GS SCORE

TEST - 04

GEOGRAPHY

Time Allowed: 3 hr. *Max. Marks: 250*

Instructions to Candidate

- There are **EIGHT** question divided in **Two Sections.**
- Candidate has to attempt **FIVE** questions in all
- Question No. 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.
- 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 Question-Cum-Answer booklet must be clearly struck off.

81

1. You have missed intro and conclusion in most of the questions in your answers by giving some examples.

Name KUNAL SHLOTE

Mobile No.

Date

Signature

1. *Invigilator's Signature*

2. *Invigilator's Signature*

Rohit Sir looks true

2. Bring stylistic variety in your answers by giving some examples.

REMARKS

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Roll No._____

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SECTION-A

Attempt all questions:

1. Answer the following questions in about 150 words each: (10 × 5 = 50)

(a) Write a short note on Archean and Dharwar rock system.

(b) Discuss the views regarding the formation of northern plains.

(c) Discuss the emerging problems in the cropping pattern of India.

(d) Write a short note on emerging sources of clean energy

(e) Write a short note on Middle Himalayas.

(b) Views Regarding the formation of Northern Plains

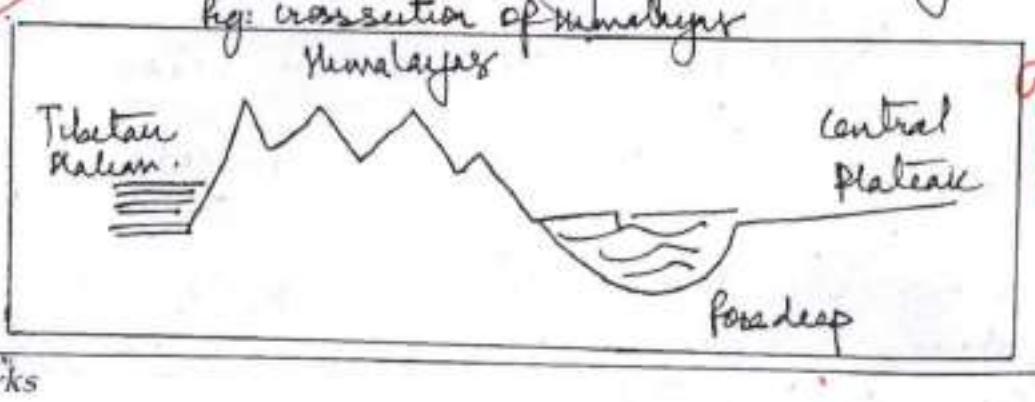
missed intoo??

① Attwuration of foredeep by steers

- During the uplifting of Shiwaliks a foredeep was formed.

- Thus foredeep got filled with alluvium due to silting of a Himalayan River

fig: crossection of Himalayas



good

Remarks

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② Ridge valley formation Theory of H-S. Burrad

- According to Burrad, a the trough of ridge valley between Himalayas and central plate plateau lead to formation of a gap.

- This gap filled by sediments and Northern plains were formed.

4½

③ Sea level Recession Theory of Blandford

- According to Blandford, a northern plains formed due receding of sea water to from foothills of Himalayas to present sea level.

- Saltwater lake in Rajasthan, Haryana were evidence of

Remarks

Conclusion??

(a) Archaean :

- Igneous rocks
- part of peninsular India, Aravallis, Chota Nagpur plateau, Mikir Hills.
- Found at base of Himalayas

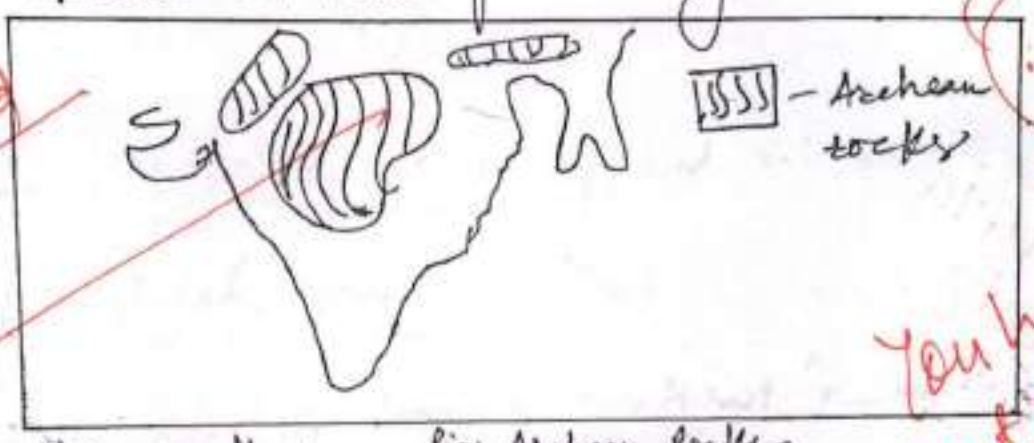


Fig: Archaean Rocks

Dharwadian rock :-

- First time discovered by DN wadia
- found in district of Dasuad.
- Sedimentary rocks
- chhotanagpur Pl, Mekir hills.
- precious minerals

