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GENERAL STUDIES (TEST CODE : 2211)

Name of Candidate	AAYUSHI BANSAL		
Medium Eng./Hindi	ENGLISH	Registration Number	1195934
Center	ONLINE	Date	08/08/22

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
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9	10	
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11	15	
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14	15	
15	15	
16	15	
17	15	
18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

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।

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.

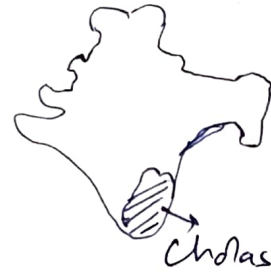
6.

All the Best

1. The Cholas are inextricably linked with the zenith of Dravidian art and architecture. Comment.
(150 words) 10

चोल द्रविड़ कला और स्थापत्य की पराकाष्ठा से अनन्य रूप से संबद्ध हैं। टिप्पणी कीजिए।

Cholas ruled the South India (Tamil Nadu region) ~~in~~ reaching zenith in 10th - 12th centuries.



Dravidian architecture

- ① Temple architecture :- Featuring lofty gopurams, tall vimana, Dravidian style temples built.

Eg → Brihadeshwara temple, Tanjore
↳ monolithic temple

- ② City Building → Built ~~Kanarp~~ Madurai, Tanjore, Puhar etc.

Eg → ~~Ganga~~ Gangai Konda cholapuram
by Rajendra

- ③ Structural temples → Apart from rock cut, standalone temples.



Dravidian art

- ① Painting → Evolved unique style, based on local tradition. Eg → Ramayan, Mahabharat wall paintings
- ② Sculpture → Bronze statues like famous Nataraj.
- ③ Influenced South Asian art (Eg → Angkor Wat in Cambodia)
- ④ Vijaynagara Kingdom & Nayaks largely tried to revive Chola art (Eg hepakshi temple Visupaksha temple)

Cholas brought a golden age of art & architecture in South India.

2. Among the major legacies of the Indian freedom movement, civil liberties formed an important one. Analyse. **(150 words) 10**

भारतीय स्वतंत्रता आंदोलन की प्रमुख विरासतों में, नागरिक स्वतंत्रता ने एक महत्वपूर्ण भूमिका निभाई है। विश्लेषण कीजिए।

Indian freedom movement carried strands of liberal and egalitarian thought.

Civil liberties

- ① Moderates (1885-1905) → fought for freedom of press, equality, freedom of speech & expression.

Eg → ~~Like~~ Surendranath Banerjee arrested for 'The Bengalee' newspaper

- ② Social reformers → equality of women, lower caste.

Eg → Ram Mohan Roy for Anti-sati Regulation, 1829.

- ③ Nehru Report, 1928 → talked of freedom of association, equal

rights for minority.

(4) 1931 Karachi Congress Session →
Passed resolution on Fundamental
Rights and National development.

(5) Trade Union movement → for
workers ~~by~~ rights & reforms
Eg → AITUC formation 1920

(6) Inclusion of farmers rights
Eg → Champaran Satyagraha by
Gandhiji

(7) Freedom of religion highlighted by
secularist movements like Arya
Samaj.

(8) Women's association for women
equality → Eg All India Women's
Conference

Indian freedom struggle inspired
the liberal Fundamental Rights of Indian
Constitution.

3. The Berlin Conference of 1884-85 in many ways set the ground for the scramble in Africa. Elucidate. (150 words) 10

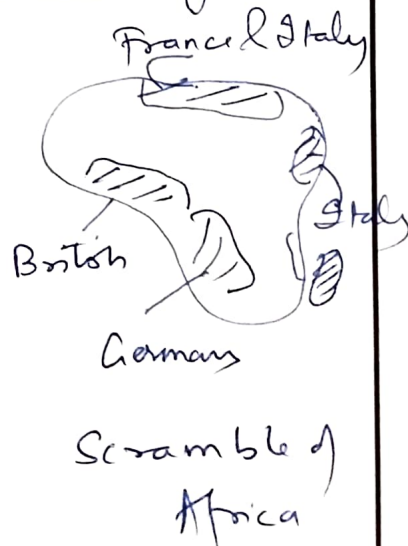
1884-85 के बर्लिन सम्मेलन ने विभिन्न प्रकार से अफ्रीका में विभाजन का आधार तैयार किया। स्पष्ट कीजिए।

Increased ambition for colonies in the wake of neo-imperialism led to scramble of Africa

Berlin Conference was held in 1884-85 with no African representative among Western European nations

① It drew the map on paper dividing the colonies by consensus.

② Northern Africa of Morocco, Tripoli was contested between France & Italy.



- ③ Germany was given south west territories to payify it.
- ④ Britain controlled area around Niger river in Western Africa.
- ⑤ France took over Algeria & Tunisia area while Italy got Tripoli.
- ⑥ However, it took much longer to establish actual effective control.

4. What is a cloudburst and what are its effects? Why are they more frequent in the Himalayan region? (150 words) 10

बादल फटना क्या है और इसके क्या प्रभाव हैं? हिमालयी क्षेत्र में इनकी आवृत्ति अधिक क्यों है?

Cloudburst refers to excessive rainfall in a short duration in a small area ($> 10 \text{ cm/hour}$)

Effects

- ① Leads to flooding due to excessive precipitation
Eg → Chamdi, Uttarakhand
- ② Can lead to glacial lake outbursts in mountains.
Eg → Kedarnath tragedy
- ③ Mass movement, debris flow, scilifuction - landslides depending on slope structure & region
- ④ soil erosion (gully & sheet erosion)

More frequent in Himalayas

① Surrounded by hills from all sides, clouds are trapped.

② Mountains aid

→ convection :- by providing (trapped) clouds
larger area for evaporation at all times of day

→ orographic rainfall → acting as barrier.

③ Presence of steep slopes, glaciers,
young fold geology, seismicity
aggravates the effect of even
lesser intensity cloud bursts.

Way forward → Early Warning system
→ Mock drills of public
→ Averting climate change
(Paris Agreement)

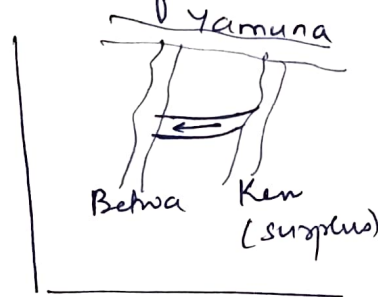
Cloud burst must remain a
hazard & not convert to disaster.

5. Despite its potential, there are several challenges in the implementation of the Ken-Betwa Link Project. Discuss. (150 words) 10

केन-बेतवा लिंक परियोजना की क्षमता के बावजूद, इसके कार्यान्वयन में अनेक चुनौतियां विद्यमान हैं। चर्चा कीजिए।

Ken-Betwa link project is a river interlinking project envisaged to link surplus Ken to deficit Betwa river.

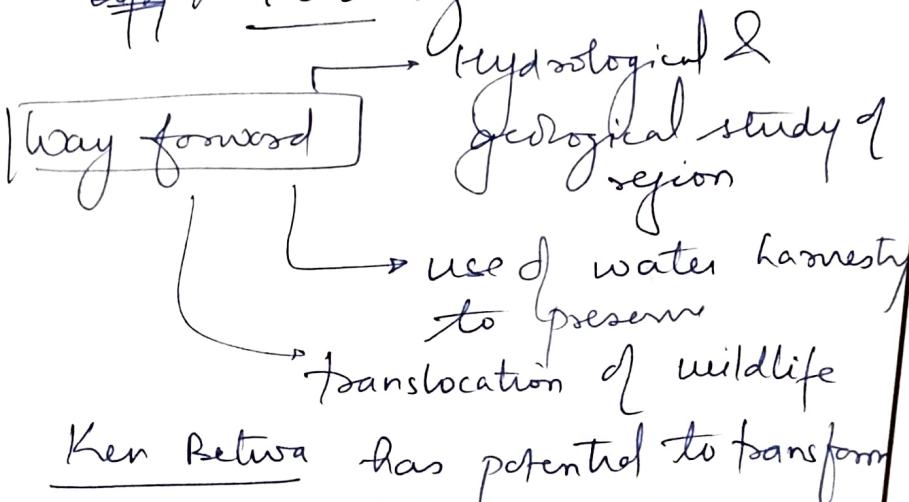
Potential



- ① Aid the water scarcity issue of Bundelkhand dryland
- ② Support agriculture in drought prone area. (Eg millets)
- ③ Support growth of industries (Eg food processing)
- ④ Decrease ~~the~~ artificial source of soil fertility (Eg fertilisers)
 harming the soil.

Challenges

- ① Submergence of Panna Tiger Reserve & forests in Wbandhan dam
- ② High cost of implementation
- ③ Associated biodiversity loss in the region.
- ④ Artificially changing local dryland ecosystem.
- ⑤ May lead to water scarcity in Ken region.



6. Identify the issues related to production and supply of coal in India. How can these issues be addressed? (150 words) 10

भारत में कोयले के उत्पादन और आपूर्ति से संबंधित मुद्दों की पहचान कीजिए। इन मुद्दों का समाधान किस प्रकार किया जा सकता है?

Coal based power still forms
~54% of total installed capacity
highlighting its importance.

Issues on production & supply

- ① Geographically skewed to eastern India.



- ② Lack of high grade coking coal for steel industry.

- ③ Dependence on imports especially Western India.

- ④ Vulnerable for international price fluctuation (eg 2021 monsoons, high price rise)

- ⑤ Lack of technology to extract despite having 4th highest reserves
- ⑥ Restrictions on private sector (despite 2017 liberalisation)

To address

- ① Increase participation of private sector (>80% Coal India Ltd now)
- ② Better transport by dedicated freight corridors
- ③ Decrease import dependence by increasing production
- ④ Involve ~~HSC~~ IISE, ISM Dhanbad for better mining technology.

Coal will remain an important fuel as Niti Aayog in years to com.

7. Present the geographical distribution of agro-based industries in India and discuss the challenges faced by them. **(150 words) 10**

भारत में कृषि-आधारित उद्योगों के भौगोलिक वितरण को प्रस्तुत कीजिए और उनके समक्ष आने वाली चुनौतियों की विवेचना कीजिए।

Agro based industries use ~~agri~~
agriculture based raw materials and
add value to them.

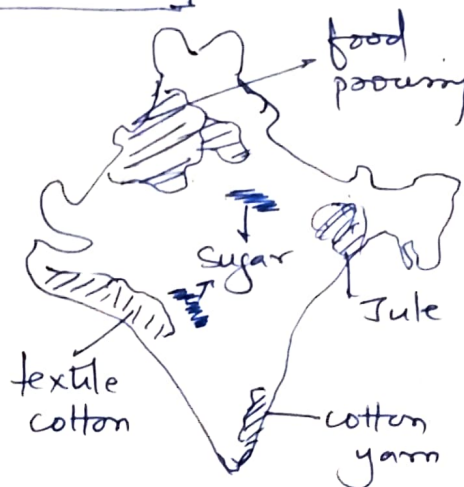
Geographical distribution

- ① Cotton based
located in Gujarat,
Mumbai, Tamil Nadu,
Telangana & UP.

- ② Jute based in
Bengal (Hooghly Belt)

- ③ Food processing around Punjab,
Haryana & western UP due to
prosperous agriculture zone

- ④ Sugar industries in UP and
Maharashtra.



Agro based industries

Challenges

- ① Costlier raw material due to erratic monsoon, rainfed zones, rising fertiliser prices etc.
(Eg ~~is~~ rise of fertiliser price in Russia/Ukraine war)
 - ② Lack of updated technology.
 - ③ Closing market due to WTO globalisation policies. (Eg dairy)
 - ④ Poor access to credit & capital (Eg during Covid)
 - ⑤ Lack of Economies of scale reducing profits.
- Way forward → Conducive Govt policies
→ Better training in technology
→ Export orientation

Agro industries provide ~~large~~ large scale employment in India.

8. The caste system continues to be one of the key drivers of poverty and inequality in India. Discuss. (150 words) 10

जाति व्यवस्था भारत में निर्धनता और असमानता के प्रमुख चालकों में से एक बनी हुई है। विवेचना कीजिए।

Caste is a segmental, endogamic social unit imposing civic and occupational disabilities based on purity and pollution.

Continues to be key driver of poverty & inequality.

① Employment → Lack of representation in public jobs
By Census 2011 → 44% Dalit households have Govt employee

② Political → Dalit Sarpanches are still not given equal status.

③ Increasing atrocities → As per NCRB, increased attacks on SC by 9.4% (2020)

④ Education → Higher dropouts in SC children, lower literacy than avg of 75%.

However, changes are visible :-

- ① Post 1991 LPG → class also plays a role in inequality
(Eg EWS reservation policy)
- ② Rise of backward castes (OBC)
post Green revolution (Eg Yadavs of UP)
in politics.
- ③ Govt policies in entrepreneurship
(Eg Stand Up India) ; Kalpana Saroj
↓
Dalit entrepreneur
- ④ Stringent legislations to curb atrocities (Eg SC/ST Atrocities Act)
- ⑤ Increasing urbanisation, globalisation,
education helping lower caste to
raise status.

Caste is & was & will be there.
It's face is changing emerging in
new avatars.

9. Discuss the issues faced by domestic workers in India. Also suggest measures that can be taken to empower them. (150 words) 10

भारत में घरेलू कामगारों द्वारा सामना की जाने वाली समस्याओं की विवेचना कीजिए। साथ ही, उन्हें सशक्त बनाने हेतु किये जा सकने वाले उपायों का भी सुझाव दीजिए।

Domestic workers are informal
labourers providing help in
daily work of a household.

Issues faced

- ① Poor social security → due to
being out of ambit of labour
laws. (Eg Covid → lost jobs)
- ② Vulnerability → Especially
women workers face harassment
even sexual exploitation
- ③ Overburdened → No methods of
paid leaves and rest hours.
- ④ Low wages → High inflation
further reduces effective income

- ⑤ Lower caste, tribals, minor girls faced double whammy of harassment.

Measures to empower

- ① Comprehensive survey to know their numbers & position (Eg recent Labour Bureau survey)
- ② Bringing under the ambit of labour laws.
- ③ Better awareness & organisation building (eg unionisation in Delhi)
- ④ Use of Civil society & NGOs to highlight cases of sexual exploitation & FIR filing.

Domestic workers provide a major chunk of 'invisible case economy'.

10. Given the deeply gendered impact of population control measures, examine the need to rethink the current approach of population control measures in India. (150 words) 10

जनसंख्या नियंत्रण संबंधी उपायों के गहन लैंगिक प्रभाव को देखते हुए, भारत में जनसंख्या नियंत्रण उपायों के वर्तमान दृष्टिकोण पर पुनर्विचार करने की आवश्यकता का परीक्षण कीजिए।

Population in India will cross China in 2023 to become most populous as per United Nations.

Gendered impact & need to rethink

① Contraception → As per NFHS, tubectomy (females) is roughly 10 times higher than vasectomies.

② Sex selective abortion → If the number of children to be limited, usually female is aborted.

③ Bodily autonomy → denied to women to choose

④ Missing women → Health impact on women due to control measures

Way forward

- ① Increasing male education & participation (eg awareness on vasectomies & condoms)
 - ② Continuing with persuasive over coercive approach
 - ③ Need to rethink population control laws in certain states (eg UP) denying benefits.
 - ④ Enlarged focus on maternal & child health (~103 MMR target 70 - UN)
 - ⑤ Focus on adolescent males & females on sex education & health. (eg Kishore Yojana)
- Population must be converted to demographic dividend with gender equity.

11. Examine the impact of the Sramana tradition on the Vedic religion and its relation with the emergence of Jainism, Buddhism and Ajivika sects.

(250 words) 15

श्रमण परंपरा के वैदिक धर्म पर प्रभाव और जैन, बौद्ध तथा आजीवक संप्रदायों के उद्भव के साथ इसके संबंध का परीक्षण कीजिए।

Sramana tradition refers to leaving domestic household & worldly responsibilities to lead a life of ascetic, as a monk.

Impact on Vedic religion

- ① Emergence of Bhakti → Shaivism (Nayanars) & Vaishnavism (Alvars) in South.
- ② These saints composed in local languages (Eg. Tirumurai in Tamil) decreasing monopoly of Sanskrit in religion.
- ③ They reduced prestige & hegemony of Brahminic priests.

- ④ It brought culture of equality
as anyone could become a monk.

Relation with emergence of Buddhism,
Jainism & Ajivika sects

- ① Buddha left his home for
path of enlightenment (Bodhi Gaya).
→ first sermon at Sarnath
established Buddhism.

- ② Vardhaman Mahavir similarly
wandered as an ascetic and ~~led~~
was called 24th Tirthankar.

- ③ Ajivika focussed on 'Niyati'
(destiny) & everything being
predestined denouncing world.

④ Buddhist Sangha → revolves around monks ('Bhikkus') and Tripitaka give rules for monks.

⑤ Shwetambara & Digambar monks discard amenities. Digambar discard even the clothes.

⑥ Values of Satya (truth), Ahimsa (non violence), Asteya (non stealing), Apasrigraha (non hoarding), Brahmacharya (celibacy) are derived from Samana in Jainism.

Samana tradition emerged as a counter revolution to challenge supremacy of Brahminic religion.

12. Shed light on the use of symbols and symbolic language by Mahatma Gandhi for both, integrating masses into the National Movement and against social evils. (250 words) 15

महात्मा गांधी द्वारा राष्ट्रीय आंदोलन में जनता को लामबद्ध करने हेतु और सामाजिक बुराइयों के विरुद्ध, दोनों के लिए किए गए प्रतीकों और प्रतीकात्मक भाषा के उपयोग पर प्रकाश डालिए।

Gandhi's entry in 1915 on Indian political scene transformed freedom struggle into a mass movement

Use of symbols for integrating masses in national movement

- ① Salt :- Dandi march in 1930 brought together urban, rural, women, students & all classes.
- ② Khadi ^{& Charkha} → Symbol of Swadeshi, against foreign hegemony of economy. Integrated peasants to industrialists.
- ③ Religion → Use of 'Khilafat' integrated Muslim masses in Non Cooperation.

④ Satyagraha → Use of non violence (ahimsa) & truth as symbols of strength, brought masses in (Eg Non Cooperation, Civil disobedience)

⑤ Fasting → Eg 1943 fast from jail against violence in Quit India by Govt.

Symbols to fight social evils

① 'Harijan' → Called lower caste as children of God to bring dignity.

② 'Bhajan' → 'Vaishnav Jan' to highlight equality of all.

③ Naxi shakti → Compared women to Sita to highlight their strength, & fight gender inequality.

- ④ Fasting during partition riots
curbed them in many areas
(Eg Noakhali)

Impact of symbols

- ① Broadened social base of
movement to lower caste &
women (Eg large scale participation
in Civil Disobedience)
- ② Creating psychological unity among
masses → birth of nationalism
(Eg → Swadeshi Khadi, no salt
tax)
- ③ Forced Govt to treat Indians as
equal → eg Gandhi Poona Pact, 1931
- ④ Inspired Constitution (Eg DPSP →
Article 40 → village panchayats)
Gandhiji was the chief
architect of the nation in making.

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13. Giving a brief overview of the three Carnatic Wars, discuss the factors that led to the success of the British against the French in the struggle for control over India. (250 words) 15

तीन कर्नाटक युद्धों का संक्षिप्त विवरण देते हुए, उन कारकों पर चर्चा कीजिए जिनके कारण भारत पर नियंत्रण के लिए संघर्ष में फ्रांसीसियों के विरुद्ध अंग्रेजों को सफलता प्राप्त हुई।

Three Carnatic wars of 18th century decided that English, not French were to become rulers of India.

Overview

① First Carnatic War → Started over Austrian War of Succession when English provoked French.
→ Treaty of Aix-La Chapelle

② Second Carnatic War → Over internal disputes of princely states
French → Muzaffar Jang (Hyderabad) & Chand Sahib (Carnatic)
~~English~~ English → Alivardi Khan + Nasir Jung
Clive (English) defeated French under Dupleix.

③ Third Carnatic War →

Battle of Wandiwash settled in
favour of English (ended with
Seven Years War)

Factors for success of British

① Private Company → East India

Company was not marred by
Govt interference & delays as French
Company

② Better navy & military strength

③ Industrial revolution in England increased available income, better technology for weapons & increased necessity for colonies.

④ Use of debt market → Bank of England supported funds.

- ⑤ Focus on commercial over other concerns by English.
- ⑥ Able leaders like Robert Clive and others (French had only Dupleix who was recalled).
- ⑦ Focus of French on their North American possessions.

Impact of wars

- ① Natives fought on both sides (local sepoys)
- ② Local princes ~~became~~ became dependents rather than patrons (Eg Alivardi Khan defeated by Captain Paradise in first war)
- ③ English ~~got~~ eliminated the last major rival after Portuguese & Dutch.
Carnatic wars laid the foundation of next 150 years of British rule.

14. Provide an account of the issues that led to a crisis in Punjab in the 1980s. Also, discuss the roadmap to peace that was eventually adopted.

(250 words) 15

1980 के दशक में पंजाब में संकट उत्पन्न करने वाले मुद्दों का विवरण प्रस्तुत कीजिए। साथ ही, शांति स्थापना की उस रूपरेखा पर चर्चा कीजिए जिसे अंततः अपनाया गया था।

Punjab faced a series of internal & external threats culminating in 1980s crisis.

Issues that led to crisis

- ① Partition :- Punjab was divided, leading to large scale violence & carried its lasting effects
- ② low development → feelings of relative deprivation aggravated.
- ③ Religious & linguistic issues → Sikhs formed a minority in the country overall.
- ④ Khalistan separatist movement for a separate nation

- ⑤ Aid from external foreign actors exacerbated the situation.
- ⑥ Capture of Golden Temple by militants ~~in~~ +
- ⑦ Led to Operation Blue Star under PM Indira Gandhi. This hurt the religious feelings of Sikhs.
- ⑧ Led to assassination of Indira Gandhi in 1984. Wide scale anti Sikh riots.

Roadmap to peace

- ① Focus on development via agriculture.
- ② Deployment of security forces to control extremism

- ③ Integration of Punjab political parties in mainstream democratic politics based on elections.
- ④ Better education & skill development programs.

Extensism in Punjab has largely subsided today due to effects of successive Governments.

15. Give a brief account of the distribution of installed capacity of solar power in India. Highlighting the challenges in proper utilisation of solar energy, mention the steps taken by the government to promote it in India.

(250 words) 15

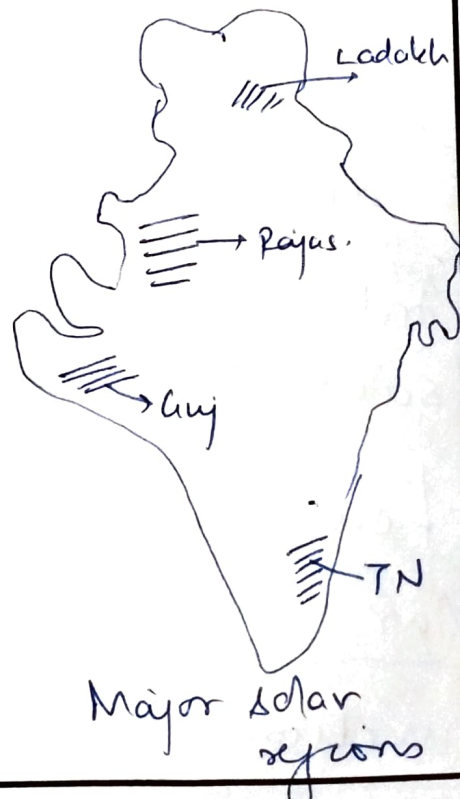
भारत में सौर ऊर्जा की संस्थापित क्षमता के वितरण का संक्षिप्त विवरण दीजिए। सौर ऊर्जा के उचित उपयोग में विद्यमान चुनौतियों को रेखांकित करते हुए, भारत में इसे बढ़ावा देने के लिए सरकार द्वारा उठाए गए कदमों का उल्लेख कीजिए।

Solar power became the face of India's renewable energy program post establishment of International Solar Alliance. (Target of 450 GW of renewable energy by 2030)

Distribution of installed capacity

① High insolation areas of Rajasthan, Gujarat, TN.

② Recent floating parks in Telangana.



Challenges in utilisation

- ① Variable source → dependent on season & time of day.
- ② Need storage → Li batteries are cost intensive.
- ③ Reverse auction policy leading to cut throat competition, decreasing viability of solar power generators.
- ④ Import of Chinese solar panels increasing dependence. → import duty increases cost.
- ⑤ Indirect pollution — due to solar panel wastage (ewaste)
- ⑥ Low response in rooftop solar due to lack of after service function

Steps taken

- ① Initial policy offered in tariff encouraging Genes with fixed profit
- ② Renewable Purchase Obligation (RPO) for Discoms.
- ③ Surya Mitra for solar panel after service in rooftop.
- ④ Usage of net meters to earn ~~for~~ from solar power.
- ⑤ PM KUSUM encouraging farmers to solarise pumps.
- ⑥ Grants to state for promotion
- ⑦ Establishing International Solar Alliance (ISA) & Green Grid.

Solar power has immense scope of 748 GW from 3% of degraded land.

16. Post-drift theories based on ocean floor mapping provided new dimensions to the study of distribution of oceans and continents. Elaborate.
(250 words) 15

महासागरीय-अधस्तल के मानचित्रण पर आधारित उत्तरवर्ती प्रवाह सिद्धांत ने महासागरों और महाद्वीपों के वितरण के अध्ययन को नए आयाम प्रदान किए हैं। सविस्तार वर्णन कीजिए।

Central concern of geographers has been to understand the present distribution of continents & oceans & how it evolved.

Continental Drift Theory

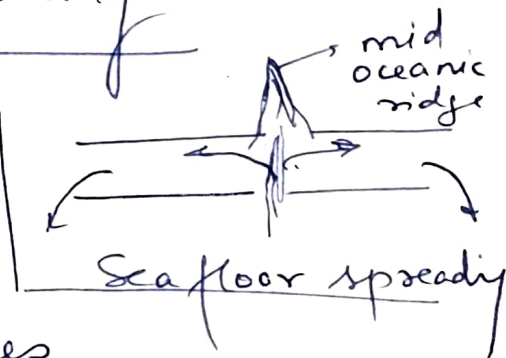
By Alfred Wegener →

- ① All continents formed Pangea & oceans formed panthalassa.
- ② ~200 million years ago, Pangea broke into Gondwana & Laureasia & started drifting apart.
- ③ These continents broke, floated on water & overtime formed present distribution.
- ④ Forces → Tidal & Pole fleeing force

This got challenged post Ocean floor mapping →

(A) Sea Floor Spreading

① Ocean floor was vast with seifs like ridges & trenches.



② Mantle came out of ~~side~~ mid oceanic ridges creating tension → spreading the floor.

③ This floor was consumed by subduction on other side.

It was further refined by plate tectonics

① It ~~is~~ is lithospheric plates moving over asthenosphere creating present continents & oceans.

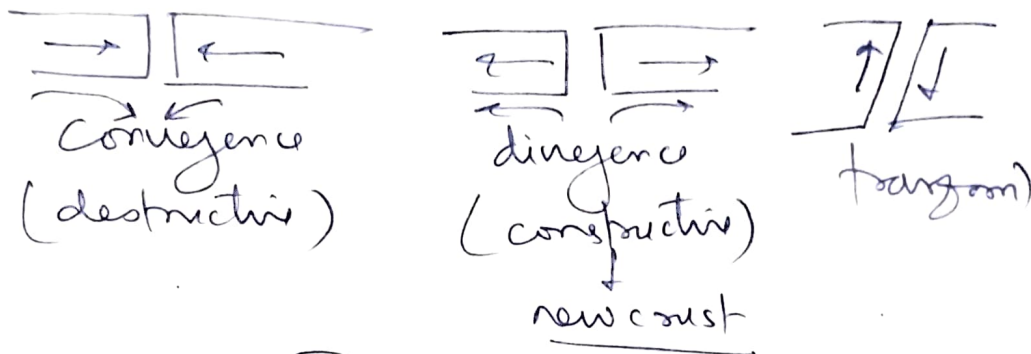


Fig plate movement

- ② Force is provided by primordial & radioactive heat.
- ③ This leads to convection currents in aesthenosphere → force behind movement.
- ④ There are 7 major & several minor plates continuously moving.
- ⑤ It explained distribution of fold mountains, volcanoes, earthquakes & benches. (eg pacific rim of fire)



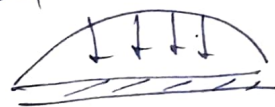
17. Explain the phenomenon of heat waves. Also, enumerate the conditions favourable for the development of heat waves in India and their associated health impacts. (250 words) 15

हीट वेव्स की परिघटना की व्याख्या कीजिए। साथ ही, भारत में हीट वेव्स के विकास के लिए अनुकूल परिस्थितियों और उनसे संबद्ध स्वास्थ्य प्रभावों को सूचीबद्ध कीजिए।

Heat waves are the rise of temperatures significantly above average temperature for a particular region & season for an extended period of time. (e.g recent heat waves in Western Europe)

Conditions favourable

- ① High pressure → acts as heat dome trapping heat
- ② Late arrival of monsoon → aggravates heat & temperature
- ③ Concretisation of land → Urban heat islands trap heat



- ④ Deforestation → Reduced transpiration further increases temperature.
- ⑤ Climate change — extreme weather events are increasing.
- ⑥ El-Nino → decreases amount of monsoon, increasingly hot.
- ⑦ Negative Indian Ocean Dipole → reduces intensity of rainfall.

Health impacts

- ① Heat stroke impacting outdoor workers.
- ② More severe impact on morbid, elderly, infants, children, ~~pregn~~ pregnant women.

③ Dehydration - reduced proportion
of water in
blood.

④ Reduced productivity.

[Way forward]

- ① Averting climate change by
adhering to Paris & Glasgow
agreements of UNFCCC.
- ② Early warning systems
- ③ Afforestation & Reforestation as
per Bonn Challenge.
- ④ Heat mapping as done in
Ahmedabad

We must be prepared for
extreme weather events occurring
on both mitigation & adaptation.

18. Providing an account of distribution of rainforests across the world, mention their key characteristics. Also highlight the threats that are being faced by tropical rainforests. (250 words) 15

विश्व भर में वर्षावनों के वितरण का विवरण प्रस्तुत करते हुए, उनकी प्रमुख विशेषताओं का उल्लेख कीजिए। साथ ही, उष्णकटिबंधीय वर्षावनों द्वारा सामना किए जा रहे खतरों को भी रेखांकित कीजिए।

Rainforests are the 'lungs' of planet Earth.

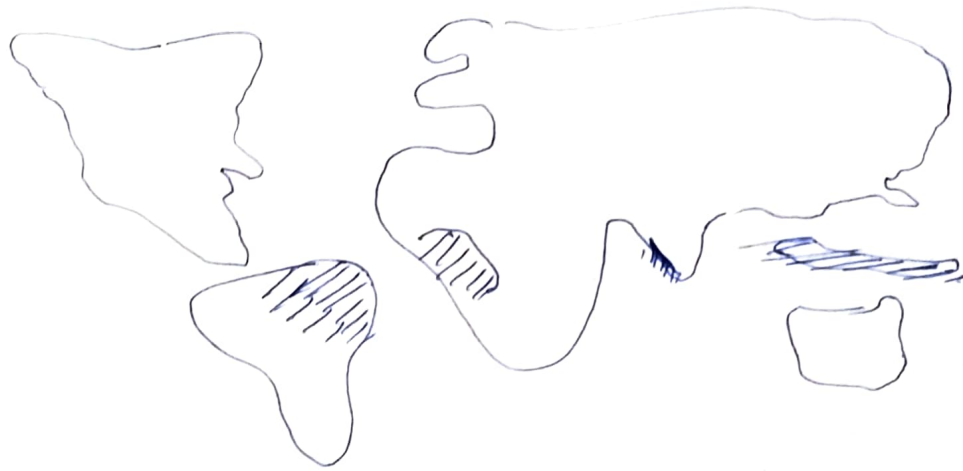


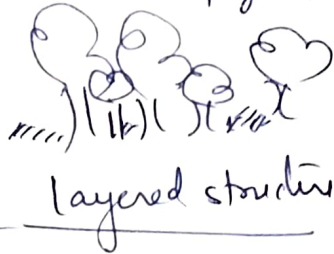
Fig → distribