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GENERAL STUDIES (TEST CODE : 1834)

Name of Candidate	KASHMIRA BARKHE		
Medium Eng./Hindi	ENGLISH	Registration Number	1356950
Center		Date	6/8/22

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
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18	15	
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20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

- Do furnish the appropriate details in the answer sheet (viz Name, Registration Number and Test Code).
उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न-पत्र कोड, विद्यार्थी क्रमांक आदि)।
- There are TWENTY questions printed in ENGLISH & HINDI
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
- All questions are compulsory.
सभी प्रश्न अनिवार्य हैं।
- The number of marks carried by a question/part is indicated against it.
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
- Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in a medium other than the authorized one.
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपका प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न-सह-उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
- Word limit in questions, if specified, should be adhered to.
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
- Any page or portion of the page left blank in the Question Cum-Answer Booklet must be clearly struck off.
उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

16-B, 2nd Floor, Above National Trust Building, Bada Bazar Marg, Old Rajinder Nagar, Delhi-110060

Plot No. 857, 1st Floor, Banda Bahadur Marg (Opp Punjab & Sindh Bank), Dr. Mukherjee Nagar
Delhi-110009

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.

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 was established by a Brahmin - Pushyamitra Shunga by overthrowing the last ruler of Mauryan empire - Brihadratha in 187 BCE. They contributed significantly to cultural and social development of India.

SUNGA DYNASTY

Pushyamitra
↓
Agriamitra
↓
Vasumitra

Fig: Shunga dynasty extent



CONTRIBUTION TO CULTURAL DEVELOPMENT

1. Phillip to Sanskrit language -

Being from Brahmin caste they put emphasis on use of Sanskrit which was slowly on the decline due to

Ashoka's Dhamma and use of Pali and Prakrit to spread Buddhism.

2. Contribution to Buddhist stupas :-

They repaired many stupas like Sanchi and Bharhut and promoted Buddhism.

3. Contribution to Hinduism: They also built many temples dedicated to Hindu gods and goddesses, Yaksha Yakshinis, etc.

SOCIAL CONTRIBUTION

1. During their reign Brahmin dominance got cemented further

2. Caste system was prominent with Shudras on the bottom and Vaishyas and Kshatriyas occupying middle rungs

3. Untouchability was not common and women enjoyed better position than medieval. Enjoyed 'streedhan'

They were eventually overthrown by Kanvas and Kushanas but their cultural and social contributions were continued later on as well

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।

Many foreign nationals ^{not only} made India their home, but also participated in the freedom struggle of India - especially getting motivated by the Gandhian philosophy.

SOME OF THEM ARE :-

<1> Annie Besant :

- She was an Irish national who saw the ~~Home~~ Home Rule movement in Ireland
- She decided to replicate it in India when she started Home Rule movement in 1916.
- She was also involved with theosophical society in Adyar and was coordinated by George Arundale

<2> A.O. Hume :-

- An English retired civil servant, he was instrumental in starting Indian National Congress in 1885

Don't write anything in margin (इस भाग में कुछ न लिखें)

(3) C.F. Andrews :

- He was instrumental in bringing Gandhi to India. He also coordinated with him in South Africa.
- ~~His~~ He was also called as 'Deen-bandhu'

(4) Satyamond Stokes :-

- He was an American citizen, who got influenced by Gndoethian ideologies and came to his ashram.
- He is known as the man who brought apples to Swida
- He married Indian woman

(5) Miraben :-

- She was another American citizen who influenced by Gandhism
- Lived at his Ashram and contributed to various movements.

Other than this there were Saraladevi and others who also contributed immensely to India's freedom struggle during Gandhian phase.

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 Lohiya was an Indian freedom fighter. He was a socialist and contributed greatly to India's freedom struggle and post independence.

CONTRIBUTION TO INDEPENDENCE MOVEMENT

1. He participated in the protest against English entry into world war II.
2. He was also against the British dragging the Indian soldiers to fight their war.
3. Further, he participated in the Quit India movement.
4. He was also against the rioters that followed in times of partition.

CONTRIBUTION IN POST INDEPENDENCE :-

1. Congress tilt slowly away from socialism and towards industrialization was opposed by his party.
2. Hence, his faction left congress-1948
3. He propounded and stood for various socio economic reforms like minimum wages, maternity benefits and education for all.
4. He also contested Lok Sabha elections in 1960s and contributed as a legislator.

Thus, his contributions are seen not just during independence movement, but he also stayed relevant in post independence period as well.

