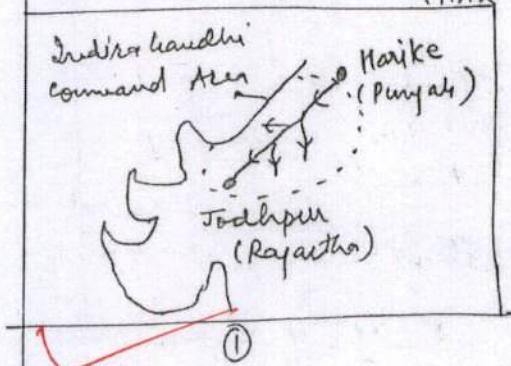
Thus IRDP holistically tried to fulfil the Gandhian ideal of "GRAMSWARAJ" through amelioration & capacity building steps

Remarks

7. (a) Assess the effectiveness of Command Area Development and Watershed Management programs in enhancing agricultural productivity and water resource management in India. (200 Words) (15)

Command Area is the zone watered by the canal irrigation and its subsidiaries channels across the river stream. Development of CA started in 1960's to ensure food security and reap the benefits of green revolution.

Case study : watering THAR



effectiveness in agricultural productivity

1. Create input management streams in lean seasons. (e.g.) Indira Gandhi Canal in Thar
2. Provide 24x7 water availability
3. Increase agricultural intensity and crop productivity (e.g.) Rice & wheat in Punjab.

Remarks

4. Timely irrigation - ensures better yield and security

5. Prevents from extreme weather conditions

(④) Rainfed areas of Pathankot

(watered by Indira Gandhi)

Effectiveness Water Resource Management

→ Prevent runoff and extra watering in fields

→ ensures sustainable agriculture.

→ Better availability for other purposes

→ Adequate zonal water requirement of crops

Drinking

Hydroelectric project

Livestock catering

(④) Kisan-Betwa Link

→ ensures rain water harvesting

(④) Tobads of UP and Phad of Maharashtra

Watershed Management is the holistic conservation

and net area from where the main stream

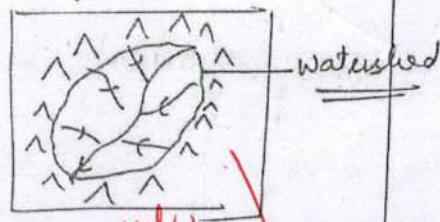
derives its regime. Conservation of such area

based management and

putting it to adequate use

is called watershed Management

Remarks



Well placed drainage.

Case study of Management

(1)

Agra Hazari \Rightarrow Ralegaon Siddhi and regeneration of trees & farming in drought prone area

Root zone watering of Hyderabad
- Pani Panchayat (Odisha)

Effectiveness in agricultural productivity

- Ensures effective utilisation of Rainwater and stream discharge
- creates sustainable irrigation source for agricultural use - (2) Traditional Sources (Talab & Shad)
- groundwater recharge and Rainwater harvesting

(8)

(2) TN's Black soil cotton and cotton of Malwa plains (Punjab)

Water resource Management

- Availability of drinking water is ensured
 - Flora & fauna around the managed area gets boosted. (2) Harike wetland and Sukhna Lake (Punjab)
- This Command Area Development & watershed management imparts greater agricultural productivity & effectiveness.

Remarks

7. (b) Analyse the historical context and consequences of state reorganisation in India and the emergence of new states. (200 Words) (15)

Since Independence, reorganisation of state is a hotly debated topic which happens in surges of tribes and flows for greater regional demand with respect to different topics

[Historical Context]

→ Demand of Lingustic provinces in Motilal Nehru's 1928 'Nehru Plan' & Home Rule propoganda of Tilak in 1916.

→ Post Independent demands → based on Lingustic reorganisation of the states

DO NOT require

- *) Shay Commission - Rejected demands
- *) JVP Commission - Rejected too
- *) Potti Seiramulu's hunger strike & death
- *) Andhra - new state based on language
- *) Fazl Ali Commission - accepted language for reorganisation
- State Reorganisation Act - 1956 and 7th Constitutional Act.

