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GENERAL STUDIES (TEST CODE : 2211)

Name of Candidate	KASTURI PANDA		
Medium Eng./Hindi	ENGLISH	Registration Number	721089
Center	ONLINE	Date	08-07

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		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	10		2. There are TWENTY questions printed in ENGLISH & HINDI इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3	10		3. All questions are compulsory. सभी प्रश्न अनिवार्य हैं।
4	10		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	10		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	10		
7	10		
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19	15		
20	15		
Total Marks Obtained:			
Remarks:			

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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.

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 Chola empire period started in southern India since the Megalithic age on the banks of river Kaveri continuing upto around 700 AD.

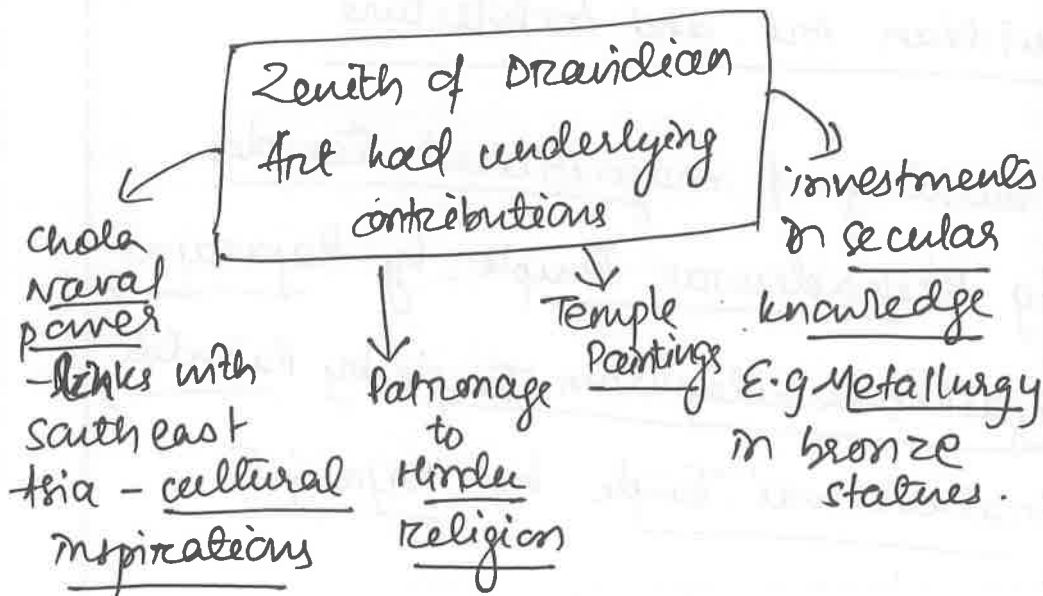
Architectural patronage of the Cholas are represented in the Dravidian Art and Architecture.

① Building of magnificent Temples
E.g. Brihadewar Temple by Rajaraja I,
Gangaikondecholapuram Temple by Rajendra I,
Airatareswar Temple by Rajaraja II

② Excellence sculpting features like river goddesses, open pradakshina patha, high boundary walls and

Intricate detailing in gopurams.

- ③ Chief religious attachment
- Hindoo culture
- ④ Use of elaborate structures of nandi, yaksha & yakshi.
- ⑤ Speciality in Chola sculpture is the Nataraja - God Shiva



The zenith of art and architecture of Cholas has been acknowledged world over in its recognition by UNESCO of Great Living Chola Temples.

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 civil liberties formed an important cause for Indian freedom struggle as it was time and again curbed by the colonial rulers, coupled with demands of restoration by nationalist movements.

The legacy repressions of civil liberties by British -

- ① curb in freedom of press e.g. vernacular Press Act 1878 (VPA), censorship acts.
- ② reduction in age of civil services e.g. ~~to~~ from 21 to 18 by Lord Lytton.
- ③ repression of peasant movements, forceful cultivation of cash crops leading to indigo crisis 1860, Fabian Revolt 1880.
- ④ division of Bengal by Curzon.

- ④ inhumane working conditions in factories.
- ⑤ interference in religious affairs
E.g. Free conversions & lex loci act
- ⑥ high taxes on indigenous salt and textiles. E.g. Calico Act.

Efforts by nationalists brought about reforms like

- ① Metcalf & Lord Ripon's liberation of press & withdrawal of VPA 1878
- ② Trial by jury & repeal of Ilbert Bill
- ③ Government of India Act 1858 promised no interference in religious affairs.
- ④ Passage of Factories Act 1881 - regulation of child labours and holidays.
- ⑤ Santhal Parganas Act, Chotanagpur Tenancy Act - Regulation in tribal lands

The cumulative efforts of restricting and liberalising by British & nationalists on civil liberties ultimately led to Indian Independence Act 1947.

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।

Berlin conference refers to the concurrence of European nations regarding trade and imperialisation of Africa in 1884-85.