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।

Tsunamis are large water waves caused when the epicenter of an earthquake is underwater in deep ocean. These regions where tsunamis generate are known as tsunamigenic zones.

GLOBAL DISTRIBUTION

1. They can be found in areas of deep seated earthquakes in oceanic crust.

2. Can be seen in Pacific ring of fire region - eg. Banda Aceh, Indonesia

3. Can also be associated with mantle plume - eg. in Hawaii in hotspot.



Fig: Tsunamigenic zones

4. They are thus mostly associated with ocean-ocean convergent plate boundaries.

PROPAGATION OF TSUNAMI :-

1. When two plates are convergent or transform boundary - they release immense amount of energy.

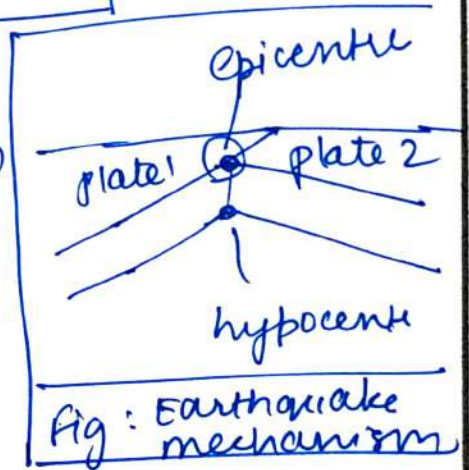


Fig: Earthquake mechanism

2. This is released as earthquake from epicentre and hypocentre
3. In large water body the wave goes unnoticed but as it propagates and approaches a land mass - the slope reduces and depth reduces
4. This leads tsunamis to rise to several meters. This happened in 2004 Tsunami many countries in tsunamigenic areas have early warning system and seismographs to alert of tsunamis and prepare accordingly. International cooperation is crucial.

5. What are atmospheric lakes? Highlight their characteristics.

(150 words) 10

वायुमंडलीय झीलें क्या हैं? उनकी विशेषताओं पर प्रकाश डालिए।

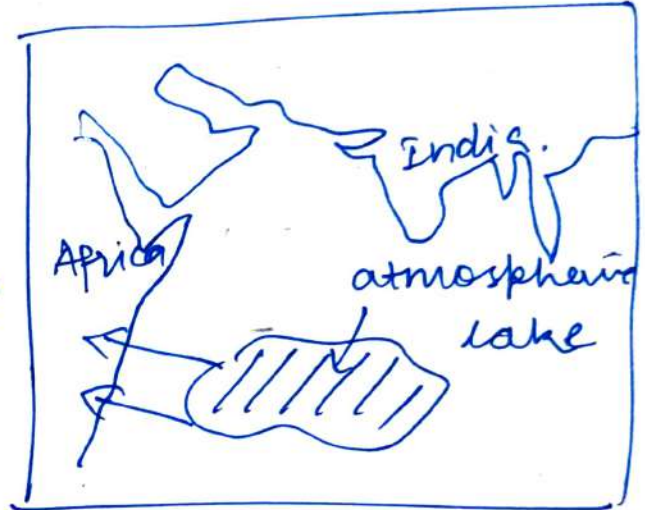
Atmospheric lakes are large masses of watervapour in the atmosphere. They carry moisture and bring precipitation.

Characteristics

1. They are a warm air mass that has high water vapour carrying capacity.
2. They are formed as oceans heat up due to insolation and water evaporates.
3. High temperature from insolation can also cause reduced pressure - low pressure.
4. Being lighter they get carried easily by the trade winds.

SIGNIFICANCE :-

1. They are responsible for causing rain on many parts of the world.
2. Atmospheric lake on the Indian ocean can bring rain to East Africa and India.
3. This helps in agriculture, drinking water, etc of these areas like Ethiopia, Somalia, etc.



Thus, monitoring the presence of atmospheric lakes is crucial to monitor monsoon as well.

