

31/12/2021

GEOGRAPHY

Time Allowed: 3 hrs.

Max. Marks: 250

Instructions to Candidate

- There are Eight questions divided in two Sections.
- 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 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 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 chronological order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the answer book must be clearly struck off.

- Good Attempt
- Very nice presentation
- Good Structuring
- All the Best!

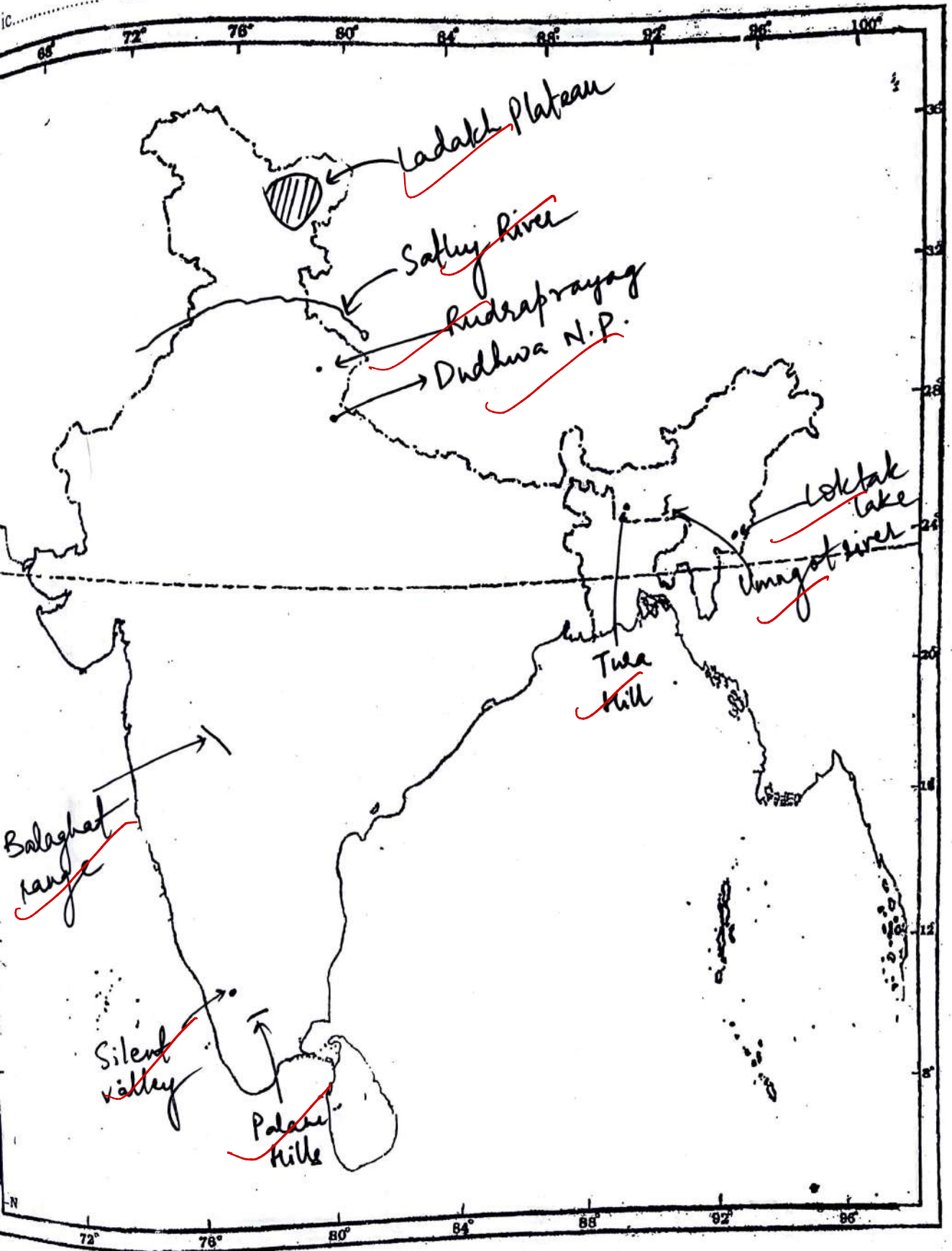
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Name Yashaarth Shekhar
Mobile No. _____
Date 31/12/2021
Signature Shekhar

INDIA

Class Practice

WITH AFGHANISTAN, BANGLADESH, BURMA,
NEPAL, MYANMAR, BURMAL, PAKISTAN AND SRI LANKA



SECTION-A

Attempt all questions:

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

(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: (2 × 10 = 20)

- (i) Umngot river
- (ii) Satluj river
- (iii) Ladakh Plateau
- (iv) Palani Hills
- (v) Balaghat Range
- (vi) Silent valley
- (vii) Dudhwa national park
- (viii) Rudra Prayag
- (ix) Loktak Lake
- (x) Tura hills

IS Good

- (b) Write a short note on geological history of India. (10)
- (c) Write a short note on Zero Budget Natural Farming (10)
- (d) Write a short note on Evolution of northern plains. (10)

Umngot River → an important river in Meghalaya + intercountry as enters into Bangladesh + one of the clearest ~~sediment free~~ river used for boating and tourism + also called Dawki.

② Satluj → originate from Rakas Tal in China + enters India from Shipkila pass +

Has Bheka Nangal dam on it + Beas joins it at Harike -

③ Ladakh Plateau → Part of ~~part~~ ^{Trans} Himalayan region + consist of rivers like Galwan + Pare-chhu + cities like Leh + Haule, Nimoo etc. Consist of Hemis National Park

④ Palani Hills → Hills on Tamil Nadu - Kerala Border + highest peak at Kottaimalai + tourist town of Kodaikanal on it + Palani Hill Devi Temple - Southern Hill Complex

⑤ Balaghat range → Hill range in Maharashtra + part of Sahyadri + important cities on it like Ahmednagar, Latur etc.

⑥ Silent valley - valley located in Palakkad and Wayanad district of Kerala + Has Silent valley National

Park which is part of Nilgiris Biosphere Reserve + important species of Silent valley → Nilgiri Tahr and Lion Tailed Macaque

⑦ Dudhwa NP — located in ^{Lakhimpur - Kheri} Bahraich district of UP + has Royal Bengal Tiger + Katerniaghat Wildlife Sanctuary part of it. located in Terai Region of UP

⑧ Rudrapur → a town located in the Uttarakhand where Alaknanda meets Mandakini river. Also a place for pharmaceutical + tourist place on way to Badrinath + part of Char Dham Project

⑨ Loktak lake → part of Manipur + has Keibul Lamjao N.P. + old's deer called Sangai which is Endangered +

floating islands called Phumdis.

(10) Tura Hills - located in Garo Hills of Meghalaya + CPPF has its company here. Tribal area + important commercial centre of Meghalaya.

(b) Geological history of India is studied with reference to Rock Structure of India. In this context, we have pre-cambrian and post cambrian structure.

