

Name — Chetan Goyal
Roll No. — GSMACT24A1433

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)

Ans

Numismatics refers to science of coins and currency from old times.

Role of numismatic evidence in understanding the political history of Ancient India

① Tells about ruling period, ruling chronology of a certain dynasty.

eg coins of Shakas provide great details.

② Commemorative coins highlight the victory of one king over another.

eg Satvahana king, Gautami putra Satkarni issued his coin minted over lost king Nahapana's coins

③ Descriptions of gods, goddesses, natural elements indicate the religious inclination and royal patronage to a religion.

→ Gupta coins → Bhagavatism.

④ Portrayal of kings → tells about his characteristics

→ Samudragupta shows playing veena on hunt and in many other poses.

numismatics evidences: economic history of ancient india

① Shows extent of trade expansion

→ finding Indian coins in Roman empire

② Declined quality of coins highlights declined trade

→ Kushan & Gupta's coins were spectacular.

③ Use of metal such as - Gold, silver, bronze, depicts the economic capacity of state.

→ Gupta period = golden age

Therefore, keeping in mind the importance of numismatic evidences, Indian govt. is planning a numismatic museum at [old mint building, Kolkata]

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)

Ans Indian freedom struggle was characterised by combined efforts of all sections of society - men, women, young, old, student, businessmen, Hindus, Muslims etc.

Impact of women's organisation in mobilizing women in pre-independence India

① Swarnadevi Kumari (sister of Ravindranath Tagore) created Ladies Society - an organisation to discuss the issues of women.

② Sardadevi Chaudhрани - created 'Mahila mandali' to include women from poor as well as well to do back ground.

↳ They raised the issues of women education, widow's conditions etc.

③ Ramakrishna Mission helped establishing
(Bhartiya mahila parishad) → ~~an~~
branch of Indian social conference
↳ raised the issues of education,
widow remarriage, property rights
to women etc.

④ All India women's conference
↳ by Marguerite Cousins &
Annie Besant
↳ fought for women's right
to maternity leave in factories,
equal pay, voting rights etc.

Other than these organisations
many organisations raised women's
issues - such as Brahmo samaj (sati),
Arya Samaj (education), Ishwar Chandra
Vidyasagar (widow remarriage) etc.

Mobilization of women by these
organisations helped in achieving independence.

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)

Ans Policy of Non-alignment simply meant keeping our nation out of hegemonical struggle between 2 blocks led by US, USSR.

Policy of NAM: to maintain sovereignty and resist colonial pressures

① Joining any one group could have meant surrendering part of our sovereignty.

↳ as we could not choose our external relations with other countries.

② As it was witnessed in earlier 2 world wars

↳ losing side was subjected to colonization by winning side.

↳ Post WW-I, European countries

distributed among themselves, the colonies of Germany.

③ Engaging in cold war, would mean deprioritising our development aspirations.

④ Alignment with a side, would perpetuate our dependency on that block.

⑤ Maintaining good relations with both blocs would not be possible

→ India has good relations with both US & Russia today.

Therefore strategy of non-alignment was a requirement of newly independent country, at that time.

However in modern times, India has changed its foreign policy to active multialignment.

- Q4. ज्वालामुखीयता में शामिल प्रक्रियाओं पर चर्चा कीजिए। साथ ही विष्टव 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)

Ans

Volcano refers to a geological process by which molten lava comes out of earth's crust.

Processes involved in volcanism:

- ① As per plate tectonics theory, when two plates converge, one plate (heavy) subducts and lava is

generated → erupting from a vent.

eg → Pacific ring of ocean fire

- ② When diversion takes place a crack is generated, from where lava comes out
eg → Great mid oceanic ridge, Atlantic

- ③ Mantle plume → Due to very high temperature convection current, help this lava to melt the crust and erupt eg → reunion hotspot.



