



# VISION IAS

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## GENERAL STUDIES (TEST CODE : 1246)

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Medium Eng./Hindi	ENGLISH	Registration Number	41166
Center	ONLINE	Date	8/8/19

### INDEX TABLE

### INSTRUCTIONS

Q. No.	Maximum Marks	Marks Obtained
1	10	
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20	15	

1. 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)।
2. There are TWENTY questions printed in ENGLISH & HINDI  
इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. All questions are compulsory.  
सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.  
प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. 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 medium other than the authorized one.  
प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके 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।
6. Word limit in questions, if specified, should be adhered to.  
प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. 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।

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. Rock-cut structures were closely associated with various religions and religious activities. Discuss the statement giving relevant examples.

(150 words) 10

शैलीकीर्ण संरचनाएँ विभिन्न धर्मों और धार्मिक गतिविधियों से घनिष्ठता से संबंधित थीं। प्रासंगिक उदाहरण प्रस्तुत करते हुए इस कथन की विवेचना कीजिए।

Rock-cut structures played an important role in the religion and religious activities of India. This is especially true for Hinduism, Buddhism and Jainism.



Fig 1: Rock-cut architecture in India

Buddhism

→ Stupas were built at Sanchi and Amaravati for worship.

→ Rock-cut chaityas, such as Karle, housed the monks

### ④ Hinduism

→ Kailashnath Temple at Ellora and the Maheshmurti at Elephanta

→ ~~Most~~ The temples at Mahabalipuram were important cultural and religious centres.

### ④ Jainism

→ The temples to the South-East of Khajuraho (Ghanti temple)

→ The caves at Sittanavasal and Udaygiri-Khandagiri housed monks and centres of learning.

Further, it is on the rock-cut structures that paintings, like Ajanta and Ellora, were drawn.

Thus, India has a rich rock-cut heritage.



2. The legislative and administrative record of the Congress Ministries during their twenty-eight months rule under the Act of 1935 was positive, but the period also witnessed the emergence of serious weaknesses in the Congress. Discuss. (150 words) 10

1935 के अधिनियम के अंतर्गत अट्टाईस महीनों के शासनकाल के दौरान कांग्रेस मंत्रालयों का विधायी और प्रशासनिक रिकॉर्ड सकारात्मक रहा था, लेकिन यह अवधि कांग्रेस के भीतर गंभीर कमजोरियों के उभरने का भी साक्षी बनी। चर्चा कीजिए।

The Congress Ministries played an active part during the two years — 1937 to 1939 — under the Act of 1935.

A number of legislative and administrative steps were taken

- Land rents were brought down and peasants got relief.
- Legislations on temple entry and reservation were enacted.
- Press freedoms were restored.
- Greater spending on health and education.

Yet there were some serious  
weaknesses too :

- (1) ~~As~~ Many ministers were swayed  
away by the privileges.
- (2) When strikes ~~or~~ or protests  
were organized, the ministers  
frequently used section 144  
CrPC and clamped down.
- (3) K. M. Munshi, in one instance,  
even ~~used~~ slapped sedition  
charges against a freedom fighter.

~~How~~ Though there were these  
weaknesses, the experience gained  
proved invaluable to the Congress  
in running the country after  
1947.



3. Kamladevi Chattopadhyay was a multifaceted personality with significant contributions both to pre and post independence India. Elucidate. (150 words) 10

कमला देवी चट्टोपाध्याय का व्यक्तित्व बहुआयामी था। उनका स्वतंत्रता पूर्व और स्वातंत्र्योत्तर भारत में योगदान महत्वपूर्ण था। स्पष्ट कीजिए।

Kamladevi Chattopadhyay was a prominent ~~less~~ woman leader ~~she~~ ~~is~~ during the freedom struggle.

Her contributions

- She participated and actively led the Salt Satyagrah
- She fought for women's rights both in pre and post-independence India.

This included women's right to vote and organizing women into self-help groups.

Thus, she was an 'inspiration to  
many.'



4. The inherent limitations of Napoleon's policy of Continental Blockade ultimately resulted in its failure. Analyze. (150 words) 10  
नेपोलियन की महाद्वीपीय नाकेबंदी की नीति की अन्तर्निहित कमियाँ अंततः इसकी विफलता का कारण बनीं। विद्योपण कीजिए।

Napoleon followed a policy of Continental Blockade to reduce and ultimately eliminate British influence on continental Europe.

→ This involved putting restrictions on trade with Britain.

→ These restrictions extended to all territories occupied by Napoleon, including Italy, parts of Austria, Spain, etc.

However, there were limitations in this policy.

(1) British naval strength was much superior. So, French navy was unable to completely establish naval

dominance.

(2) British industries were more competitive — They could produce better quality goods at cheaper prices. Thus, the blockade increased prices and resentment grew.

(3) The subjugated ~~and~~ nationalities like the Italians grew strong national feelings and began to resist Napoleon's rule.

(4) France could never satisfy the demand for goods, as its industries were under-developed.

These inherent problems led to a failure in his Blockade, and ultimately his fall.



5. Despite changes in the institution of marriage in recent times, there have been elements of continuity as well. Discuss in the context of India. (150 words) 10

हाल के समय में विवाह नामक संस्था में परिवर्तनों के बावजूद, इसमें निरंतरता के तत्व बने हुए हैं। भारत के संदर्भ में चर्चा कीजिए।

Marriage has undergone many changes :

- (1) Inter-caste and inter-religious marriages have become more common .
- (2) ~~to~~ New websites and advertisements are used to find matches .
- (3) Parents are more willing to accept love marriages .
- (4) Divorce rates have gone up .
- (5) After marriage, nuclear households ~~to~~ are the norm .
- (6) ~~to~~ Marriage halls and hotels are where receptions are held, instead of homes .