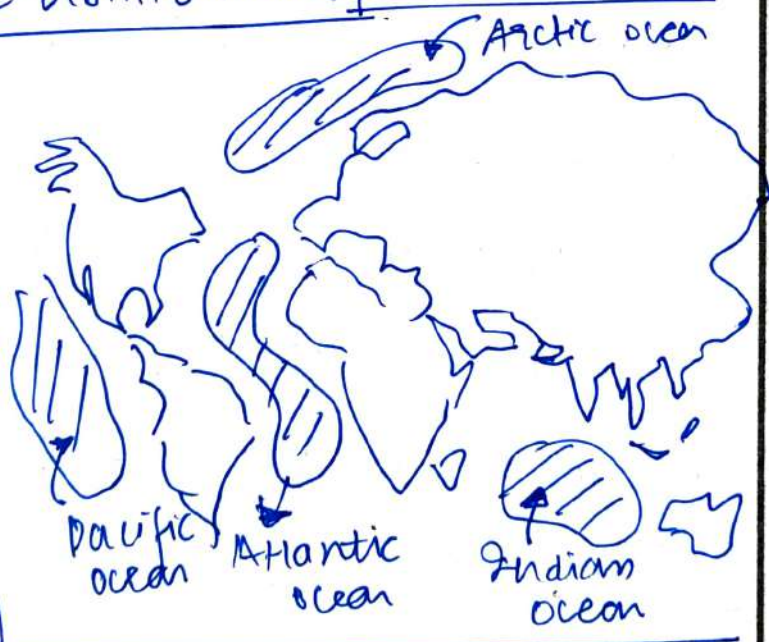
6. What are polymetallic nodules? Highlight their geographical distribution and state their significance. (150 words) 10

पॉलीमेटेलिक नोड्यूलस (बहुधात्विक ग्रंथियां) क्या हैं? उनके भौगोलिक वितरण पर प्रकाश डालिए और उनका महत्व बताइए।

Polymetallic nodules ^(PMN) are mineral rich nodules found in the ocean deeps. They are rich in manganese, Iron, Zinc, Cobalt, Nickle and other important as well as rare metals.

GEOGRAPHICAL DISTRIBUTION

- 1) They can be found in every ocean in the world
- 2) They are found at the depths



of around 6000m and more making their exploitation difficult.

SIGNIFICANCE :-

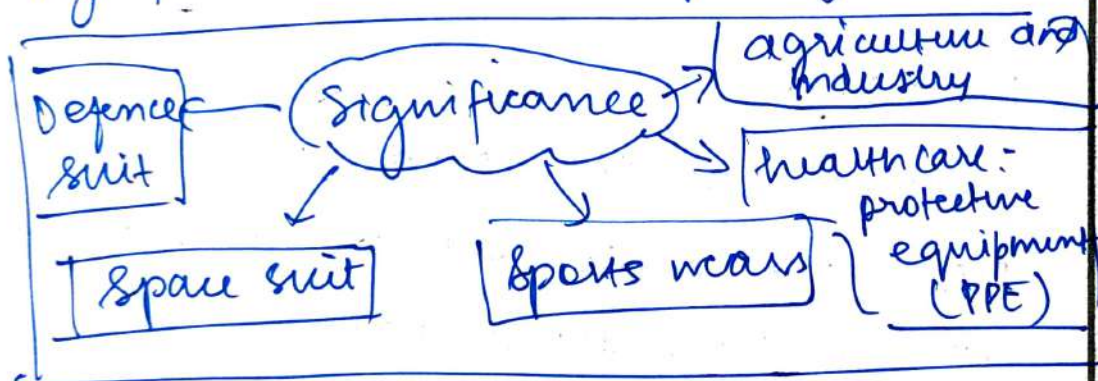
1. Being rich in so many minerals they can help nations get resources.
2. Steel is the backbone of any economy and much of the raw materials around the world like Dusseldorf are getting exhausted.
2. There is also a growing demand for rare metals which are dominated by Australia and China. India can use PMN to become self reliant.

In pursuant of this objective it has invested in Deep Ocean mission around ₹8000 crore for exploration and mining. India has also received exclusive rights of mining in India's ocean for 15 years by International Seabed Association.

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 are those textiles that are made from artificial or synthetic material. They are very significant in contemporary times.



~~As a result government~~

- 1) Defence suit: require bullet proof vests that are created from multiple layers
- 2) Space suit: should avoid sunburn and frost bite. It should also be leakproof
- 3) Sports wear: dryfit technology used to keep sports wear dry and prevent it

from hindering sports performance.
 (4) PPE - Hazzmat suits should be leak
 proof and avoid virus, bacteria, etc
 from entering - During COVID times they
 gained significance.

GOVERNMENT STEPS TO PROMOTE

1. Launched National Technical Textile Mission.
2. Recently Adidas coordinated with
 PET bottle waste collectors to incorporate
 it in their sports wear.
3. Government has also proposed the
Production Linked Incentive scheme
 for various technical textile like
Mobitech, Agrotech, etc.

Given that the growth rate of
 the industry is around 7% - government
 is getting ready to capitalize on this
new avenue which will only become
more relevant in future.

