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GENERAL STUDIES (TEST CODE : 2211)

Name of Candidate	KRITIKA GOYAL		
Medium Eng./Hindi		Registration Number	
Center		Date	28/06/22

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
5	10	
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9	10	
10	10	
11	15	
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14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI** इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. 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.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

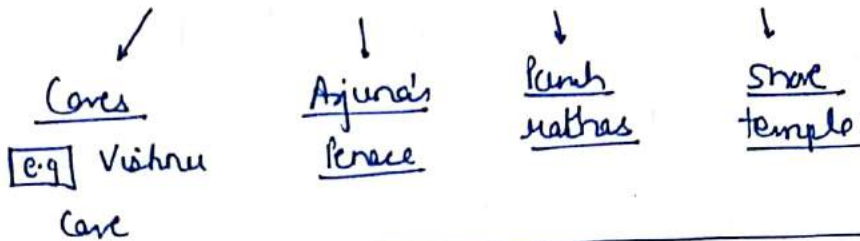
5.

6.

All the Best

1. The Cholas are inextricably linked with the zenith of Dravidian art and architecture. Comment. (150 words) 10
चोल द्रविड़ कला और स्थापत्य की पराकाष्ठा से अनन्य रूप से संबद्ध हैं। टिप्पणी कीजिए।

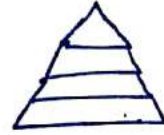
The Dravidian Art and Architecture started its
development in 7th century with Pallavas
and manvel created at Mahabalipuram
seen in



CHOLAS AND ZENITH OF DRAVIDIAN ART AND ARCHITECTURE

- (a) The Cholas period saw development of
huge gateways i.e. Gopurams
[e.g] Maenakshi Temple.
- (b) There was presence of a watchtall as well
[e.g] - Temples at Nampi
- (c) There were boundary walls across
temple and temple architecture reached
zenith.

(d) The temples were developed in pyramidal shaped and these were called as Vimanas.



(e) The Kalash in Nagara architecture was now called as Shikhara

(f) Natya figure was a prominent aspect of Chola architecture

[e.g] Found in Aihole

(g) The temples were guarded by mithuna and Yaksha figures always.

(h) The architecture further reached zenith during Rajaraja I & Rajendra Chola I

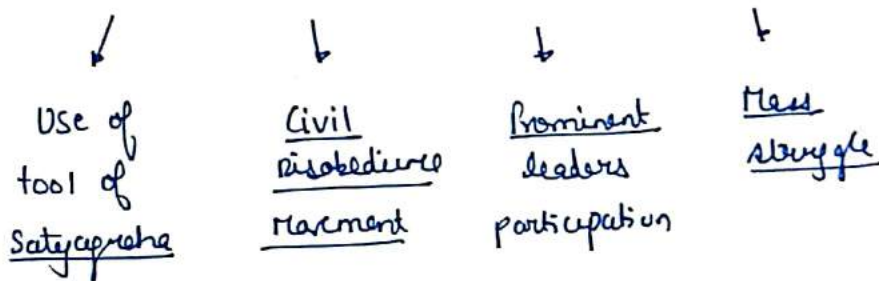
[e.g] - Rajarajeshwara temple

→ The Chola Art And Architecture inspired other South Indian schools such as Hoysala, Vijaynagara, Madurai school as well

2. Among the major legacies of the Indian freedom movement, civil liberties formed an important one. Analyse. (150 words) 10

भारतीय स्वतंत्रता आंदोलन की प्रमुख विरासतों में, नागरिक स्वतंत्रता ने एक महत्वपूर्ण भूमिका निभाई है। विश्लेषण कीजिए।

The Indian freedom movement was notable for a number of issues that it carried with itself notably :-



CIVIL LIBERTIES WAS ONE SUCH LEGACY

(A) Press freedom

↳ was vociferously demanded by moderates and later freedom fighters.

[eg] - Struggle against Vernacular Press Act led to its repeal.

(B) Removal of Untouchability

↳ with formation of Anti Untouchability League by Gandhiji and Dr BR Ambedkar's efforts

- (C) Equality of treatment
↳ eg - Agitation against reduction of Civil services Age
- (D) Freedom of religion was demanded.
↳ eg - Karachi resolution provided rights to minorities
- (E) Freedom of speech and expression was demanded.
- (F) Association by Trade Unions to present demand
↳ eg - All India Trade Union Congress, 1920
- (G) Welfare of citizens
↳ education (Munster, Woods Report)
↳ health insurance demanded.

The freedom struggle thus was notable to ensure civil liberties which is a basic constituent of human development and enshrined in Indian Constitution

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3. The Berlin Conference of 1884-85 in many ways set the ground for the scramble in Africa. Elucidate.
(150 words) 10
1884-85 के बर्लिन सम्मेलन ने विभिन्न प्रकार से अफ्रीका में विभाजन का आधार तैयार किया। स्पष्ट कीजिए।

4. What is a cloudburst and what are its effects? Why are they more frequent in the Himalayan region? (150 words) 10

बादल फटना क्या है और इसके क्या प्रभाव हैं? हिमालयी क्षेत्र में इनकी आवृत्ति अधिक क्यों है?

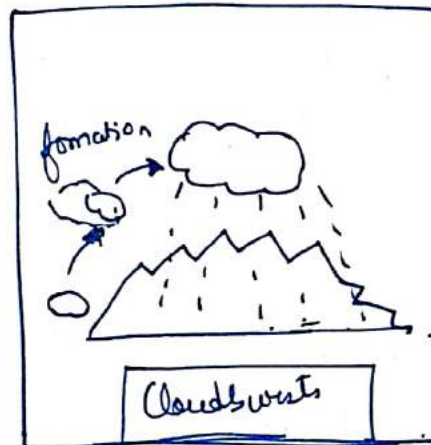
A cloudburst refers to the heavy downpour which is experienced once a cloud which is heavy in moisture bursts/dissipates.

→ REASON FOR FORMATION include heavy monsoon season, climate change induced heat and rising of hot air laden with moisture to cause rainfall.

→ EFFECTS

(A) HUMAN

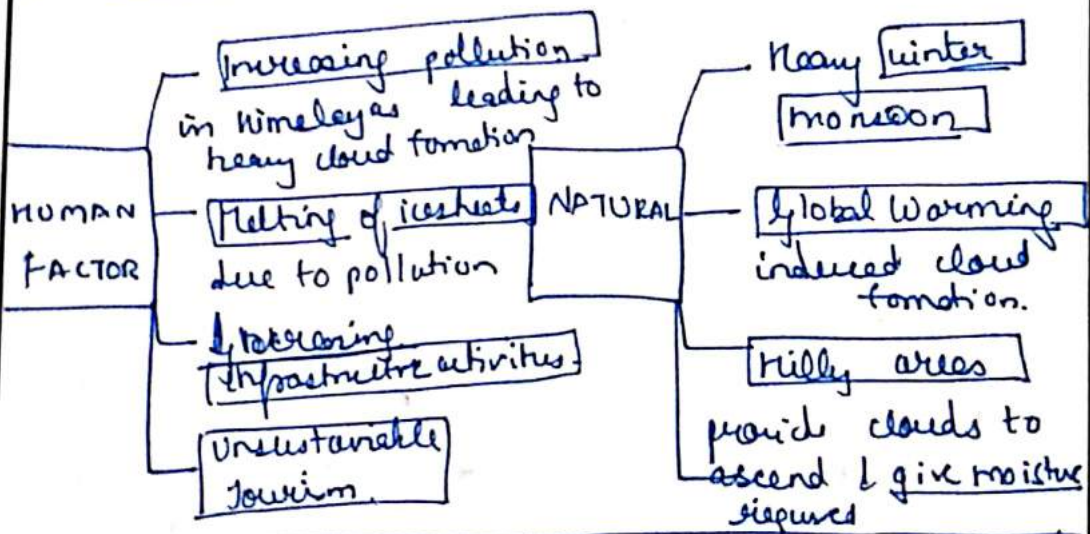
- leads to heavy death toll
[e.g.] - In Uttarakhand.
- Can induce water borne disease such as cholera
- Post trauma stress due to cloudbursts due to heavy displacements



(B) **ECONOMIC** → loss of infrastructure
→ loss of livelihoods due to massive

(C) **NATURAL** → loss of ecosystems
→ induce floods
→ heavy loss of forests as trees are swayed away.

→ **FREQUENCY IN HIMALYAS** has increased seen in Mandi, Kasauli, Dehradun.



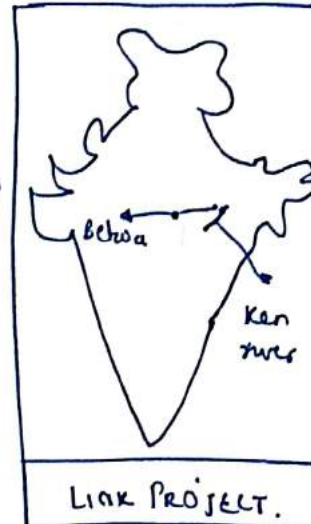
The need to prevent cloudbursts has increased now and sufficient investment in earlier warning system, identification of hotspots, resilient infrastructure and mitigation of pollution is needed.

5. Despite its potential, there are several challenges in the implementation of the Ken-Betwa Link Project. Discuss. (150 words) 10
- केन-बेतवा लिंक परियोजना की क्षमता के बावजूद, इसके कार्यान्वयन में अनेक चुनौतियां विद्यमान हैं। चर्चा कीजिए।

The Ken Betwa Link Project is country's first river Interlinking project which concerns the states of Uttar Pradesh and Madhya Pradesh.

POTENTIAL

- (a) Transfer surplus water of one river to another leading to improved agriculture.
- (b) Reduced overexploitation of groundwater.
[India uses 25% of global groundwater, NITI Aayog]
- (c) Water drinking needs of people are satisfied.
[600 million people under water stress, NITI Aayog]
- (d) Minimum flow of rivers is ensured and prevents drying up of a river.



(c) Floods in surplus state can be prevented

CHALLENGES

- (a) Submergence of areas such as Parra
Tiger Reserve and loss to Wildlife
- (b) Affect communities due to displacement
from concerned areas [e.g.] Bangas tribe
- (c) Lack of consensus among states of UP
and MP.
- (d) Affect the natural flow of water and
may lead to sedimentation, siltation.
- (e) Lack of coordination amongst [e.g.] Moetsa, Ministry
ministries of tribal areas,
Central Water Comm
ission

To deal with challenges, both states have
decided to meet half way to not cause
overexploitation of water produced by dam
and ensure rehabilitation of communities.

6. Identify the issues related to production and supply of coal in India. How can these issues be addressed?
 भारत में कोयले के उत्पादन और आपूर्ति से संबंधित मुद्दों की पहचान कीजिए। इन मुद्दों का समाधान किस प्रकार किया जा सकता है?
 (150 words) 10

India is fifth largest reserve holder of coal but is also the second largest importer of coal as per official estimates of Coal India limited.

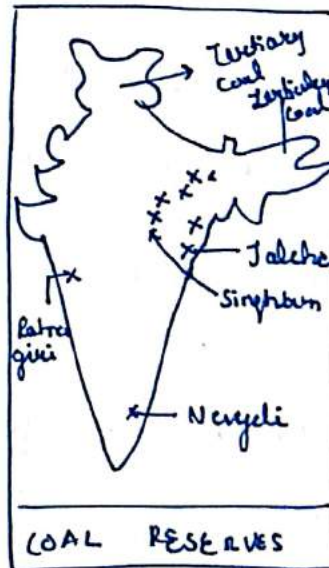
ISSUES

(A) PRODUCTION

(i) Production stagnant between FY 2018 to FY 2021

(ii) Monopoly of Coal India Ltd and limited participation of private sector

(iii) Huge payments pending of DISCOMS to coal producers which further discourage production



(B) SUPPLY

(i) lack of seamless and cost effective transportation of coal due to high logistic

Cost [14.7% GDP cost on Logistics]

- (ii) Competition faced from development of Renewable energy
- (iii) COVID 19 had further deteriorated supply due to economic disruptions

ADDRESSAL

- (a) Involving private sectors via further incentives seen in 100% FDI in Coal production
- (b) Clearing of discoms due to coal producers (UDAY Bonds)
- (c) Raising prices of electricity to consumers periodically.
- (d) Hybrid supply channel of Renewable energy & coal supply.