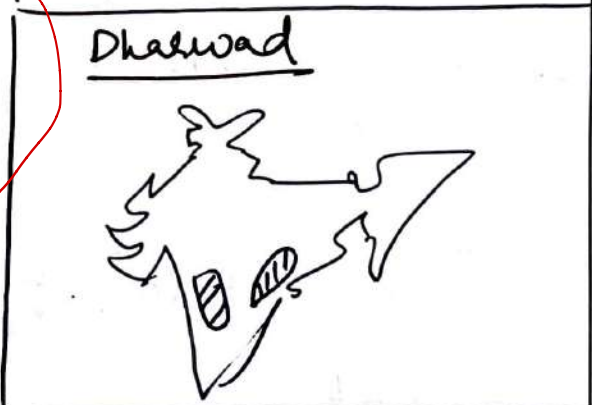
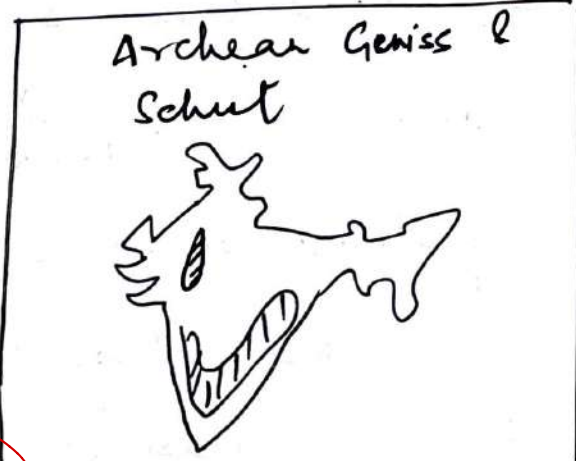
Pre-Cambrian.

(1) Archean Gneiss and Schist and Dharwad Rock structure which form the fundamental basal complex - found in

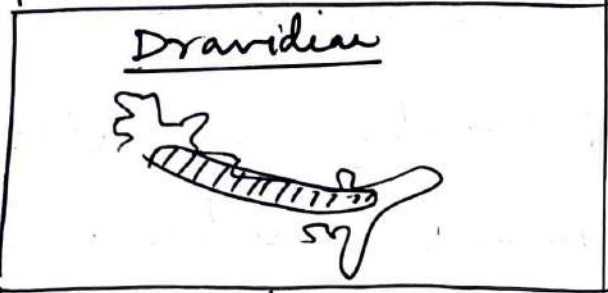
area like Dharwad, Hubballi, Cuddapah, Tamil Nadu. These, especially Dharwad are rich in metallic minerals like Iron, copper etc

Cuddappah
Vindhyan

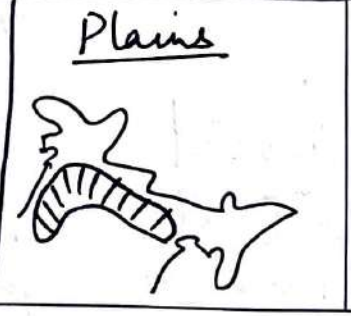
(2) Purana Rock system refers to the rocks formed during Carboniferous period. Rich in coal seams eg. Kalakot in J&K.



(3) Dravidian Rock system form the building material of Himalayas. They are of Metamorphic origin.



(4) Asyan Rock system — refers to the Gondwana Rock system found as coal in Jharkhand,



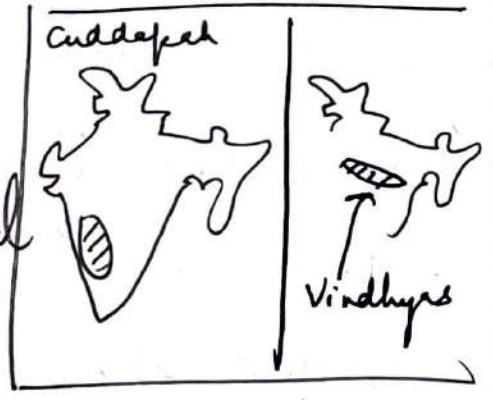
Remarks

Chhatisgarh, etc, Deccan series in Maharashtra, etc, and Plains (Recent series).

⑤ Cuddapah Rock - rich in limestone seams and found in Synclinal Basins

⑥ Vindhyan → Rich in diamond and found in plateau surface

All these rocks help us to describe geological history of India.



(c) Zero Budget natural farming's concept was introduced by Subhes Palekar as alternative to chemical based system. 4 components

Beejamrit
↓
mixture of seed + urine +

Jeevamrit
↓
mixture of jaggery + urine +

Waaphasa
↓
vermiculture for

Acchadara
↓
mulching to

Remarks

drag of cow/buffalo
to allow seed to grow

drag to
create a
medium for seed to grow

aeration
and
natural ploughing of soil

reduce
evaporative
loss of
water

Lower productivity
Unpo given
Crop losses due to pest attack

Benefits

Issues

- ① ↓ soil erosion
- ② ↓ cost as compared to traditional agri system
- ③ ↓ CO₂, CH₄ emissions
- ④ sustainability of agriculture ensured.
- ⑤ Water conservation
- ⑥ Farmer empowerment
- ⑦ Healthy cook food

- ① Lack of Human capital who understand it
- ② High cost of such product
⇒ ↓ demand.
- ③ entrenched MSP led and subsidy led system created lobbies against ZBNF.
- ④ Lack of proper govt incentive

It will help us to attain one objective of COP 26 and Panchamrit and doubling farm export as part of Agri-Export Policy of 2018. → PMPKY

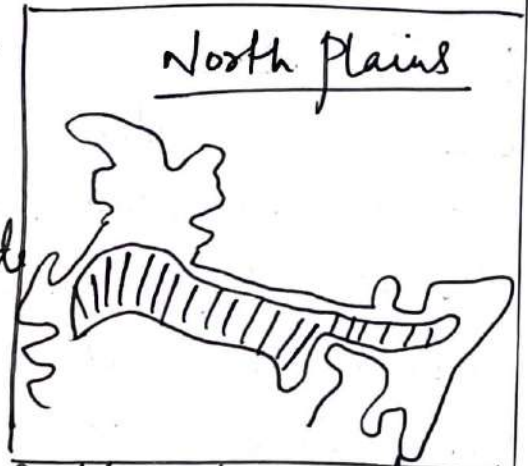
(d) Northern plain are the most recent

- Remarks
- E. Sues - Alluviation of Geosyncline ('Foredeep')
 - S. Bussard - Infilling of Rift Valley
 - S. Blanford - Regression of the sea.

formed major geographic features of India comprising rocks of Aryan Series ✓

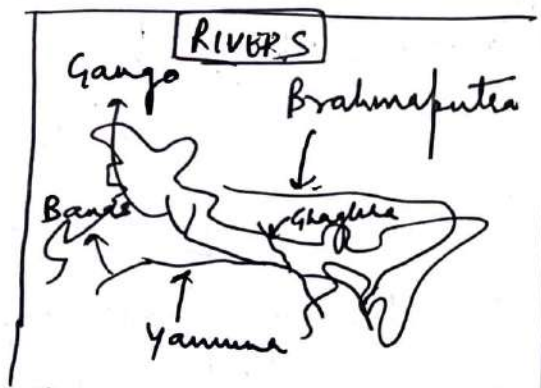
② According to Sydney Broad, they are formed as a foreland was created when Indian Plate collided with Eurasian

Plate. This depressed part was thus filled with sediment brought by rivers like



Ganga, Yamuna, Tons, Ghaghra, Rapti etc and thus it is DEPOSITIONAL in nature.

③ It is thus rich in alluvial soil - hub of food grain production like wheat, rice, etc in



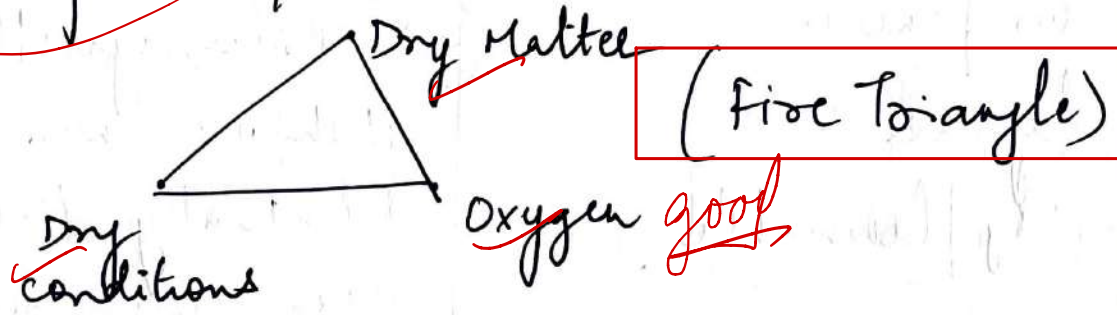
Punjab, Haryana etc but poor in Mineral wealth.