Elements of continuity

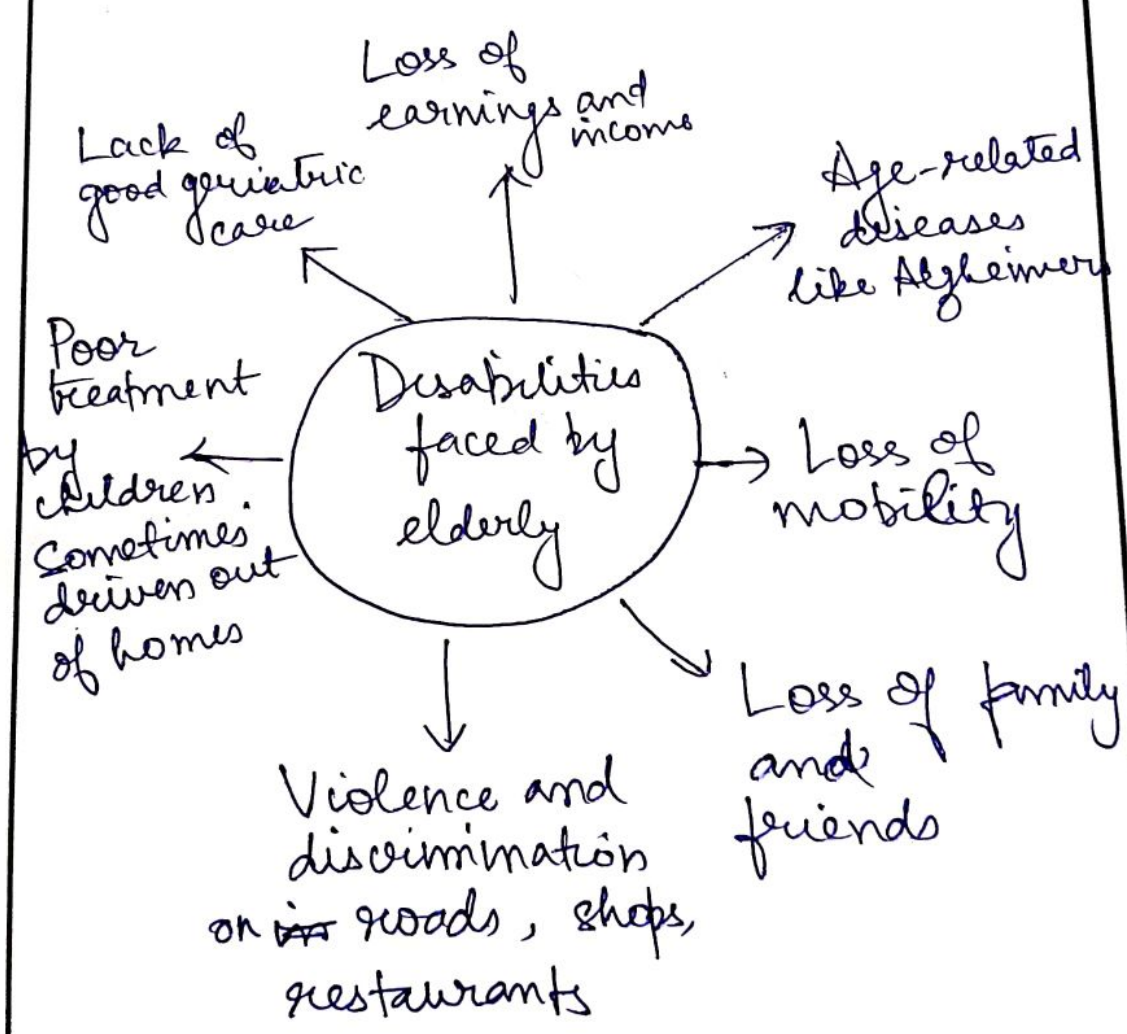
- (1) Religious rituals and priests are still important
- (2) ~~to~~ Inter-caste and inter-religious marriages, though accepted widely, are still frowned upon. Honour killings have not stopped
- (3) Weddings continue to be occasions involving large number of guests.
- (4) People wear traditional dress.
- (5) Parents continue to wield influence on the married couple. Sometimes, ~~grandparents~~ parents are called to look after the couple's children.



6. There are multiple disabilities that a person experiences in the course of ageing. Elaborate. Also identify key government initiatives taken for addressing them. (150 words) 10

कई अक्षमताएँ हैं जिनका एक व्यक्ति उम्र बढ़ने के दौरान अनुभव करता है। सविस्तार वर्णन कीजिए। साथ ही, इन्हें दूर करने के लिए सरकार द्वारा की गई प्रमुख पहलों की भी पहचान कीजिए।

As life expectancy in India rises, the number of elderly are going to rise. Currently, they make up 8% of population (Census 2011)



Given these disabilities, the government has taken a number of steps to enable ageing with dignity:

- (1) Indira Gandhi Old Age Pension Scheme
- (2) Rashtriya Vayoshree Yojana — to provide assisted living devices
- (3) Rashtriya ~~Bima~~ Varishtha Bima Pension Yojana — to provide assured 8% return on pension savings.
- (4) Income tax breaks for the elderly
- (5) National Policy for Older Persons
- (6) Maintenance and Welfare of Senior Citizens Act

