



GENERAL STUDIES (TEST CODE : 1834)

Name of Candidate	KASTURI PANDA		
Medium Eng./Hindi	ENGLISH	Registration Number	721089
Center	ONLINE	Date	28-08

INDEX TABLE			INSTRUCTIONS
Q. No.	Maximum Marks	Marks Obtained	
1	10		
2	10		
3	10		
4	10		
5	10		
6	10		
7	10		
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10	10		
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12	15		
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14	15		
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20	15		
Total Marks Obtained:			
Remarks:			

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

1. The Sunga dynasty contributed significantly to the cultural and social development in ancient India. Discuss. (150 words) 10

प्राचीन भारत में सांस्कृतिक और सामाजिक विकास में शुंग वंश का महत्वपूर्ण योगदान रहा है। चर्चा कीजिए।

The Sunga dynasty were a predominantly Brahmanical royal system that rose to prominence in central India after the fall of Maurya dynasty.

Contribution to cultural development

- ① More patronage to Hinduism
- attempted to reduce the hold of Buddhism in India
- ② Building of temples - architectures and places of worship.
- ③ Rural and urban development
- patronage to artisans, guilds, food production.
- ④ Rise in textiles, ornaments and shrenis - inter culture interaction with other dynasties like Kanvas.

southern empires like Cholas,

Social development in Shunga Rule

- ① Extensive empire building activity
- capturing other empires - war.
- ② multiple marital alliances
- ③ Greatest king - Pushyamitra Sunga
- ④ Rights and leadership on maternal side
- ⑤ Grants to Temples, Brahmins & priestly class - Brahmadeya, Agrahara.

The rich legacy carried on from Shunga dynasty made Indian culture divinely with later architectural marvels and artisinal vibrance.

2. Discuss the role of foreign nationals in the Indian freedom struggle during the Gandhian phase. (150 words) 10

भारतीय स्वतंत्रता संघर्ष के गांधीवादी चरण के दौरान विदेशी नागरिकों की भूमिका की विवेचना कीजिए।

The contribution of foreign nationals was an impactful stance during Gandhian phase of an inclusive and dynamic freedom struggle.

Direct involvement in Freedom Struggle by foreign nationals

① Annie Besant - setting up Hume

Rule League on Irish lines - later became satyagraha Sabha.

② George William Wedderburn presided INC meetings

③ Multi ethnic leadership system

- George Treendale

④ AO Hume - architect of Indian National Congress

Indirect Contribution

- ① Tolstoy - Gandhi had set up Ashram system in India based on Tolstoy Farms in India.
- ② Influence of foreign music and Theatre - gave inspiration for Swadeshi.
- ③ Verrier Elwin - tribal rights.
- ④ Wives of foreign nationals and British - who sympathised with Indians - did construction work - promotion of sports.
- ⑤ Monley Minto Montague Chempad - instilled reactionary influences → Despite their alien origin, foreign nationals immensely contributed to Indian attainment of freedom in 1947.

3. Provide an account of the contributions of Ram Manohar Lohia during the Indian freedom struggle and in post-independence India. (150 words) 10
भारतीय स्वतंत्रता संघर्ष के दौरान एवं स्वातंत्र्योत्तर भारत में राम मनोहर लोहिया के योगदान का विवरण प्रस्तुत कीजिए।

Ram Manohar Lohia played a pioneering role as a radical leader who instilled strong nationalism for creation of independent as well as post-independent India.

Contributions to Freedom Struggle

- ① Demanded the council entry after elections in 1930s
- ② Reforms advocated - freedom of press, curbing police powers, civil rights, definition of leadership.
- ③ Also constructive work with Gandhi
- ④ Led the idea of Blender Republicans
- ⑤ Swarajya Party.

⑤ He was against divisive tendencies and Islamic Communism - in Jinnah faction

Contributions post-Independent India

- ① Shaping Hindu code Bill - opinions on inheritance, marriage, rights of women
- ② Vocal against partition holocaust
- ③ Diplomatic contribution to integration of all princely states - single nation
- ④ Excellent parliamentarian and held ministerial portfolios.

In more than multiple ways Ram Mahober Lohia's ideas have shaped creation of New India @ 75.

4. What do you understand by tsunamigenic zones? Giving an account of their global distribution, explain the propagation of tsunamis. (150 words) 10

सुनामी जनक क्षेत्रों से आप क्या समझते हैं? उनके वैश्विक वितरण का विवरण देते हुए, सुनामी के संचरण की व्याख्या कीजिए।

Tsunamigenic zones refers to points in oceans that are prone to tectonic activities leading to tsunami and flooding in land boundaries.



Globel distribution of Tsunamigenic Zones

① Pacific Ring of Fire - High tectonic activity - ocean continent

convergence zone

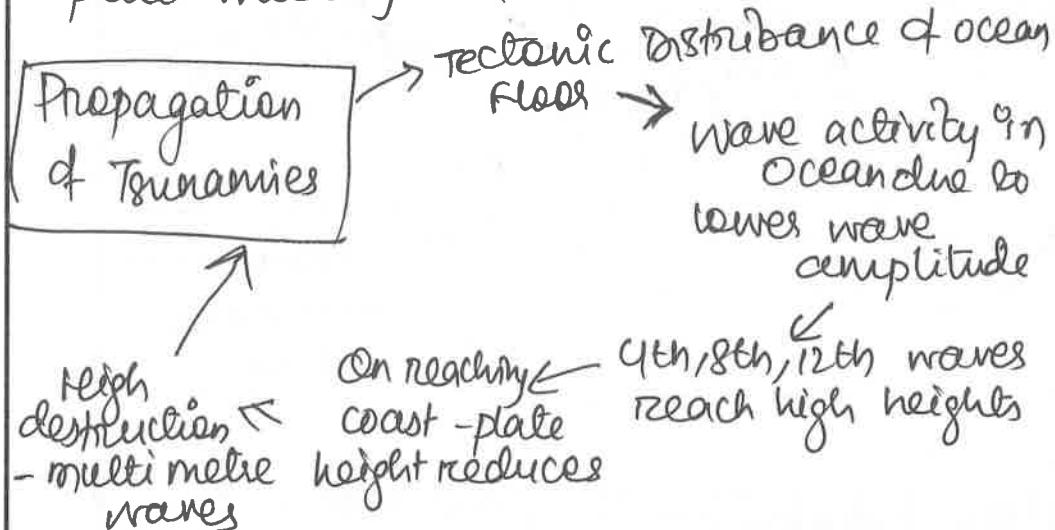
② Middle East North African zone

- extending to Mediterranean zone - presence
of multiple plates

③ South America - Andes region

④ Philippines and South East Asia, Indian
Ocean Islands - Madagascar, Seychelles,
Mauritius - ocean-ocean convergence zone

⑤ Japan subduction region - 3 continent
plate meeting area.



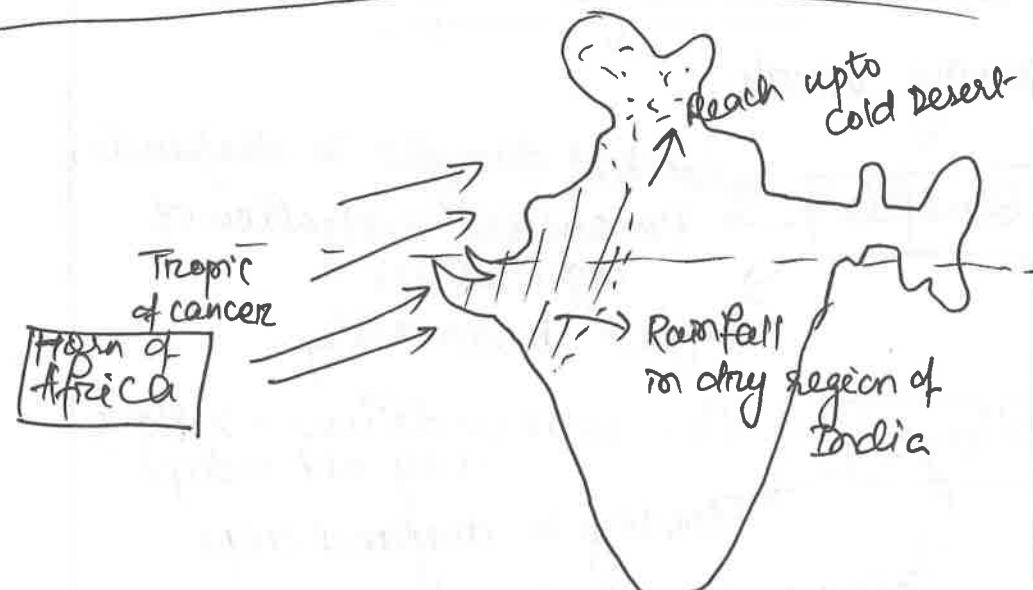
Study of tsunamigenic zones through
disaster Resilience Infrastructure and Disasters
Risk Reductions are absolutely essential
to combat disaster poverty.

5. What are atmospheric lakes? Highlight their characteristics.

(150 words) 10

वायुमंडलीय झीलें क्या हैं? उनकी विशेषताओं पर प्रकाश डालिए।

Atmospheric lakes refer to water holding clouds that propagate from Eastern Africa to western India that push rain bearing trade winds through western side of India



Characteristics

- ① Travel west to east
- ② Cumulonimbus clouds formed in

Horn of Africa - [High Pressure]

- ③ Create mild low pressure conditions in Thar - Rajasthan-Gujarat region of India - ~~rainfall~~ precipitation in deficient areas.
- ④ Influence agriculture in North west
- ⑤ Augment the western disturbance
- ⑥ Reach the Himalayan region - fast moving winds.

Benefits → combat drought in drylands
→ Atmosphere irrigation of agriculture
→ support biodiversity.

Challenges → Alters local conditions - Wildlife may not adapt
→ Flooding in dryland areas
→ Disease travel like locust Attacks and pests enter India.

Atmospheric Lakes are a nascent weather phenomena where pros and cons require deep insights to address climate change.

6. What are polymetallic nodules? Highlight their geographical distribution and state their significance. (150 words) 10

पॉलीमेटलिक नोड्यूल्स (वहूधात्विक ग्रंथियां) क्या हैं? उनके भौगोलिक वितरण पर प्रकाश डालिए और उनका महत्व बताइए।

Polymetallic Nodules are the multi-
PMN
mineral resources found in ocean bed
deeper into height. E.g. manganese-Iron-
Potassium-Uranium-Thorium found in
amalgamation. / Monazite Sand-Kerala.



Significance of PMN

① Resource potential - for energy

Shale Gas, coal Bed Methane, Uranium &
Thorium

② Export and revenue potential Eg.