Major volcanic regions in the world

① Pacific ring of fire

↳ Due to converging plates such as Nasca plate - south american plate, Jawa plate - pacific plate, this whole region is prone to volcanos.

↳ South america - Andes mountain range

② Indonesia

↳ A part of pacific ring of ocean
↳ major volcano eruption in recent times - mt. merapi

③ Italy → mt. visuvius mt.

due to converging plate boundaries of eurasian plate - and mediterranean plate.

④ Barren Island - India

↳ due to Indian plate - jawa plate

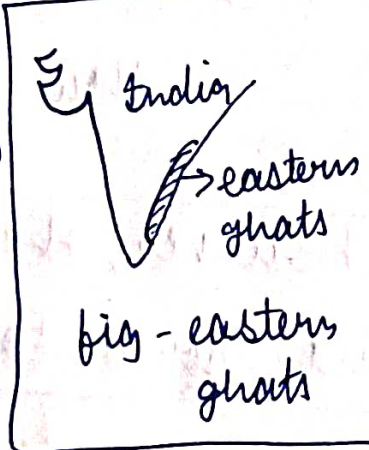
Therefore volcano are a natural phenomena, which on one hand create destruction, but on the other hand create new cycle of evolution as well.

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.

Ans Eastern ghats, situated in states of Tamilnadu, Andhrapradesh are mountain range important for their various ecological services.

Geographical features of Eastern Ghats

- ① compared to western ghats, they are lesser in height.
- ② Due to continuous erosion from rivers, these ghats are non-continuous.

- ③ They are important sources of minerals such as - limestone, iron etc.
- ④ Eastern ghats contain hills such as - papikonda, sheshachalam, kolanibet.
- ⑤ eastern ghats meet with western ghats through Neelgiri hills

Ecological importance of eastern ghats:

- ① They contain huge biodiversity.
- ② They provide shelter to several endangered species
sheshachalam tiger reserve.
- ③ Eastern ghats are home to many species of trees and medicinal herbs.
- ④ ~~Western~~ Eastern ghats guide the flow of many rivers in the region.

However, the easterns ghats are endangered today due to human activities

- ① Illegal mining activities.
- ② Unsustainable population pressure
- ③ Climate change induced stress etc.

Therefore considering the ecological services provided by eastern ghats, we must strive to protect them.

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

Ans Recently UN adopted resolution to celebrate 2023 as international year of millets.

Ecological significance of millets

① can be grown in semi-arid/arid region
↳ as they require less water.

② require less pesticide and fertilizer use
↳ doesn't lead to water pollution or eutrophication.

③ Intact soil fertility
↳ unlike cereal crops (rice / wheat), which ^{affect} ~~adversely~~ it ~~adversely~~

④ less field preparation required
↳ reduced methane emission.

Nutritional significance of millets

- ① has the ability to cure hidden-hunger.
- ② lower glycemic index
↳ helpful for diabetics.
- ③ Rich in other nutrients such as
vitamins, minerals
- ④ Gives the status of Shri Anna
for nutritional properties.

Government initiatives to promote the usages of millets

- ① Making millets a part of PDS,
under NFSA, 2013
- ② Incentive to food processing
industry for millets promotion
- ③ MAHARISHI → promoting
research in millets.

Therefore above steps will help

India achieve Nutritional security

- 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)

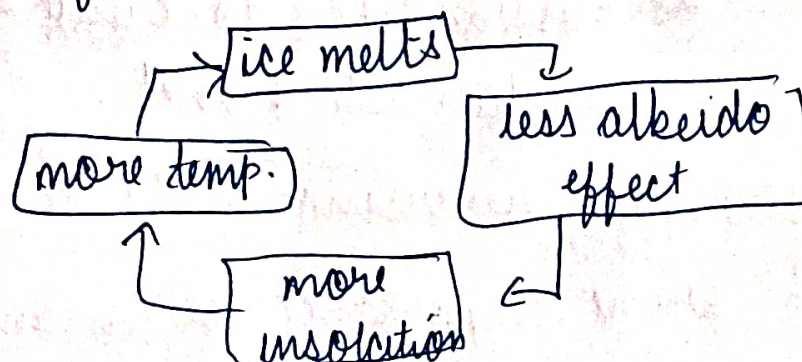
What are the potential consequences of Arctic ice melt on biodiversity and ecosystems?
How might these changes impact global ecological balance (10 marks)