While these steps are laudable, more needs to be done for effective implementation. Further, geriatric care needs urgent upgradation,

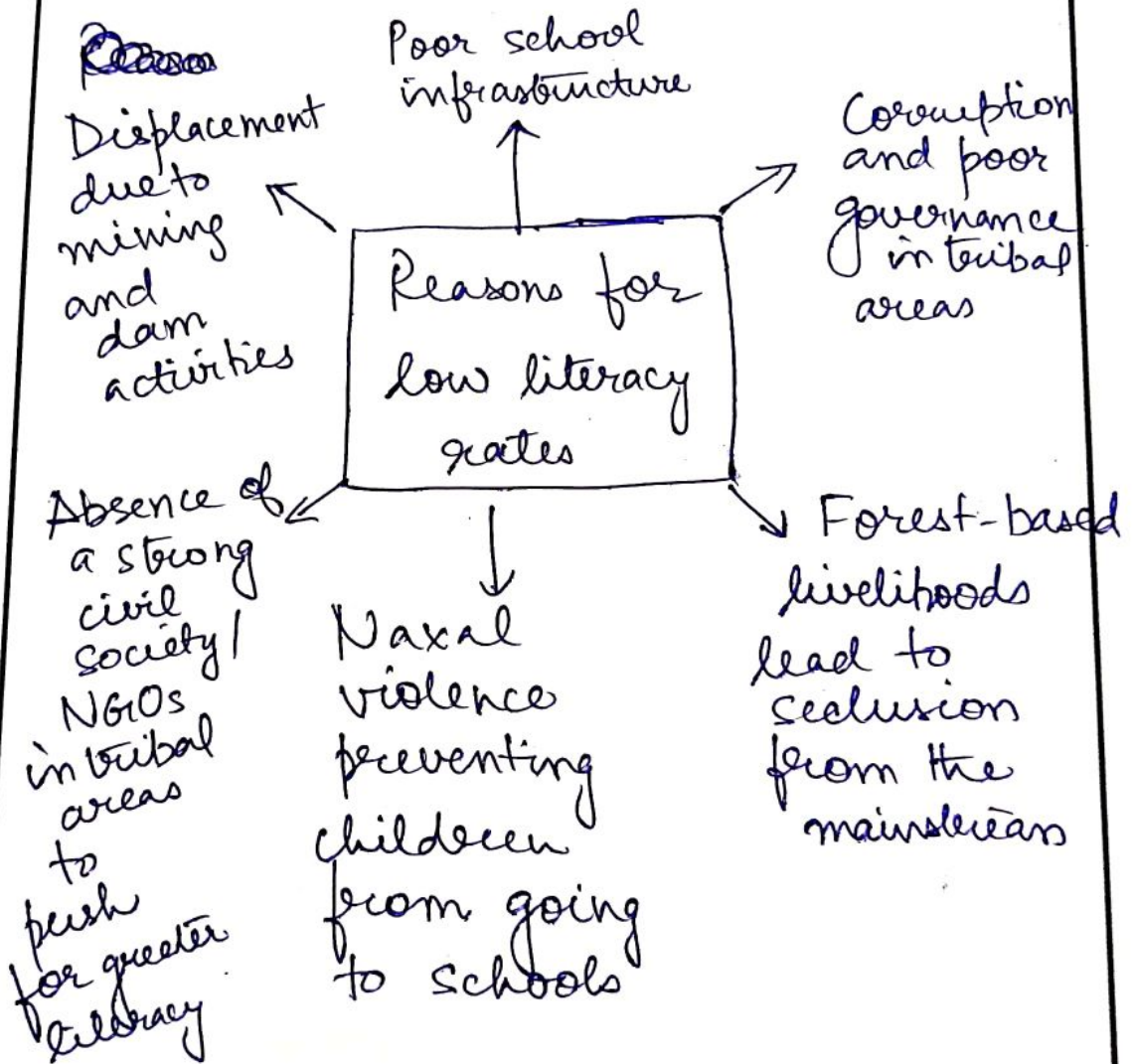


7. Highlight the reasons behind prevalence of low literacy rate among tribals. Also, mention some initiatives taken by the government in this regard.

(150 words) 10

जनजातियों के मध्य व्याप्त निम्न साक्षरता दर हेतु उत्तरदायी कारणों को रेखांकित कीजिए। साथ ही, इस संबंध में सरकार द्वारा की गई कुछ पहलों का भी उल्लेख कीजिए।

Tribal societies are plagued by massive deprivation, the manifestation of which appears in literacy rates and health outcomes.



Thus, Accordingly, ~~the~~ a number of initiatives have been undertaken.

- (1) Ekalaya Model Residential Schools (EMRS) have been opened in tribal blocks.
- (2) The government provides funds under Article 275 (1) of the Constitution to open schools.
- (3) Many states engage volunteers who ~~emplo~~ teach literacy to tribal children.

In this regard, the recommendation of the Draft National Education Policy (NEP) of focussing on functional literacy needs to be taken into account to achieve the goal of SDG-4: Education for all.



8. Explain how Continental Drift Theory describes the changing configuration of the continents. Discuss the prominent evidences given by Alfred Wegener to support his theory. (150 words) 10

स्पष्ट कीजिए कि किस प्रकार महाद्वीपीय विस्थापन का सिद्धांत महाद्वीपों के परिवर्तित होने अभिविन्यास का वर्णन करता है। अपने सिद्धांत का समर्थन करने के लिए अल्फ्रेड वेगनर द्वारा दिए गए प्रमुख साक्ष्यों की विवेचना कीजिए।

Continental Drift Theory was proposed by Alfred Wegener. It assumes that

→ Initially, there was a supercontinent Pangea and a super ocean Panthalassa.

