

NEXT IAS

MAIN TEST SERIES 2024 (FLT)

(To be filled by candidate)

TEST CODE: FLT005

Test No.: 05

Name of Candidate: Vidhi Mobile No. Roll No.: GSMACT24A1315 Start Time 10:45AM End Time 2:00PMDate of Examination: 24/08/2024 Medium: English ☒ Hindi ☐

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
6	10	
7	10	
8	10	
9	10	
10	10	
TOTAL MARKS - 100		

Q. No.	Maximum Marks	Marks Obtained
11	15	
12	15	
13	15	
14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	
TOTAL MARKS - 150		

GRAND TOTAL: / 250

EVAL CODE: EVAL DATE:

GENERAL INSTRUCTIONS

- Immediately on receipt of the QCA booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.
- Candidates must mention all relevant details like Name, Email, Roll No, Mobile, etc. in the space allocated.
- Candidate is expected to attempt all 20 questions within the given timeline.
- Answers must be written in the medium authorized at the time of admission.
- Candidates must write answers for the specific question under the respective question itself. Any answer written outside the space allotted may not be given credit.
- Please write neatly. Avoid illegible writing.
- Do not write/mark irrelevant matters in the QCAB.

सामान्य निर्देश

- QCA पुस्तिका प्राप्त होने पर कृपया तुरंत जांच लें कि इस QCA पुस्तिका में कोई पृष्ठ या सामग्री आदि गलत छपी हुई या फटी हुई या गायब तो नहीं है। यदि ऐसा है, तो इसे एक नई QCA पुस्तिका से बदल लें।
- अभ्यर्थियों को सभी प्रासंगिक विवरण जैसे नाम, ईमेल, रोल नंबर, मोबाइल नंबर आदि का आवंटित स्थान पर उल्लेख करना होगा।
- अभ्यर्थियों से अपेक्षा की जाती है कि वह आवंटित समय-सीमा के भीतर ही सभी 20 प्रश्नों के उत्तर-लेखन का प्रयास करें।
- प्रत्येक उत्तर, प्रवेश के समय चुनी गयी भाषा के माध्यम में ही लिखे जाने चाहिए।
- अभ्यर्थियों को विशिष्ट प्रश्न के उत्तर संबंधित प्रश्न के नीचे ही लिखने होंगे। आवंटित स्थान के बाहर लिखे गए किसी भी उत्तर को क्रेडिट नहीं दिया जाएगा।
- कृपया साफ-सुथरा लिखें। अस्पष्ट/असंगत लेखन से बचें।
- QCAB में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

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MACRO COMMENTS

The Purpose of evaluation@nextias.com is to provide constructive suggestions on 'How to improve Answer Writing and thereby score better marks.'

STRENGTHS OF THE CANDIDATE

AREAS OF IMPROVEMENT



IMPROVEMENT SUGGESTIONS

- Q.1 नगरीकरण के तत्वों पर प्रकाश डालते हुए चर्चा कीजिए कि किस प्रकार कृषि ने हड़प्पा सभ्यता की स्थायी सफलता और दीर्घायु में महत्वपूर्ण भूमिका निभाई थी। (10 अंक, 150 शब्द)

Highlighting the elements of urbanization discuss how agriculture played a pivotal role in the enduring success and longevity of the Harappan Civilization. (10 marks, 150 words)

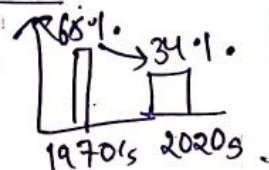
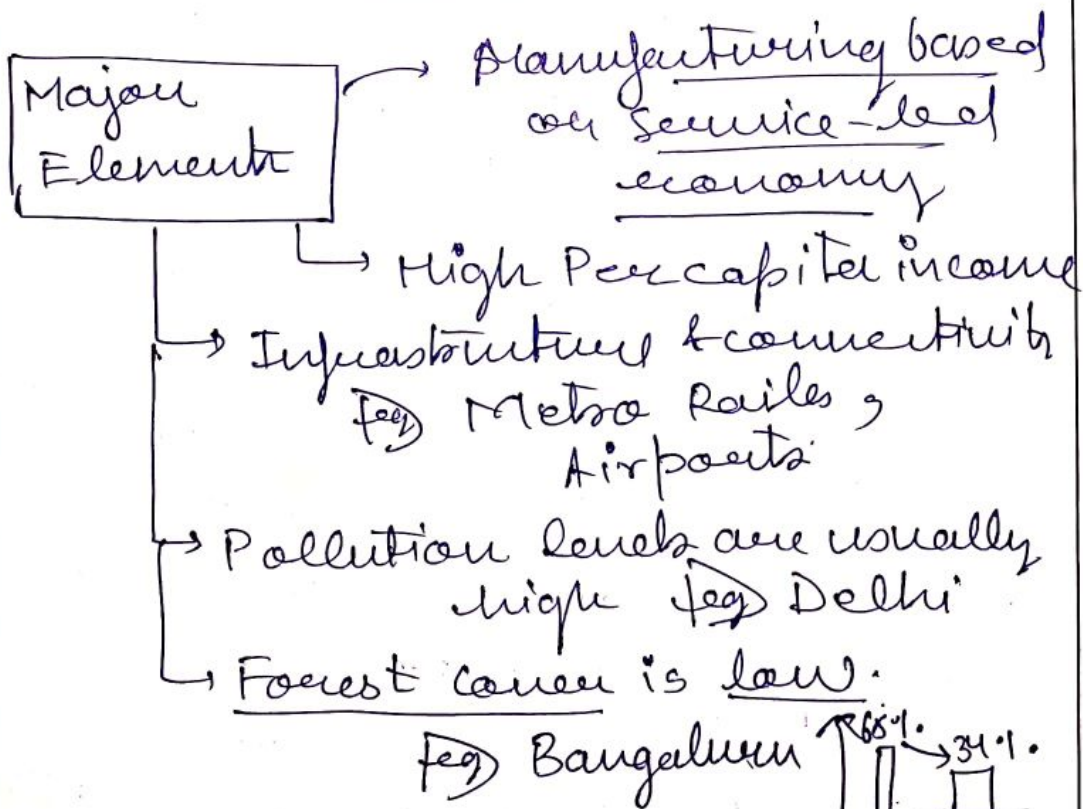
Urbanization, refers to the rapid shift in people from rural areas to urban areas.