As electricity needs are going to increase in future as said by International Energy Agency, necessary to make reforms in coal sector.

7. Present the geographical distribution of agro-based industries in India and discuss the challenge faced by them. (150 words) 10
भारत में कृषि-आधारित उद्योगों के भौगोलिक वितरण को प्रस्तुत कीजिए और उनके समक्ष आने वाली चुनौतियों की विवेचना कीजिए।

Agro Based Industries refer to those industries which use agricultural produce as a raw material and process the same to produce a finished product

eg Cotton fibre $\xrightarrow{\text{Agro Industry}}$ Textile of cotton

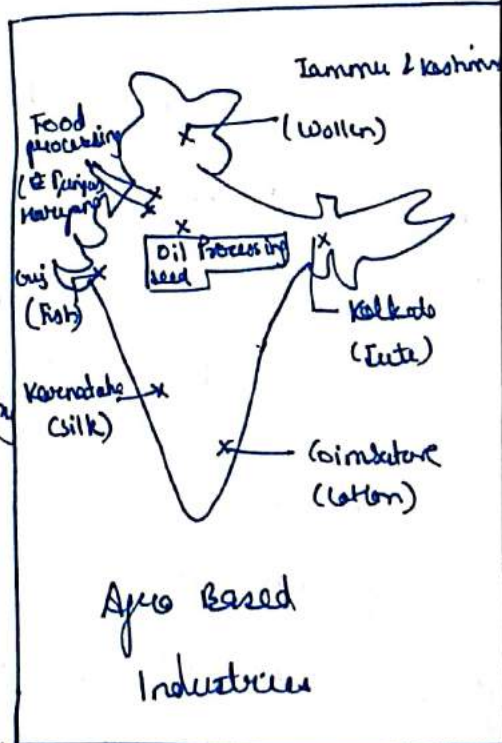
GEOGRAPHICAL DISTRIBUTION

(A) Textile industries

- o Coimbatore - cotton mills
- o Karnataka - silk industry
- o West Bengal - Jute "

(B) Food based

- o UP - Sugar Mills, Industries.
- o Haryana, Punjab. - Food processed products.



(C) Others

- o North India - Milk processing industries.
- o Western India, Coastal States - Fish processing

→ CHALLENGES

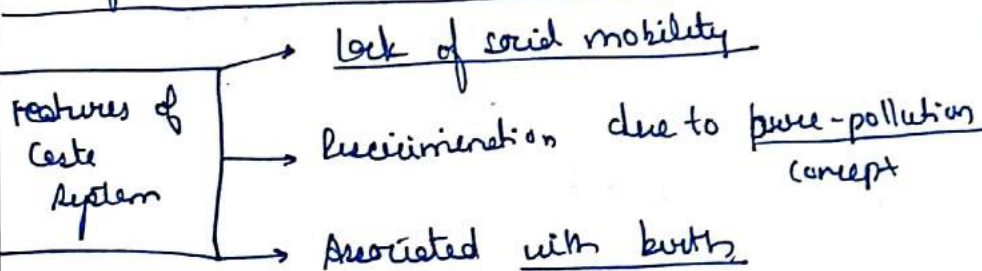
- ① lack of financial capabilities to scale business.
- ② Delayed payments, especially MSME industries.
- ③ Export potential not explored fully.
[India accounts for only 2% of total agricultural trade]
- ④ lack of strong backward & forward linkages
[e.g.] - infrastructure issue, marketing issue.
- ⑤ Lack of compliance towards technical and sanitary regulations [WTO]

→ The government aims to support agro processing industries with PM SAMPADA Yojana and Mega Food Parks. Further MITRA scheme for Textile Sector would boost these industries.

8. The caste system continues to be one of the key drivers of poverty and inequality in India. Discuss. (150 words) 10

जाति व्यवस्था भारत में निर्धनता और असमानता के प्रमुख चालकों में से एक बनी हुई है। विवेचना कीजिए।

Caste system refers to hierarchical, homogen-
ous group which has common nature,
common culture, common occupation. It's
a significant aspect seen in Hindu society



POVERTY

- (a) Caste based profession
[e.g] - Manual Scavengers usually from SC community.
- (b) Lack of access to education, housing and sanitation facilities
[e.g] - Slums in Urban areas have mostly SC communities living there.
- (c) Class Within Caste leads to divisions in caste [e.g] Math Palit, Adi Dalit

INEQUALITY

- (a) Caste based violence is also seen.
[e.g] - Dadri lynchings.
- (b) Caste based segregation of areas
[e.g] - outer skirts of an area occupied by people of lower caste
- (c) Casted Based Political mobilization reinforces caste and keeps Polit identity alive without possibility of annihilation
- (d) Casteism on access to social & cultural places [e.g] - Prohibition on access to temples

WAY FORWARD

Sensitization of society

[e.g] - Karnataka's Varaha Samarasya Yojana

Development & removal of poverty [e.g] Stand Up India scheme.

Caste Census
possibility needs to be explored.

9. Discuss the issues faced by domestic workers in India. Also suggest measures that can be taken to empower them. (150 words) 10
भारत में घरेलू कामगारों द्वारा सामना की जाने वाली समस्याओं की विवेचना कीजिए। साथ ही, उन्हें सशक्त बनाने हेतु किये जा सकने वाले उपायों का भी सुझाव दीजिए।

Domestic Workers refer to such share of population which is engaged in helping, carry out domestic responsibilities, such as washing clothes, cleaning utensils, cooking food etc.