→ These separated into Laureasia and Gondwanaland.

→ Finally, the landmasses separated into the modern continents.

The Theory ~~is~~ is based on two forces-

- Pole fleeing force (~~to~~ Coriolis force)
- Tidal force.

However, modern theory of plate tectonics argues that the earth's crust is made up of continental and ocean plates that move by convective forces/movements in the

mantle.

Evidence given by Wegener to support his theory

- (1) Jig-saw puzzle fitting of the African and South-American continents
- (2) Placer deposits — gold veins ~~is~~ are located in Ghana, but the source rock is located in Brazil.
- (3) Tullite — glacial sediments are of similar composition across the continents.
- (4) Fossils — Fossils found in the two continents separated by large oceans are similar.  
eg- Lemur fossils are found in India and Madagascar.

Thus, these evidences suggest that the continents ~~is~~ were all part of a single landmass at one point.



9. The variety of landforms on the earth's surface is the result of internal and external forces. Discuss. (150 words) 10  
पृथ्वी की सतह पर विभिन्न प्रकार की भू-आकृतियाँ आंतरिक और बाह्य बलों का परिणाम हैं। चर्चा कीजिए।

Landforms on the earth's surface are the result of endogenic (internal) and exogenic (exogenic) forces.

### Endogenic forces

These are generated from the interior of the earth's crust and mantle.

→ They are usually land-building forces.

2 types

Diastrophism

These lead to upward movement of entire crust / plate / landmass

→ Epeirogenic: Continent Building

→ Orogenic: Mountain Building

Volcanism

Landforms formed by volcanic eruptions

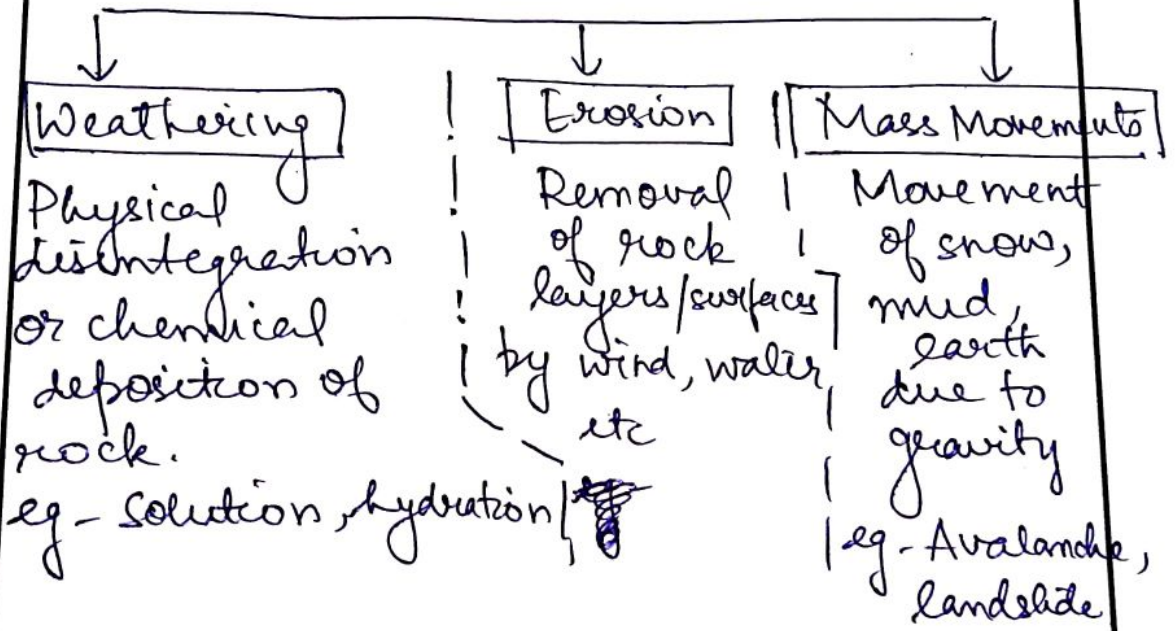
eg - Flood-basalt ~~plains~~ plains in Deccan Traps.

Exogenic forces

These are driven by agents of Sun, wind, water and glaciers.

→ These are denudational or erosional in character

3 types of exogenic forces



Exogenic forces explain the formation of depositional (eg - floodplains) and erosional landforms (eg - gorge).



10. Explaining the concept of Lapse Rate, examine its relationship with atmospheric stability. (150 words) 10

ह्रास दर की अवधारणा की व्याख्या करते हुए, वायुमंडलीय स्थिरता के साथ इसके संबंधों का परीक्षण कीजिए।

Lapse Rate is the rate at which the temperature of a mass of air falls with ~~the~~ altitude.

As we move upwards, the air expands due to loss of pressure. This leads to a fall in temperature. This is why mountains are cooler than plains.

Relationship with atmospheric stability:

→ Warm air ~~is~~ near the ground rises upwards. As it rises, it cools, ~~and~~ water vapour condenses and precipitation occurs.

→ Thus, the lapse rate allows the convective cycles and water cycle

to function.

→ Even the general circulation of the atmosphere ~~is~~ ~~but~~ works due to the lapse rate.

The warm air from the tropics rises upwards and moves north where it cools, while the cool northerly air ~~is~~ moves south.