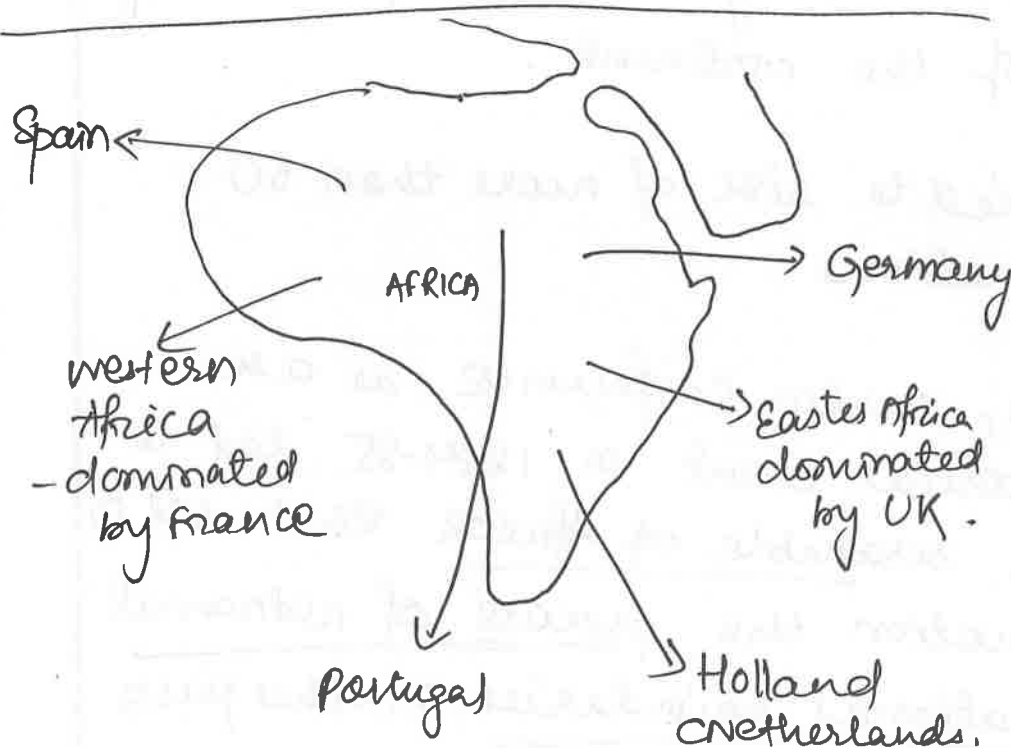


Fig. Scramble of Africa.

The ground for scramble in Africa was set by -

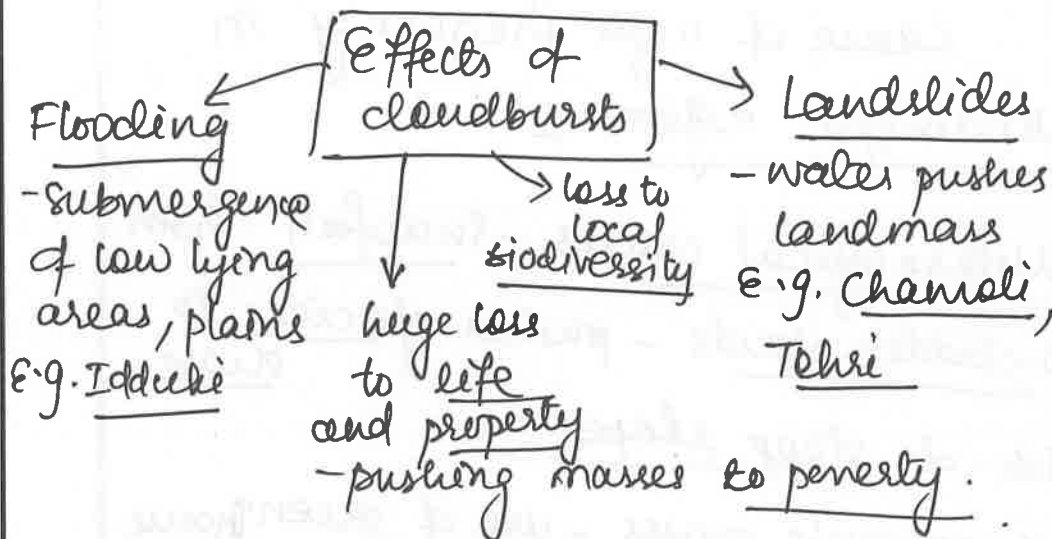
- ① Strifes between local tribal chieftains
- ② Inroads to trade relations and investments leading to ~~debt traps~~ debt traps.
- ③ Bilateral agreements - partitioning of the continent.
- ④ Led to rise of more than 60 nations.

Thus, Berlin conference as an historical event in 1884-85 led to the scramble of Africa that set in motion the process of redrawing of national boundaries in other parts.

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?

Cloudburst refers to a sudden rise in rain bearing clouds and winds with high precipitation and uncontrolled water flow.



Causes of cloudburst's devastating effects-

- ① High rise structures, unplanned constructions such as Idukki in Kerala
- ② Huge energy hydel power plants, dams
 - obstructs natural flow of water
 - E.g. Tehri.
- ③ Absence of water-storage systems

E.g. Meghalaya - Cherapunji

- ④ Huge population pressure - beyond carrying capacity E.g. Road clogging in cities like Mumbai, Bangalore - absence of percolation grounds.

Cause of high frequency in Himalayan region -

- ① Meteorological causes - snowfall from snow-cladden clouds - pushes glaciers to shore.
- ② Risk of steep slopes.
- ③ Anthropogenic causes - use of greenhouse gases, agri-industrial emissions - boost global warming and extreme events.
- ④ Unscientific urbanisation in Himalayan cities - prone to landslides.
- ⑤ Unregulated tourism industry.

Mitigating effects and frequency of cloudbursts in Himalayas requires implementing BK Chaturvedi committee suggestion of well defined assessment of the region.

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 a part of Interlinking of Rivers mission from water surplus regions to deficient regions.

Potential of the Ken-Betwa link -

- ① Availability of water of agricultural zones in Madhya Pradesh - boost to pulses, millets etc. production.
- ② Betwa lies in Bundelkhand region - dryland - addressing future water scarcity is essential.
- ③ Support to industrial region in UP
- ④ Better intermixing of Yamuna rivers
E.g. combat pollution like froth in winters.
- ⑤ Optimum supply of water to households.

- under Jal Jeevan Mission,

Challenges in its implementation -

- ① Plateau structure of region
- difficulty in constructions.
- ② less availability of skilled labours.
- ③ risk of water deficiency in Ken region
- ④ may affect biodiversity - region neighbouring Pench National Park.
- ⑤ risk to the luggers crocodiles.
- ⑥ if proper oversight is reduced
- waste dumping & choking of channels may increase.

The Ken-Betwa link as part of River linking is an ambitious plan for achieving SDG6 but a proper research prior to implementation is essential.

6. Identify the issues related to production and supply of coal in India. How can these issues be addressed? (150 words) 10

भारत में कोयले के उत्पादन और आपूर्ति से संबंधित मुद्दों की पहचान कीजिए। इन मुद्दों का समाधान किस प्रकार किया जा सकता है?