According to Census 2011

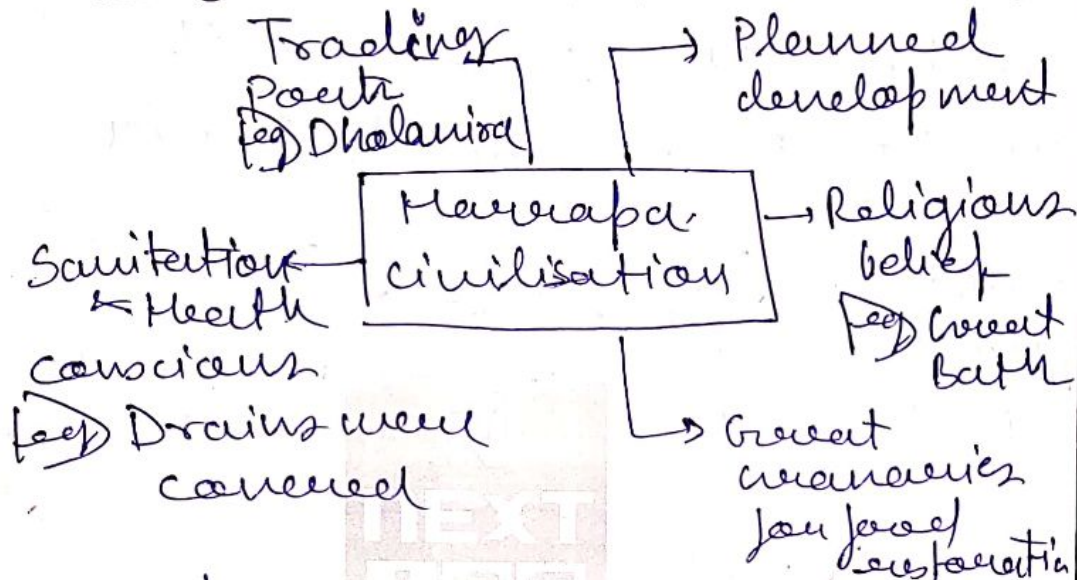
Urban area $\Rightarrow$ $> 400 \text{ sq/km}$ $\Rightarrow$ Population density

- 75% of men employed in non-agriculture work.

- 5000 persons living



Harappan civilisation was termed as the 1st urban civilisation, established in North-western region, around Indus river.



Harappa was.

Agriculture based economy, and due to → fluvial deposits of Indus, it had high productivity.

→ Surplus food grain was produced

↳ even stored e.g. Mohenjodaro

→ It led to development of other activities like Pottery, metallurgy, jewellery making etc.

→ It helped in sustaining huge population.

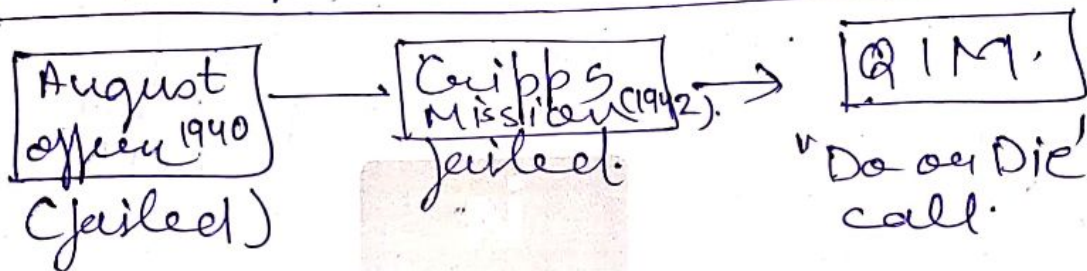
Harappa was the beginning of civilisation whose learning can still be employed in Smart Cities Mission.

Q.2

भारत छोड़ो आंदोलन ने राष्ट्र की आत्मा को जागृत किया और स्वतंत्रता के एकीकृत दृष्टिकोण में विभिन्न वर्गों को एक साथ लाया।
(10 अंक, 150 शब्द)

The Quit India Movement marked the awakening of the nation's soul and brought diverse sections together in a unified vision of Independence. Discuss
(10 marks, 150 words)

Quit India Movement, was
call launched by Mahatma
Gandhi in 1942, to end the
period of British rule in India



Marked the
awakening of
nation's soul

- Highlighted the extreme & brutal face of Britishness, lay of nat denuding power to India.
- This was the final call to end the colonial regime.
- Nearly
→ All sections were participated
- Exposed British inability to dominate, due to emergence of powers like USA & USSR.

All these factors pushed all
sections to participate.

→ women participated in
large numbers

eg) Aruna Asaf Ali's
No Steel Flag

→ Peasants participation was huge

→ Absence of anti-zamindars riots

→ No communal conflicts

→ Students were the backbone of
the movement.

→ Underground activities emerged

eg) Usha Mehta - secret
Radio.

→ Gandhi ji gave a call to princely
states to fight for the nation
and its people.

However, the major leaders were
imprisoned & movement left leader-
less, which led to emergence of
local leaders like.

QIM paved the way for future
transfer of power to realise the
vision of Independent
India.

Q.3 एशिया एवं अफ्रीका में उपनिवेशवाद से मुक्ति की प्रक्रिया को तीव्र करने में द्वितीय विश्व युद्ध के प्रभावों का विश्लेषण करें।
(10 अंक, 150 शब्द)

Analyze the impact of World War II in accelerating the process of decolonization in Asia and Africa.
(10 marks, 150 words)

World War II was a conflict between Allied Powers (UK, US, etc.) and Axis Powers (Germany, Japan, Austria). It began in (1939 till 1945).

Impact of WWII
in accelerating
decolonisation
Process

In India

- The decision for India to become part of WWII, was not consulted with Indian leaders, causing resignation from ministries.
- Launch of Quit India Movement gave momentum to the freedom struggle.
- War proved that Britishers are not the supreme authority.

2 other powers emerged like
USA & USSR.

→ was highlighted the ignorant
attitude of Britishers towards
India. ~~by~~ Transportation
of food grain $\Rightarrow$ famine
in 1943

→ Dying of Indian soldiers in W.
war $\Rightarrow$ rising discontent

→ Hence, with subsequent events
like RIN revolt, INA agitation,
Cabinet Mission, India was
declared independent.

In Africa - Britisher left Africa. due to pressure from
allied powers & raising awareness
about colonial & exploitative
nature of British rule.

Here post-WWII, the process of
decolonisation accelerated, however
it was the long-held struggle by
colonial subjects, spreading of
awareness about rights based on rule of
law that led to independence of
India & Africa

- Q.4 अवसादी चट्टानों के विभिन्न प्रकार और उनकी निर्माण प्रक्रियाओं पर चर्चा करें। अवसादी चट्टानों का आर्थिक महत्व क्या है? (10 अंक, 150 शब्द)

Discuss the various types of sedimentary rocks and their formation processes. What is the economic significance of sedimentary rocks? (10 marks, 150 words)