India launched Samudrayan Mission

- Deep sea Indian Ocean Mission
- in territorial waters

③ Precious minerals like gold, copper
in Alaskan region, Arctic zone.

④ Rare minerals - South & East China Sea
- semiconductor and electronic chips.

⑤ Source of nutrients - marine biodiversity
there.

⑥ Aphotic zone - remain relatively less
corrosive & less reactive.

PMN hold the key to a \$ trillions
dollar dollar economy if India achieves
in their optimum excavation, exploration
and utilisation.

7. What are technical textiles? In view of their significance, discuss the steps taken by the government to promote them in India. (150 words) 10

तकनीकी वस्त्र क्या होते हैं? उनके महत्व को देखते हुए भारत में उन्हें बढ़ावा देने के लिए सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए।

Technical Textiles refers to the textile that have industrial purpose and not personal retail value

E.g. Fishing nets, Stone retention in nets, packaging materials, covering corrosive & inflammable substances.

Steps taken by government to promote

① Setup Textile Parks

② AFTUS - Technical upgradation of Textile industry - Skilling and capacity Building

③ Credit facility - MUDRA, StandupIndia by MSMEs, women and small industries.

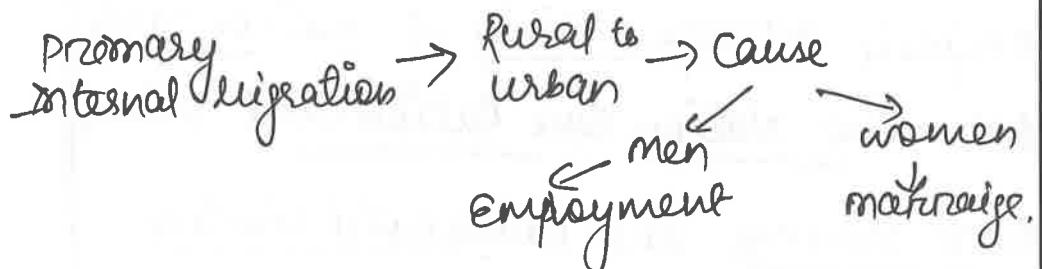
- ④ Insurance under PM Jagat Vyapari Manthan Yojana
- ⑤ ESIC and EPFO along with formalisation of economy
- ⑥ Boost textile exports - using retail advantage.
- ⑦ Priority in Procurement - Government e Marketplace, focal for local
- ⑧ Development commissions for National Mission on Technical Textiles

Technical textiles have high potential of women employment and creation of support system of 25% growth target manufacturing economy to achieve demographic dividend

8. Discuss the challenges that internal migration creates for urban governance in India. Also, suggest measures to address the same. (150 words) 10

भारत में आंतरिक प्रवासन द्वारा शहरी शासन के समक्ष उत्पन्न चुनौतियों की विवेचना कीजिए। साथ ही, इससे निपटने के उपायों का भी सुझाव दीजिए।

As per Census 2011, about 37% of Indian population were internal migrants with majority 90% of them women which calls for efficient urban governance.



Challenges

- ① population pressure in urban areas
 - high density - proliferation of slums
- lack of proper housing
- ② poor living conditions in slums - denial of water, energy, sanitation entitlements
- ③ unscientific urbanisation - absence of detailed survey and data - difficulties

in public service delivery like rations.
or essentials

④ increase in urban disasters - heat domes,
extensive flooding, water insecurity,
power outages and industrial risks.

Measures to address urban challenges
due to migration

① complete interoperability of ration cards
—ONOT - One Nation One Ration card scheme

② Drone surveys and household identity
numbers - E.g. JTGA Mission Odisha.

③ Implementing better - PM Awas Yojana,
Livelihood Mission and PM Ujwala Yojana etc.

④ Evidence based planning - use of ICT
and prediction - managing disasters.

⑤ Reclamation of water bodies, urban
forestry, Rain water Harvesting structures

Urban governance strengthening is a part
and parcel of migrant empowerment and
precursor to achieve SDG 11

9. Discuss the various opportunities and challenges posed by globalization on working women in India. (150 words) 10

भारत में कामकाजी महिलाओं के लिए वैश्वीकरण द्वारा उत्पन्न विभिन्न अवसरों और चुनौतियों पर चर्चा कीजिए।

The UNDP refers to globalisation as increasing interconnectedness of cultural, social, economic and political systems of nations across the world.

Opportunities of globalisation to working women

Q

WW

- ① Increased labour force participation rate - jobs from MNCs, flexible work hours, work from home.
- ② Financial independence & inclusion - break shackles of patriarchy.
- ③ Social acceptance of women as leaders - voting rights, land rights, reproductive rights such as period leaves.
- ④ Adoption of best practices - educational attainment, delayed marriage, less children and stress on health -

- breaking the glass ceiling

⑤ Easier transportation and connectivity

- airways, metros - safe public transport to work.

Challenges of G on women

① Incomplete Globalisation of patriarchy - even when both partners work - crucial decisions taken by women — also do double shift unpaid work

② Spread of patriarchal perception - As per UN Social Norms Index - 95% world believes women are worse business leaders - Glass Cliff rise

③ Unsafe public transport - Uber case and workplace sexual offences - (POSH Act)

④ Educated unemployment, part time roles, gender collapsation in care giving roles

The harnessing of opportunities and curbing challenges to working women in globalising work is essential for SDG No 5.