Coal is a non-renewable fossil fuel source of energy comprising 70% of thermal power plant needs.

Its other uses included raw material in steel, cement and other alloy industries.

Identification of issues in production and supply is thus crucial

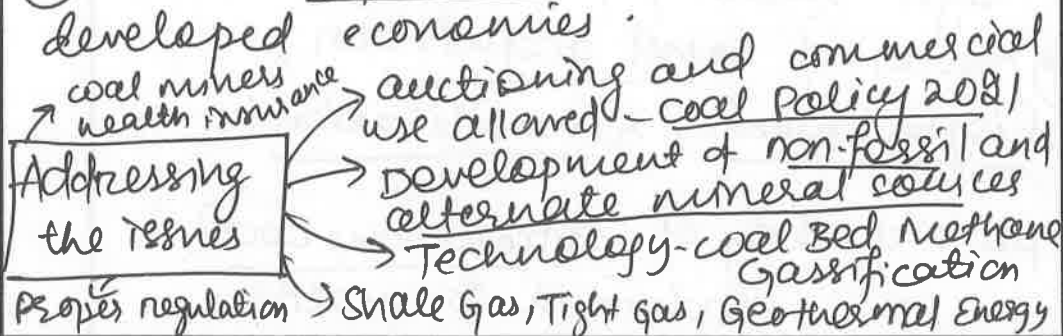
Challenges in production -

- ① unequal distribution - concentration in Singbhum region & eastern India
- ② Odisha, Chattisgarh, Jharkhand - high tribal population
- ③ issues of land acquisition, displacement, rehabilitation
- ④ poor quality of Bituminous coal - gondwana formations.

- ⑤ High ash content - issues of disposal
- ⑥ Rathole and illegal mining
- ⑦ corruption - collusion between industrialists and local politicians
- loss of taxes
- ⑧ primitive technology and increase in legacy ash waste

Challenges in supply -

- ① depletion of existing resources
- ② low diversification of non-coking coal imports - over 50% from Indonesia
- high current account deficit
- ③ poor technology development - research funds increasing towards renewable sources
- ④ carbon imperialism - backlash of developed economies



7. Present the geographical distribution of agro-based industries in India and discuss the challenges 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।

While agricultural production contribution to GDP is decreasing, agro-based industries can compensate for the agro-employment and increased India's manufacturing sector GDP.

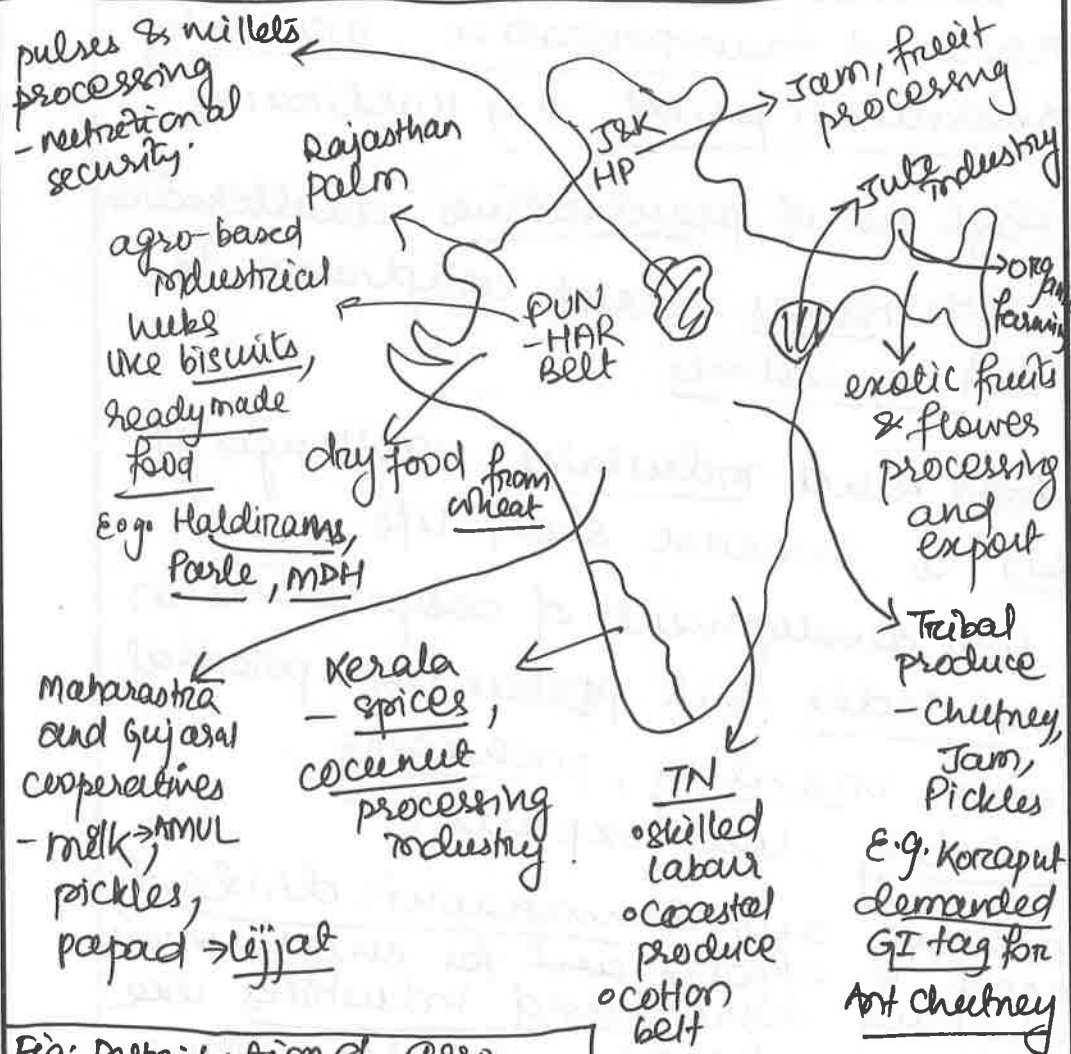


Fig: Distribution of agro based industries.

