

NEXT IAS

GS - MAINS ADVANCED COURSE 2024

(To be filled by candidate)

Test Code : GSMAC2401

Test No. : 01

Name of Candidate : ANKIT AGRAWAL

Roll No. : PTPP220280

Start Time : 6 PM

End Time : 9:05 PM

Date of Examination : 07/07/24

Medium : English ☒Hindi ☐

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

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

GRAND TOTAL : / 250

EVAL CODE: EVAL DATE:

GENERAL INSTRUCTIONS

1. Immediately on receipt of the QCA booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.
2. Candidates must mention all relevant details like Name, Email, Roll No, Mobile, etc. in the space allocated
3. Candidate is expected to attempt all 20 questions within the given timeline.
4. Answers must be written in the medium authorized at the time of admission.
5. Candidates must write answers for the specific question under the respective question itself. Any answer written outside the space allotted may not be given credit.
6. Please write neatly. Avoid illegible writing.
7. Do not write/make irrelevant matters in the QCA5.

साधारण निर्देश

1. QCA पुस्तिका प्राप्त होने पर कृपया तुरंत जांच लें कि इस QCA पुस्तिका में कोई पृष्ठ या सामग्री आदि गलत छपी हुई या फटी हुई या गायब तो नहीं है। यदि ऐसा है, तो इसे एक नई QCA पुस्तिका से बदल लें।
2. अभ्यर्थियों को सभी प्रासंगिक विवरण जैसे नाम, ईमेल, रोल नंबर, मोबाइल नंबर आदि का आवंटित स्थान पर उल्लेख करना होगा।
3. अभ्यर्थियों से अपेक्षा की जाती है कि वह आवंटित समय-सीमा के भीतर ही सभी 20 प्रश्नों के उत्तर-लेखन का प्रयास करें।
4. प्रत्येक उत्तर, प्रवेश के समय चुनी गयी भाषा के माध्यम में ही लिखे जाने चाहिए।
5. अभ्यर्थियों को विशिष्ट प्रश्न को उत्तर संबंधित प्रश्न के गोले ही लिखने होंगे। आवंटित स्थान के बाहर लिखे गए किसी भी उत्तर को क्रेडिट नहीं दिया जाएगा।
6. कृपया साफ-सुथरा लिखें। अपठनीय लेखन से बचें।
7. QCA5 में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

FOR OFFICE USE ONLY

Student Concerns / Query	Evaluator's Feedback / Response
1	1
2	2
3	3

MARKING SCHEME: *

MARKS PER QUES	Below Average	Average	Above Average
10 Marks	Below 3.00	3.00 - 3.75	4.00 and above
15 Marks	Below 4.50	4.50 - 5.75	6.00 and above

*Subject to change without prior notice.

IMPORTANT QR CODES

 Topper's Copy	 Common Mistake and Correct Filled QCAB
 Copy Scanner App	 Next IAS Test Centre Location

MACRO COMMENTS

The purpose of evaluation @NEXTIAS is to provide constructive suggestions on 'How to Improve Answer Writing and thereby score better marks.

STRENGTHS OF THE CANDIDATE

AREAS OF IMPROVEMENT

IMPROVEMENT SUGGESTIONS

Q1

प्राचीन भारत के सांस्कृतिक और सांख्यिक इतिहास को समझने में सिक्काशास्त्रीय साक्ष्यों की भूमिका का परीक्षण कीजिए।
(10 अंक)

Examine the role of numismatic evidence in understanding the political and economic history of ancient India. Provide specific examples. (10 marks)

Political & economic history of ancient India is deciphered from sources like architecture, literature and art forms which include numismatic evidences.

Role of Numismatic evidences.

Political History

a) Symbol of authority usually depicted on coins (eg. Indo-Greek first to issue coins → shows first wave of immigration of foreign rulers.

b) shows centralised administration →

with uniformity of laws (eg. Kushan empire issued gold coins which was found in most of their ruled areas.

c) Interaction with outside Political entity → presence of coins issued in particular kingdom found in other civilisations & kingdoms both domestically

2 Internationally

Economic History

① level of economic development showcased through type of coins issued

(eg) Gupta period golden age coincide with largest amount of gold coin issued whereas, their decline coincided with silver & copper coin

② level of trade & trading of specific goods & services → for (eg) agriculture was mostly traded based on barter system whereas other precious metals on coins.

③ Number of coins issued & purity also showcased richness & wealth of kingdom

(eg) Kushan empire believed to issued most pure gold coins:

Numismatic evidences

thus provide idea of economic & political history along with society, culture & international relations of those ancient times.

Q2

स्वतंत्रता-पूर्व भारत में विविध सामाजिक-आर्थिक और क्षेत्रीय पृष्ठभूमि में महिलाओं की संगठित करने में महिला संगठनों के प्रभावों का आकलन कीजिए।

(10 अंक)

Assess the impact of women's organizations in mobilizing women across diverse socio-economic and regional backgrounds in pre-independence India. (10 marks)

Women in pre-independent India suffered from several issues like female infanticide, neglect of education, sati, dowry, no widow remarriage, etc. Thus women organizations formed to bring women together to fight for their cause.

Impact of Women's organization

- ① Advocated for Education → Wood's Dispatch focused on women education.
- ② Abolition of Sati → Brahmo Samaj led by Raja Ram Mohan Roy actively fought against SATI.
- ③ Widow remarriage Act → by Lord Dalhousie
- ④ Fight against female Infanticide → ~~Born~~ abolished by Lord Mayo.

- ⑤ All India women's conference → advocated for political & economic right of women.
- ⑥ Mahila Argya Samaj → aimed to remove orthodox practices related to women.
- ⑦ Savitri Bai Phule opened girls college in Pune and helped lower caste women.
- ⑧ All India women Association → fought for education rights and equal participation of women in economic sphere.

Women organisation of pre-independent India inspired and set the foundation for women organisation & movement in post independence India like Anti Dowry movement, Nibhya movement, etc.

Q1

गुटनिवेशकों को नीति किस प्रकार प्राप्त तथा अन्य नए स्वतंत्र राष्ट्रों को अपनी संप्रभुता बनाए रखने में औपनिवेशिक दबावों का प्रतिरोध करने को आकांक्षाओं को प्रतिबिंबित करती है?

How did the policy of non-alignment reflect the aspirations of India and other newly independent nations to maintain their sovereignty and resist colonial pressures? (10 marks)

At the heights of cold war between NATO Allies and USSR, the newly Independent nation chose the policy of non-alignment.

Non-Alignment reflected aspirations

① Focus on addressing critical challenges of poverty, mass illiteracy, etc.

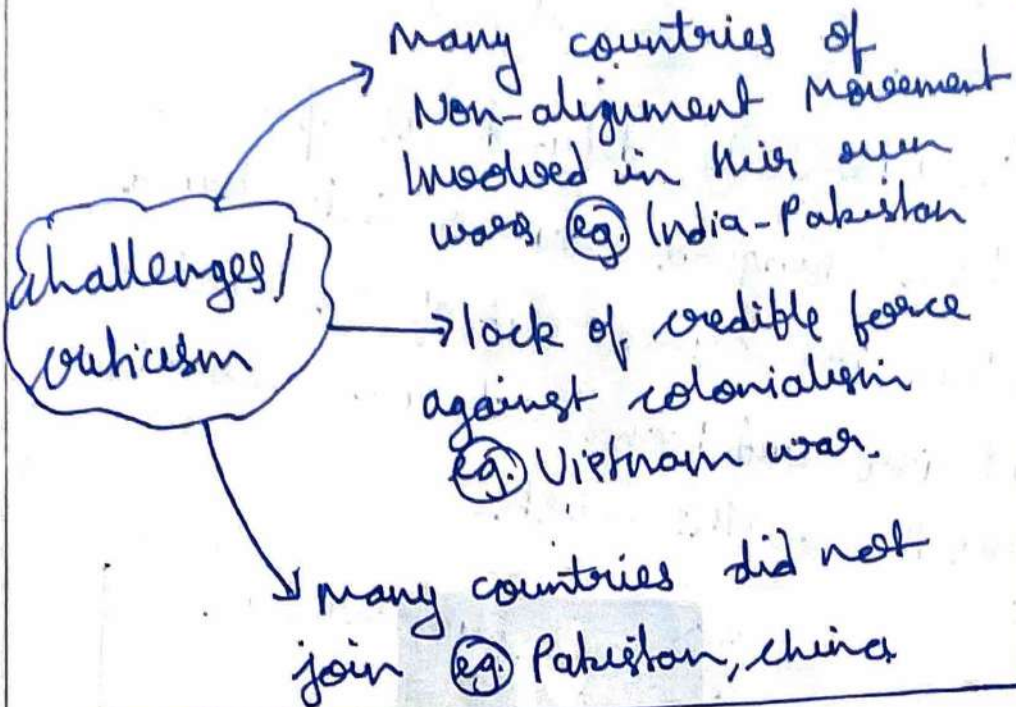
② Nascent stage of democracy thus focussed on sustaining it rather than getting involved in external affairs.

③ Wanted to derive benefits from both side e.g. Egypt after war.

④ Threat of losing freedom as past wars fought on basis of imperialism.

⑤ Wanted to create new world order of multi polar world where voice of

global south was heard.