→ In cold winter nights with clear skies, inversion takes place — the ~~to~~ air is cooler at the lower layers than at the upper layers. This helps to dissipate the smoke and fog over fields. ~~and~~

→ Temperature inversion over the hills protects plants from frost.

Thus, ~~a~~ lapse rate plays a significant role in stability.



11. The colonial period brought the influence of Western architectural forms to India. In this context, giving examples, highlight the contribution of Europeans to Indian architecture. (250 words) 15

औपनिवेशिक काल में भारत पर पश्चिमी स्थापत्य शैलियों का प्रभाव पड़ा। इस संदर्भ में, उदाहरण देते हुए, भारतीय स्थापत्य कला में यूरोपवासियों के योगदान पर प्रकाश डालिए।

Western architectural forms are more realistic, associated with ~~govern~~ day-to-day houses and buildings and influenced by ancient Roman and Greek architecture.

Indian architecture, on the other hand, ~~was~~ is more religious with greater ~~on~~ ornamentation.

The colonial period brought Western influence into architecture

(1) The Victoria Memorial was a jewel of British architecture

(2) ~~The~~ ~~the~~ Lutyens' Delhi ~~has~~ includes structures built in

Gothic and Roman styles.

(2) Russel's Cornmarket Place with ~~to~~ its circular structures and large pillars ~~to~~ is reminiscent of similar structures in European cities.

(4) The Victoria Terminus in Mumbai is a Gothic architecture.

These influences have lingered on post 1947.

(1) Most city-buildings and government offices mirror the colonial architecture.

(2) Most Dak Bungalows are British-made.

(3) The residential homes built using reinforced concrete are European in nature.



(4) Le Corbusier's Chandigarh has  
the French architectural  
imprint.

(5) Charles Correa's architectures  
in Lyon are based on European  
and scientific principles to  
solve problems of sanitation  
and housing.

The Victorian Art Deco of  
Mumbai got the UNESCO  
Heritage tag recently. These  
influences need to be preserved.

12. The nineteenth century witnessed a struggle against the backward elements of traditional culture. Discuss in the context of socio-religious reform movements. (250 words) 15

उन्नीसवीं सदी वस्तुतः पारंपरिक संस्कृति के पश्चगामी तत्वों के विरुद्ध संघर्ष की साक्षी बनी। सामाजिक-धार्मिक सुधार आंदोलनों के संदर्भ में चर्चा कीजिए।

India in the 19th century was plagued by backward elements.

These included

- Regressive practices like Caste system, Sati, etc.
- Subjugation of women and not allowing them to get educated
- Growing communal tensions between Hindus and Muslims.

The socio-religious reform movements tried to eliminate these problems based on the principles of rationality, humanism and doctrine of progress.

(1) ~~These mov~~ While some movements tried to uplift the status of women in society such as



Brahmo Samaj, and Prarthana Samaj.

They were successful in getting the Sati Regulation and Widow Remarriage Act, passed.

(2) Satyashodhak Samaj and Sri Narayana Guru worked for ending untouchability and emancipation of Dalits.

(3) Movements like the Arya Samaj and Ramakrishna Mission used religion and ancient scriptures to get rid of ills of idol worship, caste system and fatalism.

Vivekananda stressed on Vedanta. In the process, a ~~no~~ lost national pride was awakened.

(4) ~~Now~~ Similar movements arose among Muslims (Aligarh), Sikhs (Singh Sabha) and Parsees (Rahnumabai, Majdayan Sabha).

(5) The Ahmadiya movement tried to focus on communal harmony.

However, these movements had a few drawbacks

→ They generated reactionary movements, like the Dharma Sabha.

→ Some of them actually communalized the atmosphere even further, such as Shuddhi movement of Arya Samaj.

Thus, the 19th century reform movements played an important part in India's cultural history.



13. Explaining the reasons behind partition of Bengal, discuss the successes and limitations of the Swadeshi movement launched in its wake.

(250 words) 15

बंगाल विभाजन के लिए उत्तरदायी कारणों की व्याख्या करते हुए, इसके आलोक में आरंभ किए गए स्वदेशी आंदोलन की सफलताओं और कमियों की विवेचना कीजिए।

Partition of Bengal was carried out in 1905 to stifle the growing national movement ~~an~~ using the policy of divide and rule.

Official reason for Partition

- Bengal was too large to administer
- So, it was partitioned into East and West Bengal.

Actual Reason

- East Bengal had a Muslim majority, while West Bengal was Hindu.
- In West Bengal, Bengalis would be turned into a minority as it included Bihar and Orissa
- This would divide the national

movement on religious and linguistic lines.

### Swadeshi movement

The Swadeshi Movement, in response to the Partition, involved boycott of foreign goods, liquor and to some extent schools, courts and offices.

### Successes

- It was a first step towards self sufficiency. British imports declined drastically.
- Steps were taken to improve education by the National Education College.
- Scientists like JC Bose ~~made~~ made discoveries, while Ray opened Bengal Chemicals.
- The government was forced to annul the Partition in 1911
- Witnessed mass participation



of students, women, etc making the movement broad-based.

### Limitations

- Differences between the moderates and extremists led to the Surat Split, 1907.
- The Muslims stayed away. Further, use of Hindu symbols like Ganpati - Shivaji festivals ~~and~~ distanced the Muslims.
- Khadi and domestic cloth were expensive and could not replace cheap mill cloth.
- People could not boycott schools and courts forever, as most jobs were ~~to~~ affected.

These limitations made the movement restricted ~~to~~ effectively to Bengal. However, it gave an impetus to the national movement.