Challenges faced by agro-based industries

- ① seasonal nature - cyclic unemployment
e.g. cotton and Jute region - limited harvests per year.
- ② large scale industrial concentration in Northwest - unequal distribution
- issues of transportation, increasing preservation period e.g. Kaldirams.
- ③ High use of preservatives - adulteration
- health issues - strict compliance to FSSAI guidelines.
- ④ food based industries - challenges of R&D to increase shelf life.
- ⑤ low development of cooperatives in East India - but possess high potential
- ⑥ poor branding, packaging, marketing - low exports.

To achieve our demographic dividend, increase in efforts ~~are~~ for employment generating agro-based industries like Agro Export Policy are being done.

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 is a means of stratification of society in hierarchically arranged groups with attached disabilities and privileges.

E.g. access to priestly and reeling activities to high castes - high income but manual scavenging castes to untouchables - pushing them to poverty.

Caste system as a driver of poverty

- ① As per National Human Rights Commission Report by 2015 - 90% of manual scavengers were SCs - with railways & municipalities as biggest employers.
- ② Traditionally - lower castes - poor access to land ownership - low social mobility - no rent income.

- ③ Outcasting of inter-caste marriage couples - lose inherital & ancestral wealth - pushed to poor living.

Caste as a driver of inequality

- ① Traditional dominant castes - high income from land - also dominate in politics - gain high mobility

- ② women of uppercastes - treated as objects of prestige - high educated unemployment

- ③ majority lower caste women - employed as domestic workers, informal workers.

- ④ casteisation of politics - increase identity based rifts - caste communalism increases - usurp lands of Dalits, denial of access to public resources.

While institution of caste increases disparity in Indian society, it is also diminishing with middle class, secular employment and fundamental rights driven constitution.

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 the informally employed persons to perform household tasks with low pay and no social security.

Issues faced by domestic workers -

- ① Exploitation by employers - high working hours, low pay, no holidays.
- ② Dominated by women - but suffers policy paralysis - due to no data collection and absence of regulation.
- ③ risk of marginalisation - sexual assaults and violence - applicability of POSH Act is lacking.
- ④ no social security benefits like ESIC and EPFO.
- ⑤ possess poor skill - issue of no alternative

income

⑥ double burden - perform domestic work at own home also

Measures to empower them -

① Rise of gig economy and intermediate aggregator E.g. urban clap - can increase data and regulation of the work

② skilling of women

③ Extension of labour code 2019 - for equal pay -

④ Inclusion in social security benefits like insurance, retirement benefits.

⑤ States announcing salary to housewives - for domestic work

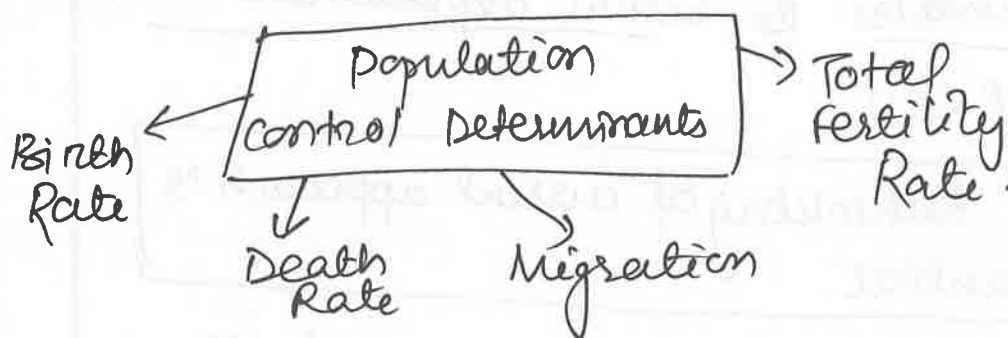
⑥ Regulation in urban areas - increase PASH Act penetration by local bodies.

Empowerment of domestic worker is precursors to achieving SDG Goal No 5 - gender equality.

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।

Population control is a set of practices to regulate the growth of population and its maintenance at an optimum level.



Gendered population control in India

- ① operative procedures - 7% vasectomy but tubectomy as high as 93%.
- ② contraceptive medicines and techniques e.g. Pills - concentrated on women
- ③ awareness drives include no males e.g. ASHA workers - only women

Impact of gendered measures -

- ① continuity in male chauvinism
- ② persistence of myths about divine curse when contraception is on men
- ③ lowering TFR in India and other countries to below replacement level.
 $TFR < 2.1$.

Rethinking of current approach is essential

- ① Equal burden on both partners
- equality in society - with rise in income and both employed parents
- ② Inclusion of males in awareness drives.
- ③ Upgradation of family planning as optimum offspring - not least offspring as per choice and income
- ④ addressing myths & rumors

Population control is a part of India's inclusive growth and human development agenda to become strillion economy

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।

Sramana tradition refers to the rigorous and extreme religious and cultural practices promoted in vedic religion with differential prescriptions on hierarchical groups.

Examples → women not allowed to read vedas & learn Sanskrit
→ rigorous rituals like idol worship, havans, animal sacrifice, fasts etc.
→ social segregation and disabilities of untouchables - the outcastes.

Impact of the sramana tradition in Indian society -

① Backlashes from community - austerity in practices, increased gap

between rich and poor

E.g. High taxes on peasants as an offering to god-like kings.

② collusion between priestly & rulers
- free land donations in return of glorification in literature - exploitation of the masses.

③ rigidity in social life - recurrent rituals, yatras, yajnas - low leisure

④ strict chaturvarna system - humiliation of sudras and complete marginalisation of the outcastes like chandalas etc.

⑤ Four lifephases / ashrama system
- vidation often had severe punishments
- no freedom of choice to marry.

The above difficulties in human life led to a reactionary rise of alternate practices like -

- ① Buddhism — Siddhartha Gautam
 — essence of knowledge and
 attainment of moksha
 — access to all castes, even women
 — preached equality joined
 — disciplined guru-shishya parampara
 was retained.

