

NEXT IAS**GS - MAINS ADVANCED COURSE 2024**

(To be filled by candidate)

Test Code : GSMAC2401**Test No. : 01****Name of Candidate :****Roll No. :** RAJAT SINGH **Start Time** **End Time****Date of Examination :** 10/08/2024 **Medium : English** ☒ **Hindi** ☐

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

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

GRAND TOTAL - / 250**EVAL CODE:** **EVAL DATE:****GENERAL INSTRUCTIONS**

- 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/mark irrelevant matters in the QCAB.

सामान्य 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 के उत्तर संबंधित प्रश्न के नीचे 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. QCAB में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

<u>Student Concerns / Query</u>	<u>Evaluator's Feedback / Response</u>
1	1
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2	2
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3	3
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<u>MARKING SCHEME *</u>			
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.

<u>IMPORTANT QR CODES</u>	
 Topper's Copy	 Common Mistake and Correct Filled QCAB
 Copy Scanner App	 Next IAS Test Centre Location

MACRO COMMENTS <i>The purpose of evalution @NEXTIAS is to provide constructive suggestions on 'How to improve Answer Writing and thereby score better marks.</i>
STRENGTHS OF THE CANDIDATE
AREAS OF IMPROVEMENT
IMPROVEMENT SUGGESTIONS

- Q1. प्राचीन भारत के राजनीतिक और आर्थिक इतिहास को समझने में सिक्काशास्त्रीय साक्ष्यों की भूमिका का परीक्षण कीजिए।
विशिष्ट उदाहरण भी प्रदान कीजिए। (10 अंक)

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

Numismatics refers to study of coins.
They provide diverse understanding
of political, economical and social
conditions of their time.

Significance of coins in understanding
ancient India

1) Political history

↳ Tells about names and order of
kings of dynasty

eg gold coins of Indo Greeks and
Shakas tell about names of rulers

↳ Tells about the extent of empire
eg Gupta gold coins are found as far
as Madhya Pradesh which denotes
the extent

↳ Radioactive dating can help understand
the Timeline of various dynasties

↳ Ideas about rulers and their regime
eg Samudragupta coins show him
playing veena

↳ Religious history of rulers
eg Kushana coins show Hindu & Greek
deities

2) Economic history

↳ Idea about artisanship and coin making industry

eg Lead coins called 'potin', gold coins of Guptas called varaha & panam

↳ Use of diverse metals, alloys tell about industrial development

eg bronze, copper coins of Chalukya dynasty

↳ Role in trade and commerce

g) ~~the~~ Coins of Sargam age and Maryan punch marked coins in Europe show trade relations with Greeks and Romans

Thus coins provide immense insights into history of ancient India

- Q2. स्वतंत्रता-पूर्व भारत में विविध सामाजिक-आर्थिक और क्षेत्रीय पृष्ठभूमि में महिलाओं को 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 played an important and often unsung role in freedom struggle. Without their contribution, freedom was not possible.

Role of women's organisation

- ① Political consciousness was raised by providing platform for debate and discussion

eg → Sarla Devi Chaudharani's Bharat stree mandal raised issue of women representation

- ② Social reform movement against social evils like sati, purdah, widow remarriage and women education

eg → Pandita Rambai's Arya Mahila Samaj, Savitri bai Phule's effort to open girl school, women rehabilitation and vocational train

3) All India women's conference 1927
by Margaret Cousins saw participation
of women of diverse socioeconomic
background to discuss women's
issues

4) Women such as Annie Besant's
Home rule movement and Sorajini
Naidu's role in Congress saw
participation in Noncooperation and
Civil Disobedience movement.

However due to patriarchal mindset,
lack of education, skills and government
repression, women's movement were
limited to upper class elite. However
their efforts in mobilisation of women
laid foundation for demands of equality
and inclusive participation

- Q3. गुटनिरपेक्षता की नीति किस प्रकार भारत तथा अन्य नव स्वतंत्र राष्ट्रों को अपनी संप्रभुता बनाए रखने और औपनिवेशिक दबावों का प्रतिरोध करने की आकांक्षाओं को प्रतिबिंबित करती है? (10 अंक)

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)

Nonalignment was policy of India which advocated neutrality and not joining any power block of the cold war era. It was started by Nehru, Abdul Nasser and Tito of Yugoslavia

Policy of Non alignment and it's reflection

- ↳ Aspiration of India
 - Believed in neutrality and equal respect to all nation
 - ability to make own decision on it's merit and not under influence of big nations
- ↳ eg → friendly relation with both US & USSR without getting drawn in conflict
- Speak in solidarity on concern & interest of developing nations
- ↳ eg Issues of global poverty, inequality in developing nations
- Criticize actions of developed countries on actions that threaten world peace
- ↳ eg Korean War / Vietnam invasion by US | reforms in United Nation

2) Resist colonial pressure

- ↳ Raise voice of colonised African nations for freedom
- ↳ oppose racial discrimination of South Africa apartheid regime
- ↳ Protect indigenous markets against foreign goods and investments

☞ → India's socialistic command economy and import substitution to protect local industries

↳ Raise voice
Colonist
world's lock
participation



against former
and developed
of equal

☞ → India's criticism of arms race,
one sided nuclear doctrine of NPT
and NSG

Thus Non alignment was depiction of
India's ~~an~~ ideal of Vasudev Kutumbham
and promotion of world peace and
equality

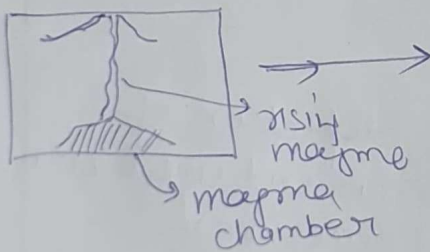
- Q4. ज्वालामुखीयता में शामिल प्रक्रियाओं पर चर्चा कीजिए। साथ ही विश्व के प्रमुख ज्वालामुखी क्षेत्रों और उनसे संबंधित विवर्तनिक विन्यासों पर प्रकाश डालिए। (10 अंक)

