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1522

GENERAL STUDIES (TEST CODE : 1522)

Name of Candidate	SADAF CHOUDHARY		
Medium Eng./Hindi	English	Registration Number	257547
Center	Online	Date	24 th Dec, 2020

INDEX TABLE

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	
11	15	
12	15	
13	15	
14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- 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)।
- There are **TWENTY** questions printed in **ENGLISH & HINDI**.
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- 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।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- 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।

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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 Bo

Q-1: →

Hampi is aptly called 'the city carved in stone'. Elucidate the architectural & historical significance of this site.

Hampi, located in Karnataka, was named after local goddess Pampadevi. It was due to long-standing religious & cultural significance of this place that Vijaynagara Kings chose it as their capital.

* HISTORICAL SIGNIFICANCE

- Already existing shrine of Goddess Pampadevi, in the form of Vishupalleke Temple (10th century)
- Later on, Harishara & Bukka founded Vijaynagara empire, and made Hampi their capital city
- Built the Vithala temple, dedicated to Lord Vishnu (13th century)
- Krishnadeva Raya later on added

Gopurams. Also, bronze sculptures of patrons.

- o Strategic importance due to Bahmani empire in the north & Portuguese in the West
- o City a centre of art & culture.
Ex → Ashthadiggajas of Keishnadeva Raya

* ARCHITECTURAL SIGNIFICANCE

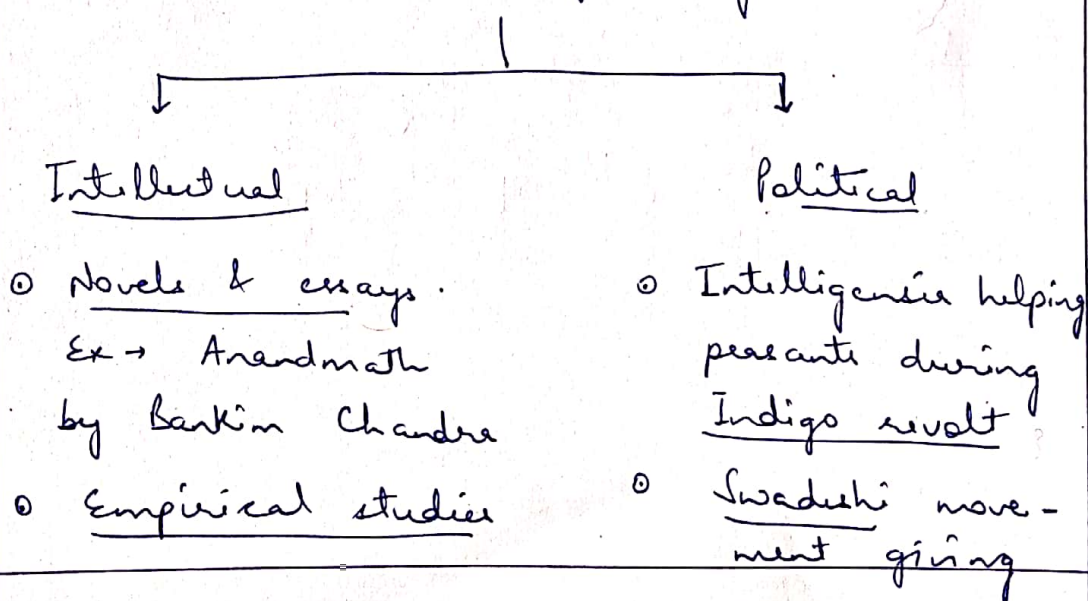
- ① Virupaksha & Vithala temples
- ② Secular architecture reaching its climax phase.
- ③ Many secular buildings, including palaces & public halls.
Ex → Mahanavami Dibba
- ④ 7 lines of forts around city
- ⑤ State of art irrigation system. Ex → Kamalapuram tank & Kiriyra canal

Thus, Hampi was both an architectural marvel & a treasure of history.

Q-2: → Explain how the intellectual & political work during freedom struggle contributed to erosion of myth of benevolence of the British rule.

Britishers were able to rule over India for 200 years due to their narratives like Whiteman's burden or benevolent despotism. This generated popular consent in favour of their rule.

However, Indians proved to be rational followers, and with the advent of education & prosperity, busted this myth in following ways :-



Ex → 'Poverty & Unbritish rule in India' by Dadabhai Naoroji

- ① Newspapers a grand mean to expose British high-handedness. Ex → Tilak's Kesari
- ② Agitation for Indian judiciary, Indianisation of civil services & military

a fillip to domestic maneyas - stirring

- ① Rowlatt Act & Jallianwala Bagh massacre exposed British oppression.

- ② Separate electorates brought out divisive character of Britishness. Ex → fast unto death by Gandhi - ji' against Poona Pact

Thus, both intelligentsia & the political leaders fought side-by-side to bring a downfall of the oppressive British rule.

Q-3 :- The GoI Act, 1919 not only marked major changes in British India but also equally significant responses from leadership of the national movement.
Examine.

GoI Act 1919 was passed by British Parliament as a result of Montford statement of Aug' 1917, where self-rule of Indians was accepted as British policy objective.

* CHANGES IN BRITISH INDIA

- ① Dyarchy at provinces, i.e., splitting legislative subjects into reserved & transferred subjects
- ② Bicameral legislature at centre
- ③ Secretary of state to be paid from British treasury
- ④ Direct elections, but limited franchise
- ⑤ Extension of separate electorates to Sikhs, Anglo-Indians, etc.

* Responses from leadership of National Movement

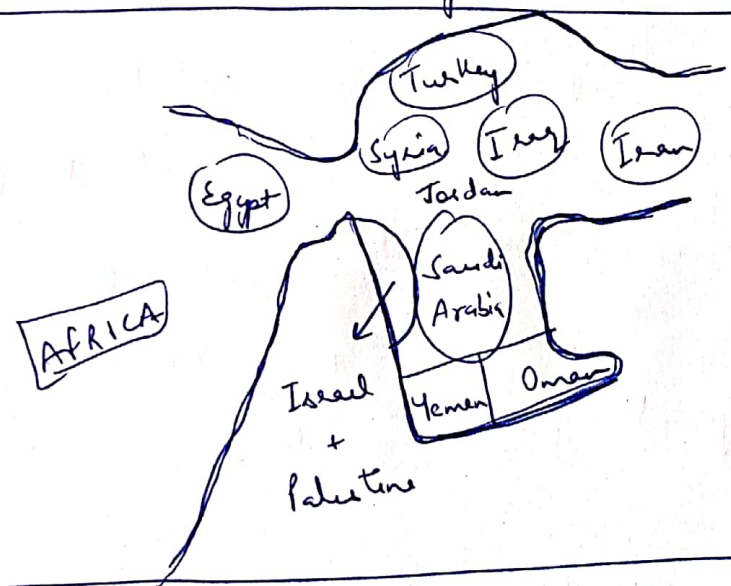
- ① Several leaders call them to be whitewash, and were in favour of continuing preparation for civil disobedience movement. Ex → J. Nehru
- ② Several wanted to participate in legislative elections scheduled for 1923. Ex → C.R. Das & M. Nehru
- ③ Others still wanted to carry on Gandhian ^{constructive} work like education, sanitation, etc. Ex → Rajendra Prasad
- ④ Muslim League welcomed the more diverse representation through separate electorates

This led to a clash between Swarajists

- ② & no-changers ③, leading to establishment of Swaraj Party in 1923

Q-4:→ Arab unity as a goal has been ever elusive to achieve. Comment.

Arabian peninsula is not only connected geographically through largely similar terrain & ecosystem (deserts), but also through largely Muslim diaspora. However, unity has always remained elusive for the region.



The region consisting of West Asia, and often extending North Africa has been home to major faultlines :

- ① Israel - Palestine conflict
- ② Arab - non Arab conflict

- ③ Shia - sunni conflict. Ex → Iran
v/s Saudi Arabia
- ④ Clash of civilizations. Ex → Turkey
(Ottomans) v/s Arabian

The countries have fought 3 wars in their post-colonial phase, i.e., since 1945, e.g., 6-days war, Yom Kippur war, etc.

Though they have an institutionalised cooperation mechanism called Org. of Islamic Cooperation established in 1957, it has largely been a slave to great-power politics.

However, recently signed Abraham Accords between Israel & UAE and Israel & Bahrain can usher in a new era of unity & cooperation.

Q-5 :-

Feminist ideas were crucial in shaping the emergence of a new phase of women's movement in India. Explain.
Also identify the key issues taken up during this period.

Feminism refers to the political thought which strives for gender equality, and is concerned with equitable distribution of resources & opportunities across genders.

Phase I

Women's movements in India were largely led by men in earlier times.

Ex → Raja Ram Mohan Ray against Sati

Phase II

Later on, women participated in the national movement, but not for the sake of their own emancipation.

Rather it was for the national collective good.

Ex → Usha Devi running underground radio during Quit India movement.

Phase III

① Feminist ideas would over inspired new consciousness among women from late 1960s. They started fighting for their own causes, and forming their own associations. Ex → Vimschana, Sakhi, etc.

* Key Issues taken up post - 1960s

- ① Dowry death
- ② Rape & gender violence. Ex → Mathura rape case
- ③ Equal opportunities. Ex → recently commissioned into army
- ④ Triple talaq.
- ⑤ Low sex ratio, lower educational & health status
- ⑥ Trade unions. Ex → SEWA

Thus, women's participation is essential for India becoming \$ 5 Trillion economy by 2025 as they make 50% of population

Q-6 :-> Social empowerment is both a pre-requisite as well as an indicator of a nation's development. Discuss with logical arguments.

Social empowerment means providing equal opportunities as well as capabilities to all sections of the society. This is the key ingredient for a vibrant & inclusive society.

* PRE-REQUISITE FOR DEVELOPMENT

① Only if all sections participate in economic activity, we would be able to generate wealth to our full potential.

Ex -> Women's low participation leading to 33% less GDP world over (WEF Report)

② Vibrant society, vibrant nation.

Ex -> No hate crimes, peace & stability

③ Helps in human resource development.

Ex → SC & ST having lower health status than general category people due to their social exclusion.

④ Human dignity is a basic human right as well as constitutional value.

Ex → Manual scavengers

* Indicator of a Nation's development

① Economy growing at full potential

② Social capital building

③ Human resource development

④ India becoming skill capital of the world

⑤ No political polarization on the basis of caste, religion, etc.

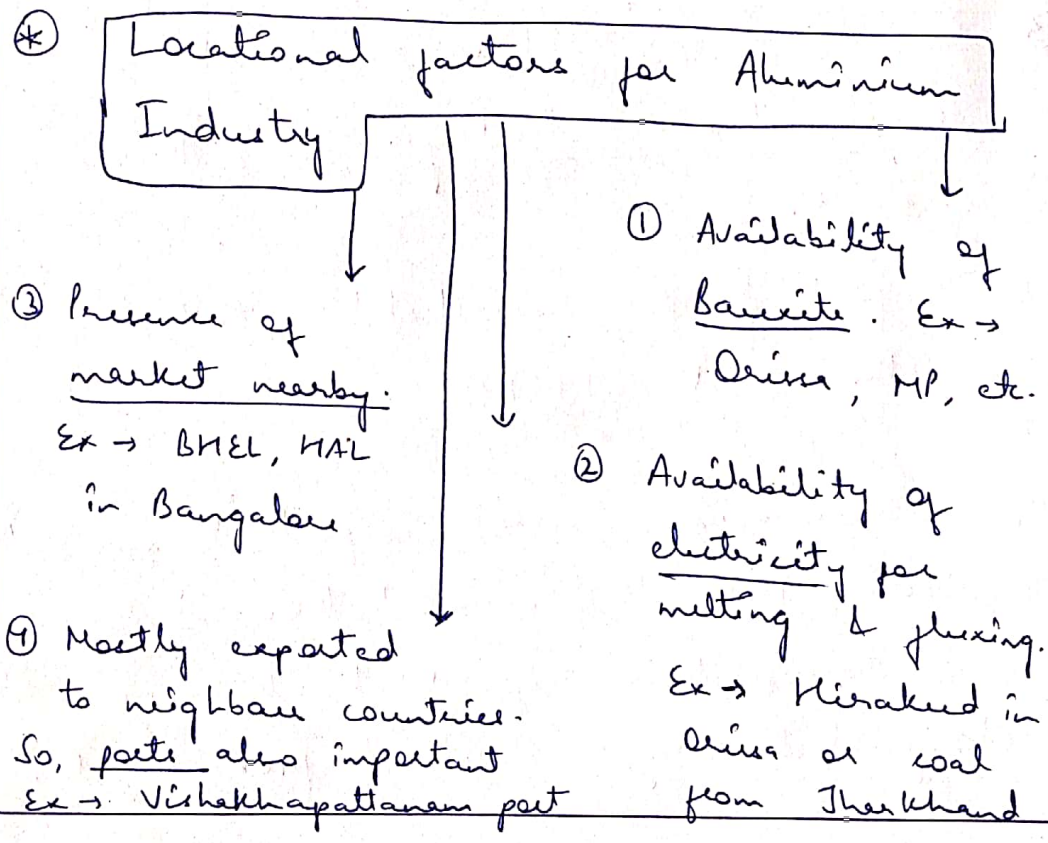
⑥ Technological development

India has always been a melting pot of different social groups & cultures.

We should try to preserve this legacy if we want to be a global superpower.

Q. 7 :-> Using examples, give an account of the factors influencing the location of Aluminium industry in India. Also, highlight the importance of this industry in brief.

Aluminium is one of the most important non-ferrous metals, especially for the industrial sector. It is obtained from bauxite, after quarrying, fluxing & purifying in integrated aluminium plants.



Major aluminium plant in India are located in Chhattisgarh, Orissa, AP & Karnataka.

* Importance of Aluminium Industry

- ① Substitute of iron for its low weight. Ex → aviation industry
- ② Good conductor of electricity, yet cheaper as compared to gold/silver. So, used in electrical industry
- ③ Ductile & malleable, so used in construction industry. Ex → Aluminium sheets
- ④ Important for household articles and other such MSMEs.

Thus, aluminium is an important mineral resource for India, and there is a need to further support it through cheap electricity, subsidised freight, etc.

Q=8 :->

Explain the interconnectedness of Global Climate System with suitable examples.

Globe can be understood as one large interconnected system, where a slight change at one place can bring incommensurable change at some other location, much like the butterfly effect.

- ① The pattern of winds, i.e., atmospheric circulation is impacted by heating & cooling pattern of a given location. This, in turn, depends upon oceanic currents, insolation, etc
- ② Winds help in movement of oceanic currents, both largely emulating each other's patterns
- ③ The rise of temperature at one place can lead to climate change at another place. Ex -> El Nino causing

floods in China & droughts in India

- ④ Global warming due to anthropogenic emissions in North pole leading to melting of glaciers in Antarctica
- ⑤ The polar jet stream splitting & scattering over USA causing weather anomalies in South Asia.

Thus, this globe is not only integrated but its systems are also interconnected. That is why, it is the responsibility of entire humanity to fight climate change.

Q.3 :- Highlight the concept of 'Atlantification' & its ecological consequences.

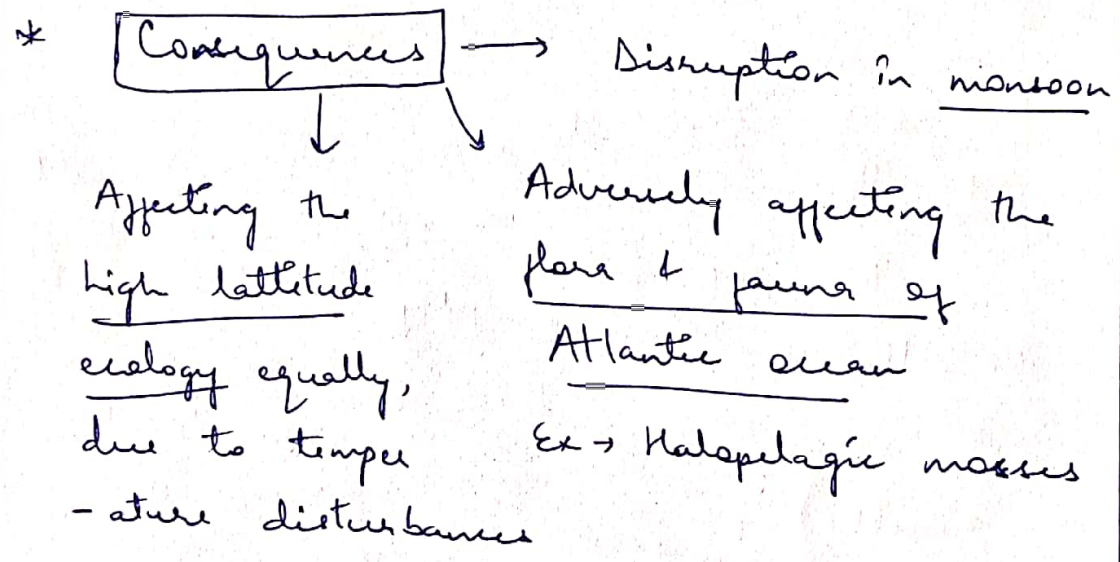
The ^{term} 'Atlantification' is connected with a wide phenomenon called Atlantic Meridional Oceanic Circulation (AMOC) which helps in driving global ocean conveyor belt.

- o The ocean currents move as a result of thermohaline circulation.
In the Atlantic, gulf stream moves north due to thermal gradient, & moving there gets saline. As a result, it sinks due to higher density & come back ~~to~~ ^{as} Canary stream
- o This way the entire global currents are interconnected, and move in consonance with each other. Change at one place can disrupt the entire

system

⊙ However, recently this AMOC is slowing down due to less temperature differential.

It adversely affects the monsoons as well as other oceanic & atmospheric circulations, known as Atlantification.



There is a need to urgently set in action a contingency plan so as to prevent such occurrences in future with global cooperation.

Q. 10 :->

Identifying the factors which affect the salinity of ocean bodies, discuss the reasons behind relatively higher salinity of N. Sea, Arabian Sea & Red Sea.

Salinity of oceans is defined as the amount of salt present (in grams) per unit litre of water (g/L).

A water with salinity about 35 ppt is said to be saline water.

* Factors affecting salinity of oceans

- ① Rate of evaporation, which depends upon insolation, location, etc.
- ② Rate of freshwater inflow, through rivers or melting glaciers
- ③ Winds, as they bring ocean currents for mixing together
- ④ Location of the body, since enclosed seas are usually more saline

* Reasons for relatively higher salinity

① North Sea : Though located at higher latitudes, gulf stream brings saline water in large quantities

② Arabian Sea : Its enclosed nature & location in tropics, leading to higher evaporation. Also, hardly any freshwater influxes

③ Red Sea : No freshwater influx, enclosed nature, high temperature

However, high salinity might be harmful for general flora & fauna, but it often gives rise to unique biodiversity

Ex → Salt-tolerant corals in Red Sea

Q-11 :- Comment on the significance of the Sangam literature as a source of understanding history of that period.

Sangam literature is a collection of Tamil works compiled during three Sangams organised by Pandyan kings of Madurai. Although their precise historical period is not known, they are usually attributed to 3 BCE - 3 AD.

* Significance of Sangam Literature

- ① Historical :-
 - o Tells about the kings, battles fought by them and their satecraft.
 - o Tells about administrative systems of those times
- ② Social :-
 - o Tells about the society, prevalent rituals & relations

- Condition of women miserable.
 - Sati prevalent
 - Love marriages allowed
- ② Economic :
- Land major source of revenue & wealth
 - Divided into 5 types depending upon its fertility. Ex → Marudam, palani, etc.
 - Trade in spices, ivory, etc.
- ④ Culture :
- People pretty religious, respect for priests
 - Harvest festivals common
 - Folklores about heroic deeds, valiant warriors, etc.
 - Inscriptions & votive records also common, people paying generously for the charities
- ⑤ Literature :
- A source of Tamil grammar
 - Masterpiece in poetry

- o Tamil language developed out of such Sangams

Sangam literature is compiled as 12 books, the earlier seven of which are also called as Tevaram.

They are not only rich source of history, but also a literary masterpiece of Tamil.

Q-12 :->

Explain the significance of role played by Sardar Patel in pre- and post-independent India. In what ways can Sardar Patel & Bismarck be compared?

Born into the princely state of Gujarat, Sardar Patel ultimately brought their unification into new-born nation of India. He not only merged 565 princely states into Indian union, but also inculcated the idea of oneness in them.

* Sardar Patel in pre-independence period

- ① Active participant of Kheda Satyagrah when he came into contact with Gandhiji.
- ② Organised Provincial Congress Committee in Bombay, sustaining it with his own income as a lawyer.

- ③ Organised Bardoli Satyagraha, where the women granted him title of 'Sardar'
- ④ Prepared National Economic Program at Karachi Session in 1929, while presiding over it. It remained the basic Congress program for all the coming years till independence

* Post-independence India & Sardar Patel

- ① Appointed as Deputy PM, home minister & also headed ministry of Information & broadcasting for some time
- ② Instrumental in maintaining post-partition peace in western India
- ③ Important member of Constituent Assembly.

- ④ Brought unification of 565 princely states into Union of India.
- ⑤ Liberation of Goa from Portuguese (Operation Polo) & storming off troops of Nizam of Hyderabad.

* Sardar Patel & Bismarck

- ① O.V. Bismarck was minister of German Emperor Kaiser William III, while Patel was a minister of democratic cabinet
- ② Both brought unification of their respective nations
- ③ Bismarck followed a policy of blood & iron while Sardar Patel was more pragmatic & pacific.

Thus, Sardar Patel can properly be called as the architect of free India, and the iron-man of India.

Q-13:- The political mobilization in princely states was not a sudden phenomenon but a gradual process with links to national movement. Discuss with examples.

~~Before India was divided~~

India under Britishers was divided into 2 categories : the British provinces (67% of area) & the princely states (33% of area). The national movement in both these categories was simultaneous but different

* Political mobilization in Princely States

- ① The seeds of anti-colonialism was sown from the very beginning when Tipu Sultan of Mysore or Maharaja Ranjit Singh of Punjab were against British rule.
- ② However, the weak position of native rulers & military as well as

economic superiority of Britishers kept the native rulers on their backfoot.

③ With the penetration of Congress, the wave of nationalism spread across princely states as well. However, Congress was more focused on British provinces & didn't want to attract new resistance from princes.

④ With coming of Gandhi on the national scene, his Satyagraha technique found many takers in princely states. Ex → Peasants of Kheda in Gujarat moved over to progressive state of Baroda during Satyagraha.

⑤ With growing links of national movement, Nehru addressed an

all-India conference of princely states in 1927. Steadily, this gave rise to Prajamandal movement.

⑥ After years of apathy, it was finally decided in Congress session of 1939 (~~at~~ (Tirpur)) to include Prajamandal movement within the folds of Congress-led movement.

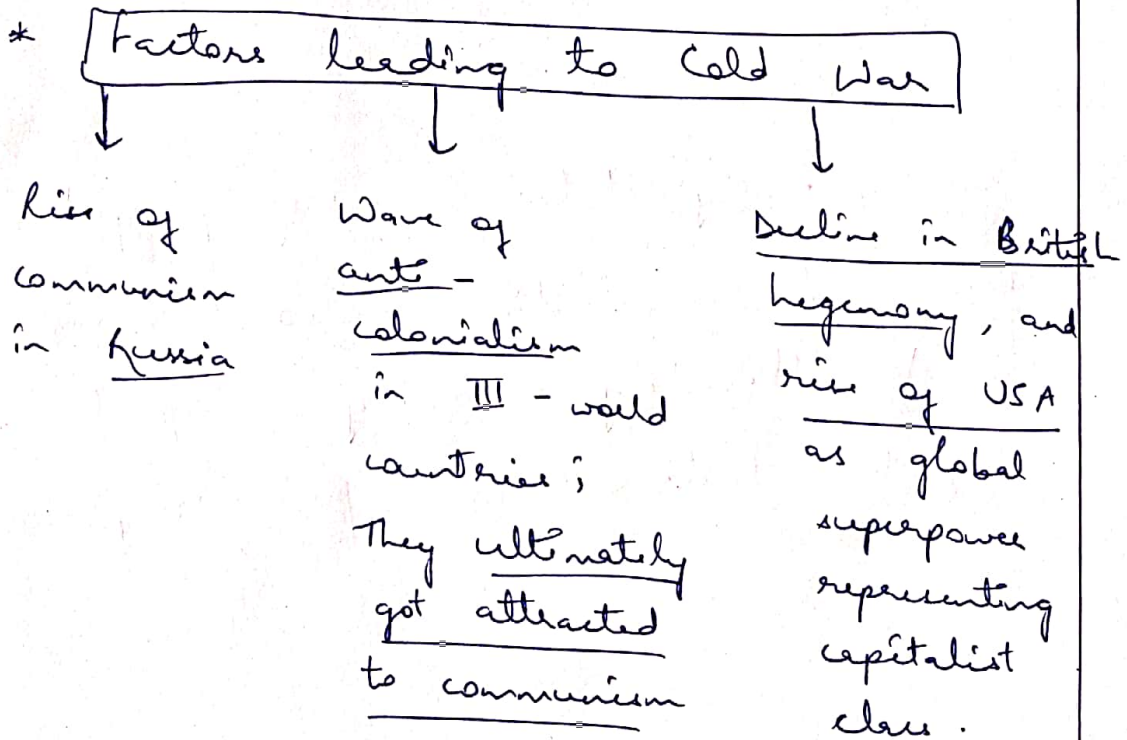
⑦ Enthusiastic participation in Quit India movement.

Thus, princely states equally played their role in Indian national movement, ultimately becoming a part of the Indian Union post-independence.

Q-14:→

How did the specter of spread of communism outside Europe & responses to it vitiate world peace in the aftermath of WWII? Discuss.

World war II is known as the worst humanitarian crisis this earth has ever seen. However, despite so much loss & blood-letting, the peace remained elusive, and the world enter into a new Cold-War era



* Instances vitiating world peace during Cold War

- ① Suez canal crisis (1956), when Israel & Britain blocked Suez route for the Egypt. In this case, Russia threatened to intervene in support of its ally, Egypt.
- ② Formation of military alliances like NATO, CENTO by capitalist world while Warsaw pact by communists
- ③ Cuban missile crisis (1962), when the Russian & American forces came upto the brink of nuclear war
- ④ Wars in Korean peninsula, Vietnam, etc. inevitably got divided along ideological lines
- ⑤ Arms race as well as technological race in space. Ex → Apollo Mission of NASA was for gaining primary

over ROSCOSMOS.

However, it was not all - conflicts only. There were golden instances of peace occurring during tough times:

- ① Rise of non-aligned movement (1961) so that countries don't have to become followers of one camp or the other.
- ② Arms control agreements. Ex → START doctrine between USA & USSR.
- ③ Nuclear non-proliferation regime. Ex → NPT in 1972.

Thus, the cold war divided the world into two camps for ^{around} 50 years, only ending with collapse of USSR in 1991.

Q-15:

States in the NER, as they stand today, are a result of multiple phases of reorganisation. Analyse.

Northeast India represents a paradoxical situation. On one hand, it is a land of unparalleled natural beauty, on the other, it is a region of unending hostilities & conflicts.

Post the state reorganisation commission (1956) recommendations of linguistic reorganisation, the voices for north-eastern reorganisation grew louder.

The reasons for this were varied:

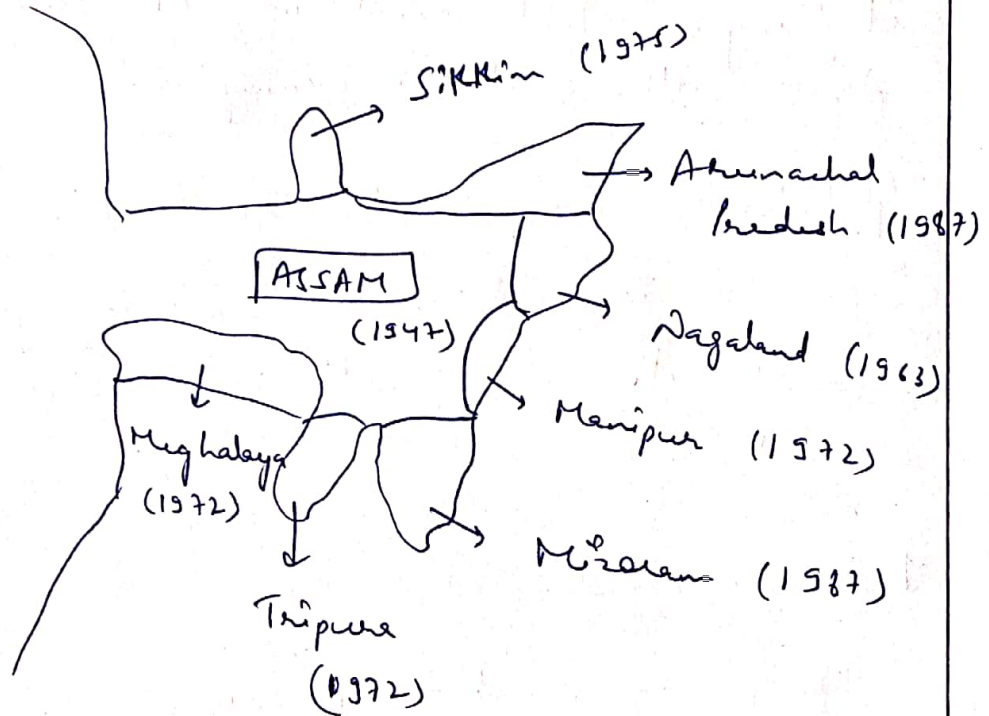
- ① Ethnic diversity. Ex → Nagas, Mizos
- ② Linguistic factors. Ex → Bangla-speaking population often targeted by Assamese population.

- ③ Scarcity of resources . Ex → Assam took advantage of flat terrain, while other peripheral states were left lushing.
- ④ Long history of resistance . Ex → Naga national movement dating back to 1919.

* Reorganisation of Northeast region

- ① 1947 :
 - State of Assam
 - princely states of Manipur & Tripura
- ② 1963 : Nagaland carved out of Assam
- ③ 1975 : Sikkim incorporated into India
- ④ 1972 :
 - Manipur & Tripura elevated to states
 - UTs of Arunachal Pradesh & Mizoram
 - Meghalaya upgraded to state from sub-state

⑤ 1987 : Statehood to AP & Mizoram



Thus, Northeast India represents the federal equilibrium that Indian union maintains by accommodating various regional aspirations & ~~identities~~ identities.

Q-16 :->

Although globⁿ has enriched the Indian culture, it has also exacerbated many challenges which exist in 21st century. Assess with suitable examples.

Globalisation refers to contraction in space & time dimensions, bringing the world closer as well as faster together.

In India, globalisation became a mainstream - med phenomenon post - 44 reforms of 1991.

It has not only brought global culture to India, but has also taken Indian culture to the globe.

(*) Globalisation enriching Indian culture

① Proliferation of brands for consumer goods, apparel, etc.

Ex → Walmart setting shops in India

② Media becoming more diverse.

Ex → Netflix culture

③ Cosmopolitanism of lifestyle.
 Ex → Hanging out with friends, solo trips, etc.

④ Expanding culinary choices.
 Ex → Mexican food, Dominican culture, etc.

* Exacerbating new challenges

① Feminisation of poverty.
 With men moving out of villages for employment opportunities, females are often left behind for low-paying jobs

② Casualization of labour.
 Ex → rising platform workers / gig economy leaving workers vulnerable due to informal jobs

③ Dark web & pornography.
 Rising crime and people falling prey to transnational organised networks,

esp. the vulnerable children

④ Decline in social capital

Real-life interaction replaced by digital interaction

⑤ Political instability due to increasing interference in country's electoral system. Ex → Cambridge Analytica

Thus, globalisation is a double-edged sword. It's the joint responsibility of government, civil society & the citizens to make it a boon for the society, and not a bane.

Q-17 :-

Modernisation in the context of India has to be seen differently from the West. Explain the statement with reference to impact of modernisation on traditional institutions & activities.

Modernisation refers to upgradation of existing systems/institutions in accordance with the changing time. However, it is a culturally - relative term, meaning different things for different people.

* Modernisation in West

- ① Secularisation, i.e., decreasing impact of religion on day-to-day lives
- ② Urbanisation ③ Industrialisation
- ④ Increasing autonomy for individuals, i.e., community not judging any individual's behaviour

- ⑤ Democratic political system
- ⑥ Science & technology reigning supreme
- ⑦ Proliferation of IT

* Modernisation in India

India has always been an exception. It has been a land of diversity, yet inclusive in nature, holding together different world perspectives.

However, it has not been unaffected by modernisation, albeit in a slightly different way from the rest of the world :

- ① Traditional Institutions :
 - Religion still continues to guide our lives
 - Caste credentials still matter, though not in the public sphere anymore due to right to equality.

① Nuclear families going back to being joint families for the sake of child-rearing

② Activities : ① Increasing participation of women in economic activities, however still low-paid

① Double burden of work

① Economy moved to service sector, leaping the industrial sector as in the West.

③ Science : ① Making great strides but still backward-looking

① Traditional medicinal systems still popular.

Thus, modernisation & traditions have co-existed in India since time immemorial and continue to doing so.

Q. 18: The term NE doesn't convey the cultural diversity of the region which still remains largely unexplored. Examine.

Northeast India includes the 7-sisters states and Sikkim. It has been always a mosaic of different cultures, but is largely suffering from the dictum of 'out of sight, out of mind'.

* Cultural diversity of Northeast

- ① Part of two biogeographic provinces viz. tropical & palaearctic
- ② Four biodiversity hotspots from UNESCO
Ex → Nokrek in Meghalaya
- ③ Forest wealth of Assam, Himalayan mountains of Arunachal Pradesh, Khasi ranges in Manipur & Mizoram
- ④ Numerous rivers & related flora-fauna

All this gives rise to very different cultures on all sides of geographical features viz. :

- ① Maruti island in Assam having Naam - ghars for Kirtans
- ② Naga festivals of Hornbill, showing their diversity among ^{tribes like} AOs, Konyak, etc.
- ③ Metrochhal culture of Meghalaya
- ④ Manipuri festivals of Lai haroba
- ⑤ Classical dances like Sankirtans, Sattriya as well as Theatrics like Bhasna.

* Reasons for being largely explored

- ① Disturbances due to ethnic movements
 - ② Difficult terrain
 - ③ Lack of connectivity
 - ④ Climatic factors
 - ⑤ Low population
 - ⑥ Low focus by the government
- ⑦ Low private sector participation

* Way forward

- ① Regional connectivity through UDAN 3.0 as well as international component of UDAN
- ② NITI Aayog developing detailed project reports for tourism keeping in mind sustainable development objectives
- ③ Incentives to private sector. Ex → Tax breaks
- ④ PMKVY used for skill development in tourism sector for local youth
- ⑤ Using NE - Venture capital fund for tourism - related infrastructure development.

Thus, there is a need to shift our focus towards sustainable & inclusive tourism to bring out the best of Northeast India.

Q-19:

The Tibetan Plateau, known as the Water Tower of Asia, plays an imp. role in system of Monsoon over Indian sub-continent. Explain.

Tibetan plateau, located at an altitude of 6000m, is one of the highest plateaus in the world. It is the largest water-source outside the poles, and thus is known as the 'Third Pole'.

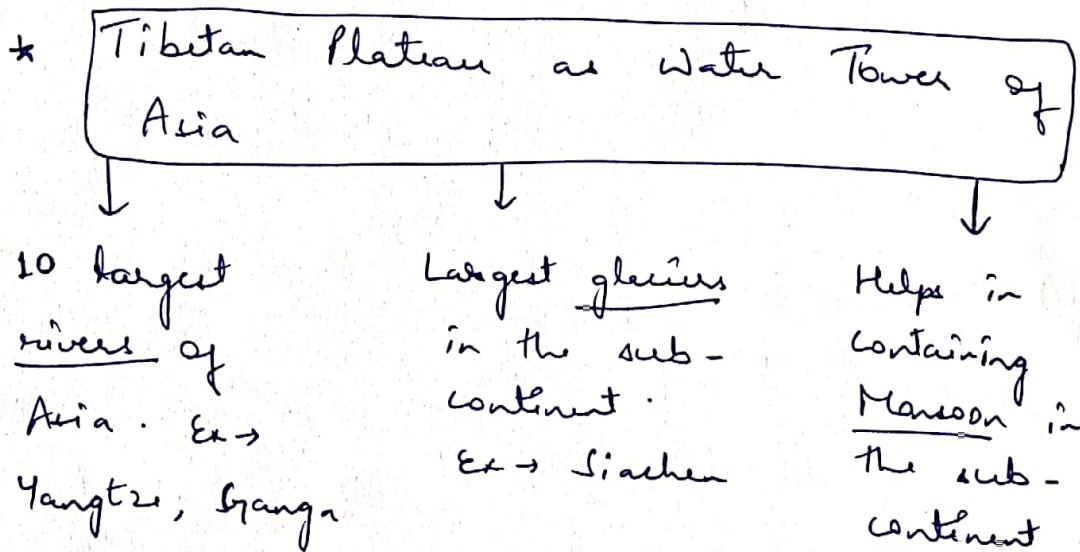
* Tibetan Plateau's role in Monsoon

- ① Withdrawal of Subtropical Westerly Jet stream to the south of Tibetan plateau creates the conditions for setting in of monsoon
- ② When low-pressure area is created in north-India, monsoon winds rush into fill it up. Tibetan

plateau prevents these winds from crossing Indian sub-continent into Central Asia. Thus, they cause rain in northern Ganga plains

③ Heating of Tibetan plateau due to its exceptional height creates a low pressure condition, and helps in intensifying the Monsoon High lying beside Madagascar.

④ Source of rivers, from where water gets evaporated to bring precipitation.

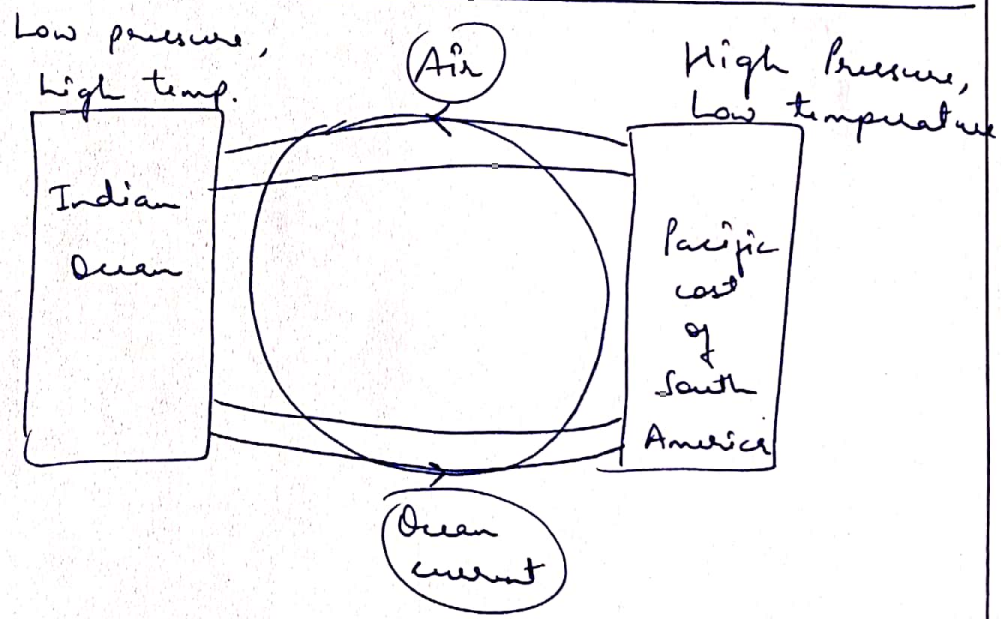


Thus, Tibetan plateau has a pre-eminent position in the climatic conditions of South Asia. However, there is a need to check ever increasing global warming, if we want to sustain it in its natural environment.

Q-20 :

What is Walker circulation? Highlight its impact on global climate. How is it affected by emergence of ENSO?

Walker circulation refers to the flow of air from equator to the tropics on both sides of the hemisphere. It is one of the most important factors in determining global climatic conditions.



• In summers of northern hemisphere, i.e., June-August, a low pressure area develops over Indian ocean due to high insolation from sun.

- o This results in movement of winds from South American west coast towards Indian ocean.
- o They pick up moisture on their way & cause monsoonal rains in India & other south-Asian countries
- o Its air-component is known as the Walker cell, while the corresponding oceanic circulation also takes place.

* Impact on global climate

- ① Monsoon in S. Asia & SE-Asia
- ② Drought - like conditions in South America
- ③ Upwelling of cold currents, making South American waters exceptionally nutritious
- ④ Also governs the climatic conditions of Australia, Africa & China.
Ex → Southern jet for Africa

* Effect of ENSO

- Sometimes, cold water on Peruvian coast is replaced by warm water, a phenomenon known as El-Nino
- It reverses the air circulation, i.e., inverted Walker cell, and it is known as Southern oscillation
- This causes rains in South America, while S. Asia & Australia goes dry. Also, floods in China are a result of ENSO

Thus, global climatic system is an interconnected entity, and a slight change in one of its components result into change in global climatic patterns.