Remarks

* Demands of separate states based on language grants - (16 states & 4 UT's)

Consequences of Reorganisation

1. Increased demand from the states having different linguistic population.

* Maharashtra & Gujarat

* Punjab, Haryana & Uttarakhand

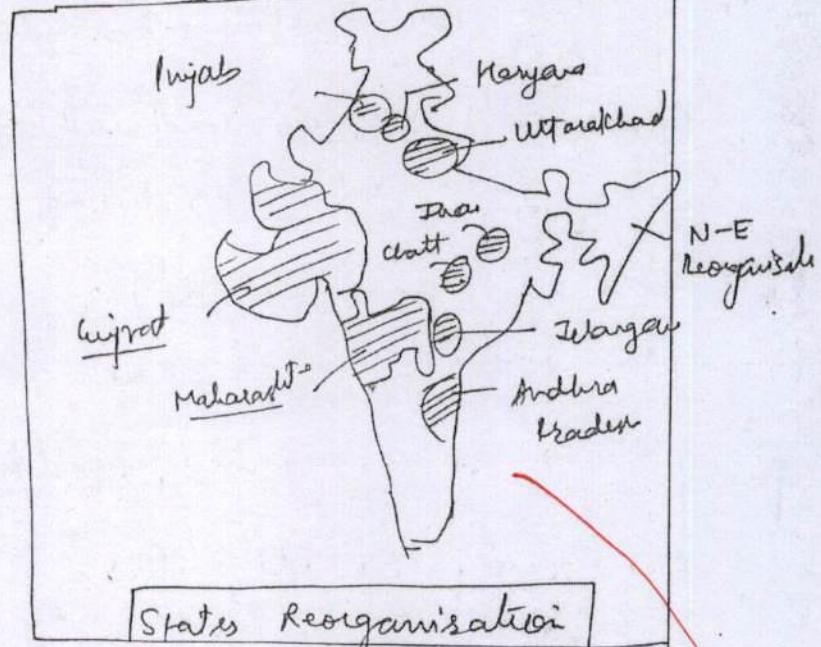
2. greater realisation of economic & regional backwardness and separation demand

(*) Andhra Pradesh & Telangana

(*) Chhattisgarh & Jharkhand

3. greater regional identity imposing concepts of "Son of Soil" & "Insider-Outerider hypothesis"

(*) North-East in TN



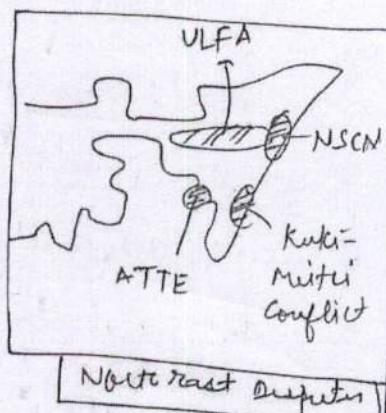
Remarks

Link w.r.t Geography

4. Greater ethnic discontinuity in North east demanding more autonomy

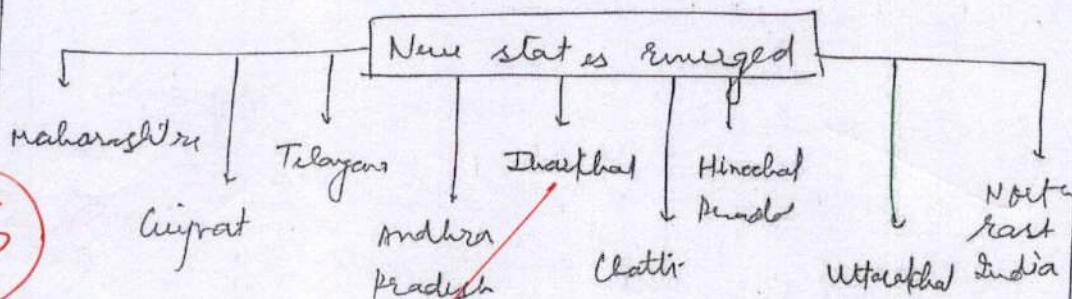
⑦ Balkanisation of North-east India

5. Still violence and infiltration occurs in North east India due to various reorganisation demands



6. Increasing negative regionalism among the population.

⑦ Haryana - reservation of seats for localites in private jobs



Thus - in order to forge unity in diverse background, India must forge integrative elements of schemes, soft power of each state and cultural identity to put forth the idea of "UNITY IN DIVERSITY"