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 समझ उत्पन्न चुनौतियों की विवेचना कीजिए। साथ ही, इससे निपटने के उपायों का भी सुझाव दीजिए।

Internal migration means migration that happens within a nation. People usually move from rural to urban centres in search of job, higher standard of living and access education and health facilities. But it has effect on urban governance.

Challenge to urban governance :-

1. Slums :-

- Urban centres have limited space. This leads to mushrooming of slums where migrants live in sub human conditions and are vulnerable to diseases - eg Dharavi - Mumbai
- non portable ration and lack of jobs

2. Encroachment of waterbodies :-

- This can be due to land reclamation and reduction in catchment area.
- This becomes a perfect recipe for

flooding as seen in Hyderabad and Chennai

3. Encroachment of monuments also occur and threatens our rich heritage.
4. Environmental governance: wetlands are converted into lands and this affects carbon budget and water cycle.

STEPS THAT CAN BE TAKEN :-

1. Smart Cities Mission (SCM) launched for sum redevelopment and retrofitting
2. PM Awas Yojana can also help.
3. AMRUT scheme and HRIDAY scheme can be converged with Swachh Bharat mission and SCM to protect monuments and make urban spaces accessible to disabled and one nation one ration

Further, MGNREGA like schemes can help provide jobs and improve lives of urban dwellers especially those that come as a result of internal migration.

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।

Globalization means integration of global economy with ~~the~~ national economy. As a result of it, many avenues and opportunities as well as challenges have opened up for working women.

Opportunities

1. Economic empowerment - as per NSSO - labour force participation rate is at 23% for women
2. This has led to social empowerment and power of decision making in family
3. Political participation has increased due to more awareness and 40% of local bodies are led by women
4. It has provided flexible working hours for them especially in IT sector and Business Process Outsourcing (BPO)

Challenges :-

1. Despite this, they are burdened with household chores.
2. Many also face dowry death and domestic violence. As per NCRB, 2020 data 10000 cases of dowry registered.
3. Female literacy is lagging at 65% (2011 census)
4. Lack of water facilities, maternity benefit, toilet infrastructure and safety from sexual harassment has deterred many women.
5. Even in Lok Sabha, still only 14% (717th) are women.

Thus a lot needs to be done in the form of POSH (Protection of Sexual Harassment), education impartment, political reservation in Parliament and social reforms scheme like Beti Bachao Beti Padhao, ICDS, etc needs to be undertaken to smoothen globalization process for women.

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।

Many states recently - Karnataka,
Chattisgarh, etc have enacted
anti conversion laws in India.

Rationale behind these laws :-

1. Prevent forced conversion to other religion - eg. missionaries.
2. Prevent conversion by marriage - eg. seen in Shafin Jahan case (2018) where girl converted to Islamism.
3. Protect people's right to freedom of religion (Article 25 to 28)
4. Protect religious minorities like Buddhism, Zoroastrianism and tribal religion like Sarnaism.

Concerns raised :-

1. Hurts the secular fabric of our society
2. Goes against right under Article 25 - freedom to propagate ones religion
3. Also goes against right of adults especially women to choose their religion consciously - especially after marriage. Thus, it violated A-21
4. In the Stanislaw v/s MP case - right to convert someone was taken away.

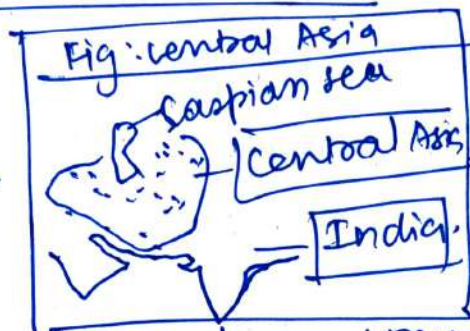
Secularism is at the heart of the constitution and part of the basic structure. It should be preserved. Anti conversion laws should only deal with forcible conversion. Conversion by marriage is a 'self regarding' action as per J.S. Mill and state should not interfere.

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।

Central Asia is the region which covers today's Central Asian Republics like Kazakhstan, Uzbekistan and also parts of Iran, Iraq and Afghanistan. They contributed immensely to political and cultural landscape of ancient India.

POLITICAL LANDSCAPE :-



1. Aryans arrival :-

- Aryans were considered to have come to India from Siberia, Eurasia and Central Asia.
- They arrived from Bolan Pass and made India their home.
- Many Mahajanapadas - Kuru, Gandhara, Taxila, etc were of Aryan origin.

2. Iranians:-

- Many rulers like Darius, Cyrus and Xerxes made the northwest part of India a part of their empire.