It is thus an important constituent of India

Answer the following questions:

- (a) While forest fires are a recurring and common phenomenon, their frequency has been on the rise in India. Discuss the major causes of frequent forest fires in Indian hilly states in the last few years. What measures can be taken to control this problem? (250 Words) (20)
- (b) Different physiographic divisions of India are complementary to each other and lead to socio-economic development of the nation. Explain. (200 Words) (15)
- (c) Animal rearing is a key livelihood and risk mitigation strategy in rural areas, especially in dry regions. Substantiate your answer with suitable examples. (200 Words) (15)

(a) Forest fire occurs when 3 things are fulfilled:



eg. Bandipore forest fires of 2018-19

Causes (in last few years)

Natural

- ① Increased incidence of lightening
- ② rubbing of dry

Anthropogenic

- ① Climate change induced drought like conditions and fires

Altered seasonal regime - longer dry season.

Remarks

- declining population of ungulates and other grazors.

- improper forest management
 - monoculture → homogenisation of tree community
 ↳ eg. W. Himalayas
 - exotic grasses & plants more susceptible to fires.
 - conversion of forests into pastures

bamboo clumps .

③ Fire - as a natural mechanism
eg. Savanna

~~④~~
④ Presence of chir pine in hilly area - *flamable resin*
highly flammable

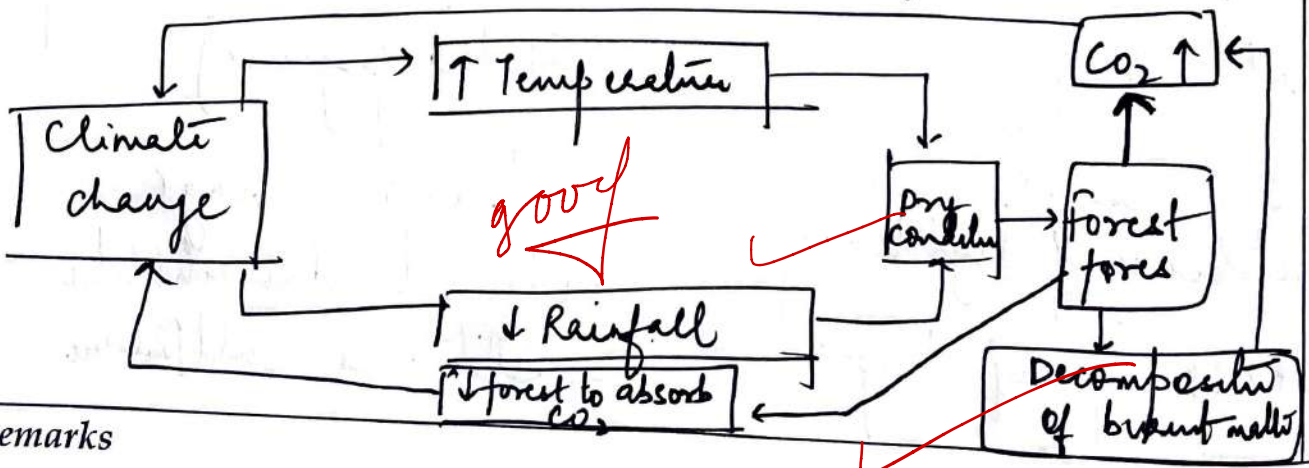
eg. Uttarakhand forest fires in 2020

temperature + ↓ rainfall ⇒ condition ~~to~~ for fire

② fire set to tree by Jhum cultivation

③ Pidis, cigarette thrown non-chalantly often can cause fire

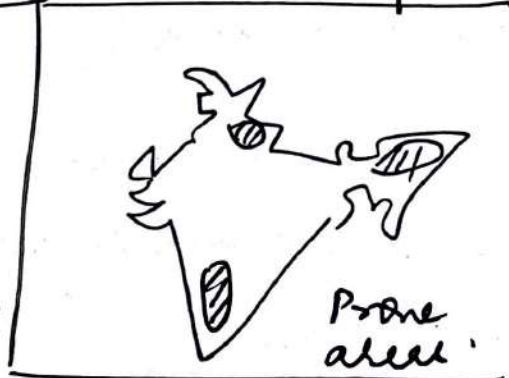
④ Fire lit to scare away animal often later dangerous proportion



Remarks

~~How~~ Measures

① Understanding regions which are specifically prone to forest fire and taking help of forest community



② use of fire lines to restrict spread of fires

③ Controlled combustion of collected debris from time to time. good

④ Removal of chire pine which is specifically prone to burning

⑤ Special forest task force to tackle anthropocentric fires.

⑥ ~~Use~~ use of satellite data from NASA
 GOI is running "Prevention of forest fire and Management System" to tackle it

(b) India has many different physiographic regions as map shows

I: Himalayas

are rich in mineral resources and source of many rivers like Ganga, Yamuna etc

and hub of tourism

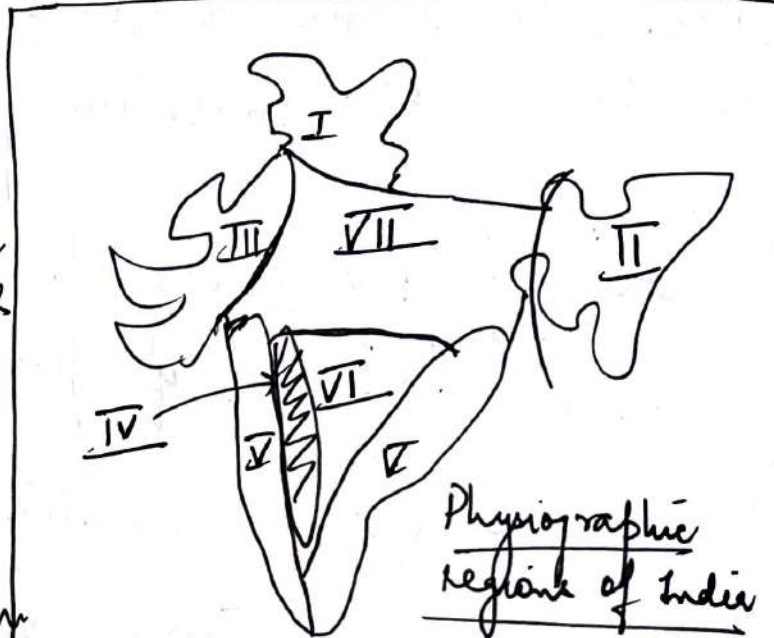
like Shimla, Kullu, Gangtok etc ⇒ support economic social development of the region.

II North-East - rich in tribal culture

+ Forest resource + waters like Brahmaputra

⇒ enables us to combat climate

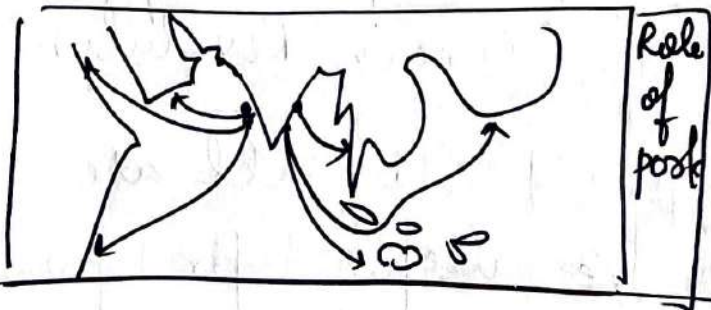
change and thus create environment for sustainable development for socio-economic growth



III Deserts like Thar and cities like Jaisalmer, Baermer, Nakhtarane provides avenue to grow different varieties of crops (Millet) + promote Tourism + provide valuable marbles among other mineral
 ⇒ leading to social - eco. development.