10. Discuss the rationale behind anti-conversion laws in India. Also, state the concerns that have been raised with regard to these laws.

(150 words) 10

भारत में धर्मांतरण विरोधी कानूनों के पीछे निहित तर्कों पर चर्चा कीजिए। साथ ही, इन कानूनों के संबंध में व्यक्त चिंताओं का भी उल्लेख कीजिए।

Anti Conversion laws in different states
are adopted to curb the menace of religious conversion by using force, deception or trickery.

Rationale Behind the laws

- ① Reduce exploitation of women in the name of religion - conversion to minority religions.
- ② Protect identity of community - demand by religious patrons.
- ③ Establish communal harmony - tolerant pluralism of all religions.
- ④ Perpetuating ideological cohensions - negate possibilities of violence, riots, honour killings, mob lynchings etc.

Concerns raised against them

- ① Method of vote bank politics
- appeasement to majority religions.
- ② State suppression of right to choose partners (Art 21) - unethical - clarified by Supreme court in Hadga case.
- ③ Misogynistic framework of laws
- men denied to control choice and sexuality of women in the name of protection.
- ④ can spearhead conflict between religious leading to communalism
- ⑤ Does not aim at any social reforms
- perpetuates Brahmanical patriarchy
- "Caste in name Jihad" - lower caste, ^{Hindu} men belong to upper caste Hindus men (Aparna, ^{vaidik})

While anti-conversion laws aim at religious pluralism, law commission invited has recommended uniform civil code for upholding secularism.

11. Central Asian contacts had a profound political and cultural impact on India in ancient times. Discuss. (250 words) 15

प्राचीन काल में मध्य एशियाई संपर्कों का भारत पर गहरा राजनीतिक और सांस्कृतिक प्रभाव पड़ा है। विवेचना कीजिए।

The Central Asian contacts entered Indian subcontinent through conquests on the North western side - Khyber pass like Alexander and the Huns.

Political impact on India

- ① Entry of Greek rules - setup of Indo-Greek dynasties - Kushanas
- ② System of inheritance and primogeniture
- ③ Conquests and wars - extended eastwards towards Mahayana padas
- ④ Inclusion of Brahmins and Buddhist sects in administration e.g. patronage to priests for self-glorification, e.g. King Maurendas and Nagasena.
- ⑤ Inspire feudal system of administration

Cultural impact in India

① Patronage to all religions

- built monasteries, viharas, charis

and basadis E.g. Ajanta caves, Stupas.

② Inspired literary traditions - Epics, Jataka tales.

③ Rise of secular education - astronomy, mathematics.

④ On medicine and Health - Susruta and Charaka.

⑤ Rise of Gandhara art and Mathura art - influence of Greeks and Romans

⑥ Patronage to traders - shrines, music and dance.

⑦ Building ponds and irrigation system.

~~The central As~~ ⑧ Excellent numismatics - use of golds in coin

The central Asian contacts extremely contributed to ripe Indian culture and its recognition across the world.

12. Governance, during the British rule, was a means of exploitation of India rather than a vehicle of public welfare. Discuss. (250 words) 15

ब्रिटिश राज के दौरान शासन (गवर्नेंस), लोक कल्याण के एक माध्यम के बजाय भारत के शोषण का एक साधन था। विवेचना कीजिए।

The British Rule governed India with motives of maximising own revenue, Establishing white supremacy and draining wealth rather than being public rulers.

Exploitation by British in India

① Drain of wealth - Dadabhai Naoroji

- investing in India but all profits, interests drained to Britain.

② Deparantisation - high tax revenues, zamindari system, growing commercial crops, shackling Indian agriculture.

③ Segregating Tribals - declaring as criminal Tribes, massacres and plunder of forest resources, extensive mining and

deforestation

- ④ Dumping foreign goods - Ban of Export of Indian cloth but high import of manchester textiles and Liverpool salt (calico act)
- ⑤ Degradation of artisanal and cottage industries - with no support in policies.
- ⑥ High use of force - curbed freedom of press, oppressive police regime, no practical right to equality.
- ⑦ One way free Trade policy - all raw materials exported to UK leading to food insecurity and farmers.
- ⑧ divide and rule Policy
British denied all instances of public welfare
- ⑨ English education - Meant to produce obedient workforce to take colonial orders - no implementation of vernacular

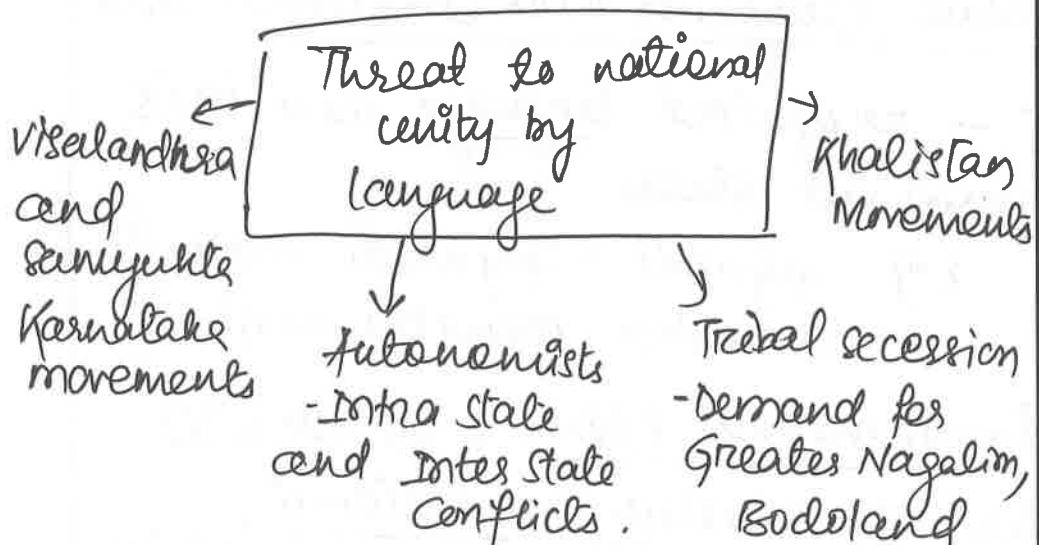
and Wood's Despatch in essence.