- ② Jainism — Mahavira and Tirthankaras
 — gaining kaivalya gyana and
 peaceful living
 — non-violence and respect to all
animals
 — women yogis were allowed
 — E.g. Swetamvaras even believe Tara was
 female Tirthankara
 — discipline like repentance for sins contained.

- ③ Jivikas — Makkhali Goshala
 — they do not believe in existence of soul
 — deny attaining knowledge
 — divinity in vachanas & Aneeraba Mantap
 — joined by these against Buddhism & Jainism

The social process of lightening of a religion
 and rise of sects like above from vedic
 tradition continues to impact present society
 as new cults and religions develop.

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।

The entry of Mahatma Gandhi in Indian National Movement in 1920s gave a new vigour to it through novel symbolisms like truth and non-violence

Use of symbolism by Gandhi

to integrate masses —

- ① Glorified the role of women and wives - the image of non-violence encouraged families to women participate - unionism in National Council of women, presidency of Sarojini Naidu on INC session.
- ② Use of "Harijan" - scheduled castes as children of god - increased their respect for Gandhi - earlier remained detached from society.
- ③ Name of Non-cooperation Movement 1919

was also Khilafat - attract muslims
in large numbers and work on Hindu-
Muslim unity.

④ Joined workers and mill workers in
fields and factories e.g. Champaran 1917,
Ahmedabad Mill Strike 1918 - gave the
symbolic language of an approachable leader

⑤ Use of salt central to civil disobedience
movement ¹⁹²⁹ - daily use of an average citizen
- highlighted it as satyagraha of the poor

Gandhi also used his symbolism
against social evils -

① Started Harijan Sevak Sangh - his work
displayed SCs as brothers & friends and
organisations are for their help. - 1926.

② promoted education of women - Nari
Shakti

③ education of children was for body,
mind and soul - developed "Nai Talim".

④ Efforts to revive cottage industries in rural areas through cooperation - which were called myriad of social evils by 'B.R. Ambedkar' - Gandhi called for 'Gramraj'.

⑤ Groomed muslim leaders to lead by example - as brotherhood in Indian National Congress E.g. Ali Brothers, Khan Abdul Gaffar Khan et.

⑥ built Ashramas e.g. Sabarmati - for constructive work - like swachata, "Cleanliness is next to Godliness".

⑦ challenged British cunningness - gave the message of using "truth" for the youth.

The symbolic Gandhian politics are heart of the Indian National Movement that inspired leaders used over like Nelson Mandela.

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 फ्रांसिसियों के विरुद्ध अंग्रेजों को सफलता प्राप्त हुई।

The three Carnatic wars between 1740s and 1760s ~~are~~ were the deterministic events establishing British rule in India subcontinent by subsidizing the French forces.

1st Carnatic war

- ① overstone of the Austrian wars of succession
- ② Treaty of Aix-la-Chapelle
- ③ ~~led~~ French forces led by Dupleix.
- ④ British got Madras and French got Canadian region in North America

2nd Carnatic war

- ① High interference in affairs of local kings in India.

- ② Success of British diplomacy under Robert Clive
- ③ Treaty of Pondicherry signed
- ④ Dupleix was recalled due to huge losses

3rd Carnatic War

- ① Overtones of Seven Years War in Europe
- ② British est rule clearly established
- ③ French forces lost at Battle of Wandiwash
- ④ Treaty of Peace of Paris signed in 1763 ending conflict.

Factors leading to the success of British forces -

- ① Far fetched diplomacy - reasoning with local kings at Madras, Mysore, Pondicherry.

- ② Flexible regime of East India company where as French rulers heavily controlled Indian situation by centralised command at home
- ③ superior British naval power.
- ④ able and efficient leaders like Clive.
- ⑤ British were less concerned about religion, French had high affiliation to missionaries work.
- ⑥ Rise of industrialisation and banking in Britain - gave them an economic and financial leverage over France.
- ⑦ British arrived in India since 1602 - good relations with Mughal empire. (France - 1664).

The strengths and achievements of British in Carnatic war was in fact an exemplary base for their India rule from 1773 to crown rule in 1858 to Cabinet Mission in 1936.

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 उस रूपरेखा पर चर्चा कीजिए जिसे अंततः अपनाया गया था।

The crisis in Punjab in 1980s was an event of ethnic-sub-nationalism resulting in secessionism and terrorism under the Khalistan Movement in 1980s.

Issues leading to Punjab crisis were

(A) Socio-cultural -

(1) Adoption of western practices - threat to identity of Sikhs E.g. Dressing

(2) Revivalist fundamentalism led by Sant Bhindranwale - criticising the "Fallen Sikhs" - who shave their beard

(3) Aspiration of a separate contra-accelutarine nation state for Sikhs.

(B) Economic and Political -

(1) Green Revolution and high

development - rise in income - rise in aspirations of separate state Khalistan

② support of political leaders and capturing religious vote bank with regional parties like Khali Dal.

③ Demand for autonomy - rise in - inspiration from rise in independent states based on ethnicity in Africa and Eastern Europe.

The Punjab crisis was addressed by Indian government with a two fold strategy -

- ① Use of police and military power - especially to curb terror funding and money laundering.
- ② Increasing decentralisation and autonomy to states - higher funds for education and employment - to reduce indoctrination of youth

Roadmap to peace eventually adopted includes -

- ① Financial commission devolution of funds - progressively increases
- ② Strengthening local democracy - participatory governance
 - 3rd and 74th constitutional amendment acts in 1992 - setting up panchayati Raj Institutions and urban local bodies.
- ③ Adoption of LPB reforms in 1991
 - Employment generation, making private businesses easier.
- ④ setting up National Education Policy 1986 and higher education institutions.

The learnings of Punjab crisis has helped India grow as the world's largest democracy building new India @ 75 this year.

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।

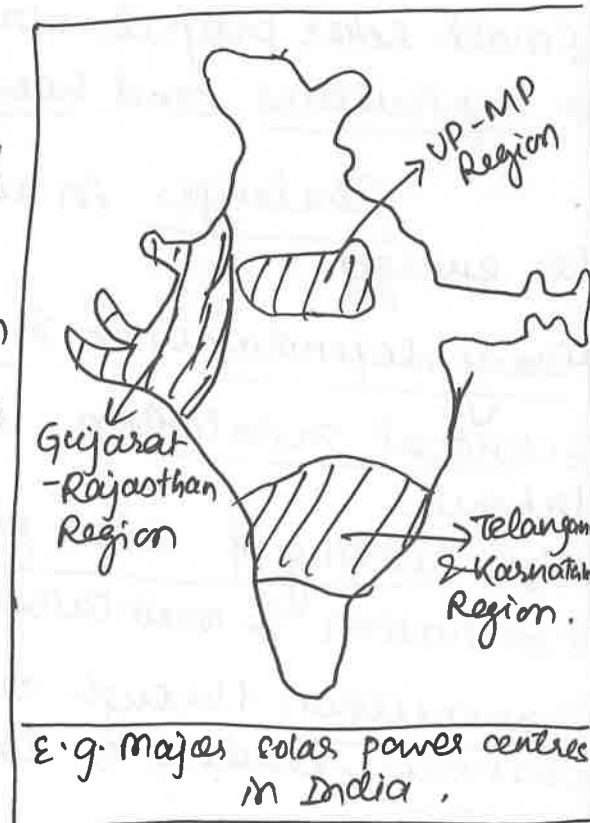
Solar power accounts for about 40% of installed renewable energy capacity in India that recently surpassed energy from hydel power (38%).

Distribution of solar power capacity in India

① High concentration in Gujarat-Rajasthan

- Tropic of Cancer Region

② Development in Madhya Pradesh Malwa Region



- ③ Largest floating solar power plant
- Omkareshwar in Madhya Pradesh
- ④ Telangana - Karnataka region - high
technology upgradation on solar energy
- research on solar chips - Technology
hub presence
- ⑤ Largest solar park - Pavagada in
Karnataka.
- ⑥ Small solar projects across India
for agriculture and housing

Challenges in utilisation of
solar energy

- ① Heavy dependance on imports for chips
- ② Technical installation - low skilled
labour
- ③ High heating of solar plant - upfront
installation & maintenance cost high
- ④ Transmission through traditional
channels - leading to losses.

Steps taken by government
to promote -

- ① Ambitious INDCs under Panchamrita principles - increase renewable capacity to 500GW - around 280GW from solar
- ② subsidies in solar chips production and research under PLI scheme.
- ③ Solar Mitras - skilling of youth for installation
- ④ PM KUSUM - solar power pumps for irrigation.
- ⑤ adoption of solar powered buildings, office spaces, technology and entertainment parks.
- ⑥ Ranking of states by MNRE and Niti Aayog - SARAL INDEX - competitive federalism.

Solar power holds the key to addressing India's energy needs which is 4th highest in world and building Atmanirbhar Bharat.

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।

Ocean floor mapping theories were proposed based on movement of tectonic plates under the effect of underlying convections of molten magma.

Formation of ocean and ~~contributions~~ and their distribution continents

(A) Converging plate boundaries

- ① ocean-ocean plates - results in island arc

E.g. Hawaii-USA

Kuril islands - Russia, Aleutian Islands
- extending Alaska.

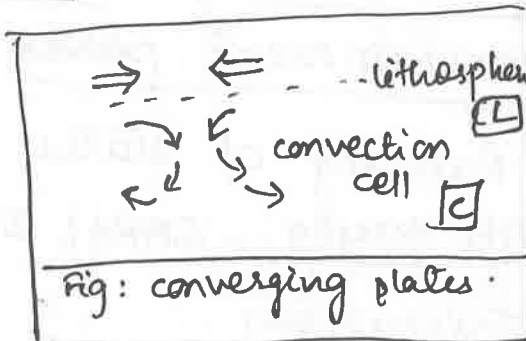


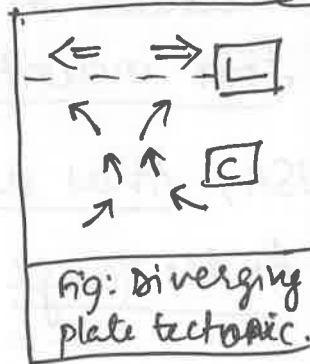
Fig: converging plates.

- ② Ocean-continent plate boundaries
- results in formation of volcanic fold mountains e.g. Rockies in USA, Atlas mountains in Africa, Andes Range - South America.
- ③ Continent-continent plate boundaries
- formation of non-volcanic fold mountains - but highly prone to earthquake due to tectonic activity
e.g. Himalayas of Indian subcontinent, Urals separating Eastern Europe and Russia, Alps joining Italy to western Europe.
- ④ Presence of trenches at subsiding point - feature of diverging / converging plates - e.g. Diamantina Trench in Indian ocean, Alentian Trench

in North Pacific Ocean etc.

(B) Diverging plate boundaries

- Formation of mid-oceanic ridges and rift valleys
- later develops to nascent sea and leading to ocean

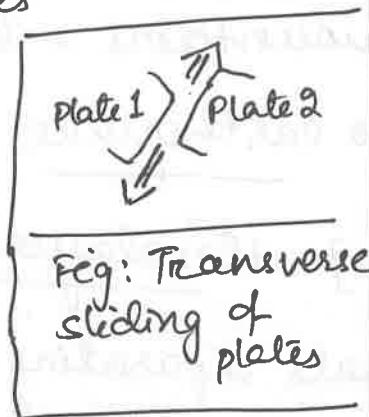


E.g. Great African Rift valley

(C) Transform boundaries

- can lead to separation of landmass
- faulting & quaking activity

E.g. San Andreas Fault
- USA



Thus, post ^{drift} ~~three~~ theories threw light on distribution of oceans and continents, necessary to understand local weather patterns and global climate

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 the high increase in temperature concentrated in specific regions for high periods and unpredicted intervals of time

e.g. urban heat waves in Delhi, Chennai

Causes of Heat waves -

- ④ Natural - Geological
- ① Plateau and upland regions
e.g. Rajasthan, Dharwar experience frequent heatwaves
- ② water stress and drought prone zones with low precipitation e.g. Rajasthan - Jaisalmer desert
- ③ Indian side of Himalayan region acts as shield against rain-bearing

Mediterranean winds

④ Breaks in monsoon - increases temperature called October Heat may result in cyclones.