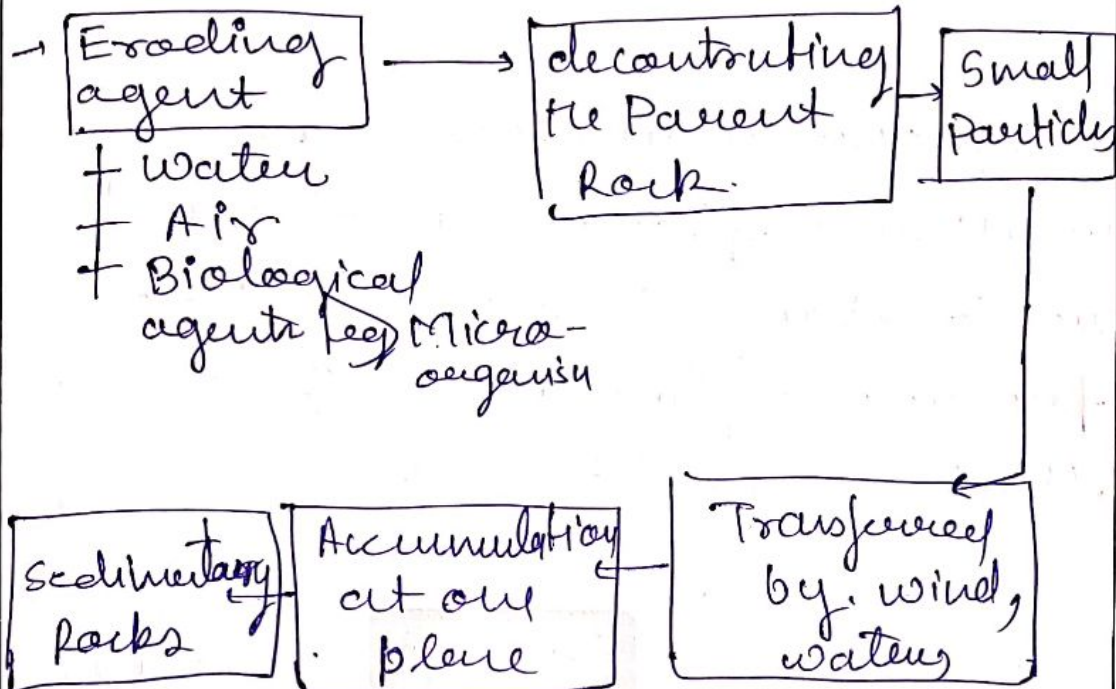
Sedimentary rocks are type of geogenic material formed by the small sediments when they are consolidated in a structure

Types of
sedimentary
rocks

Granite →

→ Limestone

Formation



The process continues, banding, layering due to multiple rounds of such process can be observed.

→ Minerals eg Aluminium, ^{Thorium}
Economic Significant → Can be used for construction material

↳ Soil formation eg Sandstone

↳ Agriculture purposes

→ Energy generation. eg Coal, Petroleum

→ They have fossil fuels for study of evolution

Have Rock helps in finding the interior nature of earth & have economic significance.

Q.5 प्रतिचक्रवाती परिसंचरण की विशेषताएं क्या हैं और वे भारतीय उपमहाद्वीप पर मौसम के गतिरूप को किस प्रकार प्रभावित करते हैं? (10 अंक, 150 शब्द)

What are the characteristics of anticyclonic circulations, and how do they influence weather patterns over the Indian subcontinent? (10 marks, 150 words)

Anticyclonic circulations are a weathered phenomenon observed due to changes in temperature, pressure system leading to altering of wind patterns.

Characteristics → High pressure system at centre
→ they are formed after "Frontogenesis"

→ They rotate in clockwise in Northern Hemisphere & anti-clockwise in Southern Hemisphere.

→ marked with clear skies, & calm wind.

→ Can be originated over land and sea.

→ Rainfall may occur.

→ Usual cover a very large area.

Influence over weather patterns
in Indian subcontinent

- They help in attracting westerly Disturbances, originating from Mediterranean sea.
- Cause rainfall & snow fall over northern India during winters.
- They are crucial for Rabi Crops.
- They ~~help~~ perpetuate the Urban Heat Islands & ~~can~~ result into rising temperature.
- It will cause pollutants to concentrate over a region, raising global warming in the region.

Role

Both cyclonic & anti-cyclonic circulations play a very vital role in weather pattern, however their nature and impact is changing due to climate warming.

Q.6

प्रवाल विरंजन क्या है और इसके मुख्य कारण क्या हैं? साथ ही, प्रवाल भित्ति के संरक्षण में समुद्री संरक्षित क्षेत्रों (एम पी ए) की भूमिका का मूल्यांकन कीजिए। (10 अंक, 150 शब्द)

What is coral bleaching, and what are its main causes? Also, evaluate the role of marine protected areas (MPAs) in the conservation of coral reefs. (10 marks, 150 words)

Coralals are marine organism joined by the symbiotic relationship between Coral polyp & zooxanthellae (algae)

Coral bleaching is an event where the algae (gives colour to corals) left the corals & it turns white or pale.

Causes of
Coral
~~bleaching~~ bleaching

① Rising global warming

eg) IPCC, 6 MAR - world temperature has already risen $\sim 1.1^\circ\text{C}$.

② Ocean acidification, impacting its shell making process through CaCO_3 ion

③ Rising sea temperature

eg) MOES, Indian Ocean temperature

- increased by $(0.6-0.7)^{\circ}\text{C}$ in past half century
- Oil Spills, due to transportation or accident (eg) Ennore
 - Dumping of waste into sea impairing clarity of water.
 - Excessive erosion $\Rightarrow$ increasing sedimentation.

MPA are the areas declared for protection of marine biodiversity. these are like marine National Park

- [Role] $\rightarrow$ Protection of Habitat (eg) Dugong
- No go areas, by declaring core zone
 - Ensuring sustainable economic practices, without harming biodiversity
 - Establishment of observatories for data collection & scientific management
 - Promoting Sustainable Tourism
 - Reducing dumping of waste into sea.
 - Captive breeding of marine animals.
- India's attempt in declaring MPA near Myse, Tamil Nadu etc will balance the environment & development

Q.7

क्षेत्रीय आर्थिक एकीकरण एवं विकास को बढ़ावा देने में आर्थिक गलियारों की भूमिका पर चर्चा करें। चेन्नई-बेंगलुरु औद्योगिक गलियारा (सी बी आई सी) जैसी परियोजनाएं भारत की व्यापक आर्थिक विकास रणनीतियों के साथ किस प्रकार संरेखित हैं?