IV Western Ghats → hub of biodiversity + energy potential + role of monsoon
 ⇒ create potential for socio-economic development. eg. Mumbai, Mahabaleshwar, Koyna Dam etc.

V Western Coast and Eastern Coast provides space for ports like Kalwar, Vishakhapatnam etc. which enables us to trade and development



VI Deccan Plateau / Peninsular Plateau

is the rich fishing ground for minerals
 eg Iron (~~the~~ Sundaresh, Bailbil Koira
 Valley), coal (Raniganj, Singareni),
 Aluminium (Koraput), Manganese (Balaghat)
 etc ⇒ helped us in setting up
 of Iron and Steel Plant like Bokaro
 etc ⇒ development and ~~so~~ social
~~to~~ change

VII Great Plains of ~~the Indo-Gangetic~~

~~the~~ Yamuna and Ganga enabled us
 to grow wheat and rice to meet
 food security challenge in Green
Revolution eg Punjab and Haryana's
 role in Green Revolution

Thus all are complementary
 and ~~so~~ useful for growth

Remarks

Explore the mutually beneficial relationships ←

- eg. Himalayas - source of perennial rivers → responsible for the productivity of the N. Plains
- eg. Ports - facilitate the export of minerals from the Penn. Plateau
- eg. Cotton from the Deccan trap region feeds the cotton mills of Mumbai & Ahmedabad.
- eg. The Meghalaya plateau funnels & deflects the BoB branch of the Monsoon towards the N. Plains

1 Animal rearing refers to growing animal for food, fuel, milk and draught

purpose. It adds 4.15% to Indian economy and constitutes 25% to agri-

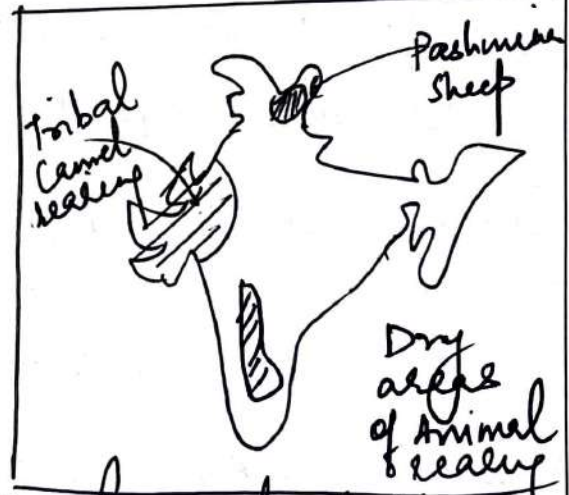
- Uncertainty of dryland farming
- Expanding degraded & wasteland - reclaimed for pasturing.
- Provide a measure of financial security - represent savings & property

Importance in rural areas - Provides manure - supplements incomes - Drylands: Only 1 cropping season

↓
Auxiliary activity.

2 Employment as in rural area, possibility of crop production is limited.

ex. Rajasthan Bagar



3 Help in meeting nutritional need of the people thus creating human potential for work. ex. Camel Milk.

4 Challenge of draught -> dependence on animal as insurance ex. Deccan draught

2015-16

4 Better avenue of income

in view of growth of co-operation led food processing industry e.g. AMUL (dry area of Gujarat)

(5) Meeting increased demand for protein through meat enables proper monetisation of animal rearing

(6) Importance source of draught by carrying good for farmer as in rural area infra is poor e.g. Bihar region

However many issues still persist like poor quality of milch cattle, lack of food value chain, infra, poor hygiene and lack of veterinary services ⇒ ↓ scope of development

∴ Thus GOI is running a national programme for Bovine Breeding and Development to tackle issues.

Remarks

3. Answer the following questions:

- (a) Discuss the origin and the physiographic features of the Himalayas. (250 Words) (20)
- (b) Recently National climate vulnerability assessment report was released. How can this report help in achieving the targets mentioned under NDC? What are the different measures taken by the government to reduce the impact of climate change? (200 Words) (15)
- (c) What do you understand by River Interlinking projects? Explain the major challenges that the Ken-Betwa River linking project is facing? Also suggest measures which can be taken to make the project a success. (200 Words) (15)

(a) Himalayas are the most important physiographic features of India formed during ~~alpine~~ Tertiary mountain building phase due to collision between Eurasian and Indian plates.

Origin

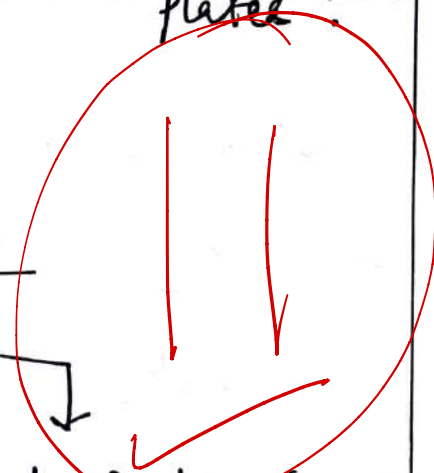
Two theories explain its origin

Geosynclinal Theory

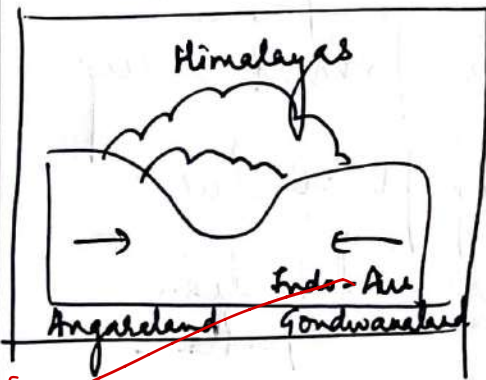
- According to it Himalayas are the result of collision between forelands of

Plate tectonic Theory

→ Acc. to it Himalayas were formed due to CRUMBLING AND



Indo-Australia and Eurasia and 3 successive phases (polygeosyncline) to form 3 aspects of Cordillera.



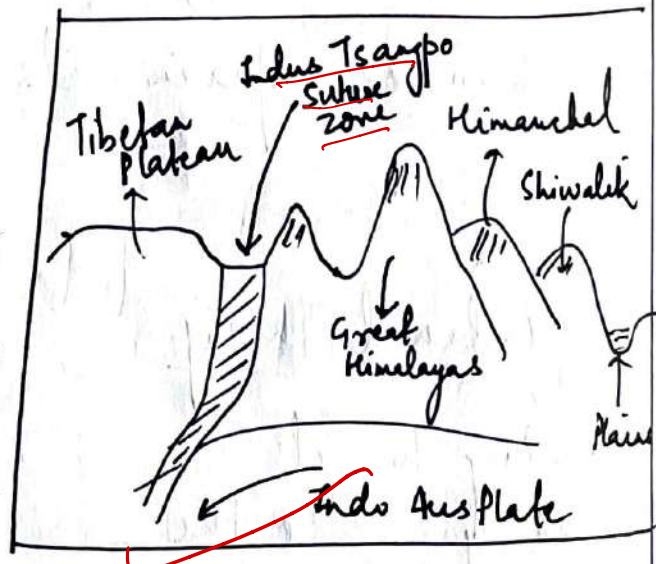
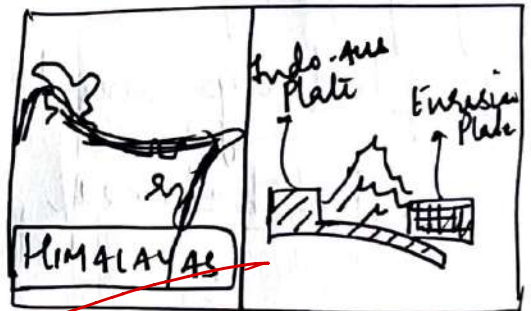
Physiographic features