③ Anthropogenic causes

① Green house gases emissions increasing - agriculture, industry

② Air conditioning in urban areas - release of heat from compressors
E.g. Delhi, Mumbai

③ Burgeoning software industry and heating of computing systems
E.g. Bangalore, Hyderabad

④ Unregulated mining industry - earthquake prone regions - may emit gases causing heatwaves.

Associated health impacts of

heatwaves -

① Loss of life - during high insolation
periods - from sunstroke, excessive
perspiration.

② Risk of nutritive deficiencies - threat
to already acute state of malnutrition
in India - due to frequently changing
heat weather conditions.

③ weakening of lungs and heart - high
risk of non-communicable diseases
like hypertension.

④ Aggravating Black lung, Brown lung
disease - mining, construction &
industrial labourers.

⑤ Threat to indigenous vegetation
- diseases from altering food chain
and undernutrition.

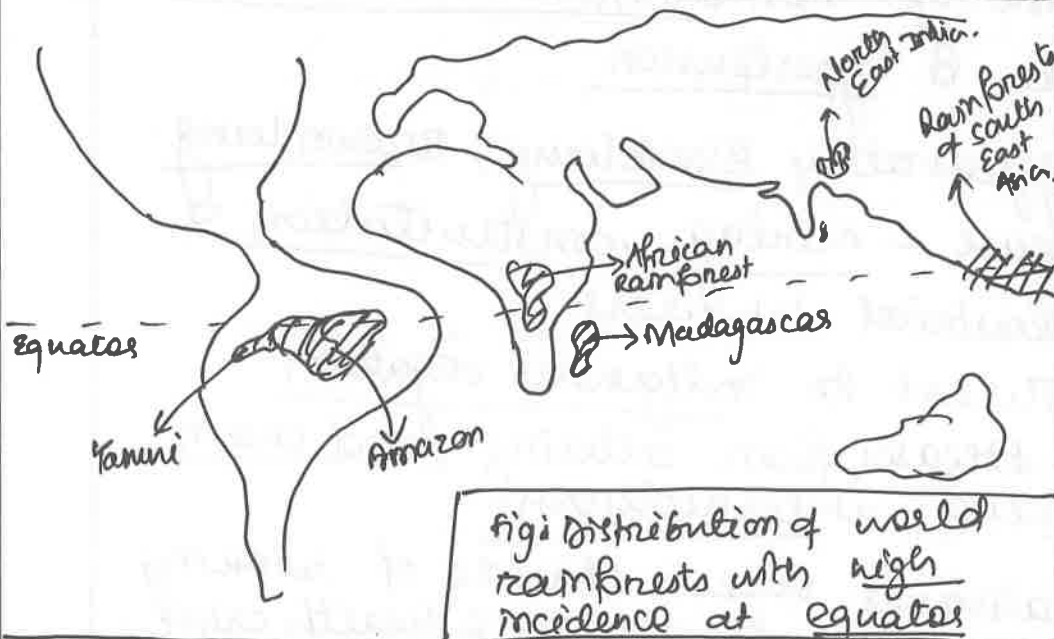
Heatwaves pose threats of rocking
communities to poverty & health crisis.
Proper imple^{ent}ment of NDMA guidelines
and SENDIA framework is a must.

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

Rainforests are the type of ecosystem that habitate evergreen vegetation and fall under hottest biodiversity hotspots.

E.g. Yasuni National Park in Ecuador,
Amazon Rainforest in Brazil,
North eastern forests in India,
South East Asian like Indonesia



Key characteristics of the

rainforests are -

- ① Presence of epiphytes - vegetation over vegetation forming large canopies.
- ② shedding occurs throughout the year with no prominent periods - making them evergreen - but hardwood (not for lumbering).
- ③ Rich biodiversity. e.g. langurs, mammals, Rubber, cocoa etc.
- ④ source of minerals like gold in Amazon river.
- ⑤ climate - rain precipitation throughout the year - convictional rainfall.
- ⑥ high prevalance of diseases due to presence of insects - mosquitoes, flies.
- ⑦ shifting cultivation by tribes e.g. Malaysia.

Threats faced by tropical rainforests -

- ① High exploitation of resources e.g. Rubber, cocoa, pineapple in Brazil and Africa.

- ② Clearing of Yamuni National Park
- industrialisation.
- ③ reforestation in Malaysia, Indonesia
- for oil palm plantations.
- ④ Hunting of animals by local tribes
- ⑤ Threat to habitat for biodiversity and
fauna.
- ⑥ Extreme events of heat & cold with
flooding - facilitated by global warming
- high risk of forest fires and disasters.
- ⑦ Release of industrial effluents
- pollution in rainforests.
- ⑧ Disease prevalence in tribes - threat
to their existence.

Rainforests like Amazon are the lungs of
earth. Hence addressing their threats
and preservation is a part of convention
like CBD and UNFCCC.

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।

As per census 2011, 30% of Indian population was urban which is predicted to rise to 40% by 2030.

With significant urbanisation, the fallouts of urbanism also requires wide discussion.

- Rise of cities in India → due to employment & business opportunities → urban dwellers are the rural migrants

The above processes ~~at~~ results in similar unequal & exclusionary structures of villages -

- ① Habitat Segregation - Rise in gated societies dominated by upper castes and slums with scheduled (SC) caste majority

→ similar to outcasting & periphery living of CSCs in rural areas.

② extension of kinship, contact and recommendation - based hiring in industries

→ like caste-based jajmani system of occupation.