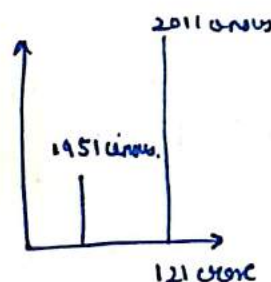
ISSUES	MEASURES
(i) <u>lack of data</u> on Domestic Workers.	o <u>Appropriate</u> data mechanisms such as <u>All India Survey on Domestic Workers</u> could help in same.
(ii) <u>Irregularity</u> in wage income <u>with no standards</u> set.	(ii) standards could be set regionally to <u>determine wages</u> and ensuring <u>living wage (A-43)</u>
(iii) No provision of	<u>Universal social security</u>

<u>pension, insurance.</u>	<u>mechanism is needed</u>
(iv) <u>Exploitation at workplace</u> is often seen especially of women	o <u>Grievance redressal cells in each state needs to be established alongwith helpline, numbers.</u>
(v) lack of <u>collectivization and no representation in policy making</u>	o With <u>help of civil society, capacity building of the workers to be done in order to enable them to present demands</u>
(vi) lack of <u>legislative framework</u> providing for their rights	o A separate law on <u>laws of labour code</u> needs to be developed.
India, as per <u>International Labour Organization</u> protection to <u>domestic workers</u> must ensure <u>old policies, laws</u> are in accordance with it to <u>achieve</u> goal of <u>A-38, A-39, A-42, A-43</u> of <u>Constitution</u>	
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10. Given the deeply gendered impact of population control measures, examine the need to rethink the current approach of population control measures in India. (150 words) 10

जनसंख्या नियंत्रण संबंधी उपायों के गहन लैंगिक प्रभाव को देखते हुए, भारत में जनसंख्या नियंत्रण उपायों के वर्तमान दृष्टिकोण पर पुनर्विचार करने की आवश्यकता का परीक्षण कीजिए।

India today is the second most populous country of the world and will soon overtake China as most populous country by 2027 as per UN estimates.



→ POPULATION CONTROL MEASURES needed :-

↓
to control
Total fertility
rate

↓
raise
awareness
on limiting
no. of children

↓
promote
voluntary
sterilization

→ GENDERED IMPACT of such measures :-

(a) 37% of total burden of sterilization on females [NFHS-5]

(b) Only 18% women have say in family planning [NFHS-4]

(c) 23-31% girls are married before 18 yrs of age as per Ministry of Women

→ NEED TO RETHINK CURRENT APPROACH

○ Current approach

Two child
Population strategy of
states (Assam)

○ Need to rethink

- Promotes sterilization
- " adaption of children
- Doesn't focus on women empowerment.
- Doesn't understand population dynamics [ES 2016-17]

(a) To ensure women empowerment & control over reproductive, sexual health (Cairo Consensus)

(b) To promote spacing between births
(Lotima strategy)

(c) Enhance social security net to reduce need to have more children.

(d) Genetic research

(e) To focus on poverty removal which would ensure ~~and~~ development of less children

As per Mission Parivar Vikas Prabhu Schem, there is a need to involve all stakeholders to control population.

11. Examine the impact of the Sramana tradition on the Vedic religion and its relation with the emergence of Jainism, Buddhism and Ajivika sects.

(250 words) 15

श्रमण परंपरा के वैदिक धर्म पर प्रभाव और जैन, बौद्ध तथा आजीवक संप्रदायों के उद्भव के साथ इसके संबंध का परीक्षण कीजिए।

The Sramana tradition refers to a tradition wherein the followers did not follow orthodoxical practices and marked a shift from Vedic religion. It saw its strengthening during emergence of Jainism, Buddhism and Ajivika sects.

IMPACT ON VEDIC RELIGION

The positive impact was seen as follows:-

(a) It reduced importance of hierarchical structure prevalent in society

(b) The divisions of Kshtriya, Brahmana, Vaishya, Shudra



gave way now to a classless society and casteless society

- (c) It denounced supreme authority of Vedas
- (d) Agriculture improved as earlier, bullocks were used for vedic sacrifices
- (e) Shift from belief in extreme rituals, practices which were costly.
- ↳ Improvement in position
 - ↳ Vaiśhyas emerged as trading class
 - ↳ śudras freedom from heavy taxes

→ NEGATIVE impact was seen however as the Brahmans became aware to the tradition, Vedas were denounced as well

→ JAINISM And Śramaṇa school

- (a) Questioned Vedas' authority and denounced Vedic supremacy.
- (b) It suggested path of Ahimsa, Asteya, Aparigraha, Satya and Brahmchariya
- (c) It called for egalitarian society.

Buddhism AND SHRAMANA

- a) Buddhism led to belief in equality of all beings and removal of distinctions
- b) Gautam Buddha suggested four following. & fold path for right conduct and behaviour

AJIVIKA SECT

- (a) Believed in Niyati school and was propagated by Makkali Goshthi
- (b) It aimed to end a materialistic society and believed in simple living and scientific thinking
- (c) It also believed in theory of atoms

Shramana School developed at a time when there was great inequality and led to showing people a new way of life without inequality.

12. Shed light on the use of symbols and symbolic language by Mahatma Gandhi for both, integrating masses into the National Movement and against social evils. (250 words) 15

महात्मा गांधी द्वारा राष्ट्रीय आंदोलन में जनता को लामबद्ध करने हेतु और सामाजिक बुराइयों के विरुद्ध, दोनों के लिए किए गए प्रतीकों और प्रतीकात्मक भाषा के उपयोग पर प्रकाश डालिए।

Mahatma Gandhi had revolutionized the Indian National movement for freedom struggle by also including within its preview masses as he believed masses had women's struggle and also campaign against social evils

SYMBOLS

(A) Integrate Masses

- The tool of Satyagraha was a symbol of including masses.

truth

Non
Violence

Not
bow before
injustice

No hatred for
foreign
rule.

- Non Violence and Civil Disobedience Movement became symbol to include

masses including students, peasants, women,
business men, labourers in the struggle.

(B) SOCIAL EVILS

- Use of Charkha to boycott British clothes
- Campaign against liquor, meat by preferring vegetarian diet.
- All India Untouchability League formation against evil of Untouchability.
- Conducting women meetings to improve their position.

→ SYMBOLIC LANGUAGE

(A) Integrate masses

- Gandhiji's Do or Die speech just before Quit India movement.
- [e.g.] ① Students to leave studies, if confident.
- ② Soldiers to not fire on countrymen

masses including students, peasants, women,
business men, labourers in the struggle.

(B) SOCIAL EVILS

- Use of Charkha to boycott British clothes
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SYMBOLIC LANGUAGE

(A) Integrate Masses

- Gandhiji's Do or Die speech just before Quit India movement.
- [Eg] ① Students to leave studies, if confident.
- ② Soldiers to not fire on countrymen

- Use of silent methods such as fasts in order to speak against British atrocities and integrate masses.
[e.g.] - Swing Quit India movement.