Ans

According to IPCC, 6th AR,
Arctic ice is melting at an unprecedented
rate. By 2050, we will have less than $\frac{1}{2}^{\text{th}}$
of present levels.

potential consequences of Arctic ice melt on
biodiversity and ecosystems

- ① Danger to local species such as -
polar bear, penguins
↳ fear of extinction
- ② Dangerous for native communities
eg. Saami, are natives of Arctic
- ③ It will be a vicious cycle, as
following



④ Rising sea levels threatens the low lying islands

Impact on global ecological balance

① Aggravate climate change
↳ as CO₂ stored in permafrost will be released

② Increased global temperatures will threaten the existence of several species.

③ Rising sea levels → dangers to SIDS

Actions required

① Mitigating the impact of climate change
↳ fulfil NDC under Paris deal.

② Mission LIFE to create a sustainable planet.

Therefore reversing Arctic ice melting is of prime importance for humankind.

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)

Ans

Article 44 of Indian constitution prescribes for uniform civil code for Indian society.

UCC: contradicts the idea of religious pluralism and cultural differences

- ① It imposes uniform laws on diverse society.
- ② Following a religion means implementing its principle in real life also
eg → Hindu → Saptkadi in marriage
Muslim → 'Nikah kadhna'
- ③ Various cultures have different customs, following UCC would mean, not allowing these customs.
- ④ Critics argue that UCC would be akin to imposing majority's way of life on minorities.

However, UCC doesn't aim to replace the social customs and traditions. It aims to:

① Provide gender justice

↳ discriminatory practices such as - Nikah halala, Triple talaa are roadblocks in women empowerment

② changing customs with time

↳ customs that are not required in modern society, will be done away with.

↳ practice of 'khatna'

③ UCC will introduce changes in majority religions as well, not only in minority.

↳ UCC will do away with

HUF concept for tax benefits

④ UCC aims to make India, a progressive society.

Therefore, UCC is a product of

constitutional morality, which will empower women.

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)

Ans According to NFHS-V, Indian population consists of 10% senior citizens, by 2030, it will reach 19%.

concept of healthy aging

Demographic shift refers to change in the age profile of a society. At present India has 65% population in working age.

With time, we will have more aged persons, and will need to provide for their social security.

concept of healthy aging refers to a process, where health deterioration is not too much with aging. Healths senior citizens can reduce burden on social security, contribute to economy.

Healthy & active ageing: contribute to social inclusion

- ① Since they are healthy and active
 - ↳ participating in economy
 - ↳ financial autonomy
 - ⇒ Silver economy can contribute to 1.5% GDP
- ② Mental health will be better as a part of active lifestyle.
- ③ This will enable them to integrate with family and society.
- ④ Women, who after their husband's death are helpless in old age, will be empowered.

Actions required for healthy active ageing

- ① Better geriatric care facilities
- ② Physical activities in earlier life
- ③ Better social security net.

By above steps we can ensure a healthy senior citizens.

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)

Ans Urban youth is characterised by 'compulsive consumption' in modern times. This could be shopping, consuming e-content, eating etc.

Factors for transition from 'conscious consumption' to 'compulsive consumption'

① Social media

- ↳ Marketing gimmicks of MNCs
- ↳ Using celebrities / influencers to promote their product.

② Materialism

- ↳ owning more things, latest gadgets is considered 'cool'.