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

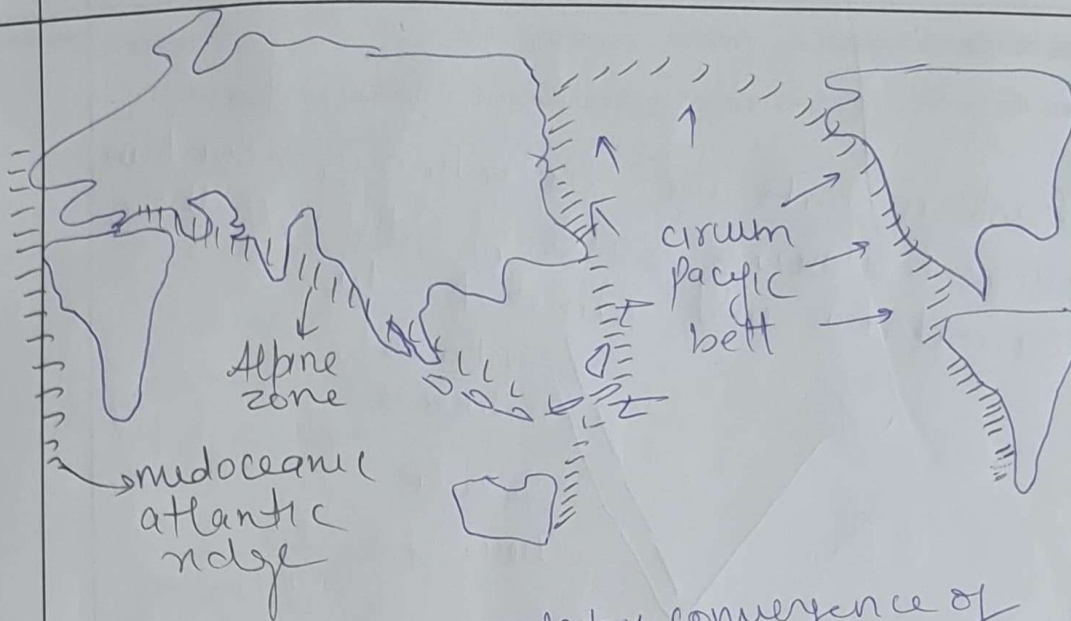
Volcanoes are fissures or openings in earth's crust which allows magma to reach earth surface & form landforms.

Process of volcanism

- ① Rise of hot molten magma due to buoyancy from surrounding heavier rocks
- ② The magma rises and spreads on reaching lithospheric crust. Due to divergence the plate weakens and fissure develops
- ③ Magma reaches earth via weak openings



- Types of process
- Continent - oceanic crust convergence
 - oceanic - oceanic crust convergence
 - Divergence of oceanic plates
 - mantle plume via hotspots
 - Rift valley in volcanic region



- 1) Circumpacific belt → made by convergence of oceanic plate of Pacific with continental plates like North and South America
- 2) Alpine zone → convergence of Eurasian plate and oceanic plates
- 3) mid Atlantic oceanic ridge → divergence between oceanic plates

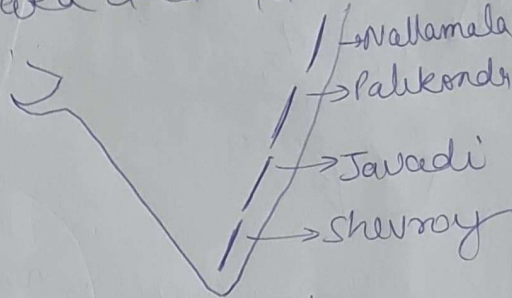
Thus volcanism need to be studied more to understand it's geophysical impacts on the world

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 discontinuous mountain range covering states of Odisha, Andhra Pradesh, Karnataka and Tamil Nadu



Features of Eastern ghats

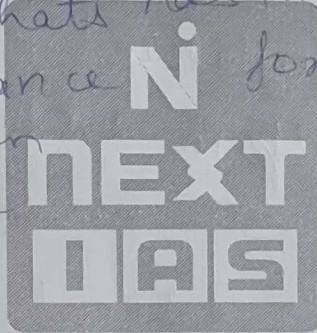
- 1) Discontinuous
- 2) broken between Krishna Godavari delta
- 3) It is an emergent coast
- 4) It is gentle slope and fold mountain unlike escarpment of western ghats.
- 5) forms area of deltas of east flowing rivers
- 6) Highly eroded and denuded and not form very high peaks

Ecological importance

- 1) Due to lesser height, it does not allow for orographic rainfall like western ghats
 ↳ formation of deciduous forest vegetation of sandalwood and red sanders

- ↳ Home to diverse animal wildlife and fauna
- ↳ Helps keep Bay of Bengal branch of southwest monsoon parallel to coast
- ↳ Influence direction and flow of cyclones of Bay of Bengal
- ↳ Erosion of these mountain provide for silt of east flowing rivers & help formation of delta

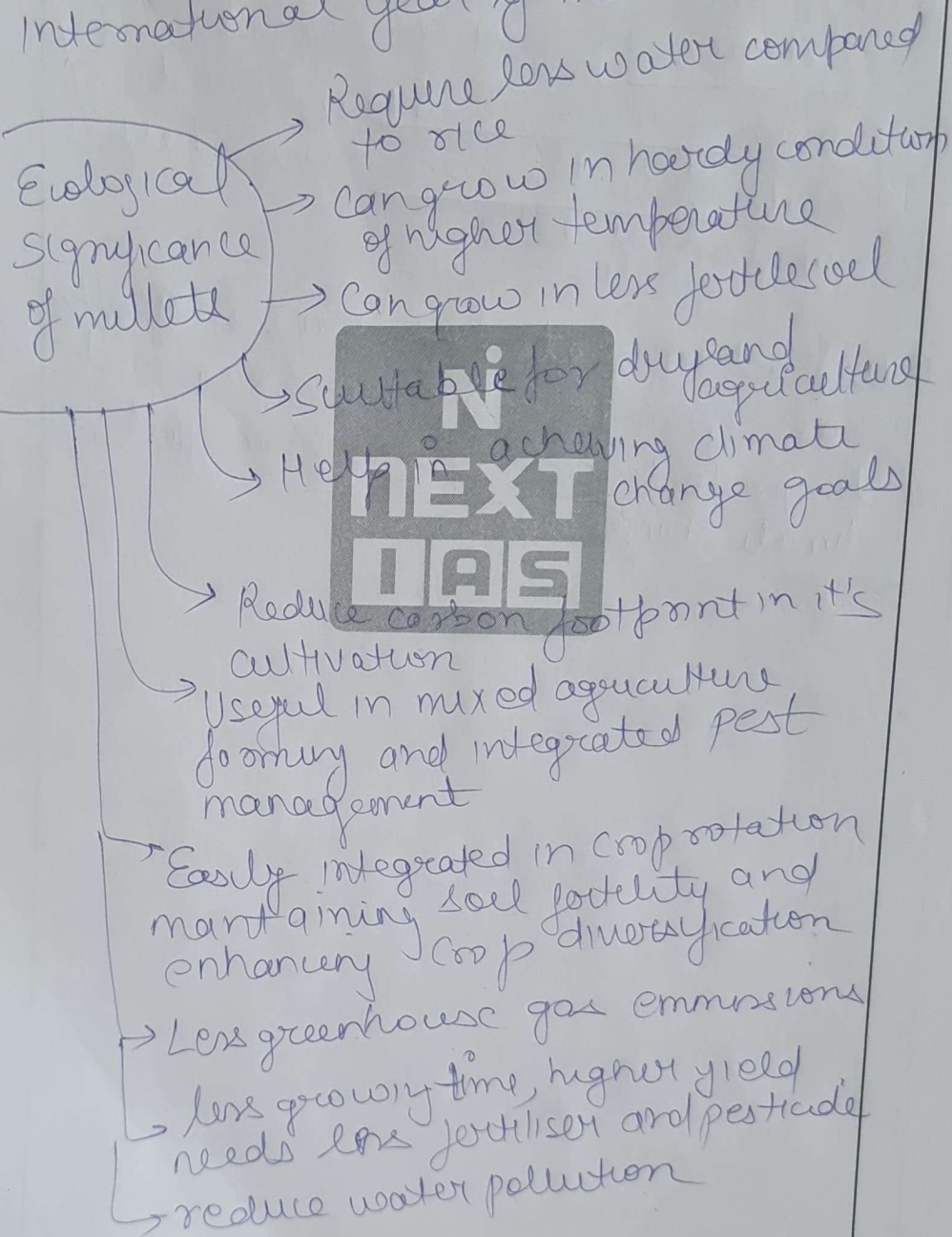
Thus Eastern ghats has immense geographical significance for India and needs protection from effects of climate change