(B) SOCIAL EVILS

- Petitioning British for peasant and workers exploitation
[e.g.] Champaran, Kheda strikes
- Use of scientific texts, Upanishads to propagate that none of these texts allow for untouchability
[e.g.] labelled them as 'Navigan'. - Children of God

Jardhija's symbols and symbolic language use followed throughout the ethos and needs of welfare of all by Pandurangyan Philosophy and achieve goal of swaraj key participation of all.

13. Giving a brief overview of the three Carnatic Wars discuss the factors that led to the success of the British against the French in the struggle for control over India. (250 words) 15

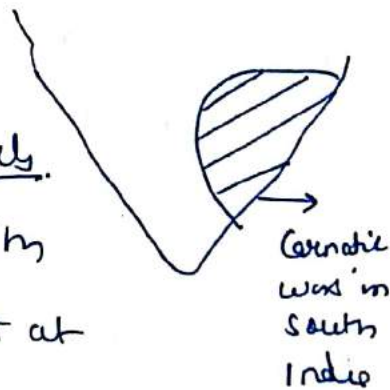
तीन कर्नाटक युद्धों का संक्षिप्त विवरण देते हुए, उन कारकों पर चर्चा कीजिए जिनके कारण भारत पर नियंत्रण के लिए संघर्ष में फ्रांसीसियों के विरुद्ध अंग्रेजों को सफलता प्राप्त हुई।

The Carnatic Wars were fought between the French and British in 18th Century. The success of British in the wars gave the British key to India as no formidable power later challenged British Authority in India.

OVERVIEW

(A) Ist Carnatic War (1740-48)

o As the British had triggered the war by taking over French vessels. The French responded with conquest of British fort at Madras.



o At the end, both parties decided to not pursue war and ended with

Conclusion of seven years war.

(B) Ist Carnatic War (1748 onwards)

- o Both the powers supported different Indian dynasties in the Country which led to the war.
- o The war ended with defeat of French as Ruplex was ruled and Lidichieu in his place was also not able to win.
war.

(C) III Carnatic War

- o It was the decisive war in which British won and ended with Battle of Wandiwash in 1760.



FACTORS FOR SUCCESS

(A) Private Company - East India

Company was a private company and more efficient than French.

- (B) Efficient Leaders such as Robert Clive, who were better than French Generals such as Dupleix.
- (C) A strong financial system of British gave them finance necessary for war.
[e.g] Imperial Bank.
- (D) Strong weapons, arms & ammunition as compared to French.
- (E) Commercial + Territorial Ambitions of British meant. British had more say in Indian Affairs.
- (F) Strong cultural ascendancy due to Renaissance, Industrial Revolution in England.

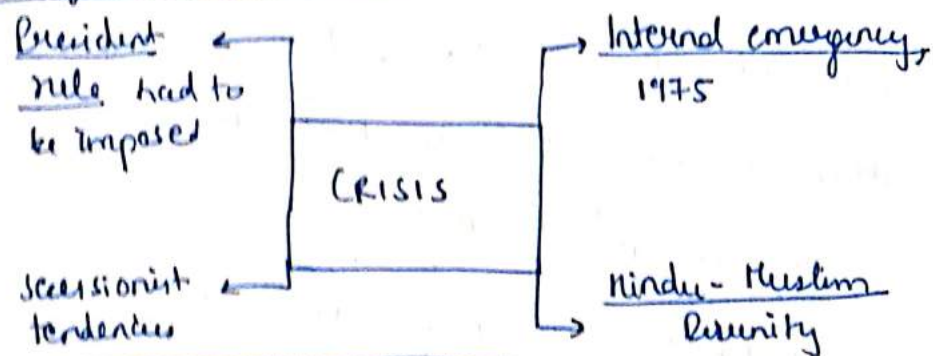
The Company Wars established British primacy in India and began the total control of Indian affairs by British.

14. Provide an account of the issues that led to a crisis in Punjab in the 1980s. Also, discuss the roadmap to peace that was eventually adopted.

(250 words) 15

1980 के दशक में पंजाब में संकट उत्पन्न करने वाले मुद्दों का विवरण प्रस्तुत कीजिए। साथ ही, शांति स्थापना की उम रूपरेखा पर चर्चा कीजिए जिसे अंततः अपनाया गया था।

The Punjab of 1980s had seen a turbulent time period which led to lot of killings, atrocities, communalism and Rise of regionalism affecting the unity and integrity of the country.



ISSUES THAT LED TO CRISIS

- (a) Rise of a communal leader i.e. Bhindrawale who had demanded a separate state of Khalistan
- (b) Inequalities in the state were witnessed

Post Green Revolution as tenants and sharecroppers were biggest losers. These people were mobilized by leaders to wage war against the state.

(c) Issue of settling Yamuna link and mistrust between state of Haryana - Punjab leading to Inter State Water dispute.

(d) Issue of Chandigarh as capital of both the states of Punjab & Haryana where former asked for Chandigarh to be given to it.

ROADMAP TO PEACE

(a) Operation Blue Star was launched to remove terrorists from the Golden Temple.

(b) Message of peace, communal harmony was propagated.

VISION IAS™

(c) Rajiv - Longowal Pact was signed on Sally-Yamuna link issue deciding to make a link allowing for transfer of water amongst the two States

(d) Deployment of military to control deteriorating law and order situation.

(e) Investment in employment, infrastructure to provide economic growth of State.