- ② Reduction in age of eligibility for military services - difficult for Indians to achieve exam.
- ③ No attempt to improve agriculture - absentee land lordism.
- ④ Large scale unscientific deurbanisation - pressure on rural lands.
- ⑤ Railways - meant to transport British goods to urban centres - high inequality.
- ⑥ mass unemployment, poverty and repeated famines - during Lord Dufferin, Lord Curzon and even in 1940s.
- ⑦ created communalism and depressed class strife.
- ⑧ Carrot & Stick policy - no real governance reforms. The suppressive and self greed oriented British governance in turn became watershed points of agitations and movements that boosted the Indian freedom struggle.

13. Discuss how India successfully dealt with the sensitive issue of language, which had the potential of threatening national unity in the post-independence period. (250 words) 15

चर्चा कीजिए कि भारत ने भाषा के संवेदनशील मुद्दे का, जिसमें स्वातंत्र्योत्तर अवधि में राष्ट्रीय एकता के समक्ष खतरा उत्पन्न करने की क्षमता थी, किस प्रकार सफलतापूर्वक समाधान किया।

India at the time of independence was a nation of over 500 princely states with multiple vernacular languages, dialects and ethnicities.



Process in which India dealt with linguistic diversity & unity

① Recognition to major spoken languages in constitution - Schedule 8

② Autonomy to use of vernaculars at state level - in legislatures and Judiciary.

③ Constitutional authority - Special Officer for linguistic Minorities - Art 350B.

④ State Reorganisation Commission and Act - recognised language as a base to carve out states
 E.g. Gujarat - Gujarati majority
 Maharashtra - Marathi majority

⑤ Fundamental Rights - Art 29 & 30
 - Right to establish educational institutions.

In post independent period, nevertheless conflicts did come up

① Division of Assam and North East
 - spearheaded by Tribal Extremism
 like Mizo groups in Mizoram and

Manipur in Manipur, Chattisgarh, Jharkhand

② Insecurity in Southern States - Northern belt administration attempt to impose Hindi - attempt to separate as Dravida Nadu.

③ Punjab insurgency, Telangana Movement - due to relative deprivations and regional disparities.

India stood the test of time

① SC recognised right to agitate for own language - not a corrupt election practice.

② Devolving through local governments - PRIs, ULBs - 73rd & 74th constitutional amendment acts 1992 and PESA act 1996

③ Asymmetric federalism - 5th & 6th Schedule, basic autonomy in 271, 371A & 12th Schedule.

④ New Education Policy 2020 - Three language formula
 → The attempts of creating a ^{homogeneous} United India from linguistic diversity of billions was difficult but an ongoing success for our tradi ka tmrit kaal.

14. Bring out the factors, which led to decolonisation after the Second World War. Also, discuss the role played by India in this regard. (250 words) 15

उन कारकों का उल्लेख कीजिए, जिनके चलते द्वितीय विश्व युद्ध के बाद विउपनिवेशीकरण हुआ।

साथ ही, इस संबंध में भारत द्वारा निभाई गई भूमिका की भी विवेचना कीजिए।

The Second world war was a period of great conflict between Axle Powers and Allied Powers that ended in 1945 with an aggravated process of decolonisation due to failure of imperialism.

Factors leading to decolonisation

- ① Acceptance of disadvantages of characteristic imperialism - war & devastating
- ② Shattering of world economy and inflation - Germany
- ③ Loss of life and property - 80 million deaths - 3% of world population in 1945.

- ④ Rise in free market concept - USA led hegemonic capitalism
- ⑤ Demands of colonies - Rise in leadership, protests - absence of monetary & military power of imperialist to rule them anymore -
- ⑥ Widespread profit concept in neo colonialism — dependency theory, raw export and consumerist import.
- ⑦ Social - intellectual forces - Gandhi, Nelson Mandela, mao, Russian revolution, Boer wars, Japan's loss in nuclear attack.

Role played by India

- ① Gave inspiration of Swadeshi freedom struggle.

② Non Alignment Movement

- primacy to independence,
decolonisation and self-rule →
 sovereignty.

③ Identifying rights of all communities,

- women & SC-STS from the start.

④ Role model of African and
South American colonies.