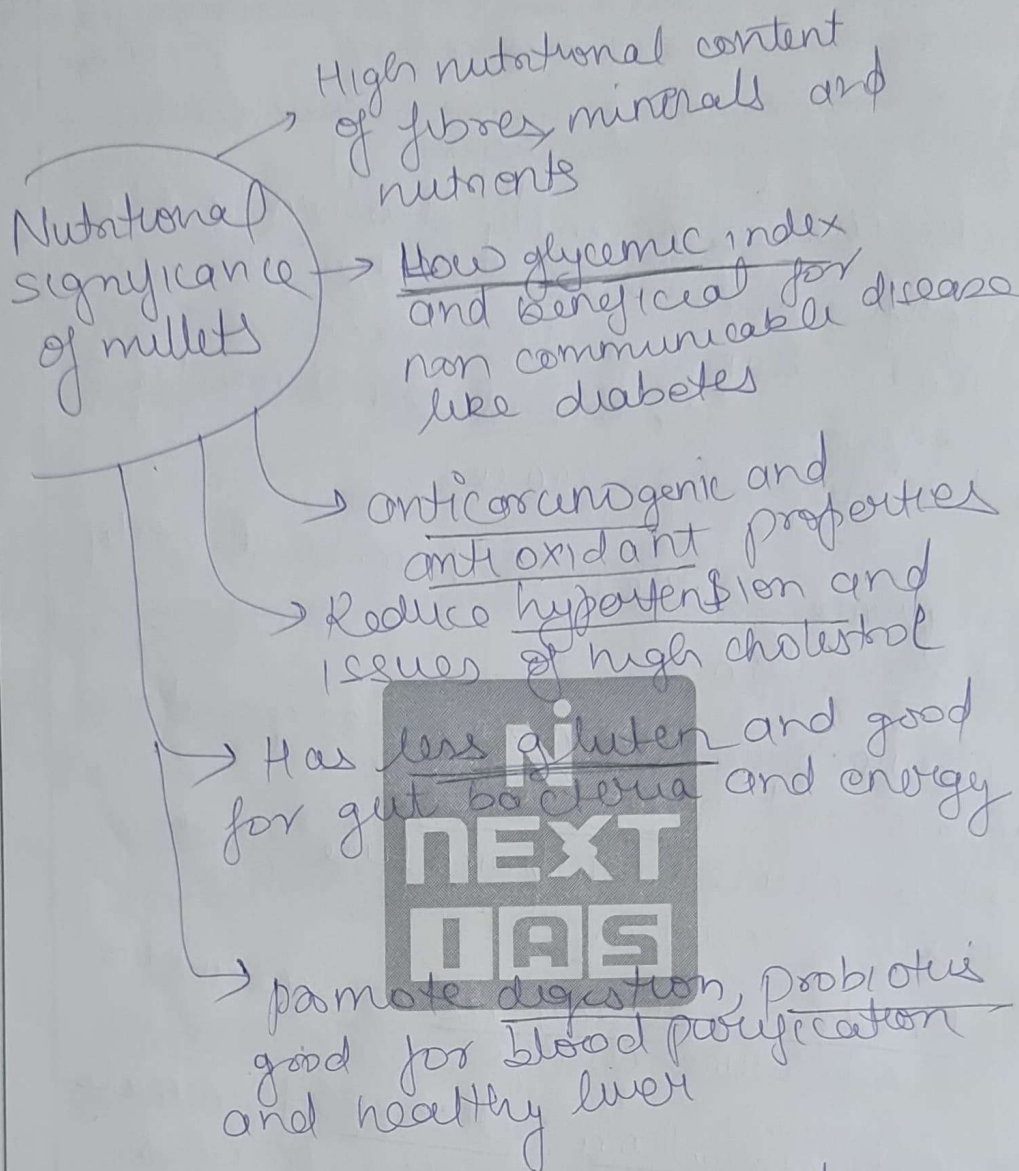


- Q6. मोटे अनाज के रूप में प्रचलित फसलों (मिलेट्स) को सरकार ने 2018 में पोषक अनाज के रूप में पुनः ब्रांड किया है। इस संदर्भ में मिलेट्स के पारिस्थितिक और पोषण संबंधी महत्व पर चर्चा कीजिए। (10 अंक)

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

Budget 2023 called millets as *Sri Anna* and has declared 2023 as International year of millets.





Thus government scheme to promote millet will help in achieving SDG goal (2) of no hunger and (3) of well being

- 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)

Arctic ice has recently shown arctic amplification which is due to climate change and has immense consequence for global biodiversity and ecological balance

Consequence of Arctic ice melt on biodiversity and ecosystem

- ① Reduced ice will increase exposed surface and lower albedo
↳ This enhanced temperature affect marine organism
- ② stenotheamal animals are sensitive to temperature change
- ③ affect migration patterns of animals from arctic to lower latitudes
- ④ wildlife habitat destruction of polar animals
↳ polar bears / reindeer / fox
- ⑤

Impact on ecological balance

- ① Rise in sea water level due to ice melt
- ② Affects the thermohaline circulation due to changes in salinity and temperature which affects density
eg Atlantic meridional oscillation circulation is weakened by Arctic melt and led to extreme weather climates in North west Europe ~~etc~~
- ③ Wind patterns affected due to ice melt and changed albedo
eg Climate change weakens trade winds which causes ELNINO
- ④ Affect ocean current movement which affects local weather and heat balance
eg weakening of Gulf stream and no mixing near Newfoundland affects fisheries

Thus Arctic ice melt needs to be studied via missions like PACER and NCPOR

Q8. क्या आपको लगता 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)

Article 44 of constitution speaks about implementation of Uniform Civil Code. It means same law of marriage, inheritance, adoption across religion.