14. The reorganisation of states in India post-independence has been an ongoing process with distinct contributing factors. Analyse. (250 words) 15  
स्वातंत्र्योत्तर भारत में राज्यों का पुनर्गठन अलग-अलग सहायक कारकों के साथ एक मत्त प्रक्रिया रही है। विश्लेषण कीजिए।

The States Reorganization Commission of 1956 initiated the process of re-organization of states.

It has been an ongoing process with distinct contributing factors

(1) Language - It was the primary factor that generated the linguistic states after 1956.

(2) Distinct sub-regional cultures  
The states like Himachal, Uttarakhand and Chhattisgarh have been formed over this.

(3) Mergers with India

Sikkim and Goa were ~~re~~ integrated into India. Over time, they became states.



- (4) Regional backwardness - Telangana was formed out of Andhra Pradesh given the backwardness of the Telangana region.
- (5) To curb secessionist movements - Mizoram and Nagaland are examples
- (6) To end special status and ensure full integration - The recent steps in Jammu-Kashmir and Ladakh.
- (7) To preserve distinct identities - This explains why the UTs of Daman, ~~and~~ Diu and Pondicherry continue to be denied statehood.
- (8) Strategic regions - Creation of Arunachal Pradesh

from erstwhile NEFA.

Thus, India's state reorganization is based on multiple factors.

In recent years, there have ~~be~~ been further demands for states like Havut Pradesh, Bodoland, Gorkhaland, etc.

While it may not be possible to grant statehood for every community, steps need to be taken to address the grievances of these communities within the existing states.



15. The Treaty of Versailles was not a peace agreement based on reconciliation but was 'dictated peace' forced on Germany, which eventually triggered the Second World War. Examine. (250 words) 15

वर्साय की संधि सुलह पर आधारित शांति समझौता नहीं थी, बल्कि जर्मनी पर थोपी गई 'आदेशित शांति' थी, जिसने अंततः द्वितीय विश्व युद्ध का मार्ग प्रशस्त किया। परीक्षण कीजिए।

The Treaty of Versailles led to the end of World War I.

Although considered a peace agreement, it was actually a 'dictated peace' forced on Germany.

→ Germany was forced to accept War guilt and had to make large reparation payments.

→ Its military was disbanded and reduced to a small size

→ It lost the most productive Rhineland which was placed under the control of France.

This led to many problems in Germany

→ The Treaty was seen as a national humiliation.

→ The large payments and loss of Rhineland led to collapse of its economy and hyper-inflation.

This created fertile grounds for the growth of Nazism and its aggressive nationalism.

Further, there were other flaws in the Treaty.

(1) The League of Nations was dominated by Britain and France. Germany ~~is~~ joined much later.

(2) Britain and France were worried at the growth of socialism in Europe. Thus,



they were willing to appease  
the Nazis. This was seen  
at the Munich Conference when  
Hitler was given Sudetenland  
from the Czechs.

\* All of these ~~weakness~~ weaknesses  
finally led to Hitler's aggressive  
expansionist policy that  
triggered 2nd World War.

16. Legal measures alone are not sufficient for addressing the issue of domestic violence against women, rather it requires intervention at societal level. Discuss. (250 words) 15  
महिलाओं के विरुद्ध घरेलू हिंसा की समस्या को दूर करने हेतु केवल कानूनी उपाय ही पर्याप्त नहीं हैं, बल्कि इसके लिए सामाजिक स्तर पर भी हस्तक्षेप की आवश्यकता है। चर्चा कीजिए।

One in every ~~two~~ <sup>three</sup> women suffer domestic violence (UN Report).

Thus, the problem is rampant.

The government has accordingly taken many measures

(1) Prevention of Domestic Violence Act, 2005

(2) Section 498 A under IPC to deal with cruelty.

(3) Dowry Prohibition Act, 1961

However, the problem persists due to multiple factors:

(1) Patriarchal attitudes → Women are taught 'it is okay' to be beaten by the husband.

(2) Lack of agency by the woman



due to ~~at~~ financial dependence on the husband.

(3) ~~Law~~ Police officials are insensitive towards such women and refuse to register cases.

(4) Absence of adequate counselling from NGOs etc to women affected by such violence.

(5) Society teaches women to be compliant. If she goes against these norms, violence against her is justified, even by mothers in law.

This calls for ~~so~~ societal-level interventions :

(1) Raising awareness among women about the legal provisions available.

(2) Teaching children in schools ~~at~~ that domestic violence is

unacceptable.

(3) ~~Gender~~ At the family level,  
fathers need to stop abusing  
mothers. Parents need to  
teach gender equality.

(4) NGOs and civil society can  
counsel the parents, mothers  
and - in laws.

They also need to help women  
in distress.

The main objective of such  
intervention has to be to change  
societal attitudes. A Swachh

Bharat type movement  
needs to be launched with  
senior officials leading by  
example.

⑩ This is important for  
India achieving SDG 5 - gender  
equality.



17. India is undergoing a demographic transition the implications of which are multipronged. Analyze.  
 भारत जनसांख्यिकीय संक्रमण से गुजर रहा है जिसके निहितार्थ बहुआयामी हैं। विश्लेषण कीजिए।

(250 words) 15

India is a young country with over 65% of the population below 30 years of age, as depicted in the age-sex pyramid below.