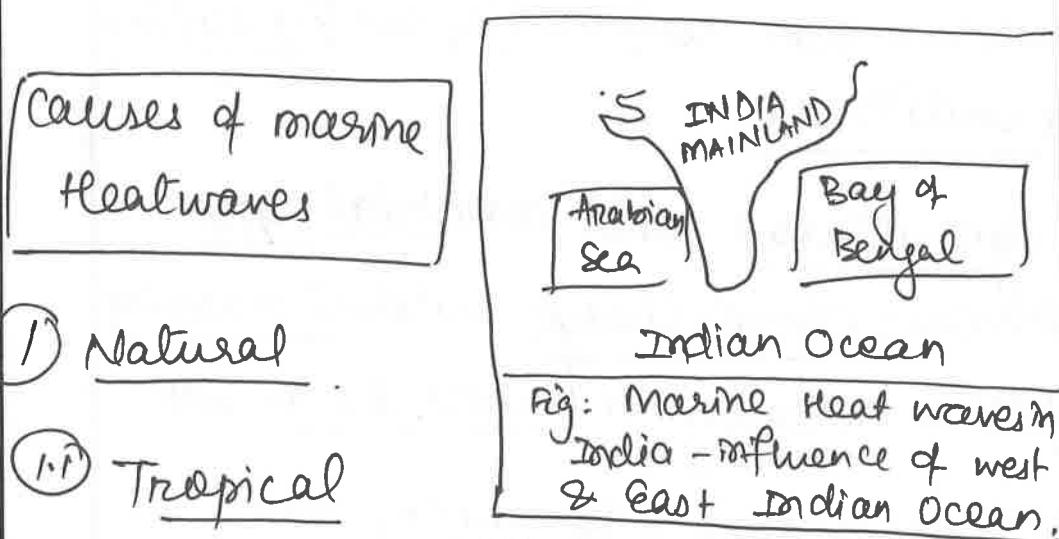
⑤ Import substitution and planned
 economy - proved achievement of
 self rule in 1st Five Year Plan

Decolonisation and devastation of
 Second world war in multiple ways
 contributed to a new world ~~order~~
 order with evolution of United
Nations - peace based system

15. What are Marine Heat Waves (MHW)? Identify the causes of their formation and discuss their consequences for India. (250 words) 15

समुद्री ग्रीष्म लहरें (MHW) क्या हैं? उनके निर्माण के कारणों की पहचान कीजिए और भारत के लिए उनके परिणामों की विवेचना कीजिए।

Marine Heat waves, as per IMD, are the prolonged heat periods in oceans that are persistently high (>5°C) over average mean-sea temperature.



1) Natural

1.1) Tropical

Region - high insolation, high salinity
- higher heating of water in summer

1.2) Climatic effects from across world

- El Nino, Indian Ocean Dipole,

MJO oscillation - traveling heat from Atlantic and Pacific ocean.

1.3 Monsoon Drift current - Heat

Transfer from west Asia

1.4 Trade winds - cyclonic disturbances

2. Anthropogenic

2.1 Unscientific urbanisation - High
emissions from automobiles, cooling systems,
air conditioners -

2.2 Agricultural and Industrial GHG
emissions - Climate Change - Global warming
- cyclones increasing in Arabian Sea as well

2.3 Coastal Erosion - by mining and
deforestation - sea incursion - entering of
marine heat .

2.4 High eutrophication - salinity \rightarrow heat
- waste disposal .

Impacts/ Consequences of Marine float waves
in India

① Degradation of land - heating, high

evaporation, unfit for agriculture.

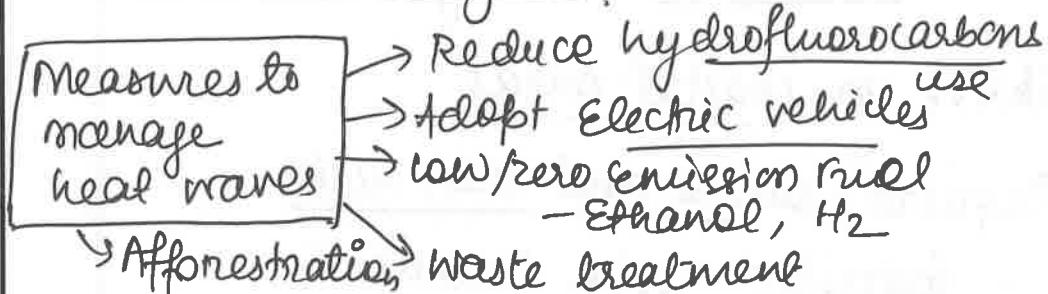
② Loss of coastal biodiversity - coral death, mangroves dead, forest fires.

③ Health effects on population - hypertension, strokes etc. as well as livestock.

④ less mixing of atmospheric particles - maintain heat - high pressure system - poor air quality

⑤ Loss of livelihood in coastal communities - unemployment, poverty

⑥ Boost to recurrent disasters - cyclones as well as droughts.



Marine heatwaves have to handled well by NAMT and SENDAI guidelines to reduce their ill effects.

16. What are the geo-climatic conditions required for oil palm cultivation? Do you agree with the view that India should promote its large-scale cultivation to reduce import dependency? (250 words) 15

ऑयल पाम (ताड़ के तेल) की खेती के लिए आवश्यक भू-जलवायविक दशाएं क्या हैं? क्या आप इस विचार से सहमत हैं कि आयात निर्भरता कम करने के लिए भारत को इसकी बड़े पैमाने पर खेती को बढ़ावा देना चाहिए?