① Key back topography especially of Shivalik as pressure was more from Indo-Australian Plate

② Consist of 3 ranges → Great Himalayas

Remarks

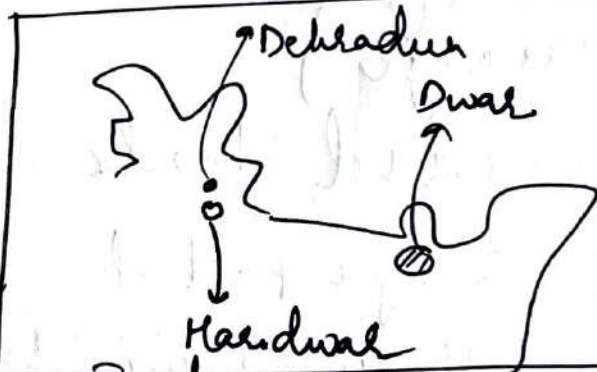
FOLDING UP OF SEDIMENT by compression created when Indo-Australian Plate collided and subducted under Eurasian Plate



Himanchal and Shiwalik

3) consist of Dun (longitudinal valley eg. Kotli Dun, Dehradun etc) and Dwar (latitudinal valley (eg. Haridwar or Dwars of Siliguri))

4) Presence of Reverse faults eg. Himalayan Front Fault b/w Shiwalik

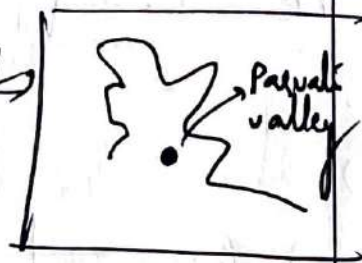


and Bhabar, Main Boundary Fault b/w Shiwalik and Himanchal and Main Central Thrust b/w Great Himalayas and Himanchal → causing Earthquakes

5) Suture Zone eg. Indus Tsangpo Suture Zone over which Indus flows

6) Presence of Nappes

7) Many valley eg. Parvati valley, Kullu Valley etc



8) Gorge eg. Baramula Gorge

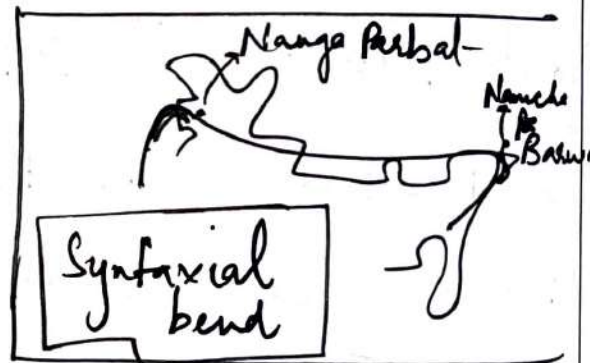
- Elevation - Orientation - Length - Width
 - Trans Himalayas - Purvachal hills.

(9) Plains of lacustrine origin eg. Kashmir or Pchradun

(10) Fast flowing river eg. Indus, Satluj, or Ganga (presence of antecedent drainage)

(11) Synaxial bends at Nanga Parbat

However due to ^{change} climatic Himalayas are facing unprecedented threat ~~ca~~ causing ~~ever~~ events ~~like~~ like Tajovan disaster.



Hence, Niti Ayoj & Panchatantra principles of Sust Sustainable Development be used.

(b) National Climate Vulnerability Assessment report was released by MoEF

and Mo Earth Science to properly understand the impact of climate change on different sections of society ^{4-diff regions}

~~It~~ ~~It~~ It became more important in view of our goal of "Panchamrit" at COP 26.



Revised NDC at COP 26

Report will help us achieve this by:

① Understanding which sector of economy need more help in transitioning to carbon neutrality

② Help us in raising finance for transition

Remarks → Highlighted correlation b/w incomes & vulnerability to climate change.

- (3) Report us help us to manage growth/development and reducing investment in coal, fossil-fuel sector.
- (4) Prepare a roadmap for future energy building
- (5) Help us to generate human capital to tackle climate change.

In view of all this GOI has taken many steps to combat climate change:

- (1) Legislative measures like CAMPA act, etc to reduce deforestation
- (2) Institutional measures like creating International Solar Alliance, coalition for disaster ~~resilient~~ resilient India to help us ~~mainstream~~ mainstream climate change.

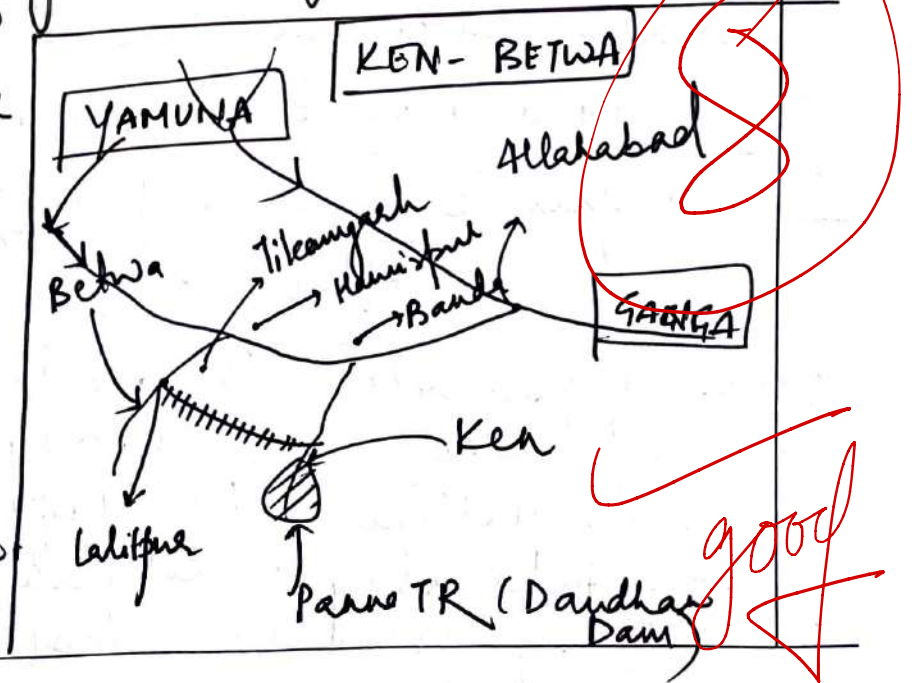
Remarks

③ Schemes like Ujala, FAME I/II, Ujjwala, National Hydrogen Mission, National Action Plan for Climate Change etc.