Remarks

7. (c) Discuss the demographic attributes in India, such as sex-ratio, age structure, literacy rate, workforce, dependency ratio, and longevity, and their implications for the country's development. (250 Words) (20)

Recently released United Nation Population Funds world population prospect and Indian lately release of NFHS-5.0 survey have vividly highlighted various demographic attributes in India

(UNFPA) - Scenario in comparison

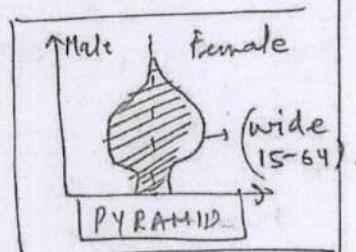
	Population	15-64 age group	>64	TFR
India	142 bn	68%	7%	2.0
China	141.8 bn	67%	14%	1.2
Global avg	8 bn	60%	15%	1.4

① Age-structure and Sex Ratio of India :

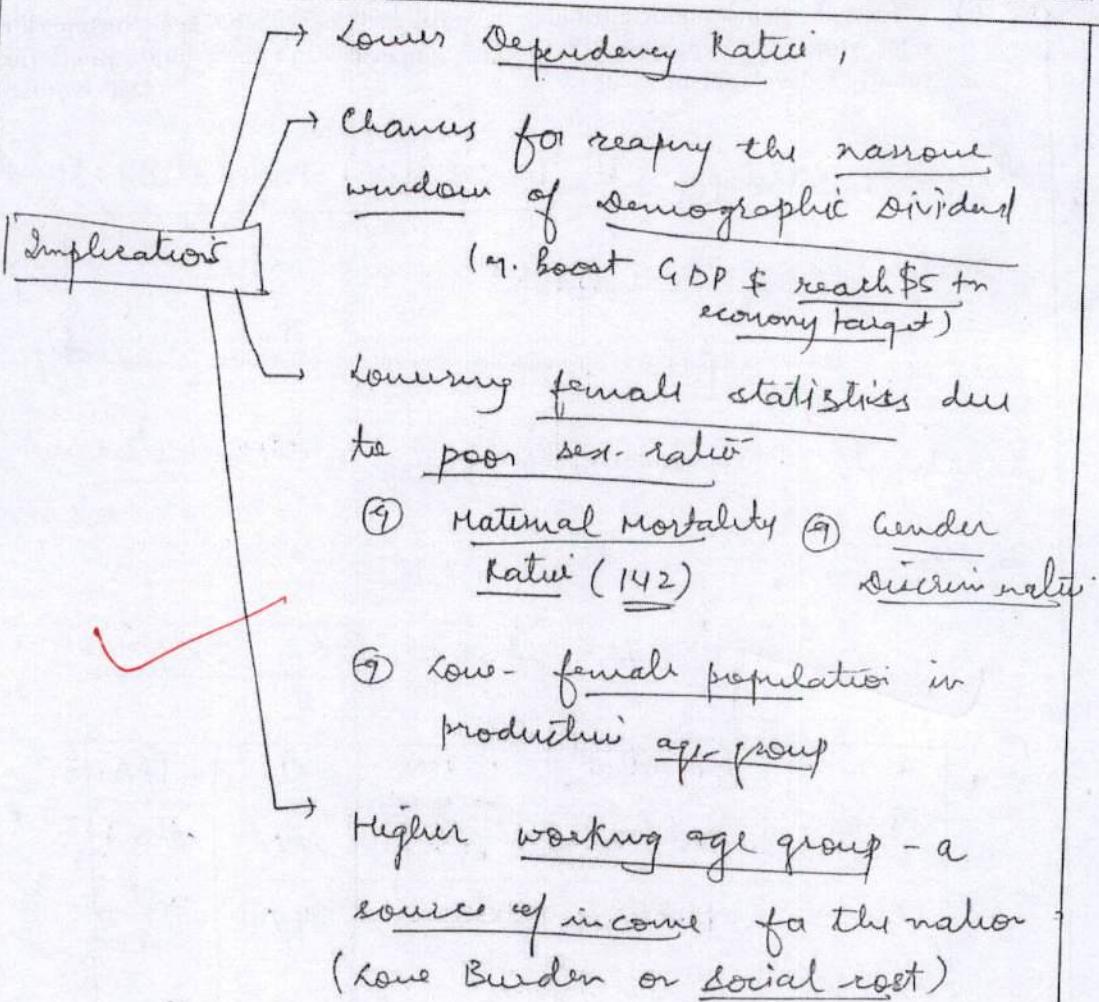
⇒ Increasing population of working age group (15-64)

⇒ Sex-Ratio - 940 to 1000
(Census - 2011)

⇒ 7% of old age population (60% of which = female)



Remarks



However other statistics:

② Literacy Rate: The amount of population above 7 years of age who can read & write, basic numeracy & language

India = 73%	Male = 82%
	Female = 59%

Implications:

Remarks

- High disparity - Rural-Urban literacy rate
- Burden on state resources. (⇒ currently only 3% of spending (Kothari recommendations - 6%))
- Poor educational outcomes - ⇒ Chances of Telless growth again (as happened in 1990's)
- gender divide - low female education
 WEF ⇒ 1% increase in education of females leads to 12% increase in GDP.
 (Trickle down effect)

workforce: The amount of people in age group 15-64 years (workers) who are willing to work, looking for work or employed.

Currently ⇒ labour force participation rate = 42% (PLFS)
 ✓ Female labour force participation = 21% (PLFS)

Implications

- Burden on employed individuals to boost growth
- Create wage gap and political challenges
- Poor quality of job ⇒ (90% informal jobs in India)

Remarks

→ Higher dependency or agriculture (53% of population)
 (\$ 43% of workforce)

Dependency Ratio: The ratio of population

$$\Rightarrow DR = \frac{(\text{pop} < 15 \text{ yrs} + \text{pop} > 64 \text{ yrs})}{\text{Total population}}$$

Currently India's Dependency Ratio = 0.3%.

- Implications
- High demand for work
 - Less social security
 - Burden on economy bound to increase after 2043.
 - Greater chances of GDP and 5th economy

Longevity - The net life expectancy in India

is 69.2 yrs ✓ Male = 67.3 yrs
 Female = 72.1 yrs

- (12.5)
- Higher health standards
 - Greater reach to hospitals & accessibility
 - However affordability is low (out of pocket expenditure) = 48%

These attributes of Indian population are highly promising & increase chances of AADHUNIK BHARAT

Remarks

by 2047

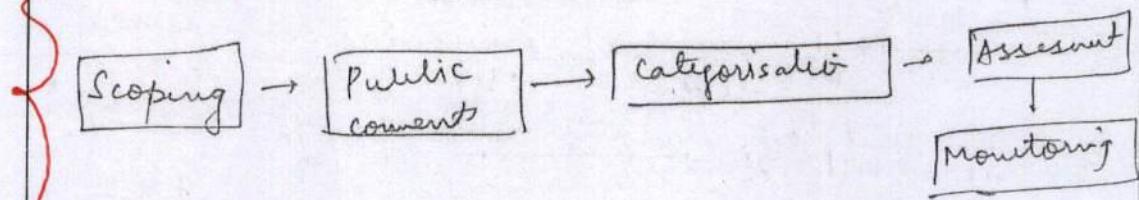
Keep one paragraph on Conclusion
 always —

8. (a) Analyse the principles and importance of environmental impact assessment and environmental management in sustainable development projects.
(200 Words) (15)

Environmental Impact Assessment (EIA) is the process of assessing the viability of project planned in the country along with its threats and challenges.

Environment Act - 1986 provides statutory basis for the EIA to occur in a mandatory fashion for a category of products.

Five procedure:



Categories of project:

Category A: mandatory EIA (central EIA process)

Category B:

- B1 - under mandatory EIA
- B2 - exclusion from EIA

State EIA process

Importance of EIA:

1. Adequate farsighted & relevant clearances for

Remarks

- a potentially environmentally deliberious project
2. ensure rehabilitation & reinsurance of the local critics & inhabitants
 3. Prevent local flora & fauna from degradation
 4. Create relevant community engagement for better adherence.
 5. Improve democratic decentralisation for local resource management.
 6. Sustainable use of resources gets ensured.

Case study :-

odisha's Niyamgiri hills were illegally put to Bauxite mining by Vedanta company. This illegal contract was put to EIA through lobbying by local tribals which led to cancellation of deliberious mining of Niyamgiri hills.

Principles followed for EIA :-

- 1) "Sui generis" (unique) nature of environment

Remarks

should be catered first (NGT)

- 2) Concept of 'Coco Parentis' - people as the parent figure of the environment. (e.g. Sukma lake-Puliyah)
- 3) Environment as a living entity - (e.g. Ganga River)
- 4) Local destruction of habitat should be as less as possible.
- 5) strategic clearances for strategic projects
 (e.g. Forest rights act - 1980 - (amended in 2023))
 ✓ No EIA for projects within 100 km of borders
- 6) Concept of Utilitarianism to be followed:
 greater good to large population.

(8)

However certain issues persist

- Consultation of people & NGO's (After clearance)
- Strategic projects - get away
- Vacancy in committee & specialisation of posts in in the committee -
 Thus, tackling these issues along with adequately following EIA norms would ensure sustainable development.

Remarks

8. (b) Discuss the factors contributing to regional consciousness and inter-state issues in India and their impact on national unity and integration. (200 Words) (15)

Regionalism in India has been an age-long characteristic due to diverse amalgamation of the Salad-Bowl model which boosts charged feelings of individuals towards a particular region (Q) - Yu-Fi-Tuan's Topophilia.

Factors contributing to regional consciousness

1. Geographical diversity:

1.1 → N.E India ⇒ Ridge & Valley topography leads to numerous tribes

1.2 → Greater division ⇒ North & South India

1.3 → Association & attachment due to a geography

(Q) Tribal, - Jat, Jangly, Jameen - Ourselves

2. Linguistic diversity:

around 200 languages & 600 dialects spoken which creates regionalism (4 language groups)

3. Caste distinction & diversity:

people from caste class which exerts dominance over regions. (Q) Cujjars in Haryana and

Remarks

Khaap Parhayat, Vokkaligas of South India

4. Ethnic diversity:

North east have more than 250 ethnicities having separate demands for regional aspirations

⑨ - Greater Nagaland - (NSCN)

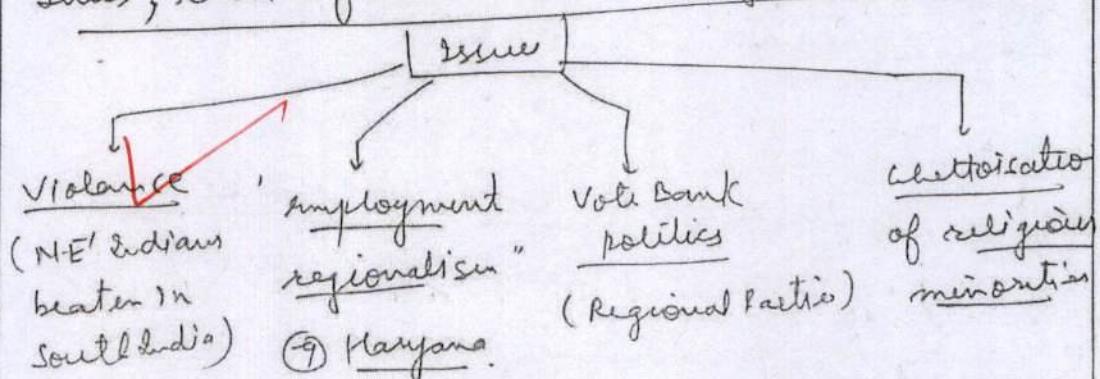
④ - Bodo - (Bodos of Assam)

5. Employment, & Educational diversity:

North-South divide → leading to migration from one-state to other.

⑨ UP & Bihar migrants discriminated in Maharashtra.