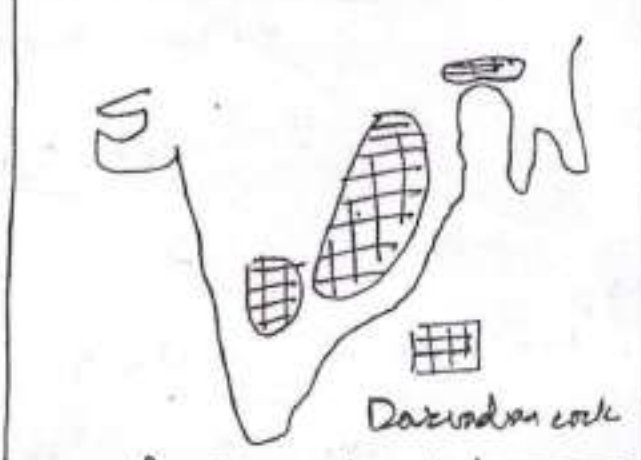


Fig: Dharwadian Rock

write some arguments

good

4

You have just listed the facts

Remarks

(c) Indian cropping pattern is largely determined by prof Tasbir Singh, Prof Dayan Kaur, prof P. Kumar based upon statistical technique by KL Weaver.

3

Problems :-

Draw map showing relevant content

- Major based on MSP offered rather than Agro-climatic zones.
- Monoculture is largely practised in semi-arid regions eg: Rice or wheat in Punjab
- Dry farming technique not spread throughout arid and semi arid regions.
- Unscientific use of livestock to complement farming.
- Extensive farming couldnot be practised due to fragmentation of land.

Remarks

(d) National Action Plan on climate change (NAPCC) of 2008 has provided a required boost to clean energy production

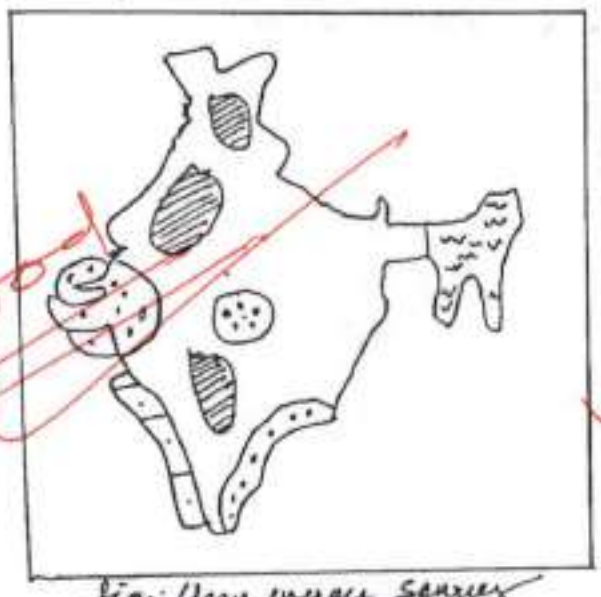


Fig: Clean energy sources

Target by 2022: 100 GW from Solar, 60 GW (wind)
10 GW (Biomass), 5 GW (Small hydro).

Issues:
- Expensive equipment
- No proper technical knowhow
- High capital cost
- Less density of power
- Improper power purchasing agreement
- Geographies not linked properly to energy

Remarks

(c) Middle Himalayas:-

- Known as Lesser Himalayas
- Seperated by Main Central Thrust from Greater Himalayas and By Himalayan Boundary fault from outer Himalayas.
- Average elevation 3500-5000 m.
- Pir Panjal in Kashmir, Dhauladhar in HP, Nag Tibba in Uttarakhand
- Hill stations like Shimla, Kullu, Manali