No it does not contradict pluralism

→ Indian Secularism is positive model and allow for state intervention against social evils and reducing intra religious domination

[eg] Issue of triple talaaq

→ Promote rights of women & minorities

[eg] Inheritance rights of daughters

→ marriage rights of women differ often against wives

→ It promotes healthy pluralism while helping society reform and progress

[eg] Hindu Code Bill did not threaten religious pluralism. Infact it promoted rights for all.

- However it can threaten pluralism
- ↳ Assimilation of minority cultures
eg tribal way of life is threatened
 - ↳ Against Article 25-28 which guarantee freedom of religion
 - ↳ Can lead to excessive state intervention in religious lives of people
 - ↳ Sabarimala verdict
 - ↳ Slippery slope on how to decide what is essential in a religion or not
 - ↳ Can lead to politicisation

Thus we need a holistic and multi-departmental study with people's participation to decide on issue of UCC. It must come from public and not be a top down approach

- Q9. भारत में जनसांख्यिकीय परिवर्तनों के संदर्भ में स्वस्थ सक्रिय आयु वृद्धि की अवधारणा पर चर्चा कीजिए। यह सामाजिक समावेशन 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)

India's average age is 29 years with around 67% of population in working age (15-64) and around 10% above 60 age

Concept of healthy ageing

→ Political participation and representation of senior citizen even as their number decline in population

[eg] proxy voting extended to people above 70

→ Social participation → alternative means of livelihood after retirement

→ vocational training

→ Improved social relations by reversing negative trend of globalisation on family structures

→ Sensitisation of youth toward needs of senior citizens

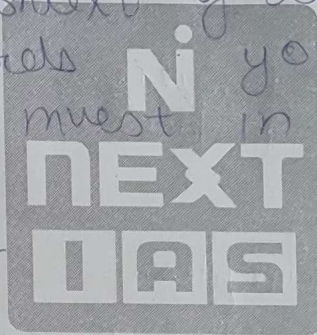
→ Health coverage and facilities to provide healthy ageing

- Economic participation → protection from cyber bullying
→ protection of savings and retirement funds via greater investment opportunities

eg PM Vay Vandana Yojana protected senior citizen savings during COVID

↳ Using their experience in think tanks, education, social events etc.

Thus in this context of demographic shift towards younger population we should invest in care economy and silver economy



Q10. "सचेत उपभोग" से "बाध्यकारी उपभोग" में संक्रमण (परिवर्तन) नगरीय क्षेत्रों में पारिवारिक संरचना और गतिशीलता को किस 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)

Globalisation and modernisation has brought changes in family structure, it's social functions and intrapersonal relationships of it's members

Effect of transition from conscious to compulsive consumption

↳ Family structure

↳ Replace joint family with nuclear families that have transitioned from unit of production to unit of consumption

↳ functionally joint but structurally different

eg → celebration of festival over digital calls, face calls

↳ Rise of materialism and consumerism motivates urban migration for urban lifestyle

↳ Importance of money, gifts, over culture of respect and love

eg dowry / bigyat weddings /

Effect on family function

- ↳ Family no longer serve as agent of socialisation and education of children
- ↳ eg rise of private schools, commercialisation of education, coaching centres
- ↳ family as agent of social control has reduced
- eg role of grandparents in inculcating values has reduced leading to juvenile delinquency, drug and mental health issues among children

Effect on family interpersonal relation

- ↳ Hustle culture, need for greater income to support consumerist lifestyle and personal career ambition
- eg → rise of dual income no kid families
- less time for kids, work life balance issues
- increase mobile time of kids

Thus mindless consumerism is leading to loss of traditional family culture & rise of new family values & norms

Q11. विजयनगर वास्तुकला की प्रमुख विशेषताओं पर उदाहरण सहित चर्चा कीजिए। उनके स्थापत्य में इंडो-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)

Vijayanagar was medieval dynasty between 1335-1565. It was marked by zenith of diversity of art and architecture and growth of Indo-Islamic composite elements in architecture.

Vijayanagar architecture

1) Vesara style of temple building
↳ tall shukharas, tall gopuram
gateways at temples, daripalas
and pillared mandapas halls called

2) Mural paintings inside temple
eg Lepakshi temple

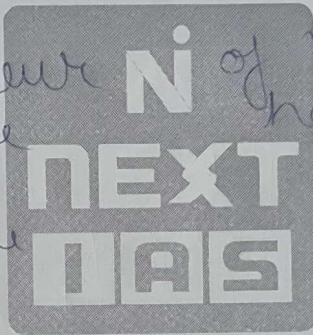
3) Interlocking pattern of bricks and no
use of mortar with uniform measur-
ements eg Hampi temple complex

4) Use of diverse motifs and carvings
on pillars eg horse carvings on musical
pillars of Hampi

5) Secular building complexes for
special festivals
eg Mahanavami dibba

Indo Islamic elements

- ↳ Use of pillars and minarets in temple
- ↳ Dome structures which are Islamic in nature were used over temple complexes
- ↳ Use of sandstone and local materials
- ↳ Calligraphy used as a sculpting
- ↳ Use of water bodies
- ↳ picturesque sculpting on walls & pillars
- ↳ The grandeur of Vijayanagar architecture has influence of Islamic architecture



Q12.

नालंदा और तक्षशिला जैसे प्राचीन भारतीय विश्वविद्यालयों की तुलना भारत के आधुनिक राज्य-वित्तपोषित विश्वविद्यालयों से कीजिए। आधुनिक विश्वविद्यालय अपनी प्रभावशीलता को बेहतर 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)

Nalanda university was made during reign of Kumaragupta of Gupta dynasty while Takshashila in modern day Afghanistan was made during Mahayanapada period of 4-5th century BCE.

Nalanda & Takshashila

Modern University

→ Secular and religious teachings

→ Fully state funded and patronised by kings

→ ~~limited~~ mostly oral tradition

→ Available to certain section of society

→ Teachers belonged to Brahmin caste

only secular teachings

both public and private funded

→ ~~so~~ written curriculum via books, computers

→ Available and open to all depending on affordability

→ Teachers are hired on merit and training & open to all

However there are certain similarities

Similarities → Diversity of subjects like maths, philosophy, architecture
 → Debates, discussion
 → students and teachers from India and abroad
 → included infrastructure like hostels, bathrooms, libraries

Lessons that can be learnt

- ① Importance of guru-shishya Parampara
 ↳ values of respect of elders
- ② Spirit of debate, discussion, free thinking and curiosity must be encouraged
- ③ Utilisation of education in real life problem solving
 eg Acharya Chanakya used his learning to write Arthashastra on politics and administration

Thus Indian universities need to imbibe this idea of holistic learning from our ancient education centres

- Q13. क्रान्तिकारी 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)

Indian freedom struggle was characterised by blend of diverse ideological strands. Gandhian non-violence and revolutionary movement were part of it.