(10 अंक, 150 शब्द)

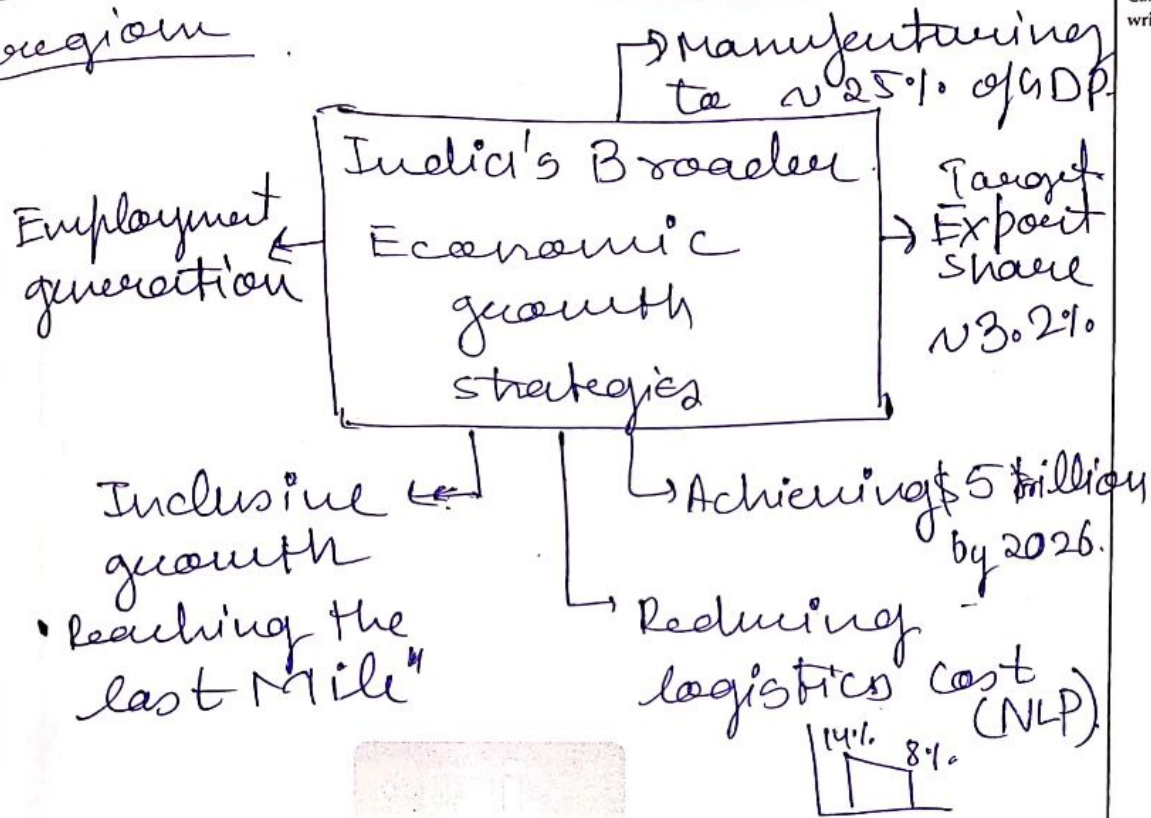
Discuss the role of economic corridors in fostering regional economic integration and development. How do projects like the Chennai-Bengaluru Industrial Corridor (CBIC) align with India's broader economic growth strategies?

(10 marks, 150 words)

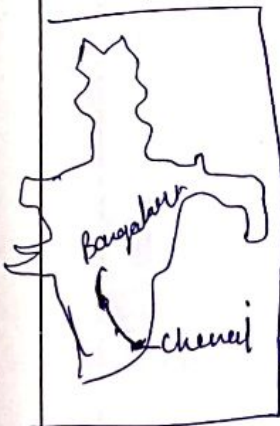
Economic corridors are specially designed places for dedicated promotion of economic activities through building of infrastructure, and provide multiple facilities.

Role of Economic corridors

- Infrastructure development
↳ attracting investment
eg) Delhi-Mumbai.
- Development of Hubs. eg) Bengaluru for particular sectors
- Integration of forward & backward linkages at one place.
- Proximity to market ensures demand
- Employment generation for regional workers.
- Inclusive growth by interconnectivity

region

Projects like **CBIC** can help in.



- ① Connectivity across region.
- ② Movement of skilled labour in Bangalore service sector.
- ③ Promote manufacturing & small scale industries.
- ④ State will also develop connecting infrastructure.
- ⑤ Employment generation in semi-skilled sectors like Transportation & Tourism.

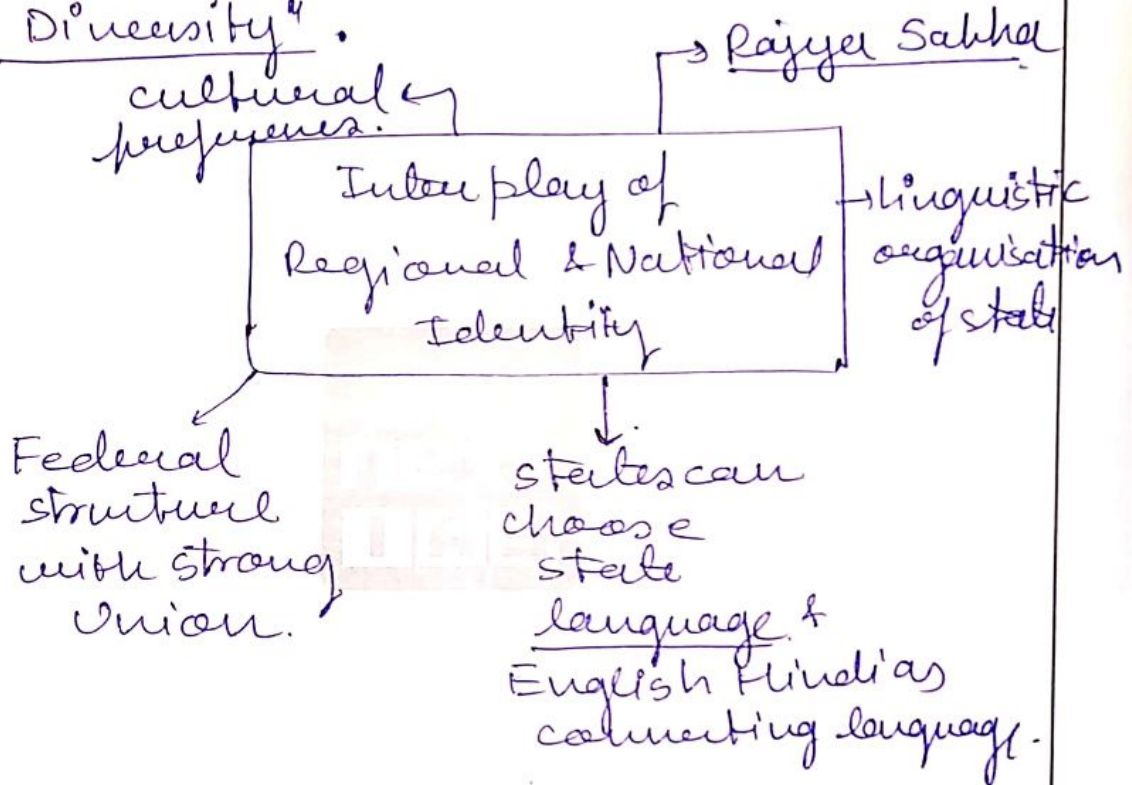
Industrial Corridors has the capacity to absorb labour and overall increasing Industry Share in GDP of the country.