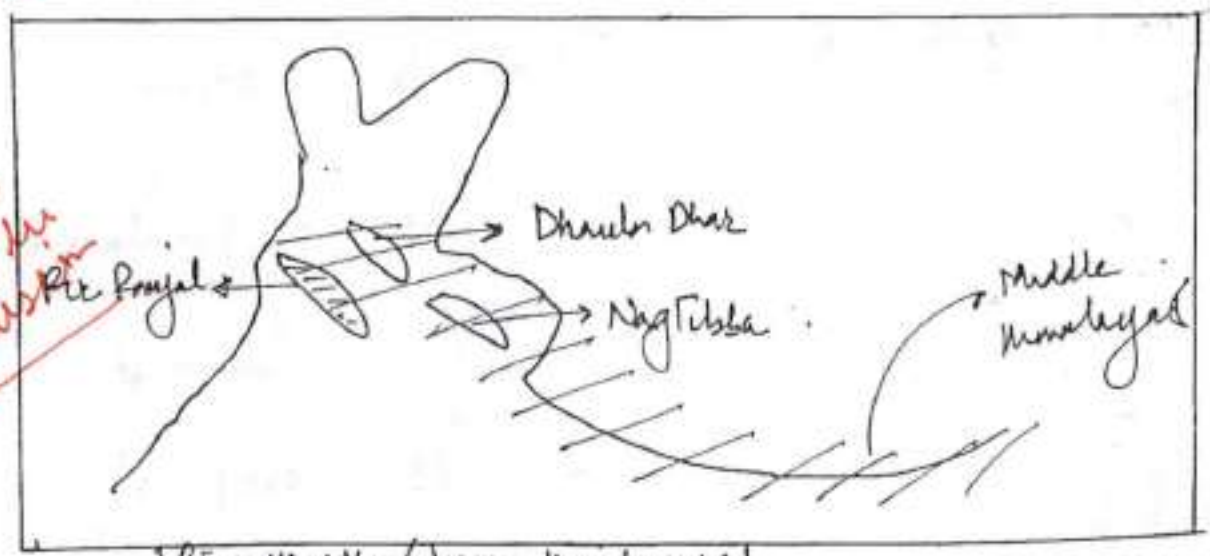


Fig: Middle / lesser Himalayas

Remarks

3. Answer the following questions:

(a) With the planets second largest population at 1.3 billion, and expectant growth to 1.7 billion by 2050, India finds itself unable to serve the vast majority of that populace with safe, clean water. In light of the above statement discuss the causes of the water crisis in India. (250 Words) (20)

(b) Compare the geographical, economic and cultural features of the Indian islands. (200 Words) (15)

(c) Discuss the global, regional and locational factors which control the phenomena of monsoon. (200 Words) (15)

(9)

The recent Composite water Management ~~Report~~ Index of NITI Aayog highlighted the impending water crisis in the country.

- 600 million people face scarcity of water by 2030.
- 22 cities will run out of water by 2020.
- Bangalore, Chennai, ~~Delhi~~ are among the first to experience water crisis.

Cause UN-World Population prospects data.

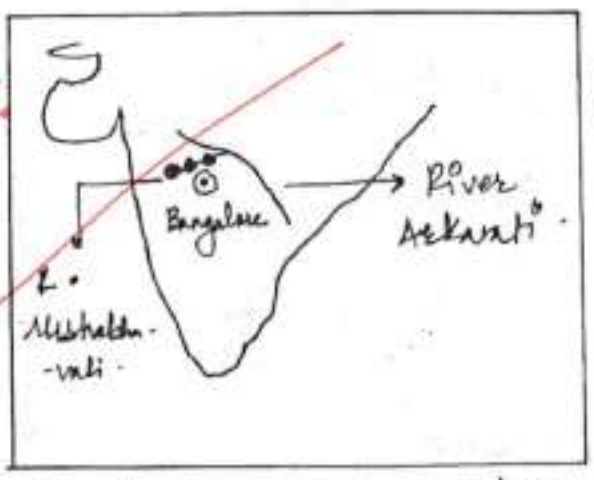
Concise your intro

Remarks

Causes of water crisis

- Bangalore :
  - located at a higher elevation than the river Arkavati and its tributary Vrishabhavati.
  - water has to be pumped upto 500 m above sea level.

Good



→ pumping operation along River Vrishabhavati

fig: Bangalore and surrounding river

Remarks

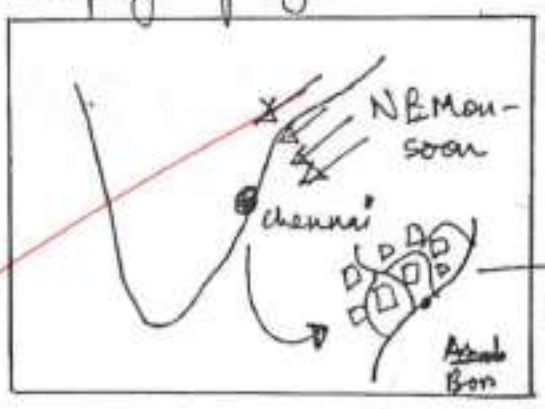
(II) North West India [Punjab, Haryana, RJ].

- Improper cropping pattern, planting water intensive crops like rice.
- Free electricity promotes rampant depletion of ground water.
- Saline soil demands more water for irrigation.

good analysis

(III) Tamil Nadu coast: Chennai.

- Erratic ~~s~~ north east monsoon.
- poor water harvesting structure
- low seepage of ground water



Remarks

(IV) North eastern Region: Hills Meghalaya

- Receive over 10000 mm average annual rainfall
- ~~s~~ Rainfall from South West monsoon winds
- faces drought during late winter and early summer due to improper water management and rain water harvesting

(V) Leeward side of western Ghat

- Ranchadava region consist of Vidharba, Marathwada, central Karnataka, western Tamil Nadu and Telegana
- orographic rainfall cannot receive and rampant use of ground water.

You have attempted the question with very good analysis

Conclusion.

Remarks

Intro is missing ??

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(b) Lakshadweep Island group.