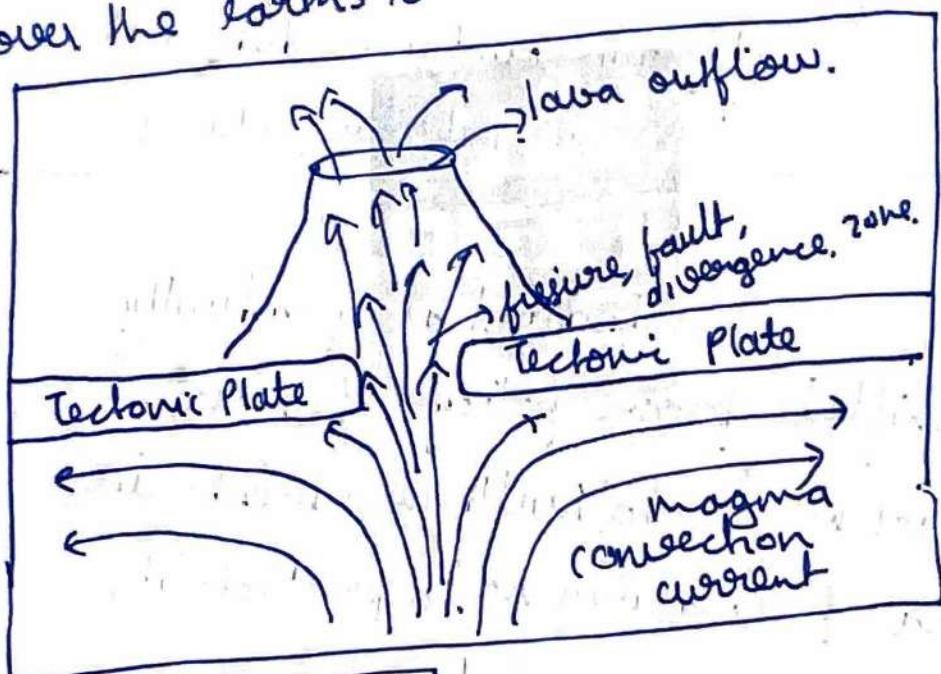
India has gradually shifted from policy of non-alignment to multi-alignment in era of cold war 2.0 to protect its aspirations and interest.

Q-4

ज्वालामुखीयता में शामिल प्रक्रियाओं पर जवाब कीजिए। साथ ही विश्व के प्रमुख ज्वालामुखी क्षेत्रों और उनसे संबंधित विवर्तनिक विन्यासों पर प्रकाश डालिए। (10 अंक)

Discuss the processes involved in volcanism. Highlight the major volcanic regions in the world and their associated tectonic settings. (10 marks)

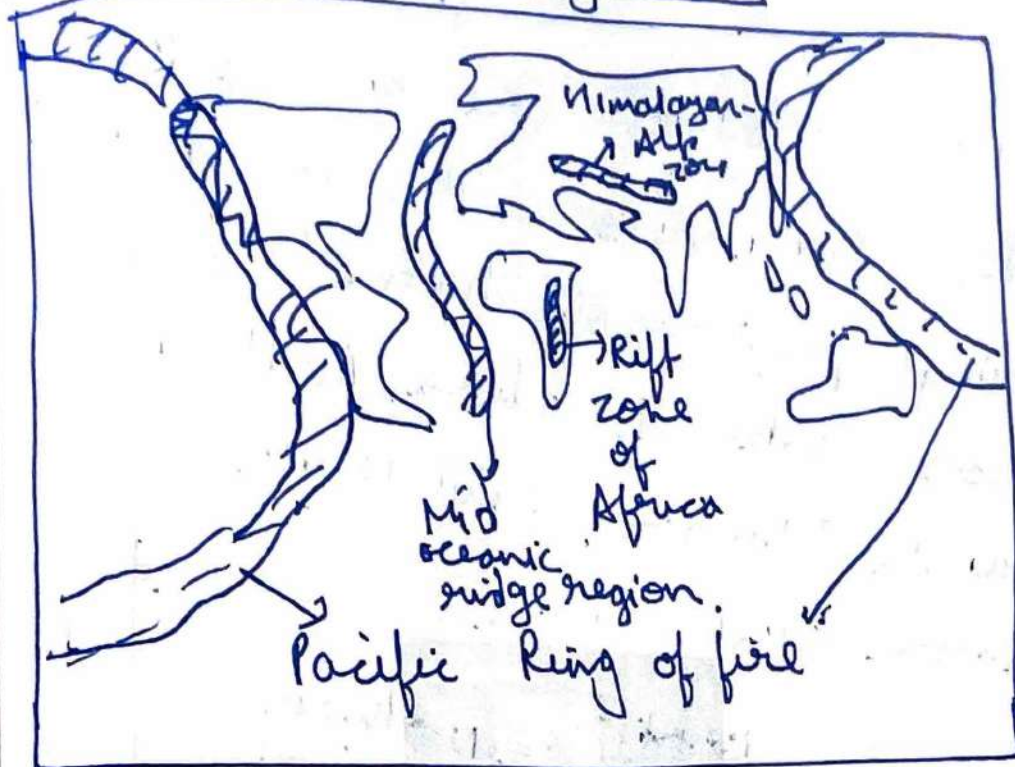
Volcanism is defined as process where magma turns into lava when it comes out of the earth's interior and form volcanic mountain over the earth's crust.



Process Involved

- ① Rising of magma due to convection cell.
- ② Breakdown of earth crust & development of fissures & cracks
- ③ Lowering of pressure
- ④ massive explosion in form of lava outpour due to sudden decline of pressure.

Major Volcanic Regions



① Pacific Ring of fire → Subduction of Pacific oceanic plate under Eurasian & North American & S. American plate.

② Rift zone of Africa → due to internal convective current.

③ Mid oceanic Ridge zone → divergence between North American & Eurasian plate.

④ Himalayan & Alp region → less frequent, but African plate & Indian plate collision with Eurasian plate.

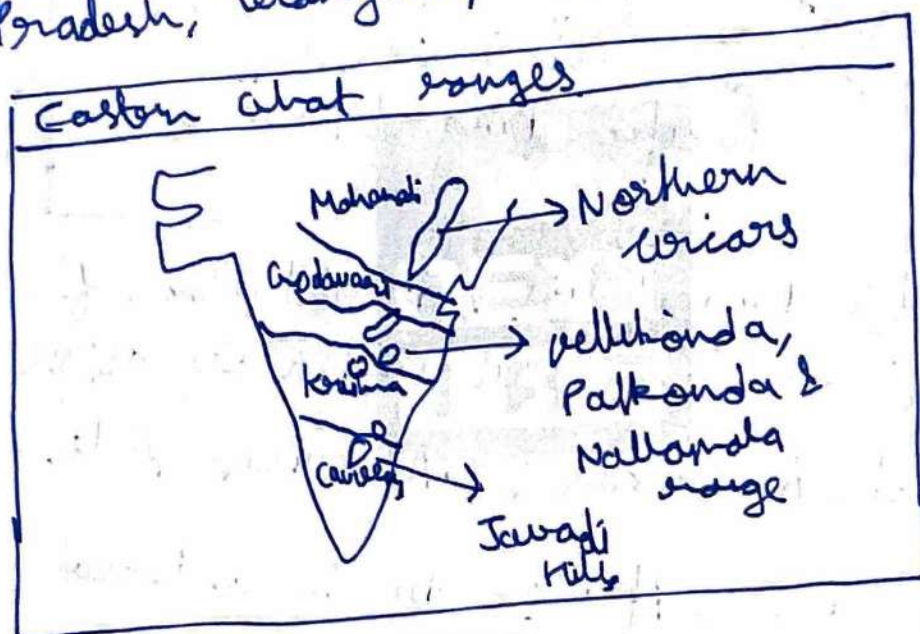
Volcanism provides us invaluable information about earth's interior & validate Plate tectonic theory.

Q5. पूर्वी घाट की भूवैज्ञानिक विशेषताओं और पारिस्थितिक महत्ता का वर्णन कीजिए।

(10 अंक)

Explain the geological features and ecological importance of the Eastern Ghats.

Eastern Ghats are one of the oldest landforms of the world formed during proterozoic times. It spans across states of Odisha, Andhra Pradesh, Telangana, Tamil Nadu.



Geological features

- ① Hill Ranges → denuded & low in relief
- ② Dissected → due to river erosion by large rivers forming valleys.
- ③ Rock type → Bauxite, granite, gneiss, ancient igneous rock formation.

① Arrangement → North East to South West.

⑤ Relief → Northern ranges are highest whereas middle ranges lowest & near Koraput, Southern ranges high.

Ecological importance

① Vegetation type → Moist deciduous & semi-evergreen type with presence of exotic species (eg) Red Sanders.

② Fauna type → low biodiversity compared to Western Ghats but high endemism, Elephants, Tiger, Porcupine, Dolphins, Olive ridley turtles, etc.

③ Climate regulation → important for passage of SW monsoon wind toward northern plains due to low relief.

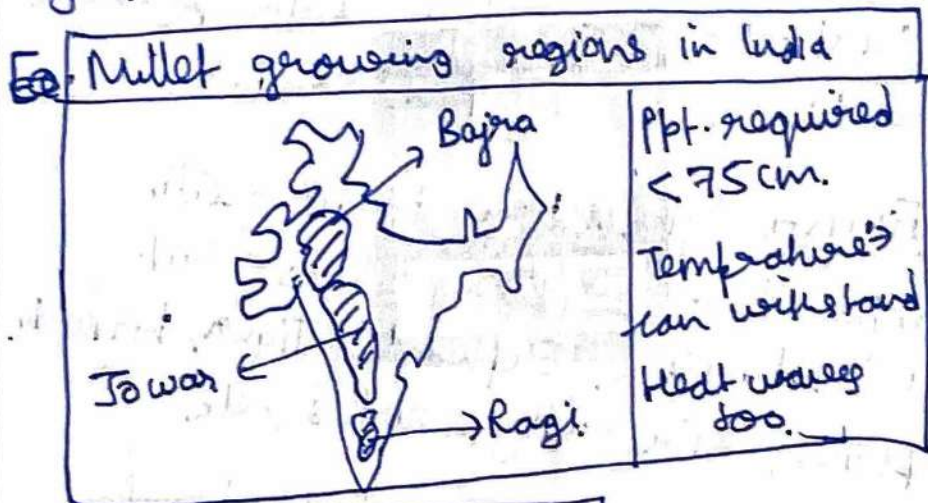
④ River valleys & National parks → (eg) Simlipal, Nallamala, etc.

Eastern Ghats unlike Western Ghats still maintain its ecological sanctity due to low human interference.

- Q6. माट अनाज को रूप में प्रचलित फसलों (मिलेट्स) को सरकार ने 2018 में पोषक अनाज के रूप में पुनः ब्रांड किया है। हम संदर्भ में मिलेट्स के पारिस्थितिक और पोषण संबंधी महत्व पर चर्चा करें। (10 अंक)

Earlier known as coarse cereals the government rebranded millets in 2018 as nutri-cereals. In this context discuss the ecological and nutritional significance of millets

Millets like Ragi, Jowar, Bajra, etc are coarse grain cereals which can act as alternative to wheat system due to ecological & nutritional significance.



Ecological significance.

- ① less water intensive → drought resistance, require less than 75 cm precipitation, rainfall suitable
- ② Maintain soil fertility → fixes nitrogen thus ~~has~~ no requirement of fertilizers thus increases agricultural productivity

- ③ Carbon Sequestration → capacity to act as carbon sink thus role in conservation agriculture.
- ④ Feeder crop → can support biodiversity and help in objective of mixed farming.
- ⑤ No Agricultural pollution → minimal or no use of fertilisers & pesticides.

Nutritional Significance

- ① High source of vitamins
- ② Presence of iron & magnesium thus help in tackling issue of anaemia.
- ③ less glucose content thus low in carbohydrate → control obesity
- ④ Make a person fuller for longer time → address issue of hidden hunger.

~~⑤ Low in calories~~

Government has taken several steps to promote it such as MSP, Millet lunch in Parliament, Institute of Millet research in Hyderabad, etc.

- Q7 आर्कटिक क्षेत्र की बर्फ के पिघलने से जैव विविधता और पारिस्थितिकी तंत्र पर कौन-कौन से संभावित परिणाम हो सकते हैं? ये परिवर्तन वैश्विक पारिस्थितिक संतुलन को किस प्रकार प्रभावित कर सकते हैं? (10 अंक)

What are the potential consequences of Arctic ice melt on biodiversity and ecosystems? How might these changes impact global ecological balance? (10 marks)

According to Lancet studies, Arctic will be ice free as soon as 2030 indicating rapid melting of Arctic ice.

Potential consequences

- ① Increase in sea level (3.2 mm per year according to IPCC)
- ② slowdown of AMOC leading to varied climatic pattern in different ecosystems
- ③ Loss of Habitat eg. Polar bear, Penguin, dolphins, etc
- ④ New forms of diseases & virus due to melting of Arctic permafrost.
- ⑤ Submergence of blue ecosystems like mangroves and coral system in tropical region eg. Sundarbans, Marshal Island, coral island.

⑥ Climate change → lower albedo act as feedback loop causing heat waves and forest fires.

eg. Amazon forest fires linked to changes in AMOC.

Impact on global ecological balance

Shifting of snow lines
Northward & upward

eg. Greenland almost ice free.

change in migration pattern of birds

eg. MOFFCC reported gradual decline in number of birds visiting India during winters from Arctic.

Heat budget regulation disruption

due to change in circulation pattern

Arctic Amplification is also linked to erratic nature of monsoon in recent times which can impact Indian economy & society greatly.

Q8

क्या आपका मत है कि समान नागरिक संहिता भारतीय समाज में धार्मिक बहुलवाद और सांस्कृतिक भिन्नता के विचार का खंडन करती है? (10 अंक)

Do you think the Uniform Civil Code contradicts the idea of religious pluralism and cultural differences in Indian society? (10 marks)

Uniform civil code is provided by constitution in Article 44 in form of directive principle.

Contradicts the idea of Religious Pluralism and cultural differences.

① VCC provides for uniformity in marriage procedure, inheritance, divorce, etc which varies from religion to religion.

↳ Hindus (Hindu Marriage Act)

↳ Muslim (Muslim personal laws)

② VCC is seen as anti tribal which has unique culture, customs, traditions, practices.

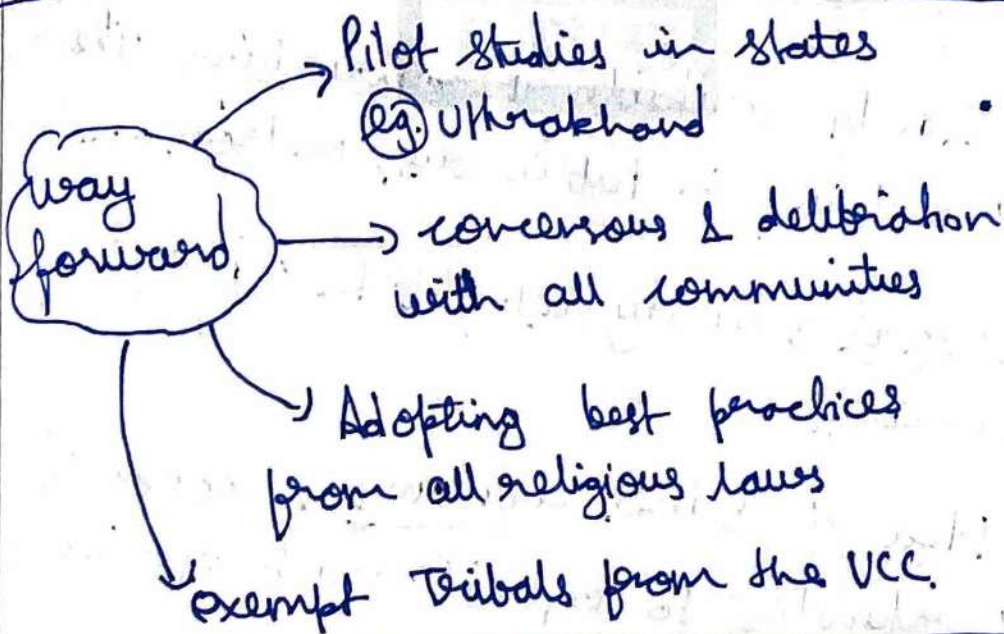
↳ more than 705 tribal communities in India.

③ It is seen as against the idea of unity in diversity.

④ Law commission said that there is no need to ensure uniformity in diverse country like India for unity.

VCC does not contradict

- ① It promotes the idea of secularism (followed in western secular countries like France & USA)
- ② It aims to ensure gender equity and empower women.
(eg) ban on triple Talac, entry of women in Sabarimala temple.
- ③ Successfully implemented in Goa & Uttarakhand



Uniform civil code can be successfully implemented only with consensus & agreement of all the communities & region thus it should not be forced upon the ~~for~~ people.

Q4

भारत में जनसांख्यिकीय परिवर्तनों के संदर्भ में स्वास्थ्य सक्रिय आयु वृद्धि की अवधारणा पर चर्चा कीजिए। यह समावेशी समाज में किस प्रकार योगदान देता है? (10 अंक)

Discuss the concept of healthy active ageing in the context of demographic shifts in India. How does it contribute to social inclusion? (10 marks)

According to census 2011, 8.1% of India's population is above the age of 60 years which is set to increase to 13% by 2030.

Concept of Healthy Active Ageing

① Provisions & Infrastructure related to geriatric healthcare

② Elderly suitable Infrastructure like wheel chair in public bus, metros, etc.

③ Social security net (e.g. 16 old age pension)

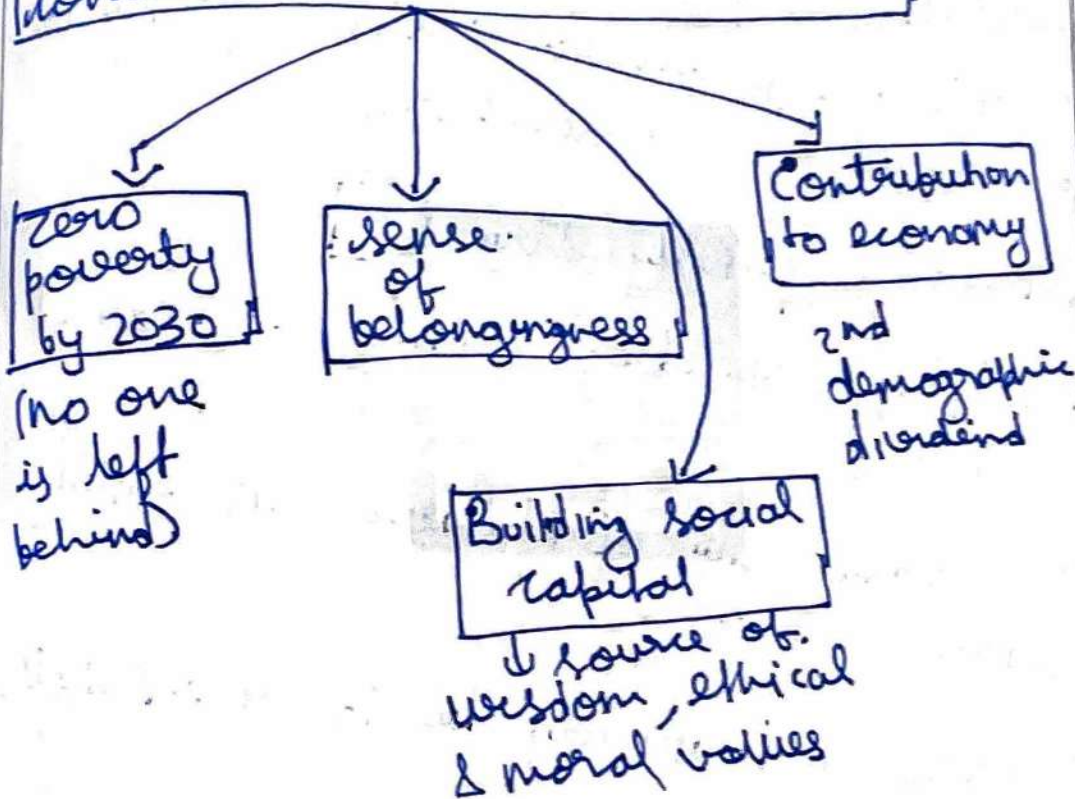
④ Idea of Silver economy → economic opportunities to exploit vast experience of elderly population.

⑤ Addressing issue of loneliness → Tata companies launch a startup to which hire youths to accompany old age people.

⑥ old age homes → Collaborating with NGOs, Public Private Partnership, etc.

⑦ Addressing issue of violence against old parents → Maintenance of Parents Act 2008.

Contribution to Social Inclusion



India need to ~~approach~~ approach by learning thorough experience of western countries that are facing huge subsidy burden & protest to address issue of ageing population.

Q10. "मजदूर उपभाग" से "वास्तविक उपभोग" में संक्रमण (परिवर्तन) नगरीय क्षेत्रों में पारिवारिक संरचना और गतिशीलता को किम प्रकार प्रभावित कर रहा है? (10 अंक)

How is the transition from conscious consumption to compulsive consumption impacting family structure and dynamics in urban areas? (10 marks)

Westernisation & globalisation has had influence on range of social institutions where we are seeing transition from conscious consumption to compulsive consumption.

Impacting family structure

- ① Wasteful spending leading to reduced savings.
- ② Increased say of children in family matters
- ③ Stress and anxiety due to unsustainable consumption.
- ④ Increasing burden of debts
↳ RBI reported that retail credit through credit card increased by 50% since COVID.
- ⑤ Change in dynamics of relationship within family
↳ fights for small issues creating tension in family

Dynamics in Urban Areas

- ① Huge waste production particularly e-waste
- ② Rapid growth of food outlets, restaurants, etc.
- ③ Rapid urbanisation due to increased economic growth due to huge consumption.
- ④ Transition from buying house to renting house
 ↳ saving money to consume daily needs services & products.

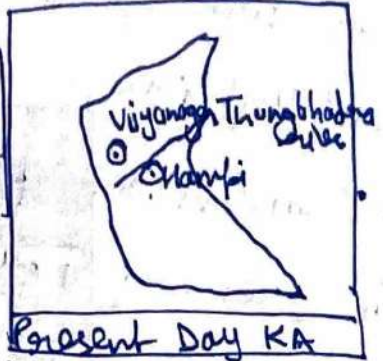
There is need to promote circular economy in this context and also ensure sustainable lifestyle through life mission.

Q11. विजयनगर वास्तुकला की प्रमुख विशेषताओं पर उदाहरण सहित चर्चा कीजिए। उनके स्थापत्य में ईर्ष्य-इस्लामिक तत्व किस प्रकार दिखाई देते हैं। (15 अंक)

Discuss with examples the key features of Vijayanagara architecture. How did Indo-Islamic elements manifest in their structures? (15 marks)

Vijayanagara kingdom was founded by Saluva dynasty on the banks of Tungbhadra river. It had one of the most fascinating architectures.

Key Features of Vijayanagara Architecture



① Evolution of Vesara

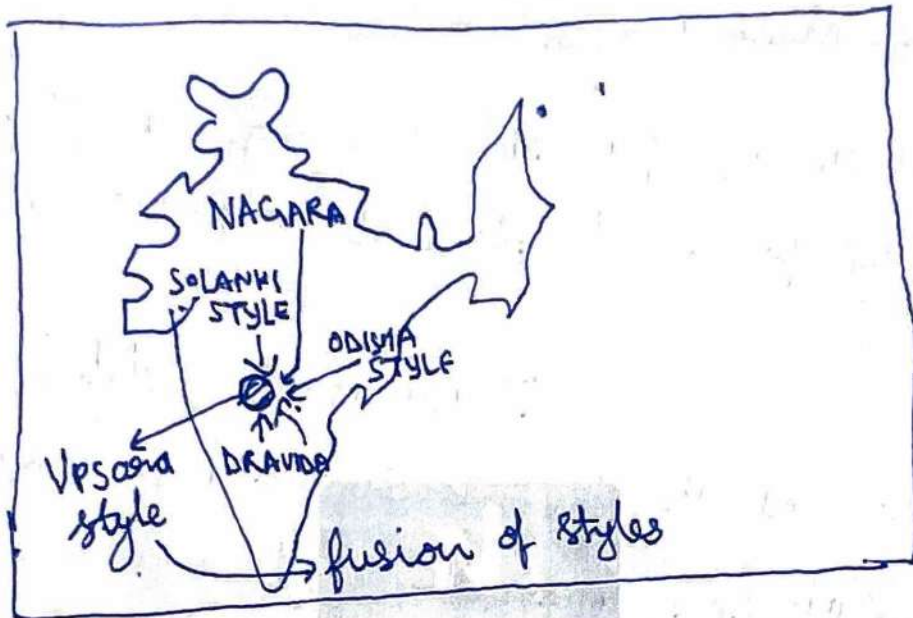
Type of Temple → mix of element of Nagara & Dravida temple (e.g. Virupaksha temple)

② Flat roof of the temples → In Hampi differed from Nagara & Dravida

③ Monolithic & Musical pillars

④ No use of mortar → Interlocking system used to construct walls of the building of temple.

⑤ Mandapam → Style also differed from that of Dravida style.



Manifestation of Indo-Islamic elements in structures

- ① Arc shaped roof in capital vijayanagar particularly in administrative building and palaces.
- ② Large & elaborate gardens complexes outside temples.
- ③ Use of marbles and sandstone in later times during reign of Krishna-deva Raya.

④ Large pillar structure around central building were also found in many places.

⑤ Gateways particularly large at the entry point of place of importance.

Vijayanagara architecture also reveals the society and economy of that time thus shows it was one of the most powerful kingdom of southern India in later ancient times.

- Q12. नालंदा और तक्षशिला जैसे प्राचीन भारतीय विश्वविद्यालयों की तुलना भारत के आधुनिक राज्य-वित्तपोषित विश्वविद्यालयों से कीजिए। आधुनिक विश्वविद्यालय अपनी प्रभावशीलता को बढतर बनाने के लिए प्राचीन विश्वविद्यालयों से क्या सीख सकते हैं? (15 अंक)

Compare and contrast the features of ancient Indian universities like Nalanda and Takshashila with modern state-funded universities in India. What lessons can modern universities learn from ancient ones to improve their effectiveness? (15 marks)

Recently, PM Modi along with Bihar Government launched the renovated Nalanda university thus reviving the glory of the past institute of excellence.

Comparison of Ancient Indian Universities and Modern State-funded Universities

① Architecture → Ancient universities more open, aesthetic and spread whereas modern more compact and post modern features like glass buildings

② Purpose → social wisdom, economic knowledge, advancement of knowledge was sole purpose in case of ancient whereas modern institution focuses on both knowledge & commercial purpose.

③ Subject matter

Ancient Institutions

- ↳ Cosmology
- ↳ Ethics
- ↳ Religion
- ↳ Science, History, geography, etc.
- ↳ Physical activities

Modern Institutions

- ↳ Technical knowledge like medical, engineering, etc.

④ Students → students from all over the world like Hsien Tsang during Harshavardhan period whereas present day institution takes mainly to domestic students.

⑤ Popularity/Quality of education → Nalanda, Vikramashila, Takshila universities were famous all over the world & imparted quality education.

↳ modern institution → only few colleges in QS world ranking with highest rank below above 150 out of 500 institutions.

Lessons from Ancient Institutions to improve effectiveness

- ① Providing holistic environment → open spaces, nature so that student can learn freely in non-preserved environment.
- ② Focus on quality of education → Avoid commercialisation of higher education.
- ③ Integration of ethics & Physical activities → for holistic development of student.
- ④ Problem solving curriculum → real world problems, focus on tie-up with Industries, government to solve problems of common people.
- ⑤ Establishing its own niche → Universities like Nalanda had uniqueness in the way it imparted education & content.

Higher education institution is the center of learning & it should remain so to take India toward the goal of developed nation by 2047.

- Q11. ब्रॉन्किस्टी आंदोलनों (1920-1930) और गांधीवादी अहिंसक संघर्ष के मध्य वैचारिक मतभेदों एवं समानताओं का विश्लेषण कीजिए। इन दोनों विचारधाराओं ने एक-दूसरे को किस प्रकार प्रभावित किया है? (15 अंक)

Analyze the ideological differences and similarities between the revolutionary movement (1920-1930s) and the Gandhian non-violent struggle. How did these two ideologies influence each other? (15 marks)

Grandhian strategy of 'Non-violence' is sometimes considered as roots of revolutionary movements (1920-1930s) which wanted to channelise their energies actively to get independence from freedom struggle.

Ideological Differences

Grandhian Movement	Revolutionary Struggle
① Believed in non-violence at any cost.	① Believed that violence may be necessary based on circumstances
② Believed methods of satyagraha, civil disobedience and Non-cooperation as an effective tool to fight British	② Did not believe in grandhian method and advocated for methods like assassination, attack on public buildings and offices, robbery, etc.

Gandhian Movement	Revolutionary Movement
③ Convince British that their rule is illegitimate and full of suppression	③ Force British to accept that their rule is illegitimate and suppression should be answered with suppression
④ Gradual freedom ↓ Dominion status & self rule ↓ Purna Swaraj	④ Immediate freedom ↓ military or armed rebellion

Similarities between the two

~~Gandhian Movement~~

① Goal of Independent India → both believed and aimed for complete Independence.
eg. Purna Swaraj resolution in 1931
Lahore session.

② Socialistic nature of state → Gandhiji believed in welfare of villages and lower caste, Revolutionaries also demanded for Socialistic republic India eg. HSRA formed in Feroz Shah Kotla in Delhi passed resolution.

③ Participation of masses → particularly youth, peasant and labour class in wider movement.

Influence on each other.

① Highlighting British oppression on masses eg. on peasant, labourers, etc.

② Revolutionaries like Bhagat Singh gave up violence in later phases and advocated youths to follow Gandhian principles in freedom struggle.

③ Undermining British hegemony → Revolutionaries helped leaders ~~show~~ the weaknesses of British.

eg. Do or Die during QIM, RIN Mutiny.

④ Tapping into class movement and youths energy → Inspired from Russian revolution, Gandhian movement later started taking up question of labour, tribal & peasant exploitation by British.

Both Revolutionaries & Gandhian movement provided dynamism to freedom struggle leading to ultimate withdrawal of British from India in 1947.