Thus, these factors enhance regional aspirations

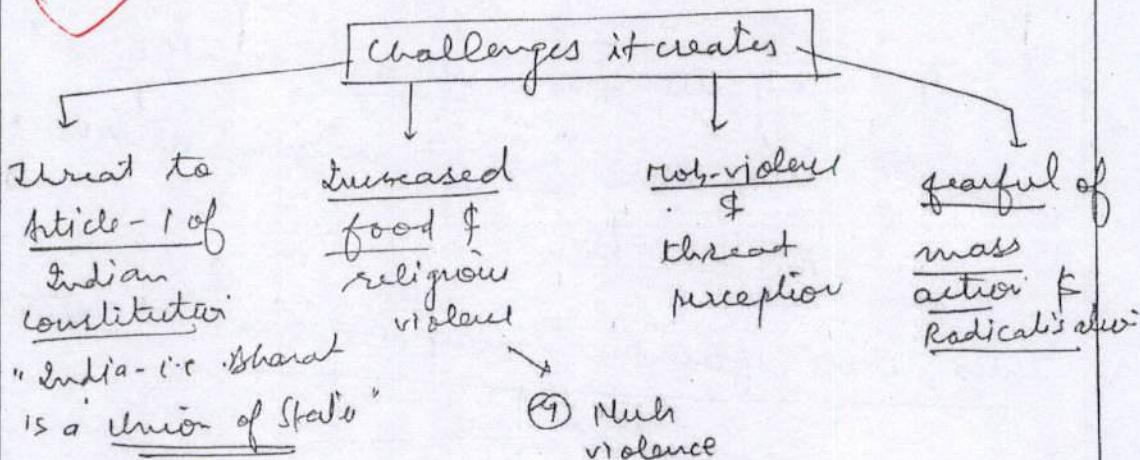


Inter-state issues in India:

1. > Inter-state River water disputes ⑨ Metadatu

Remarks

- of (Kerala & TN) and Mullaperiyar water sharing.
- 2) migrant issues - boasting soy of soil theory
 (9) Tamil Nadu's recent case of threat of violence on Biharis.
 - 3) Resource sharing - (9) land assets & building between Andhra & Telangana.
 - 4) Federal disputes - regarding central's overarching control via power.



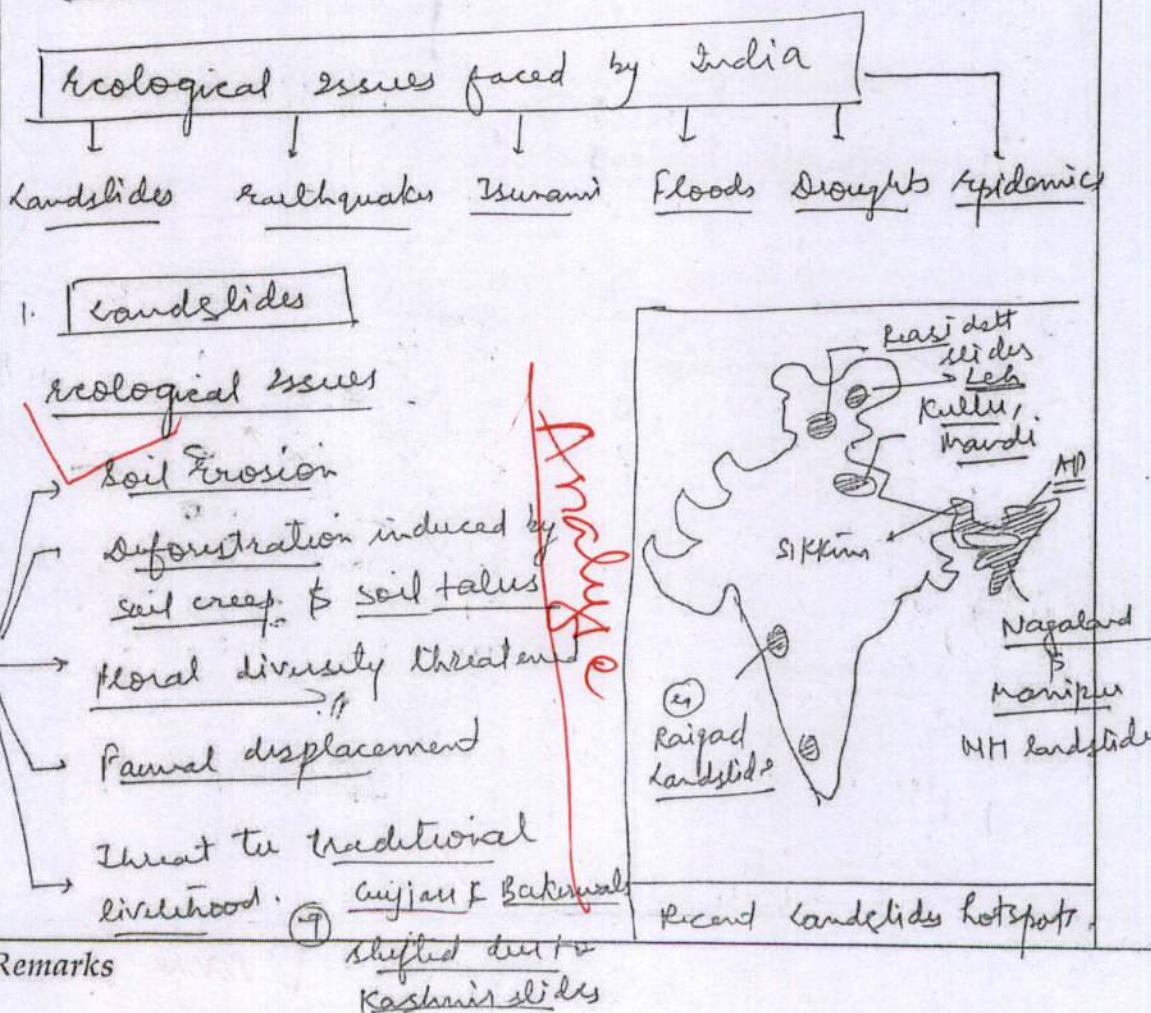
Thus, India must adhere to the meeting point model of a united landmarks ensuring the sovereignty & integrity of nation & mosaic model of multiculturalism.