Geographic features:

- Located in Arabian sea West coast of India.
- total group of island
- Lagoon formed on eastern side (Fringing / Barrier)

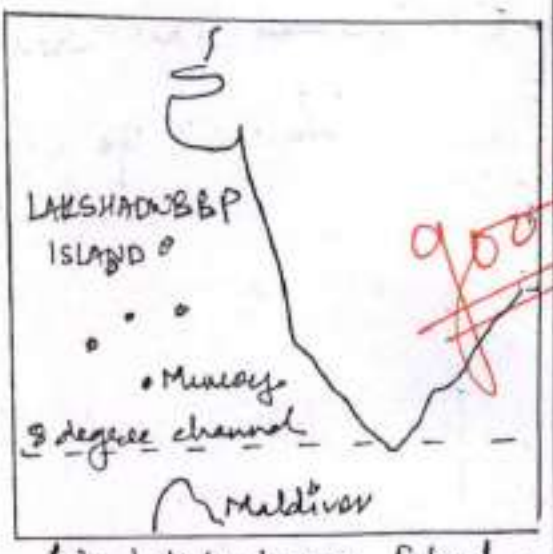

fig: Lakshadweep Island.

good

Economic

- Dependent majorly on fishing, tourism
- Island Development scheme can further promote tourism
- structures built are not concrete due to frequent sea surge due to cyclone.

Remarks

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Cultural Factors

- Majority population is Muslims.
- presence of Tribal culture has been maintained despite influx of tourism

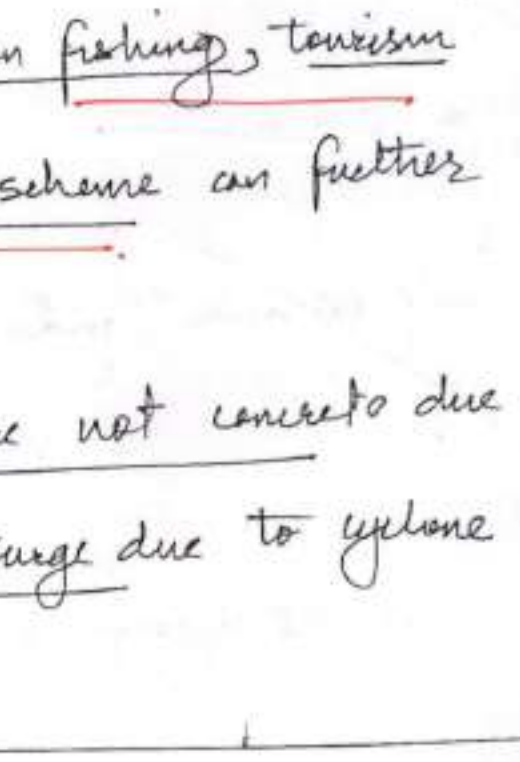
6½

Andaman and Nicobar Group of Islands

Geography

Good use of subheadings

- located in Bay of Bengal.
- lowest point of Nation Indira point.
- Duncan passage Andaman group of Island.
- 6 degree channel separating Indira Col from Indonesia



Economic

- Economic dependent on forest produce

Remarks

to like Bamboo, rubber, a palm oil, Eucalyptus.

- Recently, boost has been given to Eco tourism.

give specific examples.

Cultural

- Presence of PVGT (Particular Vulnerable tribal groups) i.e North Sentinese
- Negro and Mongoloid, both are present.
- Shompens of Nicobars are merged with mainstream culture.

Conclusion ??

Remarks

(c) Monsoon was the term coined by Arab travellers and geographers.

Monsoon refers to seasonal reversal of winds in summer season in upper Indian ocean.

Give specific names also.

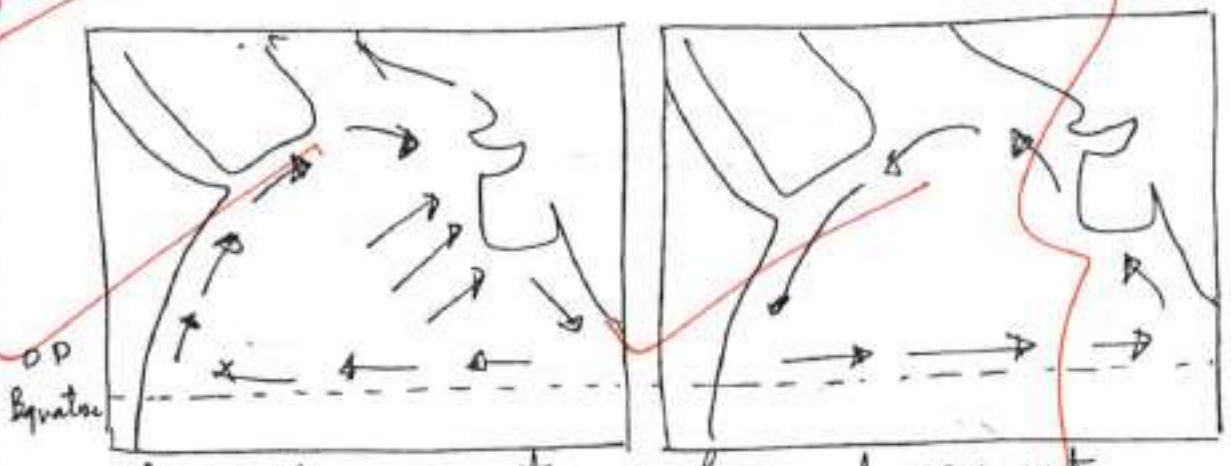


fig: wind movement (summer season).

fig: wind movement (winter season)

good presentation

Global factor

- Season reversal present predominantly in upper Indian ocean.
- Affect by El-Nino (weak monsoon) and La-Nina (strong monsoon) > Indian ocean

Remarks

depole, southern oscillation etc.