Q.9

क्षेत्रीय और राष्ट्रीय पहचानों के मध्य का अंतर्संबंध किस प्रकार क्षेत्रवादी भावनाओं के उद्भव को बढ़ावा देता है? हम क्षेत्रीय पहचान को व्यापक राष्ट्रीय पहचान के साथ किस प्रकार संतुलित कर सकते हैं? (10 अंक, 150 शब्द)

How does the interplay between regional and national identities fuel the emergence of regionalistic sentiments? How can we balance regional identities with broader national identity? (10 marks, 150 words)

India is a diverse country, following the principle of "Unity in Diversity".



However, issues like-

- ① Difference in level of development
eg) Bihar and Tamil Nadu
(53% literacy) (100% literacy)
- ② North-South Divide, due to difference in language, culture.
- ③ "Xenophobia", for north-eastern people.

- Demography composition
 feg) difference in no. of SCs/STs/
 OBC & gen.
 reservation demand
 feg) Maratha reservation
- Preference of one's culture over
 others & further perpetuated by
politicisation of the issue.
- All these factors fuels regionalistic
sentiments.

Balance between
 regional identities &
 national identities

- Developing inclusive curriculum in
 education institutes.
 feg) Inclusion of Rampa Rebellion
 in school syllabus.
- Promoting positive regionalism
 feg) Geographical identification
 feg) Dargelingtel.
- Cultural exchange programs
 feg) Tamil - Kashi Sangam.
- Regionally balanced development
 ↳ Infrastructure feg) Bharat
 mala.
 Bharat
 Net Digitisation.

All these measures will help in achieving
 "FR Bharat Shreshtha Bharat"

Q.10 विभिन्न सांस्कृतिक प्रथाएँ और परंपराएँ "विविधता में एकता" के विचार में किस प्रकार योगदान देती हैं? अपनी चर्चा के समर्थन में उदाहरण दीजिए। (10 अंक, 150 शब्द)

How do various cultural practices and traditions contribute to the idea of "Unity in Diversity"? Provide examples to support your argument. (10 marks, 150 words)

India is a unique country with multi-cultural step developed in the background of diverse historical events, consequently made India a principle of existence.

"Unity in Diversity"

cultural practices & Tradition

Diversity

- More than 19,500 mother tongue (Census).
- Food & cuisine & clothing
 - Banarasi sari, Kancheepuram silk, Lucknow Kachhi's, Hyderabad Biryani, Mumbai Vada Pav.
- Folk. tradition → Garba in Gujarat, Bhangra in Punjab, Bihu of Assam.
- Tribal diversity ~ 8% of the population (Census 2011).

→ Religious diversity, ⇒ different wedding traditions, devotional activities

→ Architecture differences

↳ Hinduism → idol worship

Islam → No-idol worship

All these factors shows diversity.

UNITY → All communities follows
the value of compassion,
love brotherhood.

→ Constitutional Values like liberty,
equality & democracy
are accepted

→ Philosophical cohesion →

↳ "Saama Dharma Sambharam"

"Vasudhaiva Kutumbakam"
promote unity & harmony.

→ All cultures, respecting elders &
guests. is there "Athiti Devo Bhava"

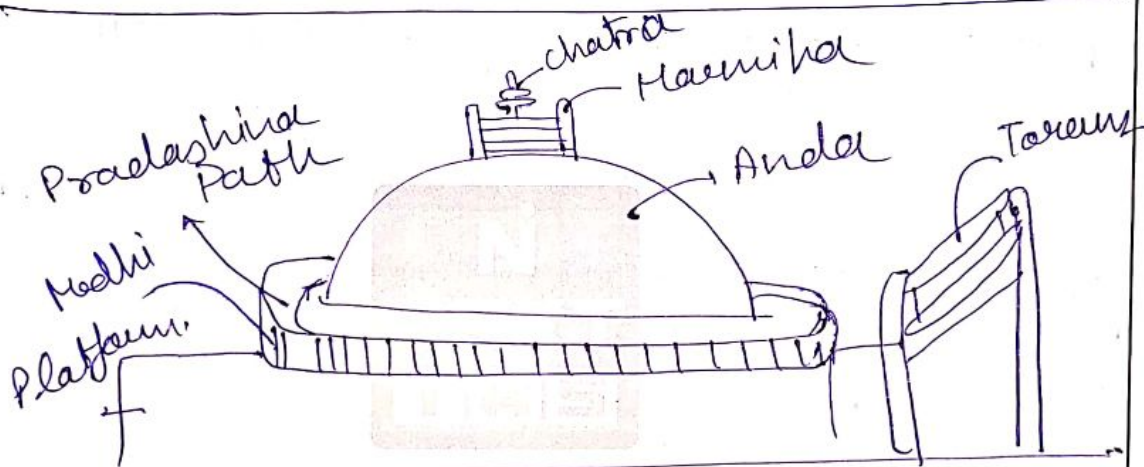
here, India is plate of food where
each tradition has its plate &
taste & collectively ensuring it.

"Thali" integrity by abiding
constitution ^{developing} mutual respect for
each other

Q.11 बौद्ध वास्तुकला और संस्कृति के संदर्भ में स्तूप कला का क्या महत्त्व है? इसके विभिन्न तत्वों तथा प्रतीकवाद और बौद्ध मान्यताओं को बढ़ावा देने में उनकी भूमिका की चर्चा कीजिए। (50 अंक, 250 शब्द)

What is the significance of Stupa art in the context of Buddhist architecture and culture? Discuss its various elements and symbolism and their role in conveying Buddhist beliefs. (15 marks, 250 words)

Stupa as an architecture emerged during Vedic period but gained prominence under the influence of Buddhism.



Significance

→ It contains the relics of the gautama Buddha.

eg) Sanchi Stupa

→ It symbolises the initial adherence to non-idol worship in Buddhism.

→ These are associated with monastic life-style.

→ Many rulers further contributed in its development.

eg) Ashoka in Sanchi Stupa.

→ They may act as a prayering
stop for pilgrimages.

→ They spread the ideas & philosophies
of Buddhism through
Jataka stories Mentioned
on walls

→ The different segments of the
stupa spread different
messages. -!

① The anda represent the
cosmos & universe.

② The Platform represent the
earth.

③ The Maumika represent the
transition from worldly
passions to higher purpose

④ 'Chattral' represents the stages of
spiritual upliftment.

The Toranas are used to mark the entrance & depicts the Jataka Tales (Buddhist fables), spreading values.