Q.5

Remarks

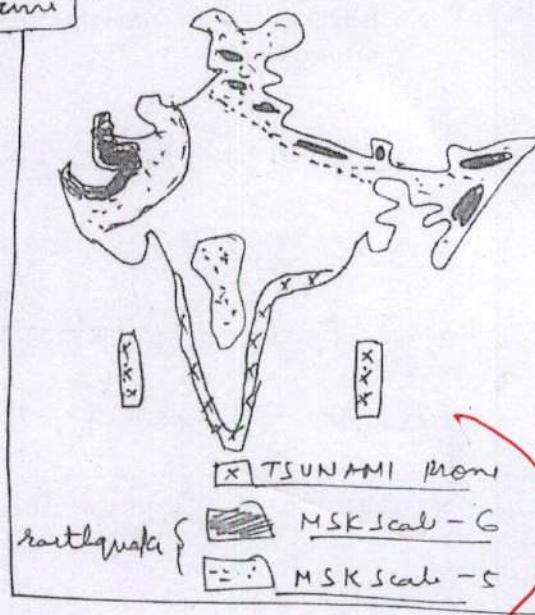
8. (c) Analyse the ecological issues faced by India, including landslides, earthquakes, tsunamis, floods, droughts, and epidemics, and the measures taken for disaster management. (250 Words) (20)

India is a unique nation situated in a multi-diverse landmass and unique advantages with respect to climate, topography and edaphic factor. However, these uniqueness possesses severe challenge to the nation at times of a disaster.