- ↳ Being updated from social media trend is 'gen z style'

③ Availability of choices in market

- ↳ difficult to choose one,

Impact of 'compulsive consumption' on family structure and dynamism in urban areas

① Reduced savings

↳ anxiety about future

↳ tension among family members

② Toll on mental health

↳ due to 'doom scrolling'

↳ affects family relations

③ OTT Binge watching

↳ Reduced time for family interactions

④ Echo chambers

↳ reinforces beliefs such

as patriarchy

↳ increased domestic violence

Economic Survey 24 noted that
obesity, social media-screen time, and
junk food can stop India from realising
its true potential.

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)

Ans

Vijayanagara Kingdom of South India contributed immensely in the field of art, architecture and literature.

Key features of Vijayanagara Architecture

① A part of Dravidian style, vijayanagara temples have large, towering Gopurams
eg Meenakshi temple, Andhrapradesh

② King Krishnadeva Raya, of vijayanagara built Kalyan Mandapam in temples.
↳ used for marriage functions.

③ Hampi temples are known for their musical pillars, unique in architecture

④ Beautiful detailing on walls and depictions of daily life events.

⑤ Material used for construction was locally available granite.

- ⑥ Vijayanagara temples included water source inside temple complex.
- ⑦ Temple complex had a well-built boundary wall.
- ⑧ Vijayanagara palaces used domes and other architectural shapes.
- ⑨ Very high usage of pillars in architecture.

Indo-Islamic elements: manifest in vijayanagara structures

- ① Use of domes, in buildings
- ② Use of mortar, as a binding agent
- ③ Detailed engravings and artistic designs on walls of structures.
- ④ Provision of gardens in char bagh style.
- ⑤ Use of geometric shapes in architecture ~~eg~~ circular pattern

⑥ Taali work in windows

⑦ Use of marble in certain structures
as a contrast to their use of
granite.

⑧ use of amalak, kalash at the top
of buildings.

The impact of Indo-Islamic
culture on Vijayanagara architecture is
understandable due to the fact that
these 2 kingdoms were contemporary.

Further, Vijayanagara not only
imported elements from Indo-Islamic
architecture but also modified it according
to local conditions and requirement.

Examples of Vijayanagara
architecture such as - Hampi ruins, are
a great subject of interest among
modern explorers.

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)

Ans

Nalanda university, also known as Nalanda Mahavihara was a centre of Indian religious and secular studies from 6th CE to 13th CE until its destruction by Bakhtiyar Khilji. Tanila was located in modern day Afghanistan region.

Difference in features

Ancient Indian universities	Modern state funded universities
① <u>Patronized</u> by <u>kings</u> , <u>wealthy merchants</u>	① <u>Funded</u> by <u>state</u>
② <u>Subjects taught</u> were <u>religious + secular</u> <u>Buddhism</u> , <u>Hinduism</u> <u>Mathematics</u> , <u>Astronomy</u>	② <u>Focus</u> on <u>secular disciplines</u> - <u>STEM</u> and <u>arts</u>

<u>Ancient Indian universities</u>	<u>Modern state funded universities</u>
③ Both <u>Nalanda</u> and <u>Tanila</u> were residential universities	③ Modern state funded universities are both <u>residential</u> and <u>non-residential</u>
④ Students came from different parts of world <u>eg</u> China, Mongolia, middle east	④ Largely students from India.
⑤ Teachers included prominent personality such as - <u>Chanakya</u> , <u>Dignaga</u> etc.	⑤ In modern universities teachers are generally <u>professional</u> .

Similarity in features

- ① Focus on discipline
- ② Teachers given great respect.
- ③ Low fees - modern state funded universities also charge minimal fee from students.

Lessons: modern universities can learn from ancient to improve effectiveness

① Attraction of best minds from world is possible through quality education

eg IIT Delhi set up campus in Aby Shahi

② Teachers should be passionate

eg Chanakya was an excellent teacher → Takshila got wellknown

③ Investment in education give rich dividends

eg India's prosperity could be attributed to these universities

④ Creation of literature, R&D is helpful

↳ Nalanda had biggest library in the world.

Recent inauguration of new campus of Nalanda University near Rajgir is an evidence of importance of these universities in Indian History.

- Q13. क्रांतिकारी 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)

Ans

Indian freedom struggle was a sum total of various strategies such as - moderates, extremists, revolutionaries, Gandhian methods and socialists etc.

Ideological differences

<u>Revolutionary movement</u>	<u>Gandhian non-violent struggle</u>
① They justified <u>use of violence</u> to gain independence.	① Gandhiji emphasized on <u>truth</u> & non-violence
② Revolutionaries believed in <u>Heroic acts</u> to inspire masses eg. <u>Bhagat Singh</u> , throwing bomb in assembly	② Gandhiji believed that such heroic acts can be easily suppressed by British force. (not effective)
③ Revolutionaries chose <u>ends over means</u> eg. - <u>Zimmerman plan</u>	③ Gandhiji chose <u>means over ends</u> eg. - withdrawal of ^{NCM} from after Chauri Chaura

Similarities between Revolutionary movement and Gandhian non violent struggle

① For both movements

Patriotism was the top priority
and independence was the end goal.

② Both movements highlighted
self sacrifice

↳ revolutionaries by heroic acts
↳ Gandhiji by fast until death

③ Both believed in capability of masses
to usher in the new era of independence.

④ Both had high regards for
each other.

⑤ Both had to suffer suppressive measures of British

↳ Bhagat singh → hanged

Gandhiji → went to jail many times

⑥ Both adopted strategies to
prepare masses for struggle.

Influence of 2 ideologies on each other

① Grandhian ideology had a great impact on revolutionary ideology.

↳ Bhagat singh in his last days wrote that independence can be achieved by mass efforts not individual heroism.

② Revolutionary ideology pushed Grandhian leaders to adopt more critical stand towards government.

↳ Grandhi requested Lord Birwin for Bhagat singh's pardon.

③ Leaders of both movement had great respect for each other.

④ Bhagat singh's martyrdom helped Grandhian leaders to bring masses in movement.

Therefore both revolutionary movement and Grandhian ideology were important in Indian freedom struggle.

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)

Ans

Indian Himalayas due to its height are covered with snow. Over the timeperiod various types of glacial landforms have been developed in this region.

Various glacial landforms : Indian Himalayas

① Later-noster lakes → depressions in these regions are filled with melted ice and take the form of lake.

② Cirque / corries / Arete
↳ these are various landforms corresponding with mountain peak / edges.

③ Glacial U valleys
↳ slow moving glaciers,

under its own burden create
U-shape valley.

④ Hanging valley: These U-shape
valley can be called hanging
valley at a place where there
is drop in elevation.

⑤ Moraine
↳ these are masses of rock,
debris or soil, kept together
by ice.

⑥ Esker / Drumlin
↳ these landforms are
created by movement of glacial
masses and deposition.

Impact of these features on local
ecosystem and human activities

① Glacial melting caused by climate
change → may cause landslides
(moraines coming down from slopes)

② These glacial landforms promote tourism in Himalayan areas.

③ Later moraine lake when reflects light → it becomes a panoramic view.

④ Hanging valley may enhance the risk of avalanche is in case of tectonic activity.

⑤ These landforms provide shelter to local biodiversity eg snow leopard.

Therefore study of these landforms enhance our understanding of local geological activities over a period of time.

In a time, when Himalayan ecosystem is under grave dangers due to climate change, we can adopt mission LIFE to mitigate its impact.

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

Ans

Global oceanic circulation patterns consist of oceanic currents and Gyre that help in thermo-haline circulation from equatorial region to poles and vice versa.