Oil seeds import contribute to the highest payments in India's food basket trade with majority from South East Asian nations like Malaysia, Indonesia

Geo climatic conditions for oil palm

- ① High humidity - equatorial
- ② Both insulation with regular rainfall
- ③ Thrive in coastal areas
- ④ Require saline and iron rich soil - Loamy with humus.
- ⑤ Grow in wet areas

cause of oil palm cultivation in India

- ① High import dependancy
- ② Nutrient requirements - diversify food cultivation over rice - wheat system.
- ③ Tribal and agricultural income - livelihood
- ④ Availability of rain forests - eastern ghats, north east and Andaman-Nicobar

However large scale cultivation may not be advised

- ① Demand extensive deforestation - like in south east Asia and Brazil.
- ② Degradation of soil quality
- ③ Cultivation requires artificial inputs - irrigation construction, fertilizers and pesticides.
- ④ Water stress - high demand.

In limited scale it is being promoted

① National Mission on Oil Palm

-Cluster based approach - Viability Price
and MSP to cultivators

② Research of oil seed varieties

③ Innovation in alternate, edible oil sources

-Rice bran oil, sunflower oil, canola
Oil - production in sustainable methods

④ FSSAI awareness by Eat Right Initiative

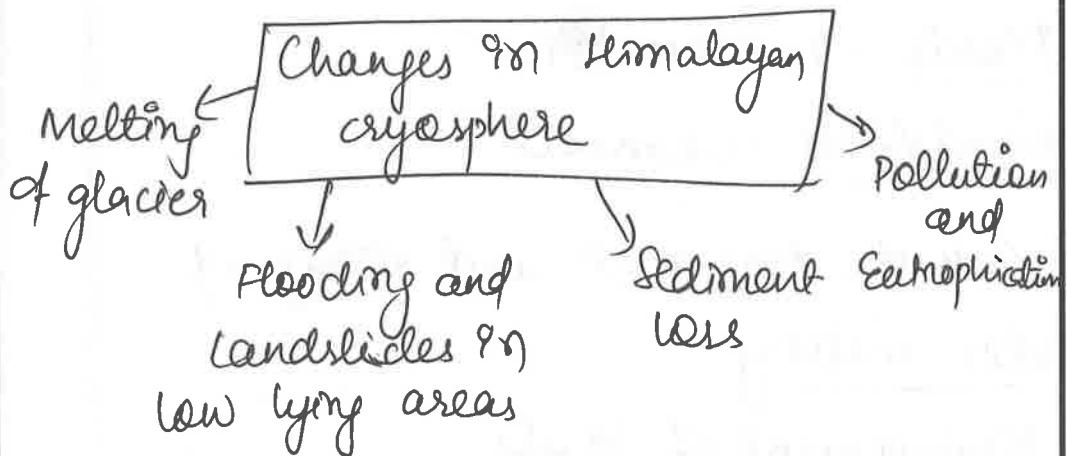
-bad cholesterol in oil palm

India being an agri-primary economy
can promote oil palm cultivation in
a nature of climate adaptive techniques
that also lead to Shok Dalmia vision of
Doubling Farm Income.

17. In view of the changes witnessed in the state of Himalayan cryosphere, discuss the implications for India's water security. (250 words) 15

हिमालयी क्रायोस्फीयर (हिमांक-मंडल) की स्थिति में देखे गए परिवर्तनों को ध्यान में रखते हुए, भारत की जल सुरक्षा के लिए इसके निहितार्थों की विवेचना कीजिए।

Cryosphere is the region in Himalayan water system which remains frozen for extended periods of times.



Pertinent implications on India's water security

- ① Exploitation of hydel power
E.g. Alaknanda project
- ② Glaciers minerals exposed
- ③ Dams and storage of water -

addressing needs of remalayan locals as well as all of India.

Negative Implications

- ① Cloudbursts and heat waves
- extreme weather conditions
- ② Floods - kedarnath
Landslides - Chamoli
- ③ Lack of transport and storage of water melting
- ④ Displacement of locals
- ⑤ Threat to biodiversity → aggravates conditions of water insecurity.

water insecurity in India

- ① Absence of irrigation - Bundelkhand,
↳ Vidarbha, Rayalseema
- ② MTI target - cities - by 2030,

Q1 cities to green out of water .

② Deficient rainfall in Rajasthan, Madhya Pradesh etc.

Solutions from cryosphere changes

- ① River interlinking - Himalayan rivers
- Rise in Ganga, Yamuna level to
drier rivers e.g. Ken Betwa Link .
- ② Small scale hydel power units ^{like} PM Kusum
- ③ Construction of sustainable
transport & storage structures
- ④ Combating global warming .

Efficient tactical policies and
guidelines are necessary to use
cryospheric changes in Himalayan
region to benefit for Atma Nirbhao
water security .

18. Ocean warming, ocean acidification and ocean deoxygenation are often referred to as the 'deadly trio' for marine life. Discuss. (250 words) 15

महासागरीय तापन, महासागरीय अम्लीकरण और महासागरीय विओक्सीकरण को प्रायः समुद्री जीवन के लिए 'धातक त्रयी' के रूप में संदर्भित किया जाता है। विवेचना कीजिए।

The Assessment Reports of IPCC have repeatedly advised on depletion of marine life through process of ocean warming (heat), ocean acidification (waste) and ocean deoxygenation (quality).

Causes of ocean warming

① Climate change and global warming

E.g. Heating of Arabian sea

② Natural process by warm ocean current

~~California~~ - Gulf Stream in USA,
Aghdas in Africa

③ High Greenhouse emissions - hydrocarbon and coal centred economy

Causes of ocean Acidification

- ① Dumping untreated wastes e.g. Great Pacific Garbage Patch - manipulates (drop) the pH value of ocean, Oil spills.
- ② Reducing carbonate density - when mineral wastes like sodium, calcium enter - rise in H^+ concentration
- ③ Mixing of nitrogen, sulphur aerosols.

Causes of ocean Deoxygenation

- ① Rise in bacterial and microbial population due to eutrophication
- ② Biological oxygen demand rises
- ③ Mixing with atmospheric ozone and high insolation - less free O_2 in water

Consequence of Deadly Trio on Marine life

- ① Coral depletion - expulsion of Xanthophyll

- ② less oxygen availability - fish kill
- ③ high sulphur in Florida coast - dead zones in Gulf.
- ④ Tar balls from oil - death of surface organisms
- ⑤ Deeper ocean life - degrades due to very fractional oxygen & sunlight.
- ⑥ Harmful Algal Blooms - from heat prolonged water.
- ⑦ Risk to coastal communities
- loss of livelihood, changed weather pattern
- ⑧ Induce marine disasters like cyclone, glaciers melting at poles, thawing of permafrost

The 'deadly trio' of marine life must be researched and managed well through sustainable blue economy to improve quality of marine biodiversity.

19. Tribals in India continue to face myriad challenges with regard to healthcare. Discuss the issues faced by them in this context and suggest remedial measures. (250 words) 15

भारत में आदिवासियों को स्वास्थ्य देखभाल के संबंध में निरंतर अनगिनत चुनौतियों का सामना करना पड़ रहा है। इस संदर्भ में, उनके द्वारा सामना किए जाने वाले मुद्दों की विवेचना कीजिए एवं उपचारात्मक उपायों का सुझाव दीजिए।

India homes about 7% of tribal population with nearly 80% of them malnourished pointing to their poor health

Challenges in healthcare by Tribals

- ① Inaccessibility - living in rural and forest wildlands.
- ② Affordability - high poverty and high out of pocket expenditure (50%) in India due to privatisation (4 times more than public healthcare)
- ③ Intoxication in tribals - substance and drug abuse higher in tribal men than others.

④ Unhygienic living conditions -

Industrialisation and mining areas

E.g. Sundergarh in Odisha, Buxar,
Dantewada

⑤ Absence of preventive healthcare - only 7%

⑥ Peculiar tribal challenge diseases

E.g. Sickle cell Anaemia in PVTGs.

⑦ Low immunisation E.g. Nagaland
only 14% children take vaccines.

⑧ Primitive practices shy from
institutional mother-child health care.

Remedial measures for Tribal Health
situation

① Inclusion to insurance system - under
PM Jan Arogya Yojana and other state
centred schemes.

② Research of tribal health & hygiene

- allocate funds from PM Swasth Bharat Yojana

- ③ Upgradation of health centres and hospitals in remote areas - compulsory service by doctors
- ④ Empowerment - vernacular education, awareness and employment - adopt better practices through Eklavya Schools, MSP on Minor Forest Produce by TRIFED.
- ⑤ Penetrate immunity drives - in PVTGs, COVID for fighting diseases.
- ⑥ Adopt tribal lifestyles - circular Economy
- ⑦ Stress on van Bandhu Kalyan Yojana
- ⑧ Curb narcotics trade in North East - Golden Triangle

Tribal communities can be better facilitated with targeted health care by Xaxa committee recommendation that takes an balance approach to integration and autonomy

20. Reservation for women perpetuates a "proxy culture" as seen in the phenomenon of "sarpanch patis". In this context, discuss whether reservation can address the issue of poor participation of women in Indian politics. **(250 words) 15**

महिलाओं के लिए आरक्षण एक "प्रॉक्सी कल्चर" को बनाए रखता है जैसा कि "सरपंच पति" की परिघटना में देखा जाता है। इस संदर्भ में, चर्चा कीजिए कि क्या आरक्षण भारतीय राजनीति में महिलाओं की निम्न भागीदारी के मुद्दे का समाधान कर सकता है।

The 73rd and 74th constitutional amendment acts 1992 made compulsory provisions of reserving 1/3rd seats in local governments for women.

Benefits of Reservation to women

- ① Rise of local leadership
- ② Predecessor of their venues and increase bargaining power
- ③ Gender parity in politics - Some states made women reservations - 50%
- ④ Address women ~~the~~ specific issues at local level - rights, hygiene, health, livelihood
- ⑤ women led development for education, health, nutrition, infrastructure

Fallouts of the Reservation System

- ① Rise in proxy candidates - sarpanch patis
- ② empowerment on paper only.
- ③ Reproduction of male hierarchy
- ④ Counters culture of increasing male chauvinism and violence.
- ⑤ less devolution of power by states - concept of local government futile.
- ⑥ Elite feminism - rich wives become ^{leaders}.
Hence, reservation has to be

Segmented with other measures

For real participation of women in politics —

- ① Introduce gender budgeting
- ② Check on proxy culture by district administrative system.

- ③ Strengthen and increase women in police system at decentralised level
- ④ Penalty and incentive system in Panchayats — inspire women to work in competitive spirit.
- ⑤ Use of ICT - e.g. WhatsApp Group initiative by Ministry of WCD and Ministry of PRIs — share best practices among women leaders.
- ⑥ Inclusion of women at all levels of politics - Legislatures of State (now only 9%), Parliament (14%)
- ⑦ Essential empowerment by education

women in politics has been Indian arches need since Independence but a Nari Shakti centred movement of Azadi Abhi Nirdo ka tmrit kaal can reform it.