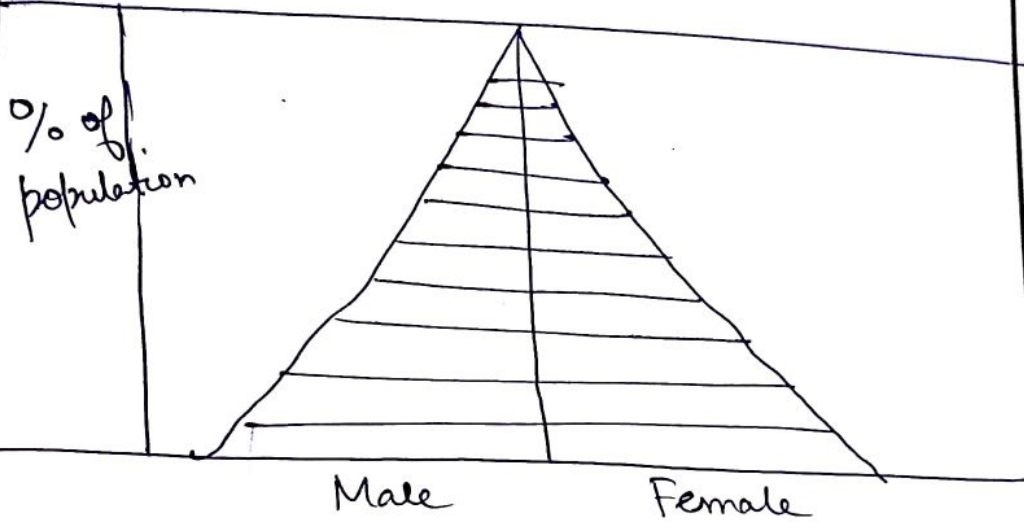


Fig 4: Age-Sex Pyramid of India

Thus, it is undergoing a demographic transition characterized by:

- (1) Rising number of young people
- (2) Falling birth and death rates

- (3) Falling fertility rates  
 (4) Improvements in maternal and infant mortality rates.  
 (5) Increased life expectancy  
Implications are multipronged.

→ The young population is a source of work force, savings and innovation.

→ However, in the absence of adequate jobs, they can turn into a demographic liability.

→ Falling fertility rates will lead to women empowerment and greater participation in labour force.

→ As life expectancy rises, the ageing population rises, requiring ~~demo~~ access to



geriatric care (Economic  
Survey 2018-19)

What Way Forward

India needs to urgently invest  
in skilling the workforce, creating  
more jobs and make access  
to women's participation easier.

The schemes like Make-in-India,  
Skill India and B, National  
Policy for Older Persons and  
Beti Bachao Beti Padhao need  
to be expanded and made  
more effective.

18. Highlight the significance of watershed development in India. Give reasons for the limited success of initiatives directed towards watershed management in India. Also, suggest some measures to improve the design of watershed programs.

(250 words) 15

भारत में जल संभर (वाटरशेड) विकास के महत्व पर प्रकाश डालिए। भारत में जल संभर प्रबंधन की दिशा में की गई पहलों की सीमित सफलता के पीछे निहित कारण प्रस्तुत कीजिए। साथ ही, जल संभर कार्यक्रमों की अभिकल्पना में सुधार लाने हेतु कुछ उपायों का भी सुझाव दीजिए।

Watershed is the area drained by a river system.

Conservation of water requires the watershed development

Significance of watershed development

- Recharge of groundwater
- Flood control, using reservoirs, ~~and~~ channels and embankments
- Increasing crop ~~and~~ water productivity.
- Improve land-use patterns and reduce deforestation.
- Increase the flow of rivers above the minimum ecological flow



- Reduce and tackle water pollution.
- Increase moisture content of the soil.
- Help in solid and liquid waste management.
- Help water availability for industries and urban areas, and avoid Chennai type crisis.

\* Initiatives taken for watershed development

- (1) Integrated Watershed Management Programme ~~under~~
- (2) Pradhan Mantri Krishi Sinchai Yojana -
- (3) National Water Mission
- (4) Jal Shakti Abhyān (Newly launched).

Reasons for limited success

- (1) Lack of people's participation
- (2) Absence of adequate laws to prevent land-use change.
- (3) Limited use of technology
- (4) Absence of convergence of schemes.

Some suggested measures

- (1) Increase people's participation
- (2) ~~Take~~ Take a multi-pronged approach — Make changes to laws, develop land-use planning, increase technology and create an inventory.
- (3) Look at forested hills and floodplains as sources of water management.

The new Jal Shakti Ministry needs to look into these aspects.



19. Explain the relationship between raw materials and location of industries. How are globalisation and technological advancements changing this relationship?

(250 words) 15

कच्चे माल और उद्योगों की अवस्थिति के मध्य संबंध स्पष्ट कीजिए। वैश्वीकरण और तकनीकी प्रगति इस संबंध को कैसे परिवर्तित कर रहे हैं?