3. Greeks:-

- Alexander the great made Sindh region as his ^{20th} Satiapy and installed Governors like Menander.

4. Indogreeks:- extended control to Ganga plains

- Sakas, Parthians and Kushanas entered around 1st century BC.
- Saka: ~~Azes~~ Azes I - started Vikram era in 57 BC

- Kushana started : Saka era - 78 AD

CULTURAL IMPACT :-1. Aryans → Vedic culture and Varnashram

Use of iron technology
art of horse riding

many epics like Ramayana,
Mahabharat and,

Literature - Brahmanas, Ayankas, etc

2. Iranians → introduced Kharoshthi and Persian script & Aramaic art of pillars which was adopted by Ashoka to create elaborate Ashokan pillar

3. Indo-Greeks → Gandhara art in blackstone (also Roman) → Mathura art form in red sandstone and masculine Buddha statues

→ Mahayana Buddhism emerged under Kanishka.

→ Promotion of Sanskrit - Ashok Vandana and Dinvandana.

→ Stupa building: contributed to Sanchi and Barnut stupa

Further, they even adopted and got assimilated into Indian culture. Menander became Milinda under guidance of Buddhist Saint Nagargina. Heliiodorus erected Vishnu pillar at Beonagar. Thus we see that they not only contributed but also adapted and adopted Indian traditions.

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 in India started as an economic enterprise in the form of East India Company. The main aim of colonization was to fund the Industrial Revolution back in their homeland. Thus it was a means of exploitation.

Means of exploitation rather than public welfare! -

↳ 1) The land revenue system :-

1.1 Permanent settlement, Ryotwari and Mahalwari were exploitative against peasants.

1.2 Forced eviction, high revenue rate and commercialization of agriculture were features of this system

1.3 No efforts were made to modernize agriculture.

1.4 Peasant revolts - Sanyasi revolt,
Naukhatia revolt.

2) Deindustrialization :

2.1 One way free trade carried out.

2.2 Indian goods faced duty of 80-85%

2.3 Peas. Artisans Artisans also lost

patronage of ^{nobles} peasants

2.4 No effort made to revive economy.

Rather only raw material exported
and finished good imported.

2.5 led to 'drain of wealth' as highlighted

by DB Naoroji

3) Peasantization and Ruralization

3.1 Artisans joined farming → burdened

the system → fall of crafts →

ruin of rural economy

However, some public welfare measures
were taken too.

Public welfare measures

1. Social reforms :-

- William Bentick abolished sati (1829)
- Dalhousie - wood's despatch for education
- Abolition of widow remarriage act.

2. Public welfare department

- Dalhousie → Ganga canal
→ Railway (1853) and telegraph

3. Local governance :-

- Mays - gave some subjects to local governments like jail, education
- Rippon - known as 'father of local self government' in India.

4. Economic reforms :-

- Factory act, 1881, 1891 reduced child labour and working hours

Thus, British government on the whole exploited India for selfish interests. But at some places we can see that they also contribute to public welfare.

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 समझ खतरा उत्पन्न करने की क्षमता थी, किस प्रकार सफलतापूर्वक समाधान किया।

India is a linguistically rich country

It is said that, 'kos kos pe badle
poani, dar kos pe baani' to underscore
the rich linguistic diversity. However, it
also posed challenge to national unity
in post independence India.

Issue from linguistic diversity

- i. Andhra Pradesh - division from
Madras as it was Telugu speaking
unlike Madras Tamil speaking
populace. Potti Sriramulu's fast unto
death caused many riots
- ii. Similar demands came from
Gujarat and Maharashtra and
there was also issue over Mumbai

dominated by Marathi low class
and Gujrati business class

3. Punjab also demandes separation
from Hindi speaking Haryana

4. Issue of language also seen in Bodoland
over imposition of Assamese.

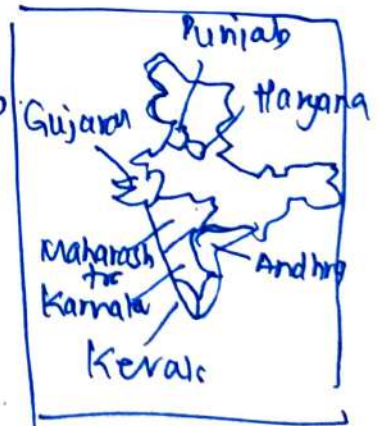
5. More recently, Tulu has be battery
for addition in 8th schedule

How India dealt

1. Linguistic states - as recommended
by Fazl Ali commission -

2. VIII schedule - 22 languages

- added Sindhi, Konkani,
Maiithili, Santhali, as
well.



3. Bodo movement - pacified by
identifying ethnic unique culture
and ethnic identity

4. Article 350 A - provides education in

mother tongue upto primary / elementary
education.

5. Language unification by using Hindi as per Article ~~350 B~~ 357.
6. Linguistic officer - Article 350B to ensure that rights of linguistic groups are upheld.
7. Further Article 29 and 30 promotes linguistic diversity.

However, many challenges still remain, eg. the use of Hindi's is protested by Dravidian States. To address this the three language formula has been introduced in the National Education Policy (NEP 2020). This can further help to prevent linguistic diversity from threatening national unity.

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

After the end of second world war (WWII) in 1945, a USA emerged as a superpower. It stood for decolonization and thus led to a series of decolonization movements the world over.

Factors leading to decolonization

- <1> As discussed before USA and USSR were pushing for decolonization
- <2> But that was not the only reason, wartime hardships, weariness of soldiers, famine and food inflation were other factors
- <3> In India, it was a result of years of struggle for independence - decades

by Nehru, Patel, Gandhi, Bose, etc

(4) ~~Indian~~ Formation of bodies like United Nations that supported sovereignty and freedom of nations also promoted decolonization.

(5) UK, France that had once been superpowers prior to WWII had lost much of its economic clout.
eg in Suez crisis - UK had to backout on request from USA & USSR.

(6) Decolonization also followed due to spread of ideas of justice, equality and liberty. It led to a contagious effect and 'domino effect' of decolonization in Africa and China.

However, India also played a major role in promoting decolonization.

Indias role

- 1) ~~Raised~~ ^{Inspired} freedom struggle in Burma under U. Aung San.
- 2) Raised voice against apartheid in South Africa
- 3) stood against cold war and proxy wars of USA and USSR. - eg Korean war (1950s)
- 4) India inspired Vietnam's liberation as well.
- 5) India formed Non Aligned Movement (NAM) during cold war to prevent divisions on global front.

Thus, the process of decolonization after WW II got fuelled by many movement factors. most significant being India's role.

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 can be defined as abnormal rise in sea surface temperature over a long period of time. A temperature rise of 4-5°C can be called as marine heat wave. It was recently reported along Indian ocean.

Causes of marine heatwave

1. Summer season / winter season :-

→ High insolation during this period can cause water bodies to heat

up

→ It is also affected by land distribution.

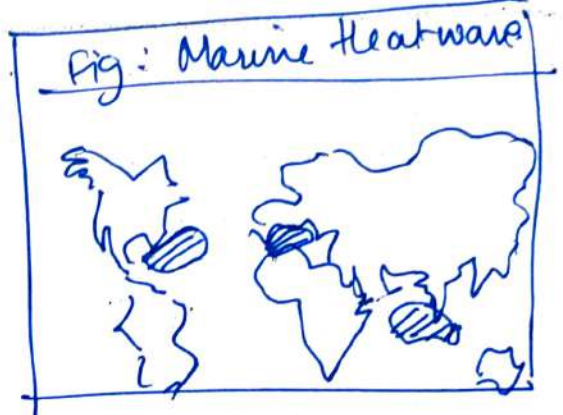
→ winter season - can occur during warm spells.

2. Ocean currents -

cause thermal circulation and regulation.

This can cause

upwelling of warm water \Rightarrow MHW



3. Global warming :-

- As per IPCC report ocean temperature was increased by 1°C in the past 50 years and can grow by 1-2°C more by 200.

Consequences :-

1. ecosystem :-

- 1.1 can cause coral bleaching
- 1.2 can lead to ocean acidification and this leads to rising of

(CO₂) carbonate concentration depth \rightarrow death of corals - eg. Andaman corals and marine animals

- 1.3 Many fishes are sensitive to ocean temperature. eg. Olive Ridley

2. Economical → can affect fish catch and impact fishing community in India.
5. → Can cause rise in sea level due to expansion and hurt coastal communities
- Can cause heatwaves on land and reduce productivity

3. can further exacerbate extreme climate events like drought and floods. It can even alter patterns of monsoon on which, much of Indian agriculture depends. (52%)

Thus closely monitoring such events, cooperating on global fronts to limit global warming. In this India's target to limit emission as pledged during COP26 is significant. Global players should also try to deal with rising temperature and MHW.

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 palm is one of the most consumed oil, especially in fast food joints. However, India imports around 95% of palm oil and this increases import bill for us.

Oil palm cultivation

1. It is a plantation crop usually grown in Indonesia and Malaysia.
2. It requires heavy rainfall, high temperature and humidity to grow.
3. Soil should be fertile and able to retain water.

Due to rising import bill, India is trying to reduce its dependency on imported oil palm.

India should promote large scale cultivation :-

1. To meet ever rising demand of oil palm.
2. India has launched National Mission on Edible oil and oil palm
3. This can reduce import duties
4. It will also improve position of farmers as palm oil is high in demand in global market and is a cash crop.
5. oil palm it also has a high shelf life and can be used in preservatives

However, there is another side to this discussion.

India should not promote oil palm

- ↳ Oil palm cultivation can shift focus away from other oil seeds like soyabean and groundnut.
- ↳ Oil palm is a water guzzling crop and can reduce fertility of soil and cause soil salinization and soil erosion.
- ↳ Oil palm is rich in saturated fats and trans fats which is bad for health and can cause obesity, hypertension, etc.

Thus, oil palm cultivation should be done in India ^{to reduce import depend}. However, ^{don't} focus should be on diversifying source of oil to promote farmer's welfare and health of citizens.

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।

As per the latest assessment report B - IPCC of the Hindukush, Himalaya and Karakoram ^(HKHM) ^{an} losing their glaciers at fast rate upto Between 1970-2020 - it lost 15%. Further, upto 2100 it will lose 35% more. This will have widespread impact on India's water security -

Implication :-



1. As per the report India will face flood situation upto 2060s
2. This can cause inundation of land, loss of biodiversity -
3. It can also affect communities dependent on rivers for agriculture

4. Ganga plains and Indus plains where farming is predominant will suffer the most.
5. It will also cause loss of life and property eg- Kosi river, Assam-Brahmaputra
6. Post 2060s there is a threat of drought
7. This will impact agriculture-dependent on river especially in northern plains.
8. It will also cause issues to drinking water and lead to water scarcity and cause issues with ~~not~~ inland navigation

Thus, India will be severely impacted - not just by flooding and droughts - but also by change

in hydrological cycle (monsoon) and carbon budget, thus exacerbating climate change through albedo.

Steps to be taken

1. Need to closely monitor changes in Himalayan cryosphere.
2. coastal communities should be made aware about effects of pollution of rivers and how it can affect in long run.
3. Global powers should coordinate with NGOs to limit climate change.
Recently at COP 26, India pledged carbon neutrality by 2070 and 45% reduction in carbon emission. These are steps in the right direction.
Global players should also take a leaf out of this book in order to ensure that SDG-1, 2, 3, 13, 17 gets fulfilled.

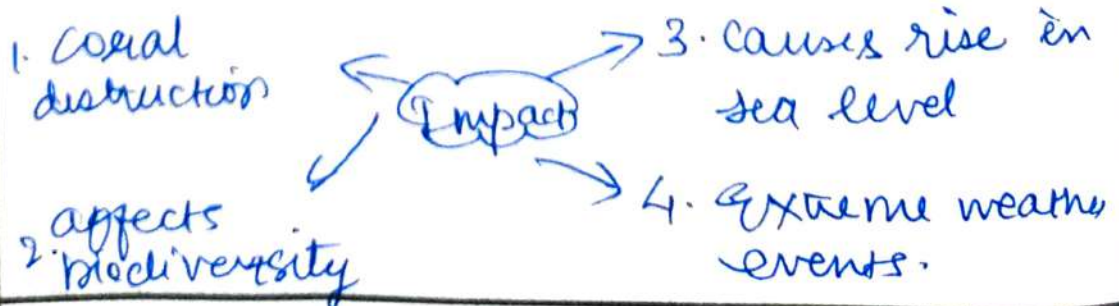
18. Ocean warming, ocean acidification and ocean deoxygenation are often referred to as the 'deadly trio' for marine life. Discuss. (250 words) 15

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

The rising global warming and sea surface temperature has vast impact on the oceans which constitute 70% of the planet. It leads to deadly trio of warming, acidification and deoxygenation which impact not only marine life but also terrestrial life.

ocean warming :-

1. It is the rising sea surface temperature due to global warming.
2. As per IPCC-80 for 1-2°C have already risen.

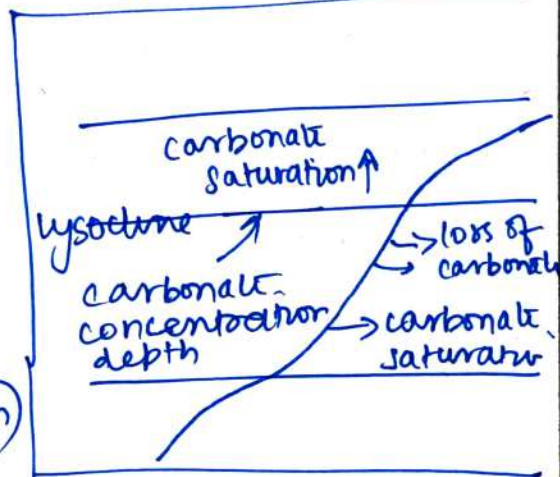


Ocean acidification

1. As the global green house gas emissions increases - ocean the biggest carbon sink - ~~it~~ absorbs excess CO_2 .
2. This lead to variation in pH of the ocean and can affect ocean temperature and

pH.