(f) Chandigarh was developed as a cosmopolitan city incorporating people from neighbouring and other States

The Punjab crisis posed a major challenge in post Indian Independence history and recently, issues which were unsettled earlier have again rose to prominence

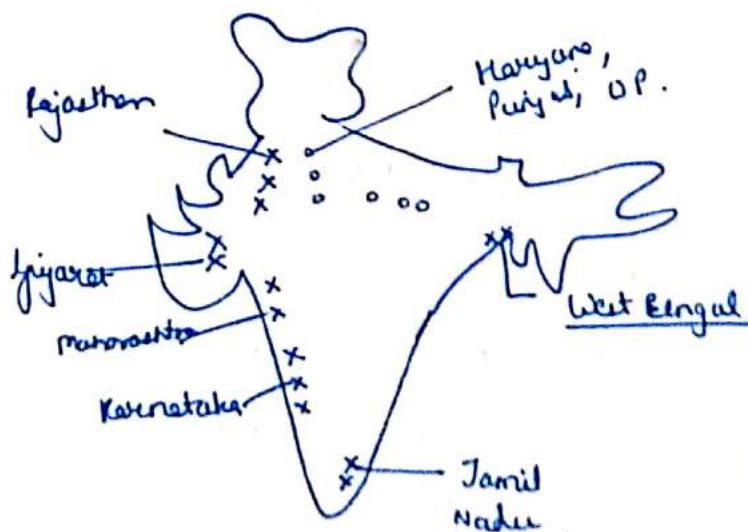
15. Give a brief account of the distribution of installed capacity of solar power in India. Highlighting the challenges in proper utilisation of solar energy, mention the steps taken by the government to promote it in India.

(250 words) 15

भारत में सौर ऊर्जा की संस्थापित क्षमता के वितरण का संक्षिप्त विवरण दीजिए। सौर ऊर्जा के उचित उपयोग में विद्यमान चुनौतियों को रेखांकित करते हुए, भारत में इसे बढ़ावा देने के लिए सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

India is blessed with ample amount of solar energy resources and is amongst top 5 countries in terms of solar power installation. India has completed target of installing more than 85 GW and shall soon complete 100 GW.

→ DISTRIBUTION



Don't let anything stop you from achieving your dreams

DISTRIBUTION ACCOUNT

- o Maximum of installed solar capacity today is in state of Rajasthan, Maharashtra, Karnataka, Tamil Nadu.
- o Installed capacity is now also being developed in states of UP, Kerala, Punjab as well.

CHALLENGES

- (a) lack of investment and technical capacity hindering in utilization of solar energy.
- b) Economic
 - heavy dependence on input for solar PV cells
 - high rates have also added to increasing cost.
- (c) lack of manufacturing capacity of solar PV modules.

(d) Lack of sufficient finance mechanism and issues of land acquisition to develop solar energy plants

→ STEPS BY GOVERNMENT

- (a) GST rates on solar PV modules decreased to 5%. [Budget 2021-22]
- (b) Subsidization of industries, relaxation of stamp duty for infrastructure development.
- (c) World Bank support from its initiative of financing mechanism
- (d) Promoting solar energy via Renewable Energy purchase obligations
- (e) Rationalizing energy rates via solar energy.
- (f) Micro solar energy projects [e.g. Kusum].

With the launch of International Solar Alliance, the aim of country is to achieve target of 450 GW and also by ensuring cross country solar energy utilization

16. Post-drift theories based on ocean floor mapping provided new dimensions to the study of distribution of oceans and continents. Elaborate.

(250 words) 15

महासागरीय-अधस्तल के मानचित्रण पर आधारित उत्तरवर्ती प्रवाह सिद्धांत ने महासागरों और महाद्वीपों के वितरण के अध्ययन को नए आयाम प्रदान किए हैं। सविस्तार वर्णन कीजिए।

The Continental Drift theory by Alfred Wegener had suggested that, earlier there was Pangea (Earth) and Panthalassa (Ocean) which was broken up due to force of tidal force and rotating of earth. witnessed in

↓	↓	↓	↓
<u>Matching of continent shape</u>	<u>Jillite presence across continents</u>	<u>presence of fossils</u> [eg] <u>lemurs</u>	<u>Flower deposits in continents</u>

→ The same was rejected as forces of tides and earth rotating force could not have led to ocean, continent.

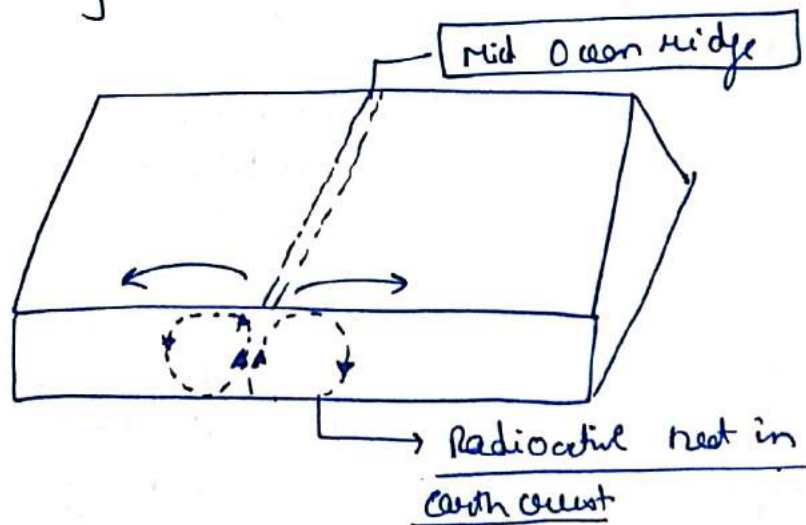
→ POST DRIFT THEORIES - NEW DIMENSIONS

(A) Sea floor spreading theory by Vess,

Law that in deep sea, across mid ocean ridges there was :-

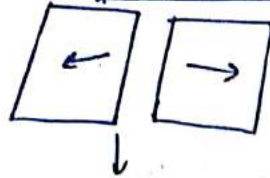
presence of volcanic eruption	rocks of same across across the ridge	<u>Ocean layer</u> was thinner than <u>continental layer</u> .
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This suggested that oceans were expanding continuously as shown below :-

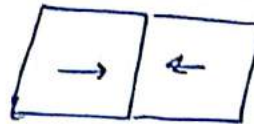
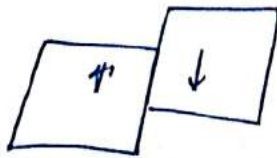


(B) Issue of force was solved as it was discovered that the radioactive heat below earth was responsible for the same, as said by Arthur Holmes

(L) PLATE TECTONIC - Mohorovicic, Parker, Morgan
 proposed that continental and ocean plates
 consisting of crust and upper mantle are
moving over asthenosphere. Interactions
 amongst them leads to formation of
continent tectonics

DIVERGENCE

(Crust formation)

CONVERGENCEMountain
formation of
(Continent - Continent Plate)

(Transform boundary)