Most industries are located near the sources of raw materials. This is especially true for weight-losing materials like iron and steel

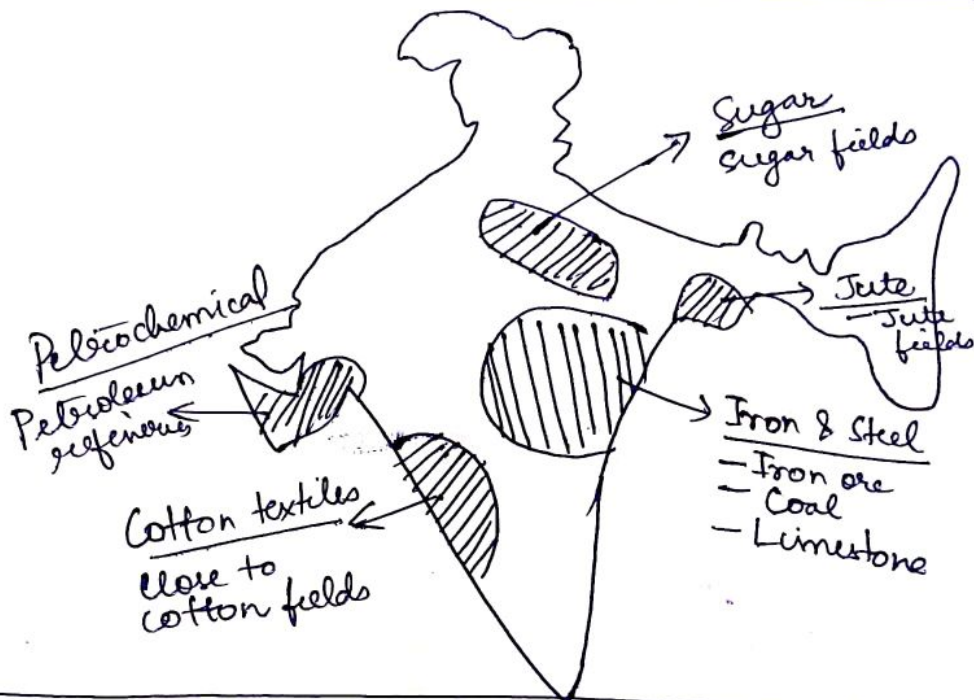


Fig 2: Location of industries near Raw Material sources

Fig 2 provides examples of some weight-losing industries located

close to their raw material sources.

→ This is because the further away is the source, greater is the cost of transportation due to weight-loss.

→ ~~The~~ However, there are some footloose industries which can be located far away from their raw material source. eg - Toy making.

→ But raw material is not the only ~~not~~ factor. Availability of labour, power and markets also determine industry location. eg China makes most of the mobile phones, although it has to import the lithium used in batteries. This is because China has the labour.



## Effects of globalization and technology

(1) Globalization has given rise to MNCs. These spread their operations across many countries.

eg - Adidas might procure the nylon from India <sup>(raw materials)</sup>, manufacture the garment in Bangladesh (cheap labour) and sell it in the US (market).

(2) Technology has further broken down the relationship.

— It is cheaper to transport raw materials.

— Synthetic ~~st~~ substitutes have emerged. eg - Nylon

— Technologies like 3D Printing can allow much faster development of products.

Thus, globalization and technology have altered the way ~~to~~ industries located ~~to~~ close to their raw materials.

20. Explain how natural greenhouse effect helps in maintaining Earth's heat budget. What are the possible implications of rising concentration of greenhouse gases (GHGs) in atmosphere on Earth's heat budget?

(250 words) 15

स्पष्ट कीजिए कि किस प्रकार प्राकृतिक ग्रीनहाउस प्रभाव पृथ्वी का उष्मा बजट बनाए रखने में सहायता करता है। पृथ्वी के उष्मा बजट पर वायुमंडल में ग्रीनहाउस गैसों (GHGs) की बढ़ती सांद्रता के संभावित निहितार्थ क्या हैं?

The Heat Budget of Earth refers to the difference between ~~the~~ insolation and ~~output~~ the radiated and reflected heat. Since the earth's temperature is constant on average, the heat budget is zero.

How GHGs maintain earth's heat budget

→ The insolation is short-wave radiation which is transparent to the atmosphere, but absorbed by the earth (51%)

→ The earth re-radiates this as long-wave radiation.

→ The GHGs absorb the long-wave radiation, resulting in



Don't write anything this margin  
 (इस भाग में कुछ ना लिखें)

warming of the atmosphere and earth. This is the greenhouse effect  
 → Over time, this is slowly released to keep the heat budget balanced.

(Fig 2)

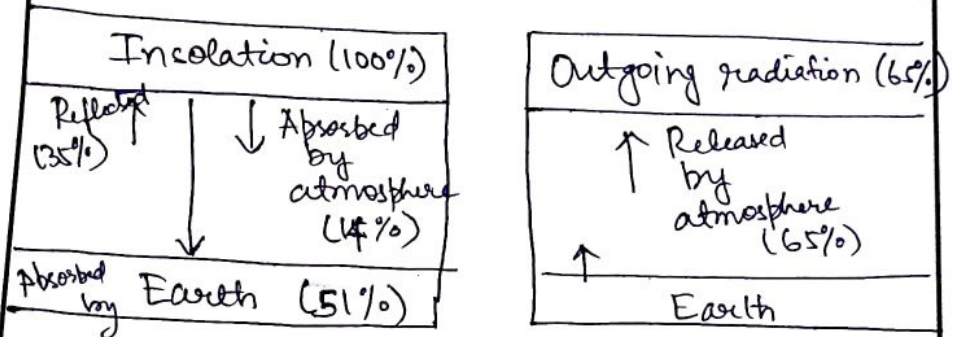


Fig 3: Heat Balance of Earth

Implications of rising GHGs

A rise in GHGs will lead to greater absorption of long-wave terrestrial radiation, leading to further warming of the

atmosphere.

→ This can lead to -

- (1) Melting of glaciers and rise in sea level.
- (2) Extreme weather events like droughts and floods.
- (3) Heat waves will become more common.
- (4) Other associated problems of climate change.

~~In the last~~ CO<sub>2</sub> concentrations have crossed 400 ppm in the atmosphere. This calls for concerted efforts to implement the Paris Climate Agreement.