③ rise of online marriage match-making that restrict caste, religion, ethnicity.

E.g. vaishyamatrimony.com, tanishaaadi.com

→ continuity in caste endogamy and village exogamy, through khap panchayat.

④ secular practices mostly matter in urban employment - dwellers continue all caste based rituals at home.

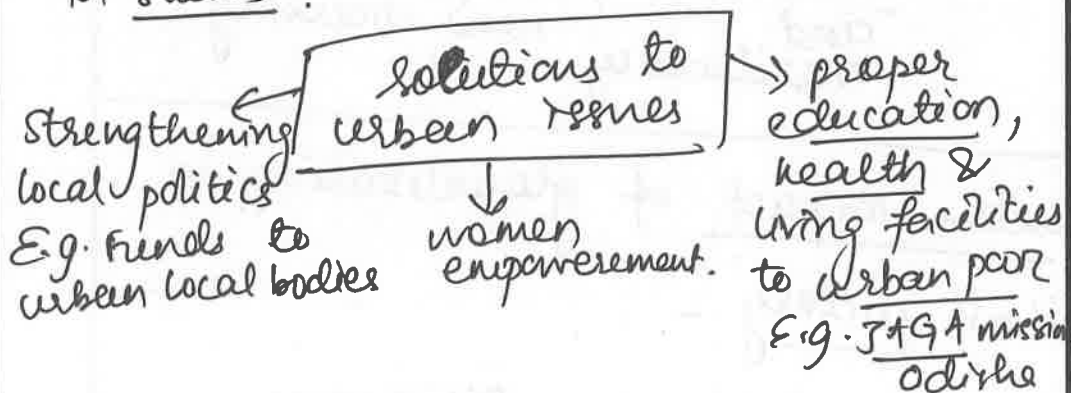
E.g. pūja, denial of some utensils to low caste friends etc.

⑤ myriad of vote-bank politics - urban politics heavily influenced by caste-based considerations E.g. UP, Bihar

→ often lead to riots like lynching & honour killing as punishments in villages.

Above continuity causes new future
conflicts like -

- ① strengthening of identity - ethnic
nationalism leading to secessionism
E.g. Khalistan movement rose in
Amritsar city.
- ② communalisation - leading to
indoctrination and terrorism in cities
E.g. Mumbai blasts 1990s, North East
Delhi Riots 2000.
- ③ unscientific residential systems - disasters
problems of waste and health issues
in slums.

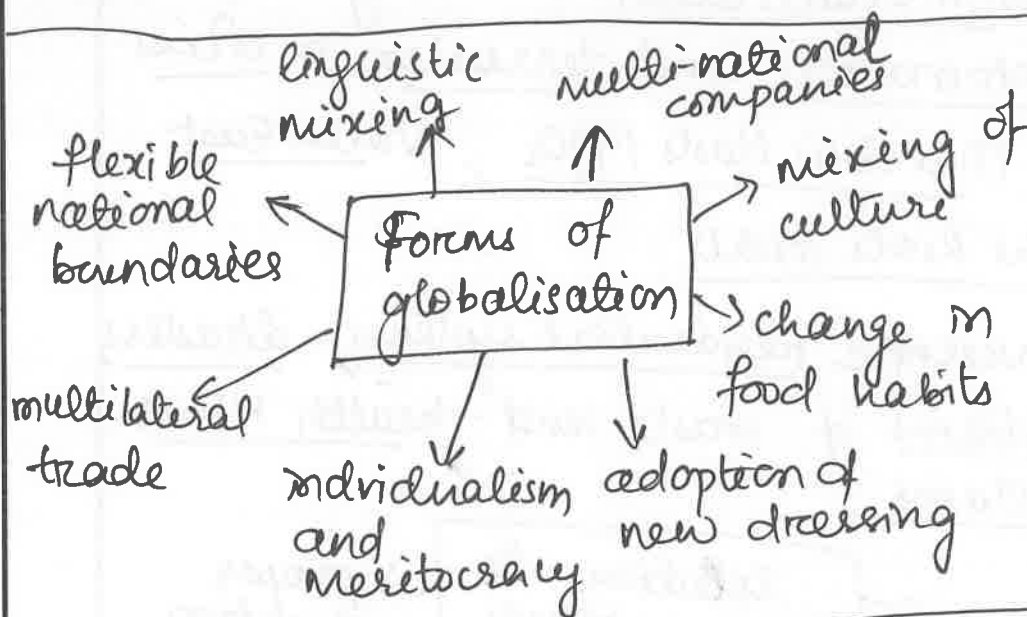


Due to rising importance of urban centres
in national development, their social
structural changes are essential to
achieve sustainable goal No 11.

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।

Globalisation refers to the increasing interactions, interconnectedness and multilateral trade among nation states across the world.



Positive impact of globalisation on tribal society -

- ① coming of democratic process
 - participation in governance
 - rising equality.

- ② gain employment - service sectors
companies - rise of gig economy
- ③ adoption of modern lifestyle - better
Standard of living
- ④ nutritious food habits - organic
cultivation - addresses malnutrition.

Negative Impacts

- ① Threat to identity - acculturation
and assimilation - backlash in form
of militancy in North East E.g. Assam,
Nagas in Nagaland.
- ② Loss of land and traditional practices
- spiritual alienation from nature
worship, displacement - naxalism
E.g. Sukhdeo Throat committee estimated
85 lakh tribals displaced for
development since 1990s but only

25% rehabilitated.

③ shyness in PVTGs - unable to adopt modernity - results in marginalisation
- literacy is still low at 57%.

④ adoption of alcoholism, drug peddling - from golden crescent and golden triangle - 80% tribal men are alcoholics

⑤ fluid borders - trafficking and arm smuggling to Myanmar, China.

⑥ clash with general society - without adopt getting proper immunity - sumding population E.g. Sentinelese, Nicobarese:

Tribes have unique culture contributing to Indian diversity, it is important for their empowerment based on Xaxa committee report like MSP on forest produce, reservation in education & jobs etc.