Similarities between revolutionary & Gandhian struggle

- main aim of full independence
- believed in the power of the masses
- hatred of the English rule
- faith in India's cultural past and faith in ability to govern themselves
- against all form of discrimination, inequality and advocated unity and patriotism
- believed in non-cooperation, civil disobedience against British rule
- advocated self-reliance, boycott of British products and reliance of indigenous products.

DifferenceGandhian

- ↳ Fully non violent struggle
- ↳ Believed in both means and ends must be justified
- ↳ [g] → withdrawal of non cooperation after Chauri Chaura
- ↳ Against dehumanising impact of machines
- ↳ Believed that British can be persuaded

Revolutionaries

- ↳ Use of violence justified to gain freedom
- ↳ means could justify the ends
- ↳ [g] → killing of unpopular officials to send a message
- ↳ Believed in Soviet style socialism with mechanisation
- ↳ No belief in Britishers

Influence of revolutionary ideas on Gandhiji

- ↳ exposed the British imperialism and provided sense of urgency towards independence
- ↳ Gandhiji's Do or die initiative during Quit India movement showed his declining patience towards British
- ↳ Realisation of need of direction to youth's energy and anger

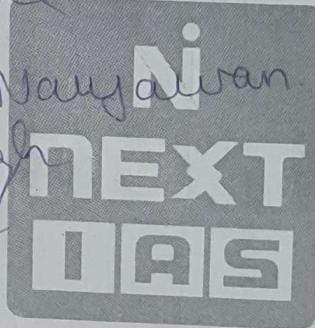
Influence of Gandhiji on revolutionaries

↳ Shunning the idea of perpetual violence and ultimately using peaceful democratic method

[eg] Ramprasad Bismil advocated that India should unite behind Congress and violence is not sustainable

↳ Need for political constructive work among masses, adoption of passive mass struggle

Eg Bharat Nanyawan Sabha by Bhagat Singh worked for education of peasant, workers



Thus Indian freedom struggle was the outcome of composite struggle and contribution of diverse ideas and patriots who had different ways but same goal

- Q14. भारतीय हिमालय में विभिन्न प्रकार की हिमनद भू-आकृतियाँ कौन सी हैं? ये स्थानीय पारिस्थितिकी तंत्र और मानवीय गतिविधियों को किस प्रकार प्रभावित करती हैं? (15 अंक)

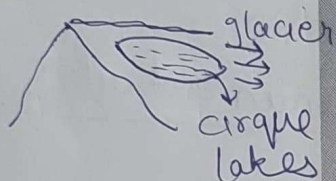
What are the various types of glacial landforms formed in the Indian Himalayas. How do these features impact local ecosystems and human activities? (15 marks)

Glaciers are ice slabs that form overtime due to snow accumulation. Due to their movement they form depositional and erosional landforms & impact ecosystem and human life

Types of landforms

↳ Erosional

↳ glacial lakes or cirques

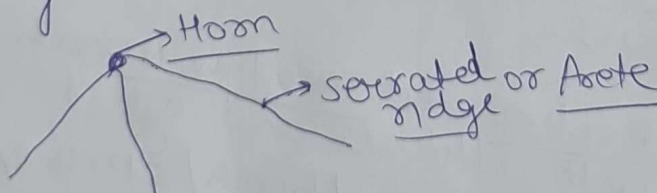


→ formed when glacier create hollows which gets filled with water

↳ Hanging valleys → formed by erosion and interlinking of many cirques separated by serrated ridges

↳ Arete & Horn

↳ These are formed between glacier troughs which rise to point called horn

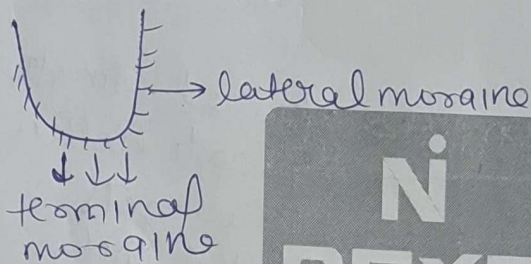


Depositional landform

↳ Outwash plain → featureless flat plain formed after glacial melt and deposition of glacial till

↳ Eskers

↳ Moraine → It is the glacial till deposited by glaciers



Effect on ecosystem and human activities

① Ecosystem

↳ glacier forms rivers on melting
↳ regulate local temperature and climate

eg ice has high albedo & provide climate forcing phenomena to regulate temperature

↳ Local wildlife and fauna dependent on glaciers

eg ~~Role~~ affects tree line and snowline which varies with altitude and affect vegetation eg → pine/birch/spruce/fir

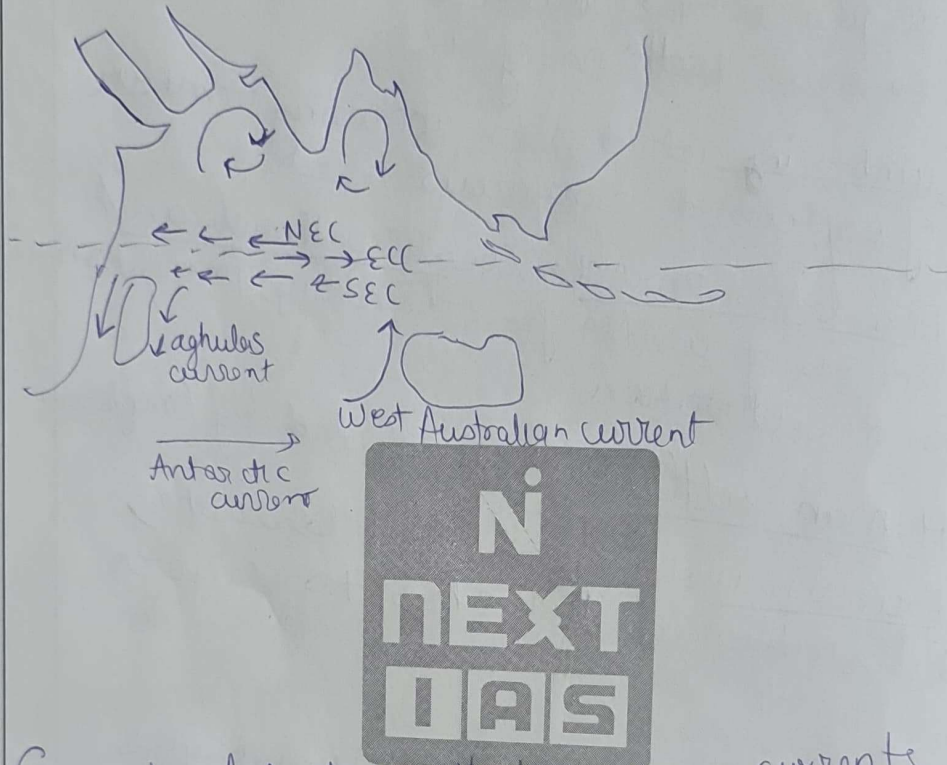
(2) Human activities

- ↳ Transhumance & nomadic pastoralism
 - ↳ tribes like Gaddis travel from one place to another based on seasonal pattern of ice
- ↳ Lumbering activities for accessing timber of softwood coniferous trees
- ↳ Tam lakes provide local wetlands and source of water for drinking, irrigation and cultivation
- ↳ Human settlement is affected by landforms
- ↳ Tourism industry to visit landscape, hill station and trek to glaciers

Thus glacial ecosystem of Himalayas have diverse impact on climate and human.

- Q15. हिंद महासागर की अद्वितीय भौगोलिक विशेषताओं और वैश्विक महासागरीय परिसंचरण प्रतिरूप पर उनके प्रभावों की चर्चा कीजिए। ये विच्छेजताएं 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)



Geographical features affecting ocean currents

- 1) Trade winds blow from east to west and give rise to North equatorial and South equatorial current
- 2) Due to ocean accumulation on east Africa coast, it gives rise to Equatorial counter current
- 3) The African coast diverts south equatorial ~~current~~ current southward that gets divided by Madagascar Island

The cold west Australian current completes the gyre on Australian coast.

→ Due to presence of large landmass unlike other ocean, the gyre is not full cycle as in other oceans. ~~and~~

Influence on climate of sub continent

① The trade wind on crossing equator in summer deflected to right due to Coriolis and monsoon from southwest

② West Australian current brings cold desicating effect to western Australia leading to dry areas and deserts

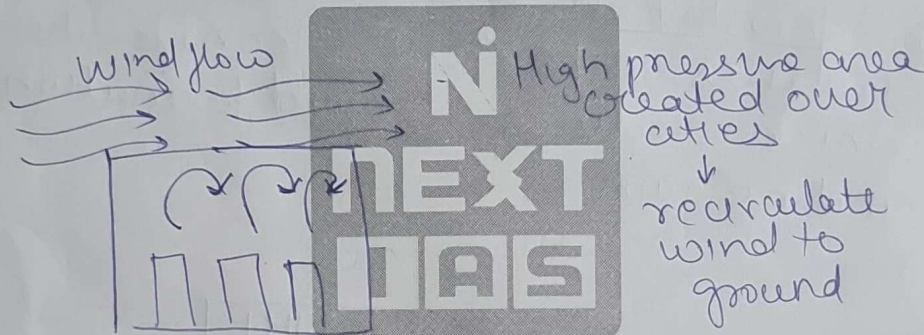
③ Piling of water on eastern Africa and upwelling region in eastern Indian Ocean forms good fishing regions due to growth of plankton

eg fishing industries in Indonesia, Malaysia, Philippines

- Q16. शहरी ऊष्मा द्वीप (UHI) भारतीय शहरों में एक महत्वपूर्ण परिघटना है, जो ग्रीष्म लहरों (हीट वेव्स) की आवृत्ति और तीव्रता को बढ़ावा दे रही हैं। इसमें योगदान देने वाले अंतर्निहित कारकों का विश्लेषण कीजिए तथा मौजूदा शमन रणनीतियों का 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 effect refers to localised abnormal rise in temperature of cities due to its unique style of urbanisation. This has led to intense heat waves.



Factor

Factors for UHI

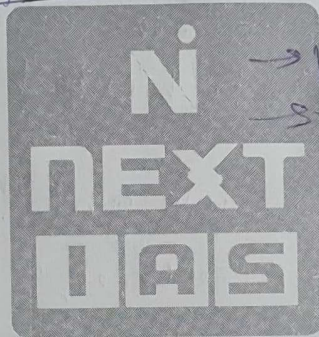
- ① Concretisation of cities
Leads to faster heating and cooling of land leading to increased heating
- ② Wind pattern
Wind over cities form a blanket and a high pressure area. This forces rising warm air parcel down which get adiabatically pressed and heated.

- ③ Funneling effect on air due to high buildings increases air compression
- ④ greenhouse gas emission from factories, vehicles promote insulation absorption
- ⑤ Use of coal tar/asphalt promotes heat absorption
- ⑥ Lack of natural lake, pond, water reservoir reduces cooling effect
- ⑦ Deforestation for urbanisation reduces vapor via transpiration which reduces cloud formation and no rain

Mitigating measures for UHI

- ① green spaces → Plantation, Urban forestry schemes like Nagar Vans
 → rooftop greenery
 → Miyawaki method of vertical forestation
- ② Urban reservoir → moderating influence
 → wetlands allow for groundwater recharge
 → act as cooling influence.

- ③ Planned urbanisation → better wind flow and heat exchange regulation
- ④ Reduction of carbon footprint → flue gas desulphurisation in thermal power plant
- ⑤ Green buildings
→ gruha / green building code → vehicle norms like BS VI, Electric vehicle adoption
- ⑥ Sustainable practice → Use of white paint
→ hollow walls
→ thatched roofs maintain coolness in summer



Thus we need holistic and multipronged sustainable methods to achieve SDG goal ⑪ and tackle issue of urban heat island

- Q17. उत्तर भारत और प्रायद्वीपीय भारत के बीच चीनी उद्योग में क्षेत्रीय असमानताओं में योगदान देने वाले प्राथमिक कारकों का मूल्यांकन कीजिए। अधिशेष 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)

Sugar is produced by distillation process from cane obtained in fields. It is produced both in North and South India. However there are regional disparities.

Factors for regional disparities

① Raw material → Sugarcane need hot, humid climate and well distributed rainfall.

→ It is weight losing crop so nearness of mill to fields is essential

eg low in north and erratic rainfall has led to low yield in north.

② Power and water availability → Irrigation facility and power generation is more reliable in peninsular states like Maharashtra and Karnataka

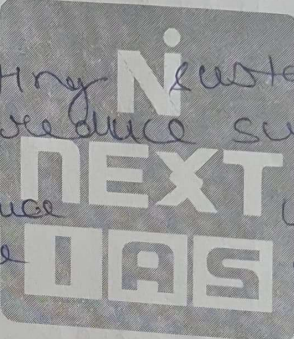
→ Rainfall availability in winters in Tamil Nadu due to Northeast monsoon

- ③ Government policy → credit facilities,
interest subvention
promotes industry
in south
- ④ Transport network → road and railway
along with port
availability provide
trade opportunities
in South India
- ⑤ Cheap labor → migration from agriculture
urbanisation disperse in UP, Bihar to
and industrialisation industrial centre of
Maharashtra
- ⑥ Agglomeration → Due to agglomeration
of industries sugar find diverse
uses in food
processing plants

Measures to reduce excess sugar

- ① Ethanol blending program → incentivise sugar
mills to use sugar
to form ethanol
→ help reduce pollution
and meet climate
change pledges
- ② Export of excess sugar in external market → wave off export duties
→ Reduce minimum export price

- Rationalise fair remuneration price on sugar → prevents excess sugarcane production
- effective use of by products → eg baggasse molasses in fibre
- Diversification of agriculture produce to reduce sugarcane production
 - eg → Enhance MSP for millets
 - mixed farming and crop rotation

Thus by adopting  sustainable measures to reduce sugar production we can reduce wastage and enhance income of both farmers and mills.

- 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 refers to rising up the ladder of social hierarchies which improve status and standard of living.

Need of social mobility for equality

→ Social empowerment via access to resources

eg → education to all via right to education allow social mobility and equality

→ ability to form informed choices & take decision

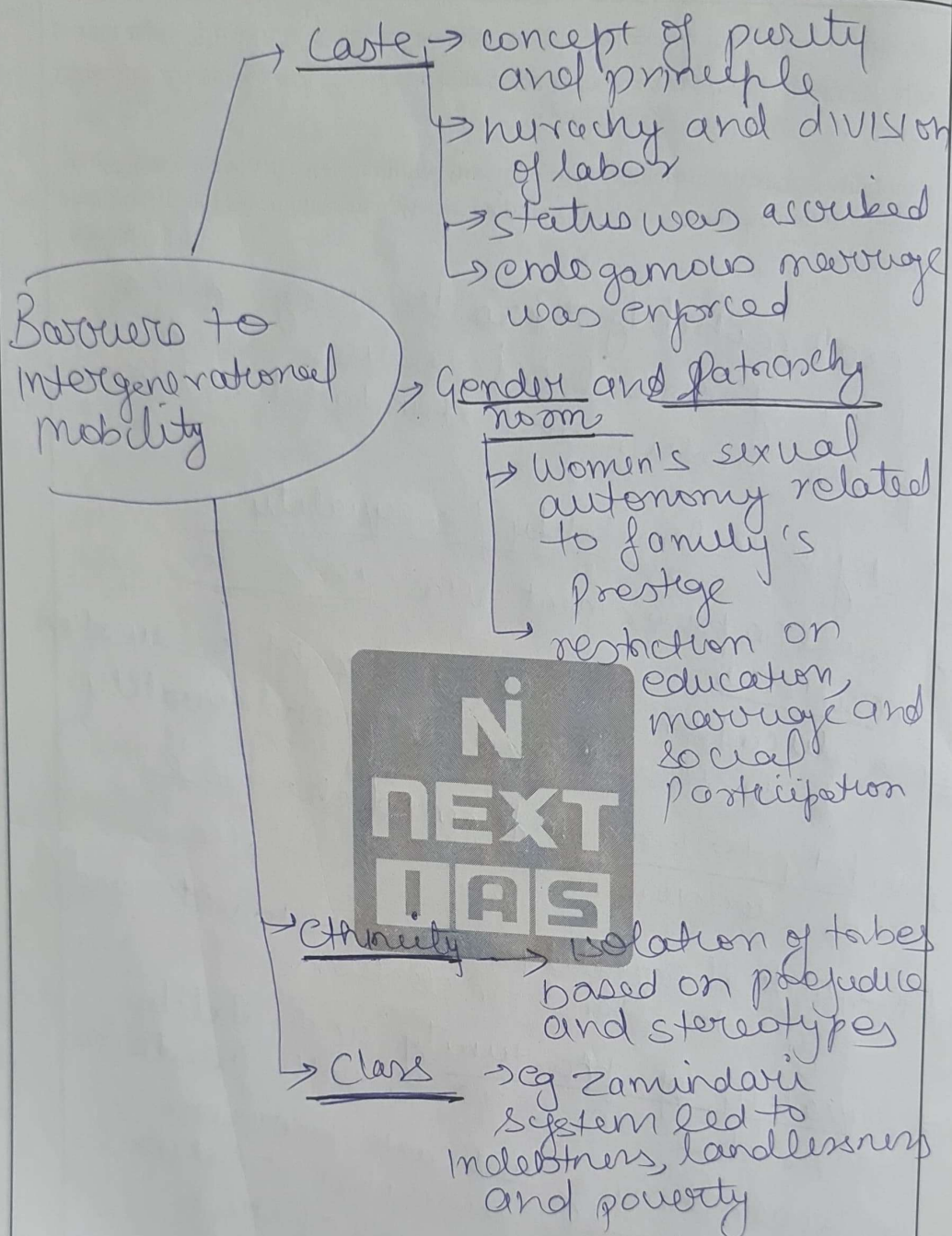
eg → political equality via right to vote and right to stand in election

→ equality of opportunity and ability to practice one's rights with freedom

eg → overcoming ~~caste~~ caste barrier of occupational division of labor to choose profession of one's own choice

→ Economic independence to provide self-reliance

eg → overcoming patriarchy allows women to participate in social life equally.



Role of education in social mobility

- Secular education → promotes value of equality and egalitarian
 - overcomes identity division on caste, religion
 - rational thinking and scientific temper