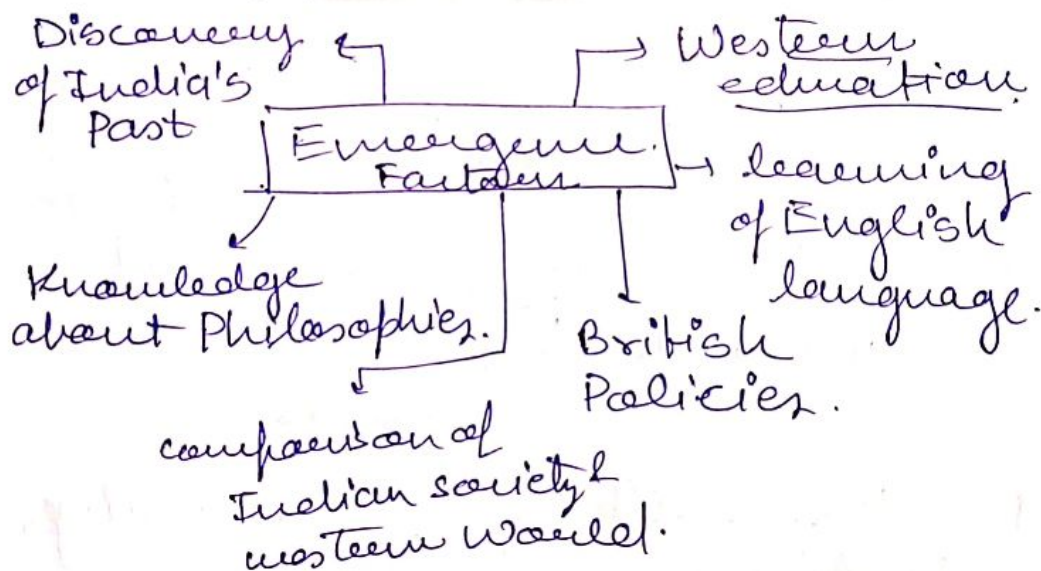
'Medhi' - railings are created for security while performing 'Poddahshina'.

However, apart from stupas, Buddhist paintings in Ajanta caves, Niharas & chaityas at Nasik, sculpture in Varanasi & Mathura also helps in learning about Buddhist beliefs.

Q.12 "19वीं सदी के भारत में स्थापित सामाजिक रीति-रिवाजों और औपनिवेशिक प्रभुत्व के विरुद्ध दोहरा संघर्ष सामाजिक-धार्मिक सुधार आंदोलनों की एक प्रमुख विशेषता थी।" 19वीं सदी के भारत के सामाजिक-धार्मिक सुधार आंदोलनों ने औपनिवेशिक सांस्कृतिक और वैचारिक आधिपत्य के प्रति किस प्रकार प्रतिक्रिया व्यक्त की है? (50 अंक, 250 शब्द)

"The dual struggle against entrenched social customs and colonial dominance was a prominent feature of socio-religious reform movements in 19th century India." How did the socio-religious reform movements of 19th century India respond to colonial cultural and ideological hegemony? (15 marks, 250 words)

The socio-religious reform movements emerged in 19th century to challenge the social ills present in the Indian society and helped in developing a social order based on modern values of equality. It is also called 'Age of Indian Renaissance'.



Colonial cultural & ideological hegemony →

- Equality based social order
- No hierarchy based social

Stratification

- Rule of law based legislations
- Justice was prominent.

Ideologically → "White's Man Burden"
→ India's are unutilised & backward.
→ Only Britishers can contribute to their growth.

with these situations in the background
Socio-religious reforms:-

- ① started challenging the discriminatory practices
eg "Sati" by Raja Ram Mohan Roy.
- ② Establishing of educational institutes. eg Vedanta college.
- ③ Fighting evils of child Marriage, Polygamy & Purdah system
eg Ashwini Kumar Dutt gave scientific reasons for child Marriage.

→ Discovery of India's Path,
helped reformers in ~~up~~
praising one's own culture
eg) Arya Samaj by Dayana-
nand Saraswati

→ Spiritual leaders promoted
rational thinking & service
towards humanity

eg) Swami Vivekananda.
"Ramer Krishna Mission"

→ They started Newspapers & released
books to spread modernism &
challenged traditional orthodoxy

eg) Gift of Monotheism.

→ Translation of religious texts to
explain the true meaning of
them & revisiting them with
rationality eg) Upanishads by
Rajendra Prasad

However, their reach was limited to
upper educated & elite class. They
failed to address inter-sectional inequality.
Holistically, they established a platform
for future reforms & comprehensive
development & inclusion of diverse sections post
independence.

Q.13 ब्रिटिश नीतियों ने भारत के विऔद्योगीकरण में किस प्रकार योगदान दिया तथा इस प्रक्रिया ने भारतीय कारीगरों के जीवन और व्यापक अर्थव्यवस्था को किस प्रकार प्रभावित किया है? (50 अंक, 250 शब्द)

How did the British policies contribute to the de-industrialization of India, and how did this process affect the lives of Indian artisans and the broader economy? (15 marks, 250 words)

Britishers came with the motive of profit generation & extracting and exploiting India resources to support Britain's Industrial revolution.

Before colonial rule India contributed ~ 24% of global trade & at the end ~ 21%, marked the phase of de-growth, caused by deindustrialisation.

Causes of deindustrialisation

→ with inclusion of Indian princely states into British empire, handicraft workers lost their patronage.

→ The policies of procurement through 'Grāmasthas' ⇒ decrease in income of workers.

→ Discriminatory trade policies.

→ One way free-trade, where no import duties on British goods & Indian exports paid high taxes in Britain.

→ Development of Railways

→ Impact of rail wagens & steel from Britain, is lead of developing in India

→ Railways led to flooding of Indian market with cheap machine-made goods.

→ The old guarantee & new guarantee system led to "Drain of Wealth"

→ Destruction of handicrafts ⇒ increased pressure of agriculture.

→ The Credit policies were against the Indian industrialists.

Impact on the lives of Indian Artisans

→ They lost their livelihood & employment opportunities

- shifted towards british factories,
worked under degraded
conditions
- Moved ^{back} towards village,
- loss of traditional handicrafts.
- Further entrenched poverty,
inequality & led to famines.

Impact on economy

- ↳ The share of agriculture ~53%
at independence. & employment
~73%.
 - No industries were developed
successfully except cotton &
silk.
 - Destabilise the self-sustaining
village system.
 - Poverty ~53% (in 1951-1961),
C.V.K. Alagh)
 - Agricultural backwardness with
very less mechanisation.
- Hence, british policies were
the main reason for the deindustrialisation
of the Indian economy.

Q.14 स्थानीय पवनों के निर्माण में कौन से कारक सहायक होते हैं? प्रासंगिक उदाहरण प्रस्तुत करते हुए, विभिन्न क्षेत्रों में मौसम और जलवायु पर उनके प्रभावों की चर्चा कीजिए। (50 अंक, 250 शब्द)

What are the factors that lead to the formation of local winds? Discuss their impact on the weather and climate in various regions, providing relevant examples. (15 marks, 250 words)

Local winds are air & wind circulation system that exists in a particular region, for a specific period of time.

There are different types of local winds caused by different factors -!

① "Loo" It is a hot air; flows during summer months in western region (Rajasthan, Gujarat, Haryana) generated due to 'advection'.

② Sea breeze & land breeze, due to differential heating of land. near coastal areas wind flows from sea towards land during day & land towards sea at night.