2. Earthquake & Tsunami

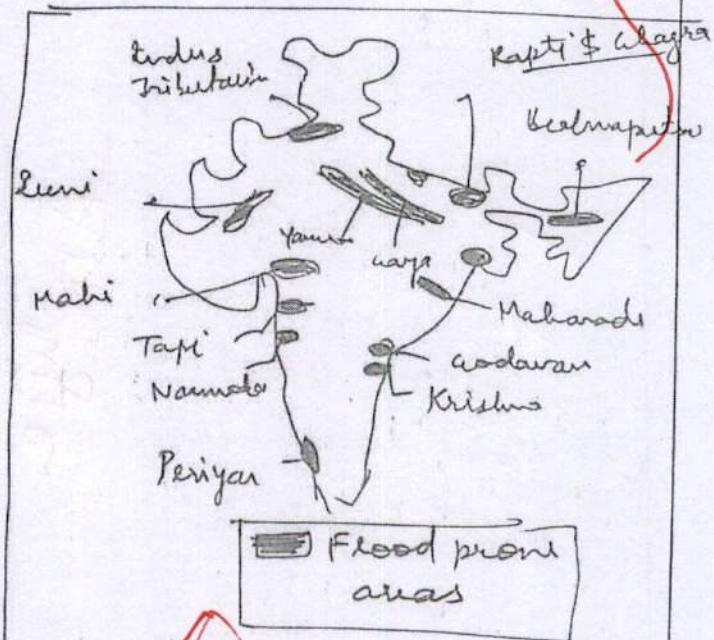
- Loss of marine life & livelihood
- coastal erosion
- Poor threat { locals
Mangroves } ecological Threat
- Lives & livelihood threat
- Landslides & erosion
- faunal & floral threat
- poor management → changing River course
floods & devastation



'Good
one'

3. Floods

- coastal erosion
- sand erosion at basins
- ecological threat
- siltation
- Need for dredging
- water-Borne epidemics, etc.

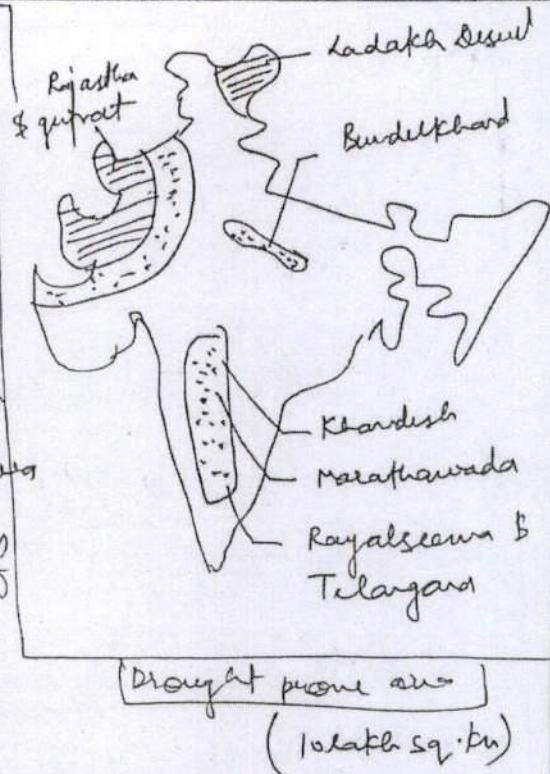


Remarks

Draw more
of
that is your
strength

4. Drought & epidemics
- Agricultural denudation
 - Increase in diseases
animals - Lumpy Skin
- Foot & Mouth
 - Ecological Threat human - cholera, diarrhoea
 - Poor acceptability of monsoon
 - Increased incidence of failures.

Deforestation & Ravaged land (Chambal)



- Increased instances of zoonosis (④ African swine flu)
- Greater animal-human conflict
- Ecological Threat from Epidemics
- Bats - reservoirs get in touch with humans
 - Worst form of epidemics spread (④ Nigerian swine flu)
 - Lockdowns & impact on ecology
 - closure of rivers & water.

Remarks

Measures taken for disaster management:

- ① Following NDMA guidelines.
② NDMA Act - 2005
- ③ early warning system & communication
 - earthquake → (Indiaquake)
 - drought → Bihar's "Befikr App"
- ④ Vulnerability analysis & risk assessment
 - ⑤ Identification of prone areas
 - ⑥ Characterisation & information dissemination
- ⑦ Response during the disaster (ecological model)
 - ↓ ↓ ↓
 - Mitigation escue search rehabilitation
operatio. & escue operatio.
- ⑧ Maintaining Sanitation & hygiene
 - ⑨ Floods, droughts & landslides
- ⑩ Promote connectivity (alternatives).

Valid

Thus such ecological threats needs to be warned & tackled through mitigation ⇒ response & preparedness following the Sendai framework.

Remarks