Regional factors controlling monsoon

- Due to heating of land in subcontinent ~~centre~~ Low pressure created
- winds blow from high pressure namely Mozambique towards low pressure over sub continent.
- This concept was explained by Halley but could not explain the break in monsoon and late arrival of monsoon.

Local factors

- Dynamic concept of monsoon was explained by Flohn 1951.

good arguments

Remarks

- Role of deflection (coriolis force), concept of ITCZ (highest temperature)

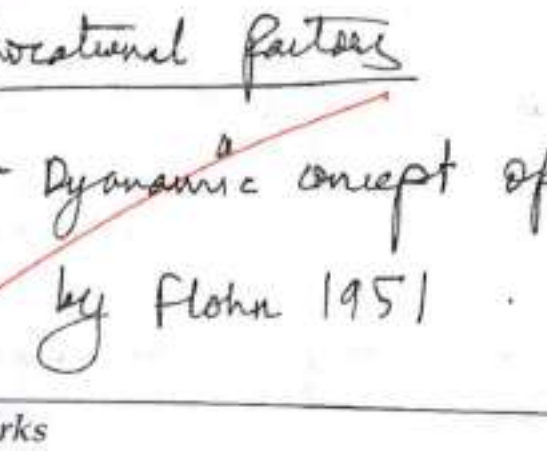


Fig: Dynamic concept by Flohn.

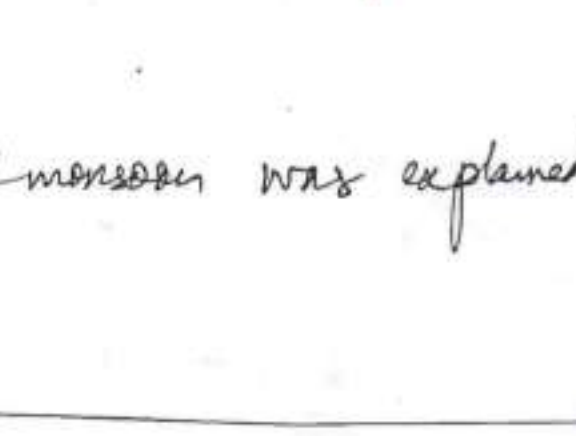


Fig: Dr Koteshwaram say

good

8

Dr. Koteshwaram explained the role of Tibetan plateau and sub tropical easterly jet.

He could explain the breaks in monsoon and late arrival of monsoon and effect on jet stream. MONEX expedition confirmed his hypothesis.

Remarks

SECTION-B

Attempt all questions:

5. Comment on the following into 150 words: (10 × 5 = 50)

(a) Discuss the mitigation strategies against the tropical cyclone in India.

(b) Koeppen's Classification of Climatic Regions of India

(c) Discuss the gender specific interventions in agriculture taken by India.

(d) Discuss the Jet Stream and Kootishwaram theory of Monsoon.

(e) Discuss the challenges in agriculture of the north-east region of India and suggest some measures.

(a) Tropical cyclones affect the eastern coast of India more severely than the western coast.

Mitigation strategy:

- Developing early warning detection systems using satellite technology, DOPLER RADAR etc.
- Developing cyclone resistance human and animal shelters as evident from Odisha.

Remarks

- setting up seperate cyclone mitigation fund amongst NDMF and SDMF.
- International cooperation to conduct humanitarian efforts.
- Setting up local force specially to deal with cyclones in vulnerable districts

(c) ~~Gender spec~~

Gender roles in agriculture are generally very skewed. Women are often treated as unpaid free labourers and employed in menial tasks.

Interventions by government are:-

Remarks

- Changing the property (land) rights from ownership by man to family ownership (3)

- Making agricultural machinery female friendly eg: Bubble solar dryer, Happy seeder etc

- encouraging women cooperatives and SHGs and extending credit facilities

generic points
Can add Gender Budgeting, PM-Kisan etc.

(d) Kotteswaram explained the concept of break in monsoon and late arrival of monsoon which couldnot be explained by Halley and Flohn.

Role of Jetstream

- Monsoon doesnot arrive in Indian

Remarks

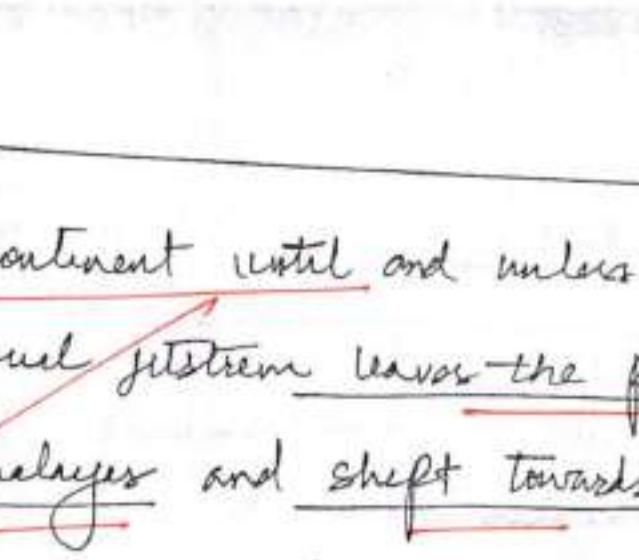
subcontinent until and unless the subtropical jetstream leaves the foothills of Himalayas and shift towards the North of Himalayas. This explains the late arrival.