→ Valley-breeze - these are winds experienced in the valley surrounded by the mountains, generally they are very ~~collect~~ cold, generated by Adiabatic & Katabatic process.

Monsoon wind - This is the seasonal change in wind pattern due to shifting of ITCZ, cause winds to deflect towards Indian subcontinent.

→ Cold winds - in the Europe, flow down the slope of Alps, in France. ~~for~~ Mistral

- Hot winds that flows towards east in North America ~~to~~ Chinook

→ Harmattan wind flows in Africa also known as "doctors".
They carry dust.

Influence on weather & climate

- wind in North America 'Chinook' 'snow eaters', is suitable for agriculture, as it increases temperature.
- Loe in India's subcontinent, raise temperature reaching $(40-45)^{\circ}\text{C}$, reduces humidity & creates low pressure.
- Monsoon winds, brings adequate moisture and cause rainfall, & reduce temperature in Indian subcontinent.
- Cold winds like Mistral in France, ~~also~~ reduces temperature & cause 'snow'.
- 'Harmattan' in Africa provides relief to countries by reducing temperature.

Hence local winds plays a significant role in managing regional temperature & climate pattern.

- Q.15 बेंगलोर और हैदराबाद जैसे महानगरों में ताजे जल की कमी के प्रमुख कारण क्या हैं? शहरी जल प्रबंधन की आपूर्ति और मांग दोनों पहलुओं को संबोधित करने वाले व्यापक समाधान सुझाएँ। (50 अंक, 250 शब्द)
- What are the primary drivers of freshwater scarcity in megacities like Bangalore and Hyderabad? Suggest comprehensive solutions that address both supply and demand aspects of urban water management. (15 marks, 250 words)

According to Central Water Commission India's per capita water availability $\sim 1700 \text{ m}^3$ & threshold for water stress ~ 1400 , it raised concerns about India becoming water stressed region in coming years.

Instances of:-
Megacities like Bangalore & Hyderabad are facing freshwater scarcity is the beginning.

Causes

- Excessive Demand due to existing urbanisation and high population density
- Groundwater extraction by households
- Practices of 'water hoarding' and 'water mafia',

- No or poor rainwater harvesting management system.
- The land structure is made up of Schist & hard rocks, which reduces the penetration of water & more runoff.
- Reducing forest cover.
 eg) In Bangalore

68%	38%
1970s	2014
- Encroachment of water bodies
 eg) Balambur lake.
- They lie in the rain-shadow region of the western ghats.

Measures for
Urban Water Management

Demand Side → Efficient utilisation of existing resources

- Rainwater-harvesting
 eg) Tankas, ~~for~~ compulsory for commercial buildings as in Pune.

- Ban on Ground water extraction & use of pump sets through municipal efforts
 - Promoting use of 'Grey water' for toilet purpose
 - Supply Side
 - Recycling and filtering facilities for maintaining supply.
 - Restoration of freshwater bodies
 - Integrated water management
 - Use of Internet of things & Artificial intelligence to check against leakages in the supply network
 - Formalisation of perennial water supply chain
 - GIS Mapping
 - strict Implementation of water hoarding acts by police & municipal bodies
- water as a most essential component of life needs to be used cautiously & finding innovative methods for its efficient use to achieve SDG 6.

Q.16 नीली क्रांति क्या है? जलीयकृषि (एक्वाकल्चर) के विकास में महत्वपूर्ण बाधाएँ क्या हैं, तथा उन्हें दूर करने के लिए कौन सी व्यापक रणनीतियाँ लागू की जा सकती हैं? (50 अंक, 250 शब्द)

What is the Blue Revolution? What are the significant hurdles in aquaculture development, and what comprehensive strategies can be implemented to address them? (15 marks, 250 words)

Blue revolution is the increase in production of water based products like fish farming, seaweed cultivation etc.

It also includes raising productivity while ensuring sustainability of marine resources. Currently India is 2nd largest producer of fisheries in the world.

Hurdles in Aquaculture Development

- Informal economy.
- lack of adequate skills & knowledge for management.
- Infrastructure bottleneck; low availability of cold storage facilities, ship building industry is not well developed.

- climate change ⇒ rising
cyclonic activities.
- changing migration pattern
of fisheries
- Destabilizing food chain.
- Biomagnification & Bioaccumulation
on bound in fishes
eg) Mercury near Japan
coast.
- Eutrophication eg) Majuli island
- Stiff competition from South-Asian
countries, and China (largest
producer).
- Poor utilisation of inland-
river water bodies & integrated
farming.
- Credit facilities are not adequate.

strategies

- Promotion of food processing
industries eg) PM-Matsya
samprad
Yojana

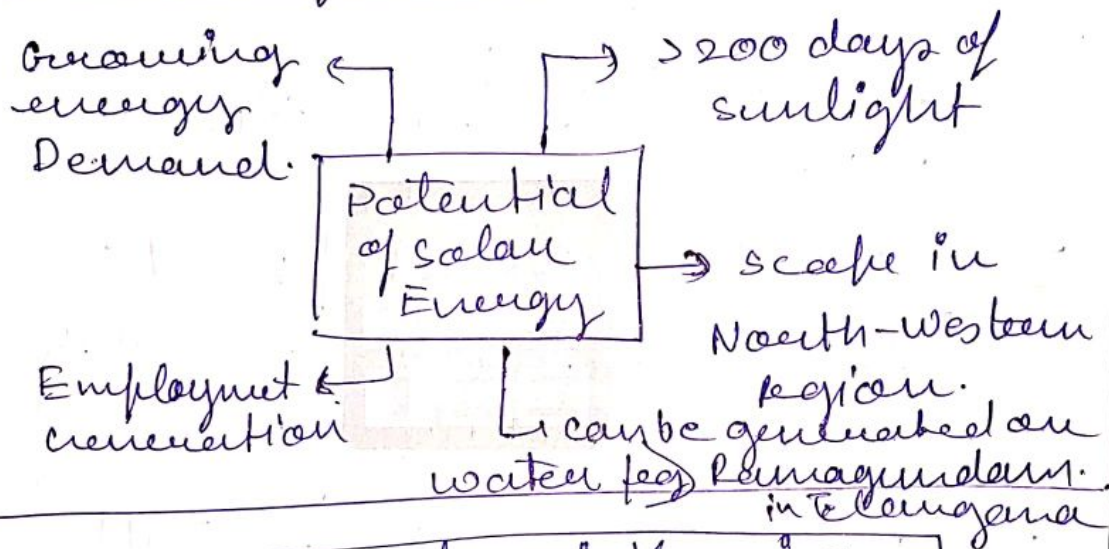
- Developing ships & Boat building under PM-Vishwakarma
- Credit supply through PM-Mudra, Priority Sector Lending, PM-Svanidhi
- Skill enhancement under Skill India Mission,
- Promoting Cage farming, Sea weed cultivation.
- Infrastructure Development
 - Sagarmala, cold-chain through PPP.
- GPS based tracking → Nabh-mitra of ISRO.