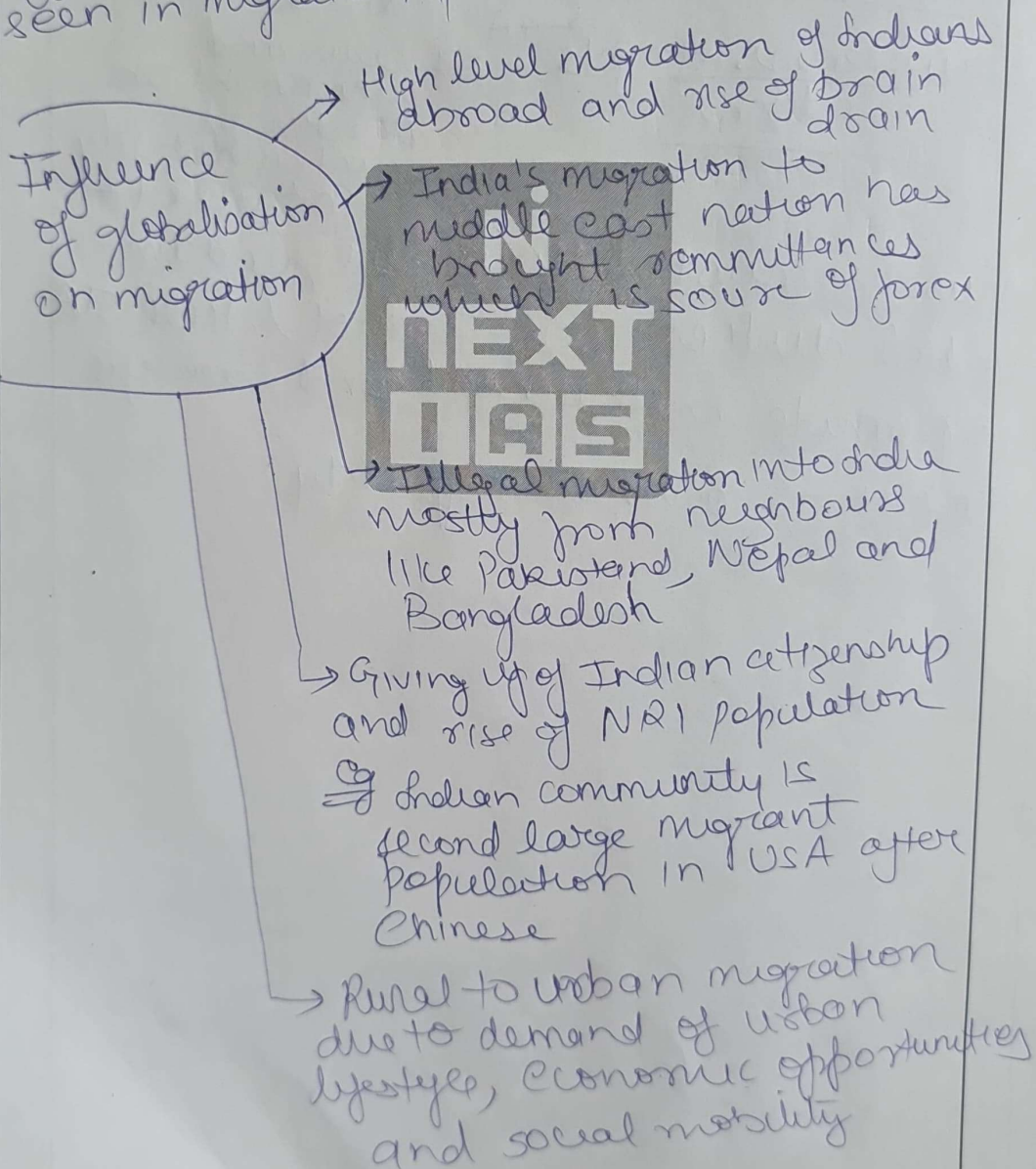
- ↳ Caste neutral job opportunities in modern urbanised economies
- ↳ Replace religion based education which placed restriction on women education
- ↳ focus on skill, upward mobility by diversity of jobs.
- ↳ English education → overcome barrier of language
- ↳ awareness of rights as citizens → ^{as} eg laws and punishment on practice of untouchability in article 17

Thus we must follow our fundam-
ental duties of Article 51A
to promote brotherhood and scientific
temper to promote equality.

Q19. भारत में प्रवासन प्रतिरूप पर वैश्वीकरण के प्रभावों का विश्लेषण कीजिए। आंतरिक और अंतर्राष्ट्रीय 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)

Globalisation is process of integration, interdependence and interconnectedness such that event in one part of world affects the other part. It's effect can be seen in migration patterns.



Economic Implication

- 1) Internal migration → overcrowding of cities
 → rise of slums
 → demographic change in urban rural areas
 → feminisation of labor in agriculture
 → congestion, traffic, rise of informal jobs in cities
 → culture heterogeneity in urban area
 → song of soil policy due to nativistic attitude
 → Rise in cost of living due to higher demand

- 2) External migration → Higher remittance for India which raises forex
 → Loss of foreign exchange due to cost of education and jobs abroad by NRI
 → Access to global market, supply chains and FDI due to people to people exchange and tech exchange

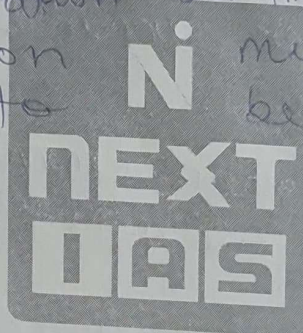
Social Implication

- 1) Internal migration → exchange of liberal urban ideas to rural areas
 → women, equality, education
 → heterogeneous society, anonymity and dilution of caste identity

- feeling of alienation and marginal men phenomena for migrants
- class become important over caste
- cosmopolitanism

- 2) External migration → International relation and diplomacy between countries
- Exchange of ideas and values between nation
 - Idea of universal citizenship

Thus globalisation has immense ramification on migration pattern that needs to be studied.



- Q20. चर्चा कीजिए कि भारत में लिंग आधारित हिंसा किस प्रकार पितृसत्तात्मक मूल्यों की अभिव्यक्ति है। इस संबंध में कानून में आधुनिकीकरण ने किस 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)

Patriarchy is a social system where men dominate and socially exploit women. It has its ramification in gender violence

Patriarchal values lead to gender violence

- ① Women are weak and dependent on men → Men commit crimes as seeing women helpless and vulnerable
- ② Women are irrational and suitable for jobs in nurturing and caring → Sexual harassment at workplace as men feel intimidated and use gender violence as justification
- ③ Toxic masculinity that men are caretakers and men do not cry → Violent outburst of men due to poor emotional regulation eg domestic violence
- ④ Women are property of men after marriage → leads to domestic violence, sexual violence, marital rape, objectification of women

Role of modernisation in ^{law in} women empowerment

→ provide for safety to women
→ promotes labor force participation
→ Act as deterrent against harassment

↳ Prevention of Sexual Harassment at work Act based on Vishakha guidelines

→ allow for easy filing of FIR and awareness of women rights

↳ Police reforms like women constables, pink booths,

→ Domestic violence Act provide protection to married women, live in relation, widows etc

↳ Expansion in ~~coverage~~ coverage of laws

↳ Rehabilitation and protection

eg → Swadhar greh mission, Shakti Mission, Dowry prohibition Act, Sukanya Samruthi Yojana

→ allow for vocational training
→ economic self sufficiency
→ ability of access to resources and making choices

↳ Health schemes & laws

Janani Shishu Suraksha Yojana

→ reduce maternal mortality and promote bodily autonomy

However there are still limitation in law in promoting women empowerment -ment

- ↳ Poor law implementation
- ↳ Police insensitivity
- ↳ lack of awareness of rights and fear of societal judgement due to victim blaming
- ↳ Delay in investigation and judicial pendency of cases
- ↳ No gender neutral laws → potential of law misuse
- ↳ No measures against glass ceiling, effect

Thus it is essential to improve laws holistically to attain sustainable development goal (5) of gender equality.