Q.4. भारतीय हिमालय में प्रमुख प्रकार की हिमनदों की आकृतियों कौन सी हैं? ये स्थानीय पारिस्थितिकी तंत्र और मानवीय गतिविधियों को किस प्रकार प्रभावित करती हैं?

(15 अंक)

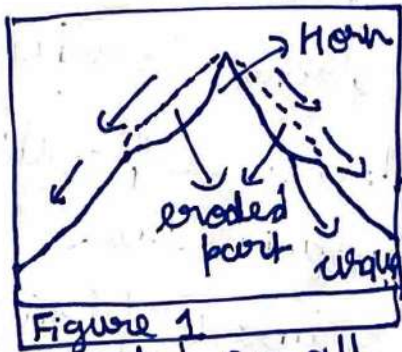
What are the various types of glacial landforms formed in the Indian Himalayas? How do these features impact local ecosystems and human activities? (15 marks)

The glaciers of Himalayas is also referred as 3rd pole of the world. Glacier act as an active agent of denudational process thus forming unique landforms in the region.

Various types of Glacial landforms in Himalayas.

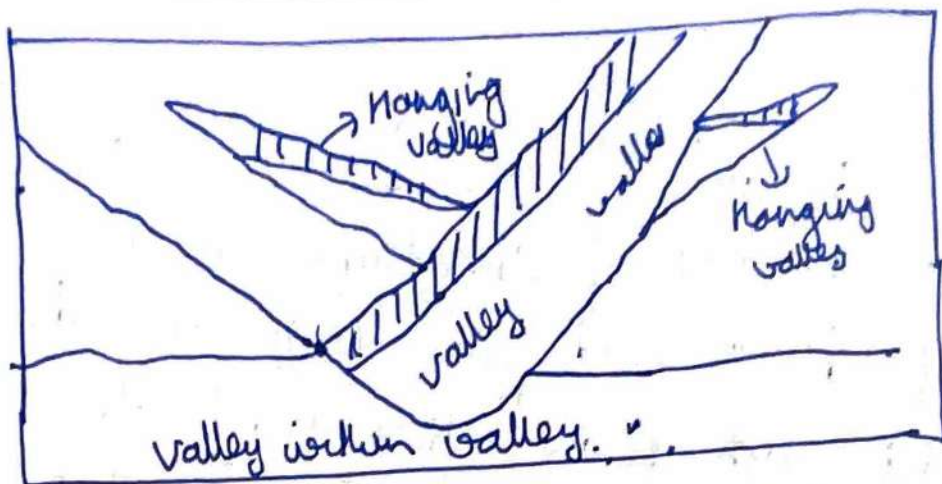
Erosional Landforms

① Lirque → due to movement of glacier in the slopes → cutting of edges as shown in figure 1. (eg) Chandra Tal in Himachal Pradesh.

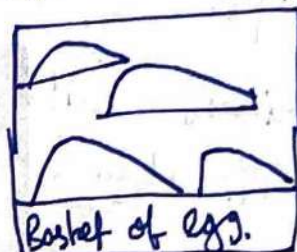


② Horn → when cirque created on all sides, there emerges pointed top as shown in figure 1.

③ Hanging valleys → U or V shaped valleys formed by active downward erosion by glacier (figure 2). (eg) Kashmir valley.



① Basket of egg topography → found in some areas of Ladakh as shown in figure 3



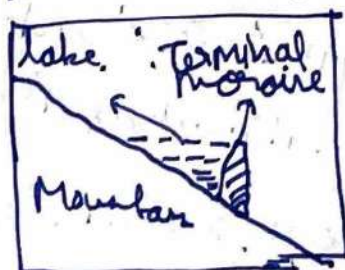
Depositional Landforms

① Moraine and Moraine Domes → ridge formed due to accumulation of debris of glacial boundaries.

↳ also responsible for formation of periglacial lake.

② Outwash plains →

the end of glacial cycle of erosion where the debris are deposited to form a fertile plain or kare plains.



Impact on Local Ecosystem & Human Activities

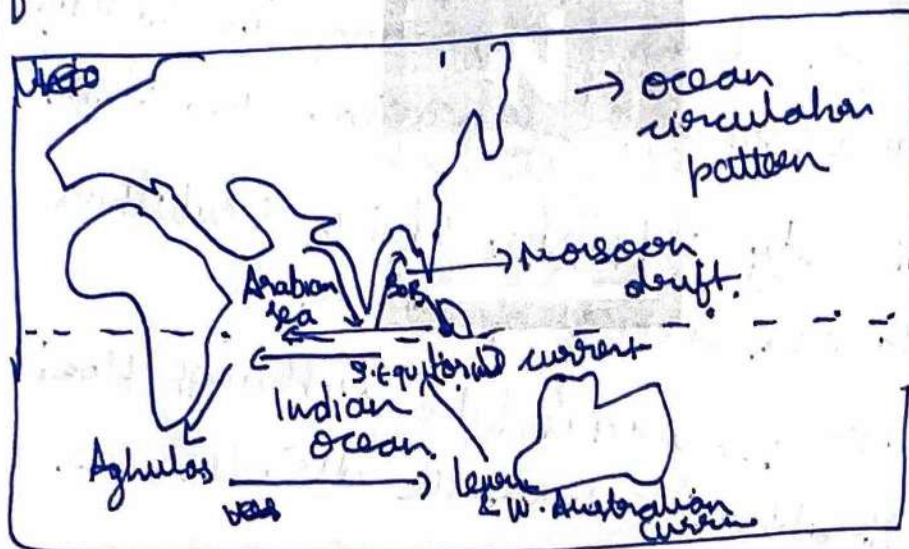
- ① Water resources → glaciers melt in form of source of rivers and lakes.
- ② Energy production → construction of HEP like Rushiganga HEP, Salal, etc.
- ③ Agriculture & food security → valleys used for terrace farming in Sikkim, Kasa (saffron) cultivation in Kashmir.
- ④ Biodiversity support → alpine & subalpine vegetation, Snow leopard, etc.
- ⑤ Disasters → glacial lake outburst flood
(eg) Uttarakhand Kedarnath disaster 2013.
- ⑥ Tourism → forms unique picturesque landscape.

With human interference and climate change, the Himalayan glacial landscape has become very sensitive to ecological changes. Thus there is need for sustainable development in the region.

- Q15. हिंद महासागर की अद्वितीय भौगोलिक विशेषताओं और वैश्विक महासागरीय परिसंचरण प्रतिरूप पर उनके प्रभावों की चर्चा कीजिए। ये विशेषताएँ भारतीय उपमहाद्वीप की जलवायु को किस प्रकार प्रभावित करती हैं? (15 अंक)

Discuss the unique geographical features of the Indian Ocean and their impact on global oceanic circulation patterns. How do these features influence the climate of the Indian subcontinent? (15 marks)

Indian Ocean is 3rd largest ocean by area and is surrounded by landmass on three sides, which results in several unique geographical features.



Unique Geographical Features

- ① Mid Oceanic Ridge → Laccadive Ridge, Chagos ridge, etc.
- ② Coral Islands → Maldives (Atoll), Lakshadweep (barrier reef).
- ③ Wide continental shelf → on western side of Indian coast due to subsidence.

- ④ Influence of monsoon wind → ocean currents follow unique pattern
- ⑤ Volcanic Islands → Andaman & Nicobar, Reunion, Mauritius, etc.
- ⑥ 3rd largest amount of cyclonic formation → 10% of world's cyclone.

Impact on global oceanic circulation pattern

- ① AMOC → global conveyor belt enters Indian ocean from east & exist from west maintaining heat balance of earth
- ② Non-formation of gyre in Northern Indian ocean → due to very less area as it is dissected by huge Indian landmass.
- ③ Monsoon currents → the direction of current changes twice according to direction of wind.
- eg. NE monsoon → current move from Bay of Bengal to Arabian sea & vice versa during SW monsoon.

Influence on climate of Indian Subcontinent

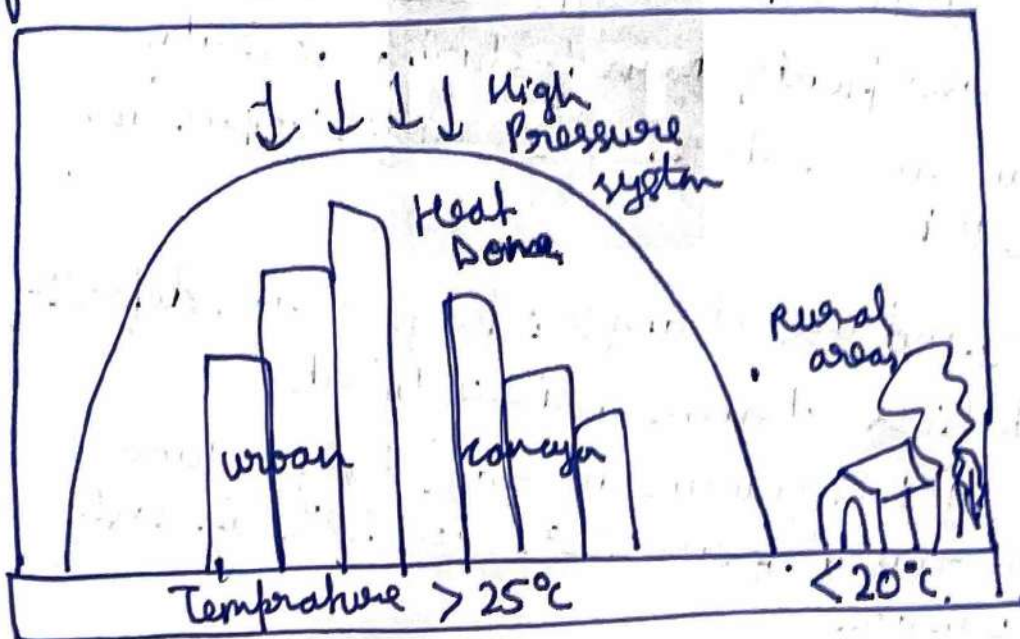
- ① Monsoon mechanism → SW monsoon wind carry moisture from Indian ocean.
- ② Indian ocean Dipole → alternate temperature pattern between west & east Indian ocean.
- ③ Heat waves → Arabian sea marine heat wave causes increase in temperature in western part of India.
- ④ Cyclone formation → small area, closed from 3 sides help in formation of low pressure center in Indian Ocean.

Indian Ocean act as natural border of India on south, east & west. This providing unique geo-strategic position in geopolitics of the region & world.

Q10. शहरी ऊष्मा द्वीप (UHI) भारतीय शहरों में एक महत्वपूर्ण परिघटना है, जो सीधे शहरों (हीट द्वीप) की आवृत्ति और तीव्रता को बढ़ावा दे रही है। इसमें योगदान देने वाले अतिरिक्त कारकों का विश्लेषण कीजिए तथा मौजूदा श्रमण रणनीतियों को आलोचनात्मक मूल्यांकन कीजिए। (15 अंक)

Urban heat islands (UHIs) have become a significant phenomenon in Indian cities, exacerbating the frequency and intensity of heat waves. Analyze the underlying factors contributing to this phenomenon and critically assess the existing mitigation strategies. (15 marks)

Urban Heat Island is a climatic phenomena where temperature of urban region is more than surrounding rural region. It decreases from city center.

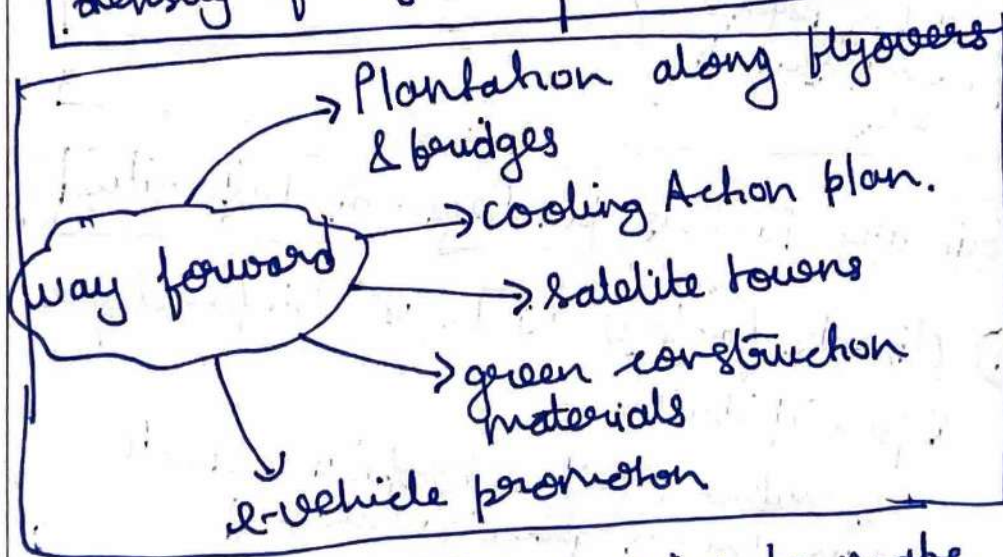


Underlying Factors:

① climate change → absorption of green house gases and increasing average temperature particularly in urban regions.

- ② Construction material $\rightarrow$ cement, asbestos, Mettalled road, etc has low albedo thus it releases heat even during nights.
- ③ Artificial drainage $\rightarrow$ made up of stones & concrete leading to increased runoff & low evaporation
 $\hookrightarrow$ leading to lower rate of cooling.
(eg. Mumbai)
- ④ Large Industrial production $\rightarrow$ Thermal power plants, manufacturing create human induced heat. (eg. Waripur in Delhi)
- ⑤ Land use changes $\rightarrow$ large scale deforestation changes micro climate
(eg. Bengaluru $\rightarrow$ average temperature increased from 22°C to 28°C in last 10 years.
- ⑥ Transport vehicles $\rightarrow$ 2% increase in Delhi population per annum but 11.1% increase in vehicle (Delhi government).
- ⑦ Monsoon pattern $\rightarrow$ 80% rain in 4 months & frequent monsoon breaks.

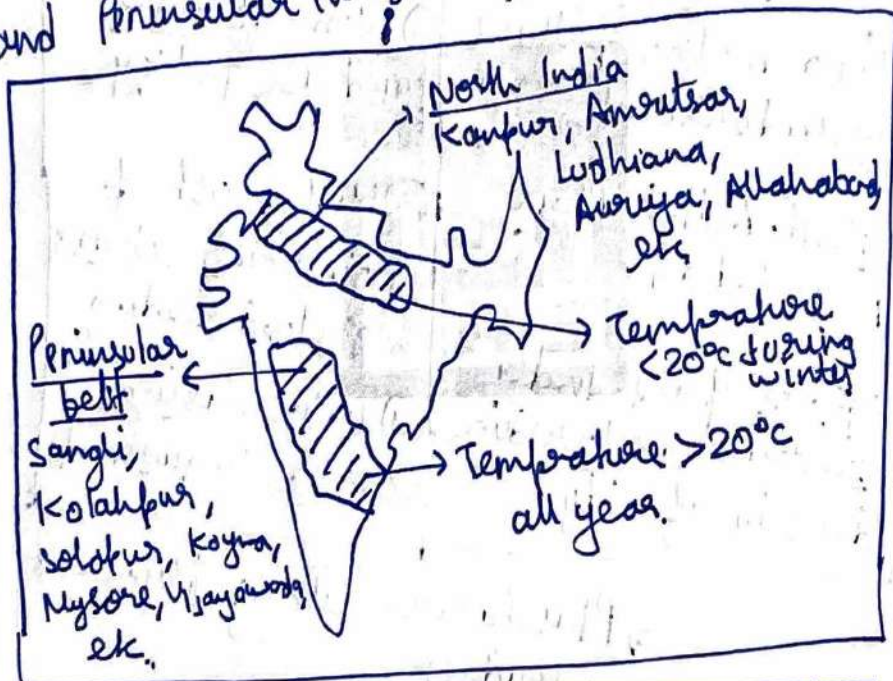
Existing Mitigating Strategies	Challenges
① <u>Cloud seeding</u> eg. Dubai	① <u>Unsustainable urbanisation</u> eg. Delhi population set to increase from 16.7 million to 30 million by 2030.
② <u>Urban forestry</u> eg. Nagar Van Scheme, Miyawaki method	② <u>Non-effective land use policy</u>
③ <u>Vertical gardens along metro pillars</u> eg. Hyderabad	③ <u>High cost of engineering solutions</u> eg. cloud seeding
④ <u>Heat Action Plan</u> Ahmedabad	④ <u>Increasing cooling requirements</u>
⑤ <u>Floor-space Index restricted</u> → to reduce density of city	



SDG 11 aims to make our cities more sustainable & livable which require tackling issue of UHI involving all sectors & stakeholders.

- Q17. उत्तर भारत और प्रायद्वीपीय भारत के बीच चीनी उद्योग में क्षेत्रीय असमानताओं में योगदान देने वाले प्राथमिक कारकों का मूल्यांकन कीजिए। अधोलोच चीनी उत्पादन को कम करने के उपाय भी सुझाइए? (15 अंक)
- Evaluate the primary factors contributing to regional disparities in the sugar industry between North India and Peninsular India. What measures can be undertaken to reduce the surplus sugar production? (15 marks)

India is the largest producer of sugar in world surpassing Brazil. However, the production is regionally concentrated in mainly North India and Peninsular (Western & Southern India).



Primary Factors for Regional Disparities

- ① climate factors such as temperature & precipitation
 - ↳ Southern belt → tropical climate & thus longer growing season
 - ↳ High sucrose content in peninsular belt

- ② Market → factor → both domestic & export market due to easy access to ports → eg JNPT & Mangalore port to export to Africa & Middle East.
- ③ cooperative culture → success of cooperatives in southern & western India → economies of scale.
- ④ Irrigation Infrastructure → Western Eastern UP & Bihar → rainfed whereas Maharashtra & K-R basin → canals & lift irrigation eg Polavaram project.
- ⑤ Forward linkages → large number of sugar processing centers and Food processing industry in peninsular states. whereas old mills in UP belt.

Measures to Reduce Surplus Production

- ① ~~Increase in Fair~~
- ① Reduce Fair & Remunerative price for sugar procurement
- ② Market Intelligence support to farmers with the help of AI & web based portal.

- ③ Ethanol blending of petrol & diesel
↳ India import 80% of its fuel needs.
- ④ Alcohol, cosmetic industry → diversion of sugar for diversifying of sectors → Non-farm employment in rural areas.
- ⑤ Promotion of mixed farming → dry regions of interior peninsula suitable for. multi cropping along with livestock thus increased income of farmers.
- ⑥ Promotion of food processing industries for value addition and exports.
- ⑦ Export focus → India is still not the largest exporter of sugar despite largest producer.

There is need for introducing conservation agriculture in sugar regions as it is prone to threats of climate change (droughts) as it is very water intensive crop.

Q18.

"समाज में वास्तविक समानता प्राप्त करने के लिए सामाजिक गतिशीलता आवश्यक है।" इस संदर्भ में भारतीय समाज में अंतर-पीढ़ीगत गतिशीलता की बाधाओं पर प्रकाश डालिए तथा सामाजिक गतिशीलता पर शिक्षा की भूमिका पर चर्चा कीजिए।

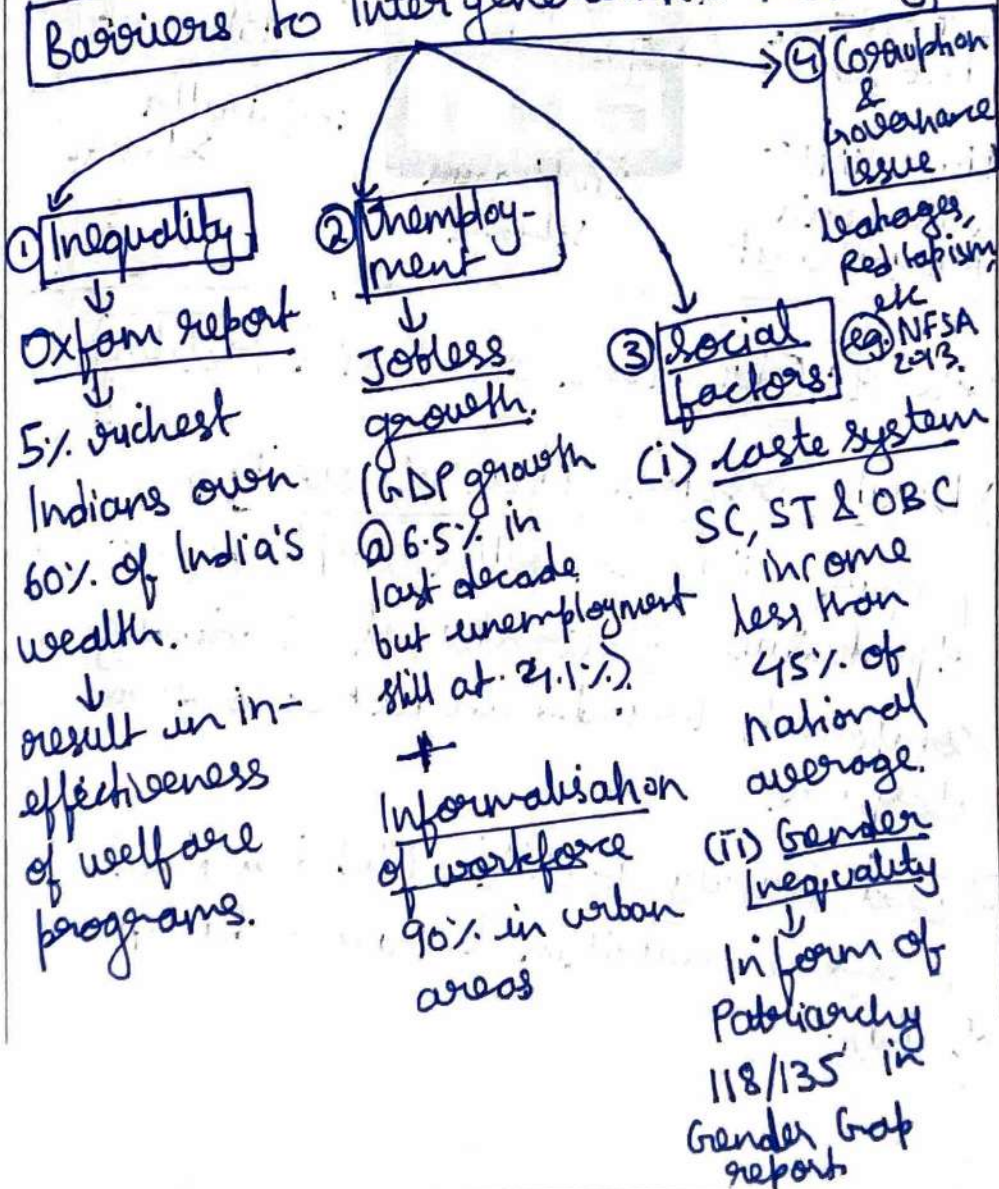
(15 अंक)

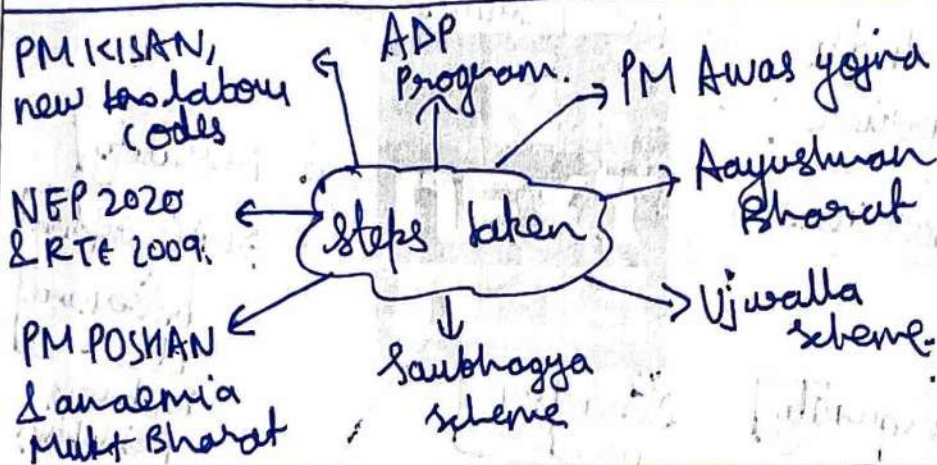
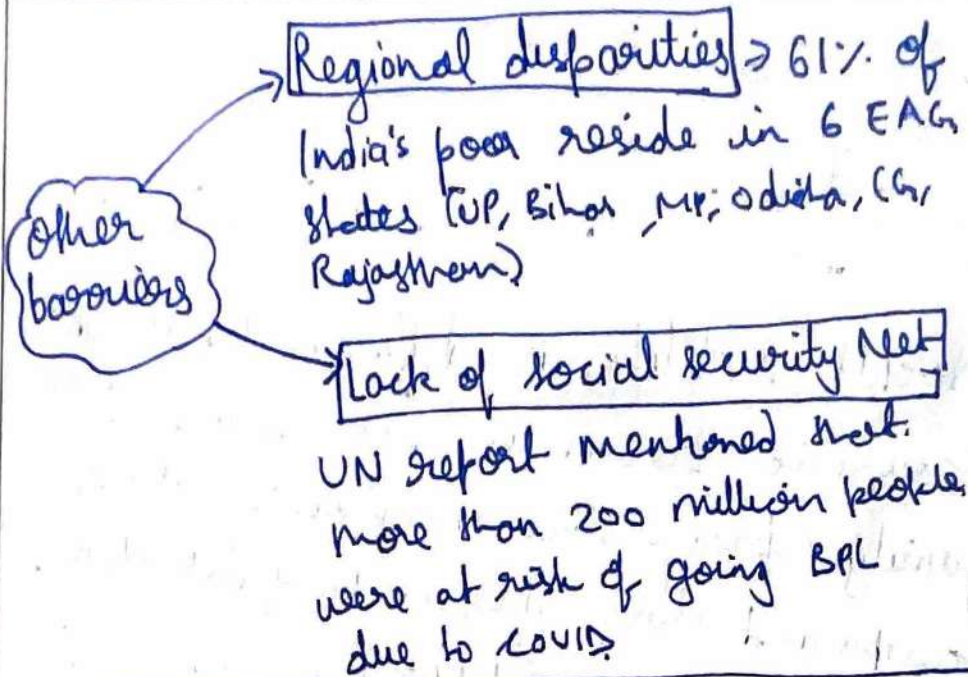
Social mobility is essential for achieving true equality within society. In this context, highlight the barriers to intergenerational mobility in Indian society, and examine the role of education on social mobility.

(15 marks)

Social mobility is defined by World Economic forum as movement of family from one economic class to upward class after each generation. In India, social mobility faces several barriers :-

Barriers to Intergenerational Mobility





Role of Education on Social Mobility

- Breaks vicious cycle of poverty → prepare child for better employment opportunities
 (a) Vocational training component included in NEP 2020 from class 8th.
- Food security of child → Mid day meal to ensure nutrition & healthy development of child.

③ Awareness about rights → prepare citizen to fight against corruption, caste rigidities, etc.

④ Provide opportunity to migrate → to urban areas & Abroad which will provide more exposure to child
(eg) PM Scholarship program.

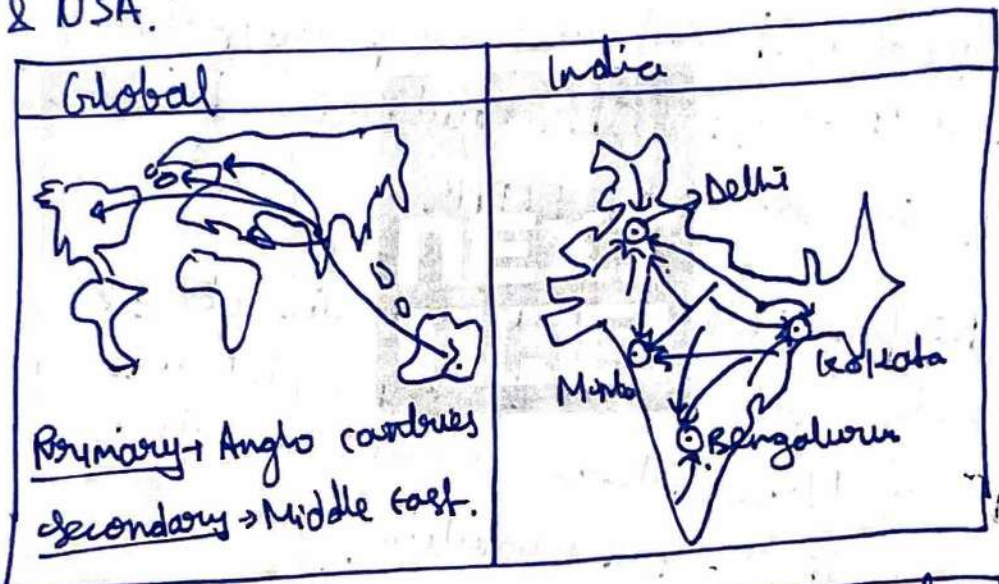
⑤ Increased labour force participation of women → gender equity in education helps in increased FLFPR.

⑥ Responsible behaviour in child → Poverty breeds anti social behaviour like theft & violence which create barriers to social mobility.

India to ensure inclusive & sustainable development by 2047
need to focus on its lowest strata and increase social mobility.

- Q19. भारत में प्रवासन प्रतिष्ठान पर वैश्वीकरण के प्रभावों का विश्लेषण कीजिए। आंतरिक और अंतराष्ट्रीय प्रवासन में वृद्धि के आर्थिक और सामाजिक निहितार्थ क्या हैं? (15 अंक)
- Analyze the influence of globalization on migration patterns in India. What are the economic and social implications of increased internal and international migration? (15 marks)

According to Economic Survey of 2017-18 there are 450 annual migration in India with rate of migration at 24.7% which is lower than Europe & USA.

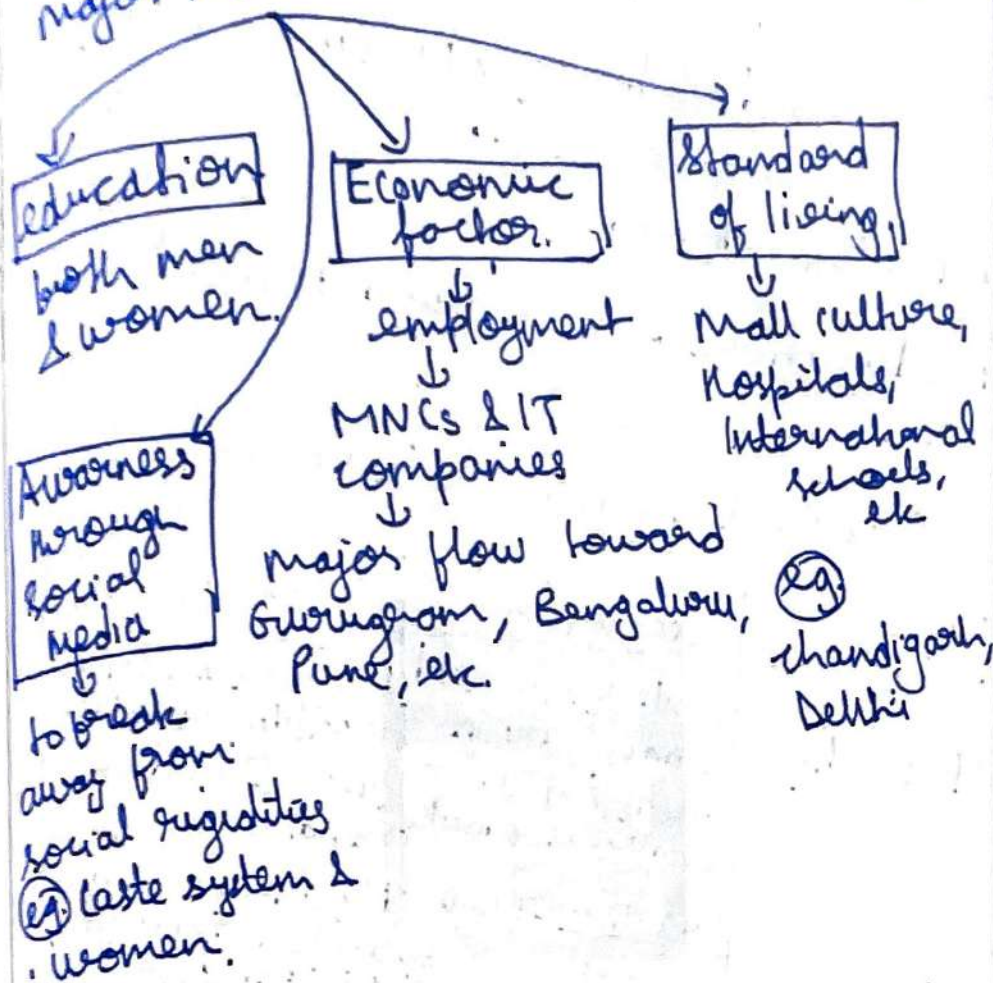


Influence of Globalisation on Migration Pattern

Domestic

- ① Rural-Rural → commercialisation of agriculture → Green Revolution → major flow from EAG states to Punjab & Haryana
↳ female migration dominates due to marriage.

② Rural - Urban → globalisation plays major role



③ Urban - Urban → wave of changed location, to avail better amenities, etc.

④ Urban - Rural → globalisation & westernisation led sub-urbanisation due to congestion, environmental issues, water scarcity, crime, etc. e.g. Noida, Whitefield, Navi Mumbai.

International

① Related visas norms → to attract deep labour in background of declining population in western countries.

- ② Global Networking → particularly in IT sector. eg TCS in US, Infosys in USA.
- ③ Standard of living → Parliamentary report states that more & more such Indians migrating abroad.
- ④ Education → flow toward Australia & UK.

Economic & Social Implications:

	Economic	Social
<u>Domestic</u>	<u>Positive</u> → Increased wages, urban areas act as engine of growth. <u>Negative</u> → Neglect of rural economy.	<u>Positive</u> → Social mobility, breaking caste & gender rigidity. <u>Negative</u> → unrest, unstable migration, left behind families.
<u>International</u>	<u>Positive</u> → remittances, brain share, FDI. <u>Negative</u> → skilled labour migration, lack of home growth companies.	<u>Positive</u> → spread of Indian culture. <u>Negative</u> → brain drain, left behind families.

Migration promote flows of people, idea & resources thus it ensure population-resource balance in the region and lead to overall human development.

क्या कीलिए कि भारत में लिंग आधारित हिंसा किस प्रकार पितृसत्तात्मक मूल्यों की अभिव्यक्ति है। इस संबंध में कानून में आधुनिकीकरण ने कितनी सीमा तक महिला सशक्तिकरण के साधन के रूप में कार्य किया है? (15 अंक)

Discuss how gender-based violence in India is a manifestation of patriarchal values. To what extent has modernisation in law served as an instrument of women's empowerment in this regard? (15 marks)

According to World Economic forum India ~~is~~ has dropped 28 places in Global Gender gap report, whose root cause lies in manifestation of patriarchal values.

Role of Patriarchal values in gender based violence

① Gender stereotyping → such as dressing choice of women seen as provocative & non-provocative.

eg. Increasing rape violence according to NCRB report where 99% cases are unreported.

② Burden of Household work → women are seen as responsible for unpaid work & thus lack of work on women safety outside home.
↳ FLFPR only 23%. (global average 73.7%)

③ Marital rape & Domestic violence?

women seen as property of men.
after marriage → 33% women aged 19-49 reported case of marital rape atleast once

④ Cyber bullying → women's opinion is mocked on serious matter online

(eg.) Palki Sharma case.

⑤ Honour killing → women seen as responsibility of men → Khap panchayat, bride burning, etc.

Role of law in women empowerment

⑥

Anti Dowry Act

↓
decrease in incidence of dowry based violence

(eg.) 1.1 lakh case reported in 2019

Domestic Violence (Prohibition) Act

↓
supplemented with one stop centers

POSH Act

↓
Increased safety at workplaces

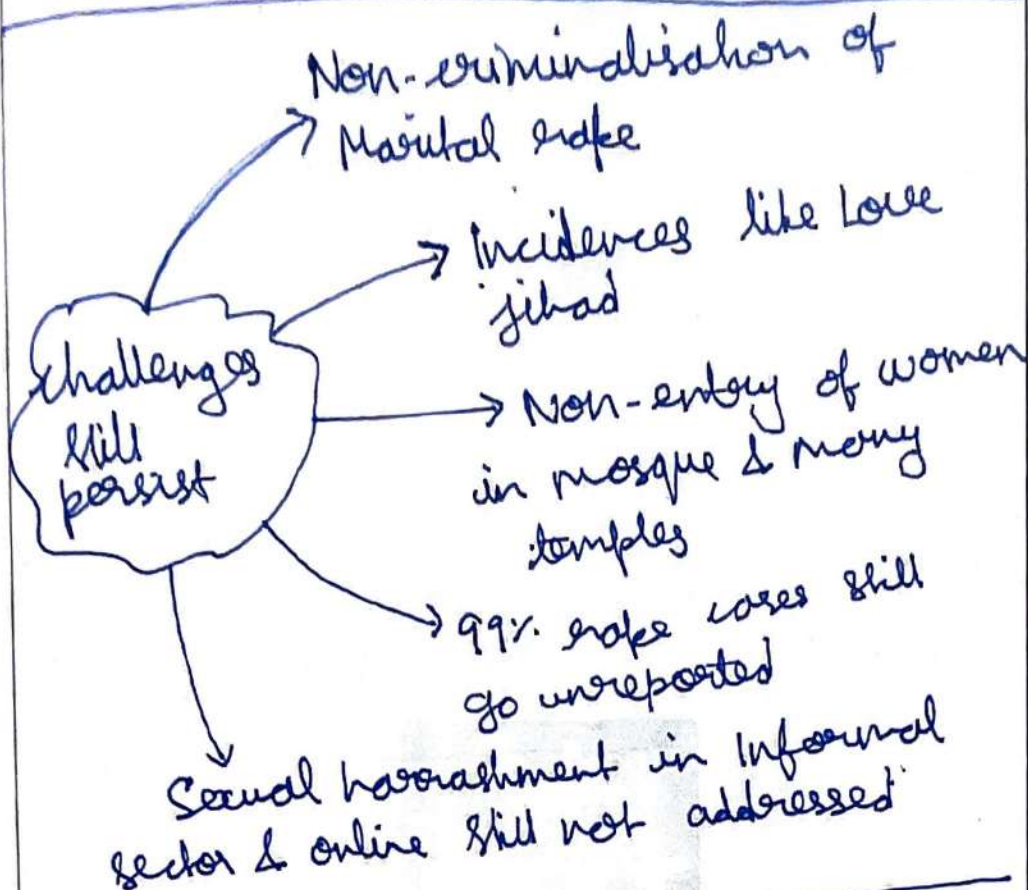
↓
WEF report

↓
Increase in female executive in IT sector

73rd Amendment

↓
active role in politics

↓
49% women panchayat



Way forward

- ① Societal changes → thorough awareness & Education programs (eg) Balika Vidya, Pink movie
- ② Encouragement to SHGs → who raises gender issues in rural areas
- ③ Review of existing legislations Juvenile Justice Act, Rape laws, etc.

PM Modi on 15th August 2023 advocated for women led development where we need to first focus on violence less society for women.