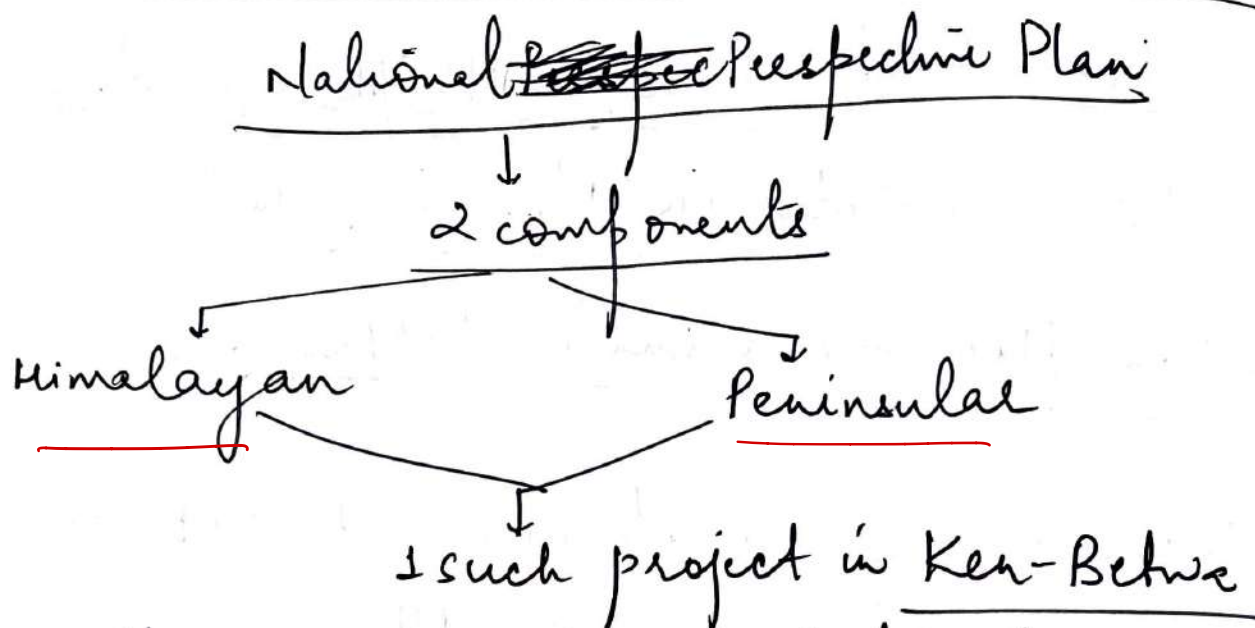
④ International collaboration at COP 26 by announcing our new NDC.
Thus all these will help to combat climate change.

① River Interlinking Project are those projects when two rivers are joined by building canals, dam etc to get many advantages like:

- ① Water for irrigation
- ② ↓ floods and droughts
- ③ ↑ fisheries
- ④ ↑ inland transport
- ⑤ Help to meet food security demand
- ⑥ Electricity generation



Remarks



Challenges Ken-Betwa Project is facing:

- ① Deforestation of large land areas in Bundelkhand
- ② Submergence of 10000 ha of land in Panna TR
- ③ Large scale displacement of people
- ④ High cost structure and dispute over sharing water between MP and UP
- ⑤ Waste logging of area due to canals
- ⑥ Complex clearance of forest, land etc

Measures

- | | |
|---|---|
| <ol style="list-style-type: none"> ① <u>Consultation with all stakeholder</u> ② <u>Creating National River Interlinking Authority as proposed</u> | <ol style="list-style-type: none"> ③ <u>↓ impact on Panna TR by diverting canal</u> ④ <u>Displacement of tribes and adequate compensation</u> ⑤ <u>All clearance are the MUST</u> |
|---|---|

Remarks

- EIA

- SLA

SECTION-B

Attempt all questions:

5. Comment on the following into 150 words:

(10 × 5 = 50)

- (a) Write a short note on food processing industry in India.
- (b) Write a short note on morphological typology of Indian cities.
- (c) Write a short note on water frontiers of India
- (d) Write a short note on Multi-national Companies.
- (e) Write a short note on reasons behind Niti Ayog replacing Planning commission.

(Q5) Food processing industry is the industry that processes primary produce into consumer produce for consumption eg. Amul → milk to Butter. *value addition + ↓ perishability.*

Ministry of Food Processing Industry

looks after it.

It has many pros and cons

<p><u>Pros</u></p> <ul style="list-style-type: none"> ① <u>enhance shelf life</u> of Milk (less) → Butter (more) ② <u>Promote diversification</u> of produce ③ <u>↑ farm income</u> ④ <u>Provide direct employment</u> to 6 lakh people 	<p><u>Cons</u></p> <ul style="list-style-type: none"> ① <u>Lack of availability of processable quality</u> in India ② <u>No contract farming</u> ⇒ ↓ <u>scope</u> ③ <u>APMC creates issue of procurement</u> ④ <u>Poor infra like roads, electricity</u> ⇒ ↑ cost ⇒ ↓ profits <p>→ Distributed procurement → <u>phytosanitary standards.</u></p> <p>→ Cold chain infra</p>
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Remarks

Many companies are part of such industry e.g. Amul, Patanjali foods, Dabur etc.

GOI runs PM SAMVADA schemes to set up cold stores and Mega Food Park e.g. Zoram Mega Food Park in Mizoram and Indus Food Park in Jaipur.

Recently, GOI introduced PLI schemes to boost export, meet consumer demand, generate employment, etc in this sector.

(b) India is old civilisation so many different internal structure of a cities may be found here (Morphology).

These are as follows:

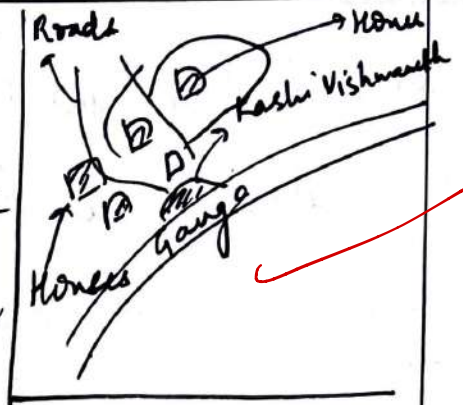
① Unplanned cities like Varanasi.

Remarks Ancient
Medieval
British Era
Post Independence

Port Based
Bozars Based

Features

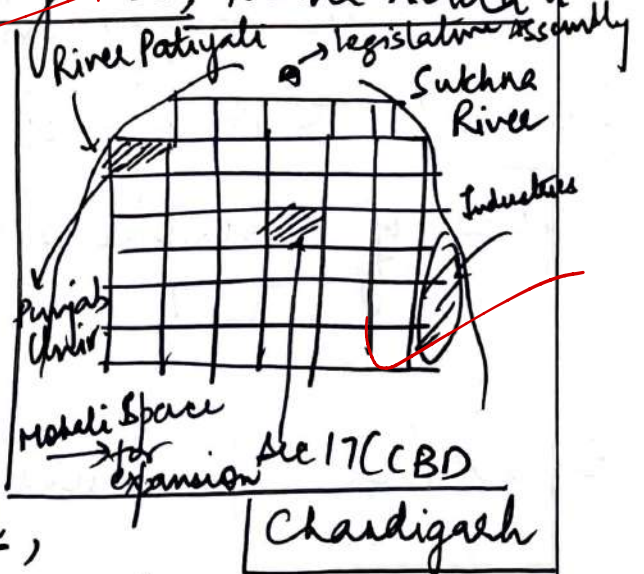
① congested road ② Developed as around temples (Kashi Vishwanath for eg)



③ CBD → both residential and commercial (eg. Laxmi Nagar in Delhi) ④ Density of cities decrease with distance from CBD.