Subduction of
heavy plate leading
to volcano, hot-spots

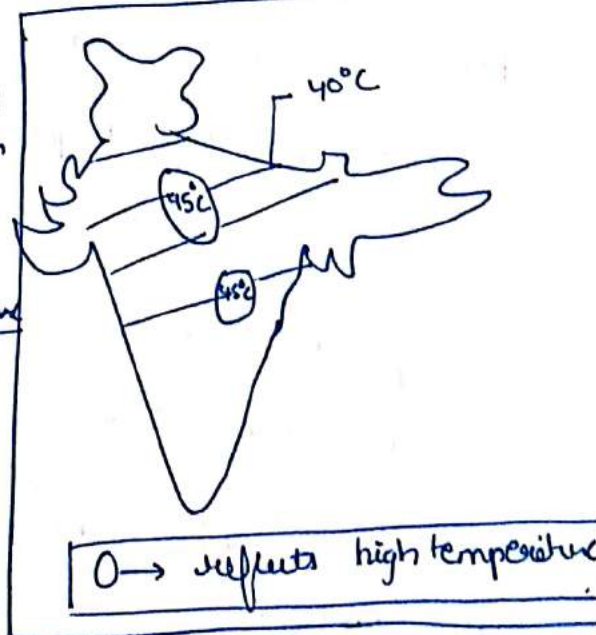
Therefore, post drift theory solved question
 of formation of Ocean and Continents, as
 seen above.

17. Explain the phenomenon of heat waves. Also, enumerate the conditions favourable for the development of heat waves in India and their associated health impacts (250 words) 15

हीट वेव्स की परिघटना की व्याख्या कीजिए। साथ ही, भारत में हीट वेव्स के विकास के लिए अनुकूल परिस्थितियों और उनसे संबद्ध स्वास्थ्य प्रभावों को सूचीबद्ध कीजिए।

Heat Waves refer to abnormal increase in temperature of place observed mostly in the months starting from April to June i.e. before monsoons and sporadically in between monsoons and in latter part of year.

→ The phenomenon of heat waves as seen in diagrams show that at some places, temperature



is more than the normal

→ Usually a rise of 5° Celsius above normal temperature for two or more consecutive days is considered as heat wave

- The phenomenon is mostly seen in North West India and at some parts of Peninsular India as well.
- Marine Heat Waves are also being experienced at coastal states now as Oceans are getting warmer.

(*) CONDITIONS

(A) HUMAN INDUCED CONDITIONS

- o Rise in Emissions from industry
- o Transportation related pollution such as CO_2 , $PM_{2.5}$, PM_{10}
- o Use of unsustainable agriculture practices such as stubble burning.
- o Reforestation and mining activities further add to it.

(B) NATURAL INDUCED CONDITIONS

- o Global Warming of atmosphere.

- Summer months associated with shifting of ITC 2 northwards
- Ocean Acidification leading to Marine heat wave

- (A) HEALTH IMPACTS →
- ① Heat strokes and dehydration.
 - ② Deaths of persons as a result
[e.g.] 2019 Delhi deaths
 - ③ Rashes, Itching of skin leading to dermatological problems
 - ④ Reduced efficiency and productivity of population.
 - ⑤ Feeling of fatigue, restlessness
 - ⑥ Increased demand for cooling substances.
would put pressure on energy system

→ The need is to focus on :-

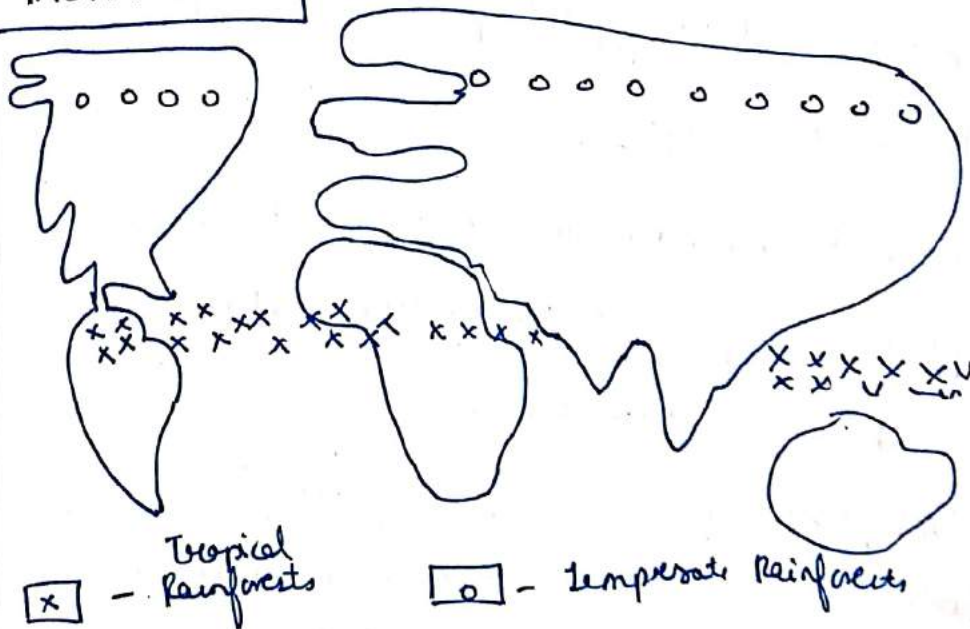
- | <u>Adaptation</u> | <u>Mitigation</u> |
|--|-----------------------------------|
| - <u>Early Heat Wave Forecasting</u> | - <u>eVehicles (FAME)</u> |
| - <u>Heat Wave Action Plan</u> | - <u>Organic Agriculture</u> . |
| - <u>Proper Ventilation of Buildings</u> | - <u>Reduce, Reuse, Recycle</u> . |
| | - <u>Afforestation</u> . |

18. Providing an account of distribution of rainforests across the world, mention their key characteristics. Also highlight the threats that are being faced by tropical rainforests. (250 words) 15

विश्व भर में वर्षावनों के वितरण का विवरण प्रस्तुत करते हुए, उनकी प्रमुख विशेषताओं का उल्लेख कीजिए। साथ ही, उष्णकटिबंधीय वर्षावनों द्वारा सामना किए जा रहे खतरों को भी रेखांकित कीजिए।

The rainforests are often termed as dumps of the World and are typically found 10° - 15° North and South of Equator and also in temperate areas.