Unique geographic features of the Indian Ocean:

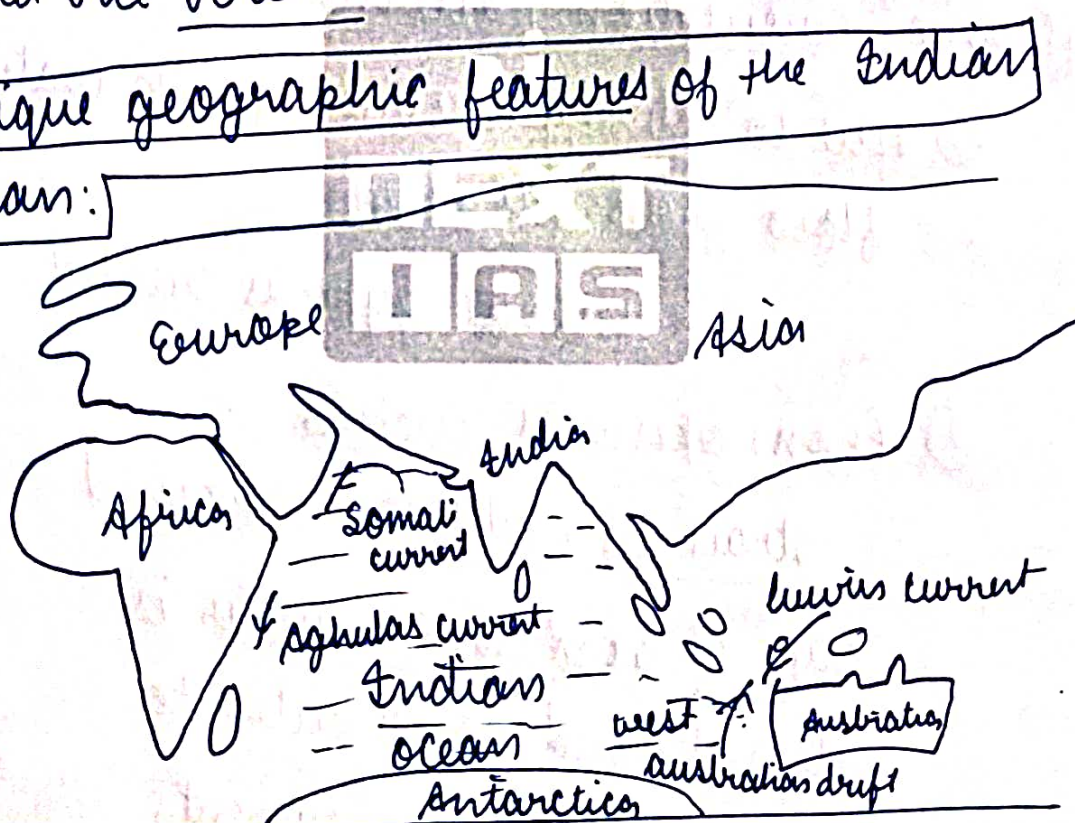


fig : Indian ocean

- ① M-shape :- unlike pacific ocean (O shape) or atlantic ocean (S shape)
- ② More landmass - compared to other ocean

③ Bound from all 4 sides

↳ west-Asia, North-India,
South-Antarctica, East-Indonesia

④ Large no. of Islands

↳ due to reunion hotspot

↳ Lakshadweep, Maldives, A&N Islands

Impact of these features on global
oceanic circulation patterns

① Due to strong restrictions on water
flow from all sides

↳ intense gyre is created.

② From openings such as

strait of Malacca, around
cape of good hope, water is
released and contributes to
currents - Benguela current,
west australian drift

③ Due to this intense gyre, there is
hardly any cold current in
Indian ocean.

Impact of these features on climate of Indian subcontinent

① Contribution to rains

↳ these oceanic circulations cause Indian ocean dipole

↳ positive phase of it is helpful for rains.

② Temperature maintenance

↳ these oceanic currents cause south-west monsoon winds which lowers the temperature over sub-continent.