3. Affects the CCD (Carbonate concentration depth)



4. This leads to loss of calcium carbonate of corals as the level rises and corals enter zone of unsaturation.

Ocean deoxygenation :-

1. This is the dead zones in marine environment caused due to eutrophication -

2. Due to high biological & chemical oxygen demand (BOD, COD) of pollutants, released into the ocean there is a death of oxygen.
3. This causes death of marine flora and fauna.

Steps to be taken

1. Countries should come together to address issues related to ocean.
2. Carbon emission should be reduced and coal should be phased out. Instead ~~electric~~ alternate sources of energy should be used.
3. Incidents of oil spills should be taken care of using sitrapper and MARPOL.

All these measures, and more can help to achieved SDG 14 and 13 for marine environment and climate.

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।

Tribals in India constitute 8.6% of the population (as per 2011 census). Their health is a cultural construct and due to their low literacy level, isolation, etc they are vulnerable to diseases and have poor healthcare facilities.

Issues faced :-

1. Nutritional deficiency :-

1.1 Tribals lack protein and other vitamins and this has led to kwashiorkor.

1.2 It has also led to high infant and under 5 mortality rate.

	general	tribal
IMR: ^(IMR)	35	41:1000
USMR: ^(USMR)	41	50:1000

[NPHS 5]

2. Sanitation :-

- 2.1 Lacking in proper toilets and sources of water are polluted
- 2.2 WASH practices are poor. eg Sahariya tribe

3. Non communicable disease

- 3.1 Heart disease and diabetes is common

4. Communicable disease

- 4.1 Malaria in Bhilsas, Todas
- 4.2 TB and COVID-19 in Dusse tribes due to lack of treatment facilities and lack of knowledge

5. Vaccination

- 5.1 They are also averse to vaccines and UIP programmes. Thus, polio is also rampant.
- 5.2 During COVID they fled from villages to avoid getting jabbed.

Measures :-

1. Proper communication is required -
Good this can be done by choosing
literate members of their society
2. ANAMAYA initiative - of government
can promote traditional ayurvedic
medicines.
3. Eklavya Ashram schools and
Anganwadis can be used to circulate
knowledge about sanitation and
disease awareness.
4. Cleaning up of public sources of water
can also help to improve health
outcome.

Further primary healthcare
centres should be set up possibly with
tribal leader ^{doctors/nurses} at the helm. This can
help to address health issues faced by
tribals.

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।

India's political participation has been low. In the 17th Lok Sabha only 14% are women. While this is an improvement over 1950s when 2% were women, a lot more needs to be done. 'Reservation' has been forwarded as a solution.

Efficacy of reservation

1. 1/3rd reservation in Panchayat ^{Municipalities} has led to 40% para local governments having women at helm.
eg. Barkhedi Abdullah - Bhakti Sharma
2. This has also promoted women's

economic and social position.

3. Reservation has also been mooted in Parliament and judiciary to emulate similar success stories.

4. Women in politics can also address more social problems and focus on education and health.

5. It also leads to sensitization of issues like rape and dowry especially in the judiciary.

However, it is not a panacea.

Failure of reservation to ensure political participation

1. Instances of Sarpanch pati where husband or father hold reins of power

2. Stereotyping of women's role - relegated to domestic sphere

3. Face with burden of home work and professional duty.

4. Ingrained patriarchy and misogyny

This has even led to low score on Gender gap index (2022) when India ranked 135/146.

Measures and way forward :-

1. Reservation and affirmative action should be accompanied by social reforms and attitudinal change
2. Educational and nutritional outcomes should be looked after of a woman and girl child - eg. POSHAN, ICDS
3. Schemes like Beti Bachao Beti Padhao and Sukanya Samridhi Yojana can help to address son-male preference

Further, reservation should be introduced in judiciary so that more students take up education of law. This can lead to political, social and economic empowerment of women and fulfil SDGs.