② Planned cities eg, Chandigarh, Greater Noida

① CBD → only commercial purpose (eg. Sec 17 of Chandigarh)



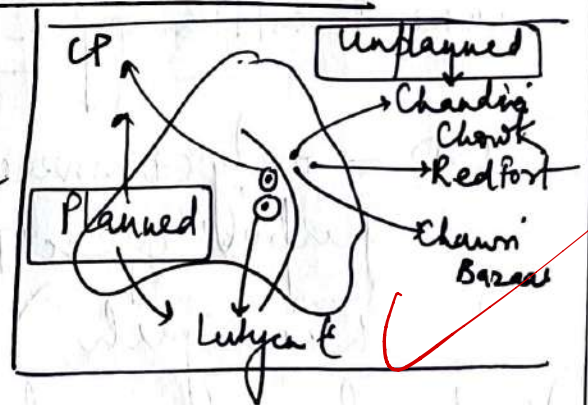
② sectoral division of cities into commercial, industrial, governance, etc eg Chandigarh

③ Roads → straight and cut each other at 90° (eg. Omicron, Alpha sector in G.Noida)

③ Planned and Unplanned → eg. Delhi (New)

Delhi (Lutyens) and old Delhi (Chawri Bazaar, Chandni Chowk) → has feature of both planned cities and unplanned cities like straight and congested road, CBD → both solely commercial or both commercial and residential eg. Chandni Chowk.

Thus Indian cities present a mesh of all types of morphology



(c) Water frontiers of India refers to waterbodies separating India from other states. They are of many forms:

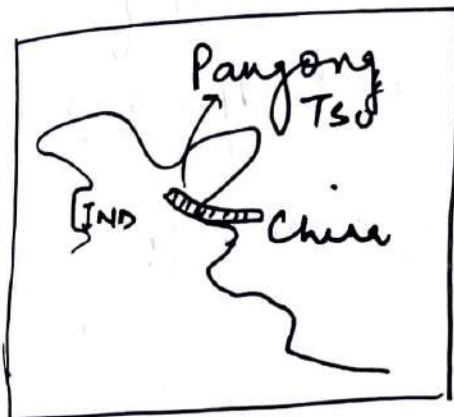
① River eg. Brahmaputra separating India - Bangladesh or Sir Creek separating Indo-Pak.

Remarks

Maritime Frontiers only

- Economic, Strategic & Cultural Importance

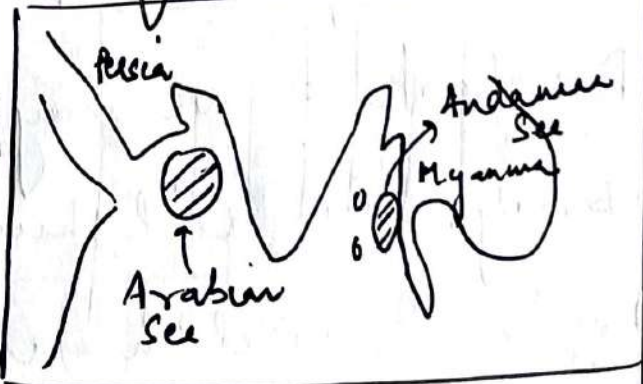
② Lake eg. Pangong Tso
forming boundary
between India - China



③ Seas eg. Arabian Sea
and Andaman sea separating
us from Persian countries

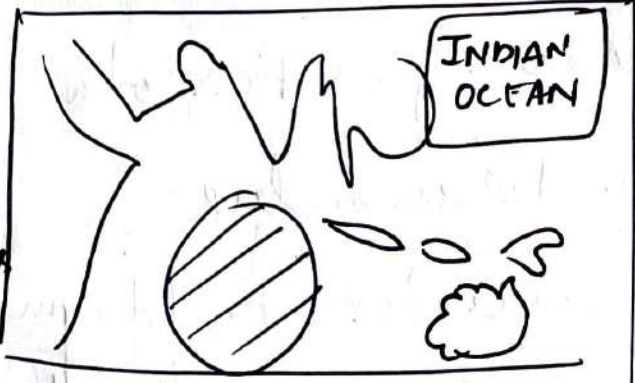
and Myanmar respectively

④ Indian Ocean separating
us from IOR islands like
Seychelles, Mauritius
and Antarctica and



Australia

Thus all these
examples present to us
varied nature with problems
like smuggling, infiltration,
flood management issues etc



(d) Multinational companies are those corporate companies which have their presence in more than 1 countries eg. Bharti Mittal operating in India and Africa or ONGC-Videsh operating in Russia, Persia etc.

Advantages → Tech Transfers
→ Efficiency, Competition & Choice

① Help generates foreign capital for us. One Poex has grown to \$634 Billion.

② ↑ exports ⇒ we may touch \$400Bn this year

③ Brings in rich human resources

④ Generate wealth and help us to attract investment to create a manufacturing base. eg. Foxconn making IPhones in

Sri-Peembadur

⑤ Generates employment and add to GDP
eg. Adani group at Kandla

Remarks

→ What is the nature of operations?

⑥ Strengthens the cause of globalisation and help us to integrate into Global Value chains

MNCs Rely on Specialisation

Issues

Inherently inequitable

High value added processes - HDCEs

Low value added processes - Developing Countries.

① Inherently exploitative especially profit oriented ones

② Poor conditions of worker eg. food poisoning at Foxconn plant at Sriperumbudur

③ Shady deals eg. Vodafone - Idea case of Retrospective taxation

④ May exploit natural resource eg. PoCSO at Niyamgiri hills

⑤ May cause of crisis in other countries to spill into India as happened in GFC in 2008

A regulatory framework must be there to regulate them.

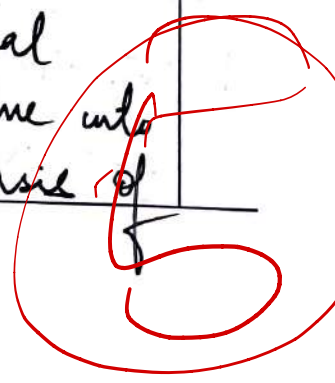
⑤ Niti Aayog stands for National Institute for Transforming India. It came into existence on January 1st, 2016. On the basis of

Remarks

→ Prompt response

→ Real time monitoring

→ Competitive Federalism - Ranks & Indices



→ Expert consultation

→ Targeted approach - eg. Aspirational Districts

an executive order of Union Cabinet headed ~~by PM~~ by PM Modi.

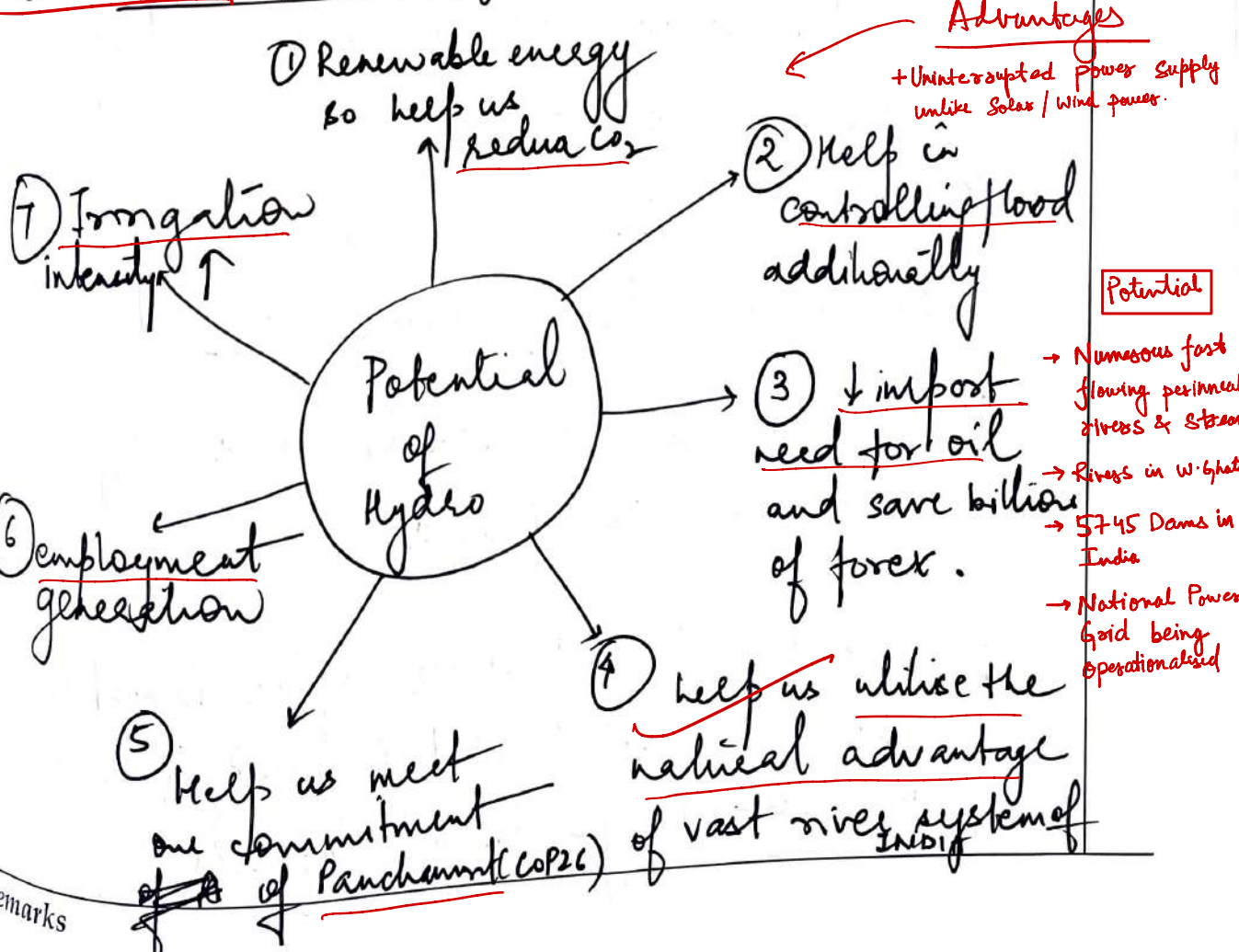
Reason for replacement of Planning Commission:

- ① Niti Ayog is built on bottom up approach while Planning Commission was on Top-down approach
hence Co-operative Federalism
- ② Planning Commission had usurped powers of Finance Commission while by establishing Niti Ayog govt has tried to restore high position of constitutional body like PC.
- ③ Planning Commission decision had to be agreed upon by National De National Development Council which was large and unwieldy and by establishing Niti Ayog govt has brought efficiency in decision making.
- ④ Niti Ayog reflected post 1991 reality while PC reflected bygone socialist era of pre 1991

Answer the following questions:

- (a) Despite having the huge potential for hydro power, India is still dependent on nonrenewable power sources, such as coal. Explain the major reasons for this. Do you think that hydro power should be developed more aggressively to achieve energy security? (250 Words) (20)
- (b) Examine the role of digital technology in transforming rural India with suitable examples. (200 Words) (15)
- (c) Elaborate on the factors that determine the settlement patterns? Also discuss the features of the various types of rural settlements in India. (200 Words) (15)

(Q) India has 3 largest no. of hydro dams in the world after China and USA but hydro-power constitute just 12% of energy mix which is poor.



Remarks

But still we are dependent on Non-renewable resources like coal because

I Coal is readily available and forms 5% of our energy mix.

II Issue involve in creating Hydro-power like:

① huge displacement of population
eg Narmada issue -

② Mismanagement leads to floods
Kerala (2018-19).

③ huge issue of physiography
like earthquake of Koyana (1960s)

④ Hurts biodiversity and huge
submergence of land

⑤ long time ^{gestation} period after investment
♀ high capital cost in view
of large large fiscal deficits

Remarks → Historical inertia - coal cannot be replaced overnight.

→ Lack of private investment

→ Inter-state disputes

All these ensure concentration
on coal (4th largest reserves of all).

However the recent coal crisis
suggests even coal dependency is
vulnerable to external threat → ↑ in price
of imported coal in wake of covid 19.

Should Hydro power be developed
more aggressively →

Yes

① Help us to meet
international
commitment of
COP 26

② Help us reach
net zero by 2070

③ Reduce dependence

NO

① Shift focus away
from other renewables
like Solar, Wind etc

② Biodiversity
adverse impact.

③ Again, the issue of

on imposing
coal

④ Rising
unemployment
may reduce
(CMIE - 7.8%)

displacement and
poor dam management
induced flood like
Kerala of 2018, 2019

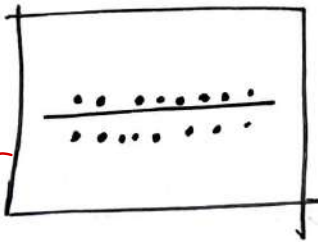
④ Huge fiscal deficit (6.8%)
in wake of reduced
earning and ↑ expenditure
→ ↓ resource for this

The optimal policy can be
development of "Small Hydes" with
funding under Priority Sector Lending
of RBI.

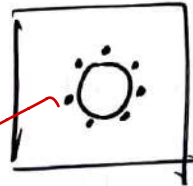
(C) Rural settlement pattern
refers to the shape of the rural
settlement. eg

- Arrangement of dwellings
- Land use pattern
- Public structures, etc.

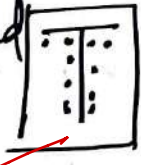
Linear



Nodal



T-shaped



Factors

- Physical Factors
- Economic Factors
- Historical Factors
- Socio-cultural Factors

① Physiography, climate, soil as areas of difficult physiography like Himalayas prevents development of linear pattern.

② Infra like road enables development of T shape, linear pattern

③ Role of Rivers eg.  => eg V-shaped





④ Place of importance
eg. Lake → Nodal settlement eg. Kodaikanal city around Kodaikanal lake

⑤ Temple eg. Srirangam Temple in Tiruchirappalli

Settlement types refers to the degree of nucleation or dispersion of

individual dwelling unit.

- ① Nucleated settlements - House located close to each other ② share same boundary wall eg. Northern India
- ③ congregated settlements
- ② Dispersed settlements → in difficult physiography climate, soil eg. Thar desert, (Jaisalmer), Leh etc
- ③ Semi-nucleated → a stage before population ↑ leads to nucleation. eg. Madwa Plateau.
- ④ Hamletted settlements in area where caste factor is prominent eg. Nagla

Nucleated	Dispersed	Semi-nucleated	Hamletted
			

(b) Digital technology refers to any technology that rides on the power of smartphones and internet to provide services to people eg use of 4G to give education

ICT + Digital Computation.

Remarks
yoo

Role of ^{digital} technology in rural India

- ① Development of educational Digi-Shaktam initiative
- ② Telemedicine can be provided to rural area eg. e-Sanjeevani
- ③ IEC campaigns can be used to make people aware about malaria, covid 19, etc.
- ④ use of digital tech for counselling during stress of covid eg. Mansodapan initiative of India.
- ⑤ provision of services through Common Service Centre
- ⑥ use of tech to digitalise and measure land records/parcels eg. Swamitwa schemes (use of tech enabled drones)
- ⑦ use of digital tech for agri-extension

Remarks

- Marketing of rural goods
- grievance redressal

- Price discovery of agricultural goods → e NAM
e RAKAM

through Krishi Vigyan Kendras

- ⑧ Make people aware about schemes of PM KISAN etc.
- ⑨ Help in financial inclusion of UPI, DBT, JAR etc. However many challenges persists eg ..

- ① Digital ~~education~~ literacy is poor
- ② lack of content in local languages
- ③ lack of smartphone (only 33% of rural households)
- ④ High cost of 5G restrict its rollout in India
- ⑤ Data Privacy violation has emerged as a new issue.

To counter them govt is running programs like PM Digital Saksharta Abhiyan (PMGDISHA), Digital India Initiative, as part of National Digital Communication Policy.

Remarks

BHARATNET.

July 2020