Aquaculture development has the potential to revive India's marine export, maintaining food & nutritional security and simultaneously raising fisherman's income. Hence, it can be termed as the 'engine of growth' for coastal economies.

- Q.17 भारत में बड़े पैमाने पर सौर फार्मों की स्थापना को प्रभावित करने वाले प्रमुख कारक क्या हैं, और उनके पर्यावरणीय और सामाजिक प्रभाव क्या हैं? भारत जैव विविधता और स्थानीय पारिस्थितिकी तंत्र की रक्षा की आवश्यकता के साथ सौर ऊर्जा के विस्तार को किस प्रकार संतुलित कर सकता है? (50 अंक, 250 शब्द)

What are the key factors influencing the establishment of large-scale solar farms in India, and what are their environmental and social impacts? How can India balance the expansion of solar energy with the need to protect biodiversity and local ecosystems? (15 marks, 250 words)

India is 5th largest solar Energy producer in the world by generating ~78 GW of energy.



Factors influencing establishment of large-scale solar farms

- ① Land Acquisition policies of the state
- ② Inter-Grid Connectivity
- ③ Availability of energy storing facilities like Batteries etc
- ④ Availability of inputs like.

solar panels, trained and skilled workforce

→ Government policies, like credit supply & interest subvention, ESG norms, PM-KUSUM

→ Availability of maintenance and repair facilities.

Impacts of large-scale solar power.

Social → create employment opportunities

→ Continuous Energy supply needed for rapid urbanisation

According to GEF, renewable energy can generate ~ 24 million jobs

→ Awareness about renewable energy and its benefit.

Environment → + Reducing Green House

gas emission (currently India 3rd largest emitter)

② Help in reducing global warming by reducing dependence of fossil fuels.

monument, it can impact biodiversity
 eg Great Indian
 Bustard in Rajasthan

→ It can generate solar panel
 waste $\Rightarrow$ increase in land
 fills

India can balance solar energy &
 biodiversity by:-

① Decentralised production

eg PM-Surya shakti Bijli
 Yojana $\rightarrow$ PM-KUSUM

② Focus on battery storage facilities

③ laying grid lines under
 the land [SC in GIB case]

④ waste management practices

eg Recycling, extraction of
 polluting minerals

⑤ Focus on technology improvement
 eg Quantum-Dot based
 solar panels

Solar energy has a huge potential in
 India & focus should be in ensuring
 balance between growth & biodiversity

- Q.18 सोशल मीडिया प्लेटफॉर्म किस तरह से सामाजिक असमानताओं और सत्ता (शक्ति) संरचनाओं को बनाये रखते हैं या चुनौती देते हैं? एक आलोचनात्मक विश्लेषण प्रस्तुत कीजिए।
In what ways do social media platforms perpetuate and challenge social inequalities and power structures? Provide a critical analysis. (50 अंक, 250 शब्द)
(15 marks, 250 words)

with >400 million social media users, India is one of largest countries with social media presence.

social media is a platform that provides connectivity across regions, exchange of views, e-comment etc.

Role of Social Media in Perpetuating social inequalities

- ① The spread of misinformation & disinformation.

eg) In Bangalore against North-East residents

- ② widens the gap between Have & Have not,

→ Poorer digital literacy among man & woman

eg) In Bihar only 24% of women owns smart-phones

- Privacy violations through "data breaches", data abuse without consent.
- Elderly may feel more isolated and anxious & are more prone to bank frauds.
- Small Scale industries may find difficult to sell their products.
- Education disparities, post-covid-19, poor household children due to lack of access to digital devices suffered from "learning poverty".
- Reinforce "gender-based norms" & crimes (eg) Cyber-stalking, child pornography etc.
- Give rise to "Tabloid Journalism",
→ violating victims privacy.
- However, social media is also a tool that can be used to challenge social inequalities —.

- ① The use of platform for feminist movements eg #MeToo.
- ② It has democratised the marketing of products. eg SHG's products
- ③ spread of values & govt. initiatives like
 - "Beti Bachao Beti Padhao"
 - "Swachh Bharat Mission"
- ④ community formation & supporting ~~exp~~ model issues
 - eg Environmental issues
 - eg #BlackLivesMatter
- ⑤ Provides a platform for entertainment to elderly & children.

Way Forward: → Promoting Digital ethics

- Cyber security framework. eg National Cyber Security Policy.
- Enforcement IT Rules 2021, for quicker redressal.
- Promoting Digital literacy. eg Microsoft Initiative

Social media can be the bane & boon for the society and regulation by state while innovation can help reap its benefits.

- Q.19 जनजातीय एवं मुख्यधारा समाज का तुलनात्मक विश्लेषण कीजिए। क्या जनजातीय समाज मुख्यधारा समाज से ज्यादा प्रगतिशील है? (50 अंक, 250 शब्द)
उदाहरण सहित तर्क दीजिए।
Give a comparative analysis of the tribal and mainstream societies. Is tribal society more progressive than mainstream society? Argue with examples. (15 marks, 250 words)

Tribal constitutes a 8% of total population, as per census 2011. They have special traits, practices, tradition and cultures that differentiates them from the mainstream societies.

Tribal	Mainstream
→ Excessively relied and attached to forest & its products for livelihood	→ Dependent upon agriculture, Industry, services for livelihood
→ Use primitive techniques for farming like Jhum cultivation	→ Farmers use modern equipment like <u>Tractors</u> , fertilisers etc.
→ Matrilineal & matrilineal lineages are observed.	→ Mostly Patriarchal society

Average
sex ratio $\sim \frac{990}{1000}$

→ Poor integration
of technology.

→ maintain their
cultural traditions
of marriage,
land management
etc

→ remain isolated
from world
events

eg Jenuwa Tribe

Aug $\sim \frac{990}{1000}$

→ heavily relied
on technology
like smartphones,
internet etc

→ Adoption of
legislations for
marriage & inheritance
purposes

→ Deeply connected
with the world

Tribal societies
are progressive

→ Promoting gender equality
eg Matriarchal Set-up

→ Respect for nature, promoting
sustainable use of resources
eg In sacred groves.

- Nature reengineering practices
 - eg. living-bridge in Meghalaya
- Use of natural therapeutic resources for treatment
 - eg. Ayurveda

However, they have regressive elements like,

- ① witchcraft & superstitious beliefs
- ② health indications eg. Sickle cell Anaemia in Koroi tribe.
- ③ lower literacy level.
- ④ Gender inequality eg. Nagaland restricted women as teachers in Panchayat.

Way Forward → Implementation of FRA, 2006, PESA, 1996.

- ↳ maintaining autonomy under 5th & 6th Schedule
- ↳ Socio-economic Development under PM-JANMAN, TRIFED etc.

Tribals are the living examples of 'Unity in Diversity' and they should be developed in their own ways.