Add more arguments

- The heating of Tibetan plateau determines the subtropical easterly jet stream.

This descends over the Madagascar and enter India as offshore winds.

not in conclusion



Remarks

Challenges of NEK agriculture	solution/measures
① Subsistence farming	→ Measures of land consolidation to boost yield.
② Low levels of mechanisation	→ creating cooperatives to reduce capital cost and extending credit facilities.
③ Shifting cultivation leading to forest clearing	→ provide organic fertilizer to boost soil health.
④ Low procurement of grains by FCI	→ providing facilities for private procurement and stocking.
⑤ Lack of market for tribal products like Bamboo, Silk	→ Increasing presence of TRIFED.

Follow the proper structure while answering questions. Just like this.

2½

Remarks

6. Answer the following questions:

(a) Give an account of energy resources in the country. Comment on the need for developing and harnessing alternative energy sources support with appropriate arguments. (250 Words) (20)

(b) What are minor forest produce? Discuss their significance to rural and tribal economy. (200 Words) (15)

(c) Discuss the importance of animal husbandry and also discuss socio-economic and environmental aspect of animal husbandry in India. (200 Words) (15)

Work on the structure

Account of Energy resources in country

→ Coal (45%)

→ Biomass and waste (20%)

→ Petroleum & other liquids (20%)

→ Natural gas (5%)

→ Hydroelectric (2%)

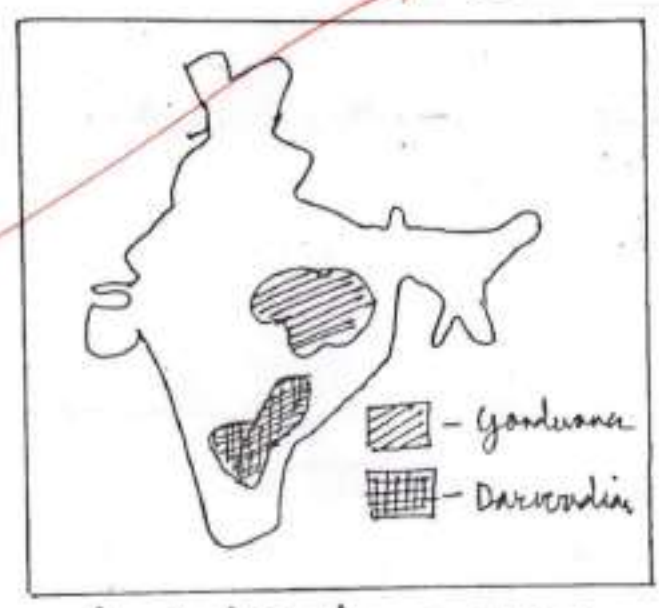
→ other renewables (2%)

As evident, majority of energy source is obtained from coal.

Remarks

potential coal reserves of 300 million tonnes.

Major coal producing areas are :-

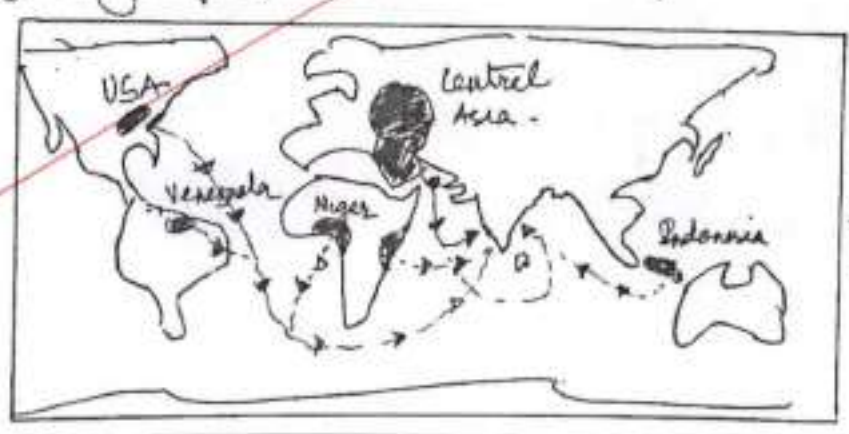


States :-
- Jharkhand.
- Odisha
- Bihar
- Karnataka
- Tamil Nadu..

good

fig: coal producing areas

Majority of petroleum is ~~exported~~ imported :-



- petroleum exporting areas of

Remarks

Need for developing and harnessing alternative energy :-

- India's commitment in 1992 Rio Earth summit, Kyoto protrol target, INDCs.
- India's geography provides huge potential for renewables.