DISTRIBUTION



ACCOUNT

• Rainforests can be found in Brazil,

Ecuador, Peru in South America.

◦ In Africa, it can be found in Kenya, Tanzania and other countries.

◦ In Asia, it can be found in Indonesia, Phillipines, Malaysia, Thailand.

◦ Temperate rainforests can be found in upper latitudes in Canada, US, Europe, Russia, China.

→ CHARACTERISTICS

- (i) These rainforests typically have epiphytic growths.
- (ii) There is less solar penetration at deeper reaches of forest as covered by large trees
- (iii) Soils are red latosol soil on which they grow
- (iv) Huge amount of litter on soil can be seen due to decomposition & humus formation

Threats

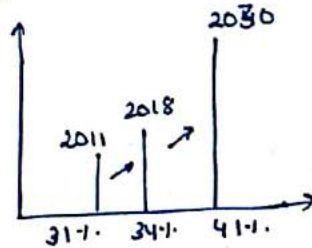
- (a) Reforestation activities have started mostly seen in Indonesia, Ecuador
- (b) Loss of biodiversity such as organisms in Malaysia, Indonesia
- (c) Plantations are being established by clearing forests [e.g] Oil Palm Plantation
- (d) Global Warming And Increasing pollution is reducing life of these forests
- (e) Development Projects such as construction of roads, railways leading to affecting the Forest dwelling Communities
[e.g] seen in Brazil

The countries as per commitment to Paris pledge should avert the threats by maintaining the pristine forests purity and fulfil sustainable development goals as a result.

19. Indian cities are not only mimicking the social and cultural structures of inequality and exclusion found in rural areas but are also creating fault lines for future conflicts. Discuss. (250 words) 15

भारतीय शहर न केवल ग्रामीण क्षेत्रों में पाई जाने वाली असमानता और बहिष्करण की सामाजिक और सांस्कृतिक संरचनाओं की नकल कर रहे हैं, बल्कि भविष्य के संघर्षों के लिए दोषपूर्ण स्थिति का भी निर्माण कर रहे हैं। विवेचना कीजिए।

There is a growing trend of urbanization which is being witnessed as the population today stands at 34.1% of total Indian population and is projected to grow in future



RURAL AREAS INEQUALITY AND EXCLUSION	MIMICKING BY URBAN AREAS
(A) <u>Caste Based</u> Inequality & exclusion in rural areas	(A) • <u>low social mobility</u> to SC • <u>Growth of slums</u> which has majority of <u>SC community</u> • <u>Caste Based violence</u> . <u>[eg] Dadri lynching.</u>
(B) <u>Gender Inequality</u>	(B) • <u>glass ceilings</u> at <u>workplace</u>

and Crimes Against
Women

[e.g] Dowry

◦ Real Care Burden
of Women

◦ 30% of crime against
women due to cruelty
by husband, relatives

(C) Regional Inequalities
in development of
villages.

◦ Seen in growth of
cities like Kochi, Bangalore
but not in cities like
Ratna, Ranchi

(D) Wealth Inequalities
and exclusion

◦ 10% of population
today hold 54% of
wealth [as per Oxfam]

(E) Other inequalities seen
with Patriarchy (like
Panchayat), access to services

◦ Same is visible in
digital literacy &
inability to access services.

→ FAULT LINES FOR FUTURE CONFLICTS

(i) The caste based inequalities could lead
to further conflicts, future demands of
reservation thus increasing inequalities.

(ii) Regional Inequalities could promote regionalism
and sons of soil policy

[e.g] Maharashtra only for Marathies.

(iii) Digital Inequalities could lead to huge
chunk of population at receiving end.

(iii) Possibility of Uproar
of Poor against
Rich Class

(iv) Religious Inequalities
could also promote
Communalism

WAY AHEAD

Development of Areas

[e.g] NAXATI, UDAN

Social security, MGNREGA in

Urban Areas

Investing in
Women skilling
and acting
against Sexual

harassment of
Women at workplace

Sensitization of Society against
Caste based discrimination

[e.g] Vinaya Samsasya
Yojana (Karnataka)

The above way ahead could ensure
Urban areas develop sustainably.
as per SDG-11 without inequalities.

20. Examine the multi-dimensional impact of globalisation on tribal development in India. (250 words) 15
भारत में जनजातीय विकास पर वैश्वीकरण के बहुआयामी प्रभाव का परीक्षण कीजिए।

Globalization refers to inter connectedness, integration, interdependence amongst communities in exchange of goods, services and flow of ideas. Globalization has brought the world together.

Tribals constitute 8.6% of Indian population and are spread throughout length and breadth of country.

→ POSITIVE IMPACT

(A) Social Impact - increase in access to education, health facilities and women empowerment

(B) Economic → marketing of tribal products [e.g] PM VAN, ONAN
↓
agriculture skills built → demand for hI products of tribals.
[e.g] Tribal Handmade Bagpacks [e.g] - Cheriyal Scroll Art.

(C) **CULTURAL** - promotion of tribal dance,
culture, music on global level
[eg] - North East India festival.

(D) **POLITICAL** { collectivization of tribals to
put forth demands
formation of fifth, sixth
scheduled areas to protect
indigenous societies/tribals.

→ **NEGATIVE**

(A) **CULTURE** { Westernization of habits
such as seen in clothing
leading to loss of tribal
identity
→ Homogenization of language
means 5 tribal languages on verge
of extinction [UNESCO]

(B) **ECONOMIC** - 40% of tribals below poverty
line due to excessive competition from
global products

(C) DISPLACEMENT - Tribals are 40-50% of displaced communities due to roads, railways, dams building.

(D) SOCIAL → 60% mortality related to malaria.
↳ 40% literacy rate only (2011 census).
highlights benefits of globalization not
battered down.

→ WAY FORWARD → ① Digital literacy
[e.g.] goal of Facebook.

② Marketing of tribal product [e.g.] go tribe Campaign of Amazon

③ Education via Eklaya schools and
Reservation in higher educational institutions.

④ documentation of tribal culture is needed.

A Tribal Panchsheel Policy must be
followed by government as was done
post Independence to provide tribals
rights on forests and economic, social rights.