③ Creation of low pressure conditions → give rise to cyclones

④ Presence of Lakshadweep - (coral islands)

⑤ High biodiversity on A & N islands

⑥ Presence of all types of climate on Indian subcontinent.

Therefore, the unique features of Indian ocean contribute immensely to climate of Indian sub-continent.

- 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)

Ans

Urban heat islands, as the name suggests, are a phenomena causing very high temperatures in urban areas giving rise to conditions of heatwaves.

Factors contributing to UHI:

① Concretization of cities
↳ use of concrete and asphalt causes radiations to be trapped.
↳ therefore raising temperature.

② Glass buildings
↳ Glass allows short wave radiations to go through but traps long wave radiations.

↳ GHG effect

③ Deforestation

↳ forests are great sink of CO₂ and temperature but due to faulty urban development ↳ deforestation has taken place.

④ Industries / ACs / vehicles

↳ flue gases / emissions further raise the atmospheric temperatures.

Existing mitigation strategies

① Compensatory afforestation

↳ to increase the sink of GHG gases and control temperature rises.

② Urban forests by Miyawaki

method to increase the green cover.

③ Use of reflective materials in construction

↳ minimizes heat absorption

④ Strict emission norms

↳ BS-VI vehicles

Esp in thermal plants

However, these measures are not sufficient as:

- ① Do not address the root cause of the problem → provides only quick fixes (temporary)
- ② Afforestation efforts are not taken seriously by companies or authorities.
- ③ Lack of private investment on technological innovation → to reduce emissions.
- ④ Top-down approach → people not following it.

way forward

- ↳ ① Mission LiFE → mass movement
- ↳ ② Shifting industries to tier-II, tier-III cities
- ↳ ③ R&D investment → for tech innovation

By using above measures, world can become a sustainable habitat for humankind.

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)

Ans India is one of the leading producers of the sugar. However within India, there exist significant regional disparities in sugar production.

Primary factors: contributing to regional disparities

① Soil type :- while black soil in peninsular India is less suitable than northern Indian alluvial soil found in UP, Bihar, MP.

② water availability → Perennial rivers system of Ganga provide round the year water availability to this water guzzling crop

↳ no such major water source in peninsular India.

③ Government policies

↳ sugarcane is provided with FSP (fixed support price) by government. (generally very high)

↳ mill owner is allowed to procure sugarcane from within certain area only.

(restricts his purchase option)

④ Mills location

↳ a lot of mills are located in north India, contributing in production.

⑤ Demand in market

↳ generally north Indian consume more sugar per capita.

Measures to reduce the surplus sugar production:

① further increase in FSP

② Diversion of sugarcane for bio-ethanol production.

③ Impose quantitative restrictions
on sugar mills.

④ Incentivise farmers to grow
other crops ~~to~~ Millets

↳ help saving water

↳ maintain price of sugar
in market (no excess supply)

⑤ Awareness among people regarding
health hazards of excessive sugar
consumption.

Therefore by using above methods
we can achieve reduction in sugar
production, which will help us in

① water conservation

② Avoiding diseases ~~to~~ Diabetes

③ No fall in sugar prices etc.

These benefits will help in increasing
farmer's income and reduced expenditure
on healthcare.

- 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)

Ans

Social mobility refers to availability of opportunities in society to improve one's social, economical status.

Barriers to intergenerational mobility in Indian society:

① Caste system :- It is an ascriptive system that bars a person from achieving better quality of life.

eg Caste based occupation

79.7% of manual scavengers are from Dalit caste.

② Gender discrimination

↳ due to patriarchal mindset misery of women is perpetuated.

~~eg~~ 'womb to tomb' discrimination

③ vicious cycle of poverty

↳ lack of universal health,
education cause poor to remain
perpetually poor.

④ Dynastic businesses / politics

↳ prohibits rise of talented
person. perpetuates their
sub-ordination.