Can talk about INDC & SDG targets in detail

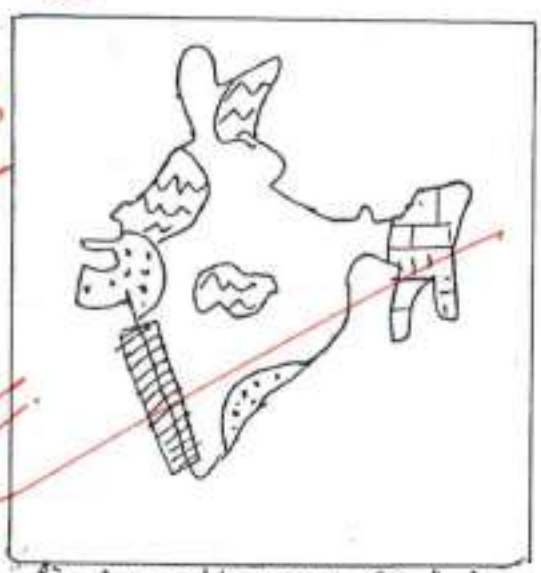


fig: Renewable energy (India)

- Tidal energy along western coast
- wind energy along Gujarat and Tamil Nadu coast
- potential solar farms in Rajasthan, Ladakh, Uttrakhand Region.
- potential of Broadband (production of Jatropha crops)

Remarks

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Measures to boost alternate energy

- providing land to set up tidal farms and wind farms (effect of agglomeration)
- subsidizing initial capital as it is a capital intensive industry.
- Providing proper power purchasing agreement to boost renewable power procurement by DISCOM.
- changing Building Codes to link FSA to conditional solar rooftop potential.

India has tremendous potential for renewable. providing proper policy framework is need of hour.

Remarks

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(b) Minor forest produce are commodities obtained directly obtained from forest.

It includes no or basic initial processing.

These include tendu leaves, gum, bamboo, mahua flowers etc

The area where minor forest produce is dominant are:-

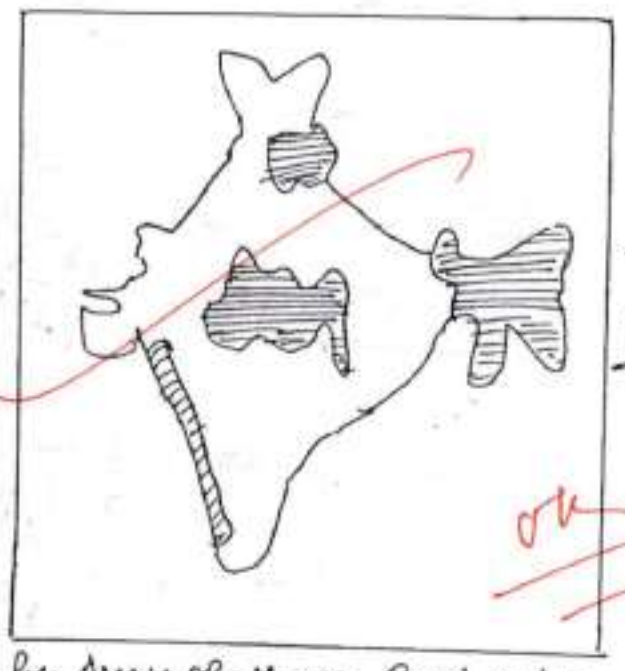

Fig: Areas of Minor Forest produce

Major - Areas of Minor forest produce.

states :- Western Ghat, Madhya pradesh, Chhattisgarh, North Eastern Region.

Remarks

Significance :-

→ provides source of livelihood to tribals living in forest area

eg: Goods of MP depends on Mahua flowers.

Nagas of North East depend on sale of Bamboo.

→ provide as a way for rural women empowerment

eg: women cooperative roll incense sticks from temple flowers in Kanpur.

→ provide opportunity to rural youth who have lost faith in agriculture and want to migrate to cities.

Remarks

(c)

As Animal husbandry is defined the activity of using feed animals to provide additional products like milk, eggs, meat, leathers etc.

According to Prof Jasbir Singh, animal husbandary accounts for more than 50% of agriculture income

Importance :-

- Supplement income constant income contrary to erratic monsoon.
- provides opportunity for women to contribute to family income.
- Manure waste from animals can be used as manure and fertilizer.

Remarks

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Some economic and environmental impact :-

- Disease like foot and mouth disease cause enormous economic loss to poor farmers
- Genetic stock of imported breeds has affected productivity
- Social issues regarding recent meat ban controversy
- Methane released from digestive system of animals has been source green house gas. This is causing environmental concerns.

Conclusion ??

5

Can draw a map of major animal husbandry areas

Remarks

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7. Answer the following questions:

(a) What are dry the regions of India? How do the physical and human factors intervene to create the unique conditions of poverty and deprivation in these areas?
(250 Words) (20)

(b) Agriculture in North East India provides livelihood support to 70% of the region's population still it produces only 1.5% of the country's food grain production. Discuss reasons and suggest measures.
(200 Words) (15)

(c) Critically analyze the overall change in cropping pattern in India post green revolution era.
(200 Words) (15)

(a)

Dry regions of India are region receiving less than 20 cm of annual rainfall and variability of rainfall more than 60%.

fair into good

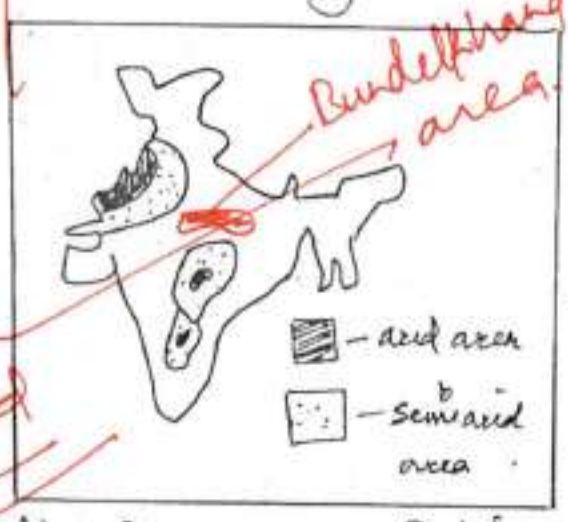


Fig: Dry areas of India

Regions consisting of dry areas :-

- Western Aravalli Region
- Central Indian region of Vidharbh, Marathwada
- Telangana western odisha, Western Andhra

Remarks

Pradesh.

- Dry regions of India were classified by Gabna Sadasyuk and prof Sen Gupta in paper "Regionalisation of India"

Physical factors leading to poverty and deprivation

- Due to lack of rainfall, sand and desert soil are formed. → give specific examples

- extreme weather [Hot days and cooler nights] limit the diversity of crops only crops like dates, figs are grown.

Remarks

- Lack of water leads to settlement being compact near a water source eg Lake, Pond as is seen in Rajasthan.

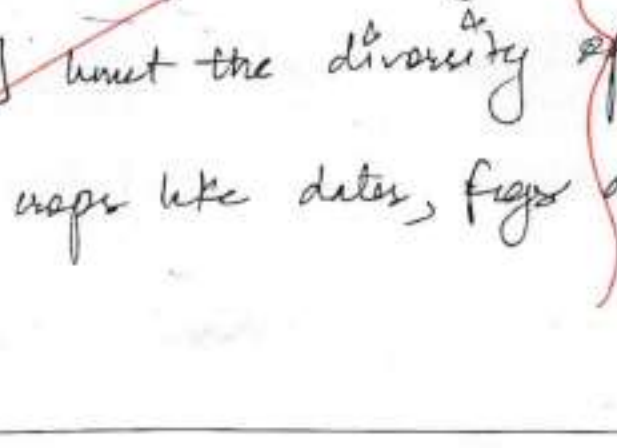


Fig: State of Rajasthan.

- Less groundwater further aggravates the problem. Dry farming is practised

Human factors leading to poverty and deprivation

- ~~people~~ According to mise Sample

Remarks

people living near dryland and passes are Robbers

eg: Criminals taking shelter in chambal Ravine.

- Affluency of people is low in extreme Weather; this further aggravates the problem of poverty.

Solutions like Indira Gandhi canal, Ken-Betwa river linkage provide opportunity for agriculture. Further livestock and dry land farming can be practised to alleviate poverty and deprivation.

7

good conclusion

Remarks

(b) Agriculture is one of the leading professions for people of North east: Reasons for such phenomenon:-

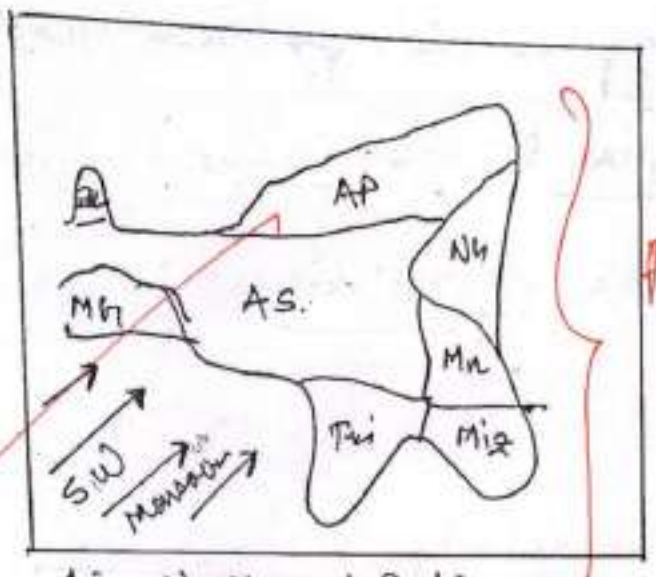
- Rainfed agriculture can be sustained due to Bay of bengal branch of South west Monsoon

- Traditional and Tribal practises of organic farming, shifting cultivation still prevalant.

- Presence of market (Local population) reduce dependency on government interventions like MSP, crop insurance etc

good arguments

Remarks



Add some ideas in the map

fig. North east India

6½

- Reason for low contribution to food grain production :-

- Majority of farming is subsistence farming due to presence of small patches of land amidst forest.

- Lack of mechanization, modern pesticide and fertilizer leads to low productivity.

- Procurement of crops through APMC

Remarks

Mandi and by FCI is poor.

- Transportation cost of carrying ground from NER to main land is enormous.

Measures :-

- Local farming practises should not be disturbed, they should be complemented with bamboo cultivation, silk production etc.

good suggestions

- TRIFED should work towards development of tribal market for tribal produce.

- Insurgency and inter tribe conflict should be stabilised to boost production.

Remarks