⑤ Informal sector

↳ lack of social security,
poor pay, harsh conditions of
work, lack of upskilling

↳ lead to intergenerational
poverty

Role of education on social mobility

① women empowerment

↳ educated women is
likely to take reproductive
choices

↳ financial autonomy

② Skills to informal workers
↳ they can move from this place to a better place.

③ Dalits / lower caste
↳ Dr. Ambedkar is a shining example of how education can fuel social mobility.

④ Education has the capability to reform the patriarchal, casteist mindset

However, education alone is not sufficient, it should be supplemented with:

① Affirmative action towards downtrodden

↳ Nari Shakti vandan Adhikam

② change in societal attitude

③ Support to big workers etc.

Therefore above steps can ensure an open society, where everyone can scale heights in their lifeline.

- 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)

Ans

Globalisation refers to increased interconnectedness of the world facilitated by ease of movement of man, material, culture and ideas across borders.

Influence of globalisation on migration patterns in India

- ① Increased emigration to foreign country in search of better opportunities.

eg in 2021, India earned \$111 million in remittances, highest in the world.

- ② Gaining prominence of H-1B visa in USA, due to IT industry and better pay.

- ③ Many foreigners coming to India for jobs eg Japanese township in Gurugram (manesar)

- ① Increased internal migration
↳ to cities having concentrations
of MNCs

eg IT hub Bengaluru.

- ② People are migrating from rural
areas to urban areas in search
of better education, health,
jobs.

Economic and social implications of increased internal migration

- ① Feminization of agriculture
↳ double burden on women
↳ time poverty for them.
- ② Remittances helping in development
of rural areas.
- ③ Rise in nuclear families, single
person households
- ④ Family relations are getting
weaker.

- ⑤ It has increased female LFPR
↳ in nuclear families, women are more likely to take up jobs.

eg PLFS → 37% female LFPR

- ⑥ High cost of living in urban areas is eroding the savings of families

Economic and social implications of increased international migration

- ① Remittances → important role in development of Kerala
- ② Better pay in foreign countries
↳ better living standards
- ③ International integration of child → old aged parents are left alone → suffer many problems

Therefore, while ~~immigrations~~ immigrations have helped in economic growth but our social goals have taken a back seat.

we must rectify this to ensure

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)

(Ans)

~~Sylvia~~

Sylvia Wolby defines patriarchy as the continuous exploitation & oppression of women by men.

Gender based violence : manifestation of patriarchal values

① concept of 'Rape culture'

Rape culture is societal values that normalise the incident of rape. They demonize the perpetrator, blame the victim to some extent and want to forget about it.

→ Nirbhaya case, R G Kar rape & murder case

Feminists argue that there is need for change in patriarchal values of society.

② Domestic violence

↳ Pati (meaning 'owner' literally) can do whatever he wants with his wife (his 'property')

↳ As these values are percolated down to next generation, such incidents are repeated.

③ Sexual harassment

UN women report

↳ men of all class engage in sexual harassment, women of all class suffer sexual harassment

↳ An indicator to the women that they do not belong outside 'kitchen'.

Modernisation of law: instrument of women empowerment

① POSH act 2013 → based on Vishakha Guidelines

↳ reduced incidents but not panacea.

↳ poor implementation (ICC not active)

↳ visible in # me-too movement

② Act against domestic violence

↳ Apathy of police administration
has made this law ineffective.

↳ still many cases of domestic violence coming.

③ Aparajita bill, 2024 → by WB govt.

↳ recommends fast probe,
death penalty, women in charge
of leading investigation etc.

However, feminists like Nivedita

Menon argue that what is required is:

① Swiftness not severity of punishment

↳ swiftness of punishment will
act as deterrent.

② Demolition of patriarchal values

↳ use of gender sensitive
training to police, administration.

By taking above steps we can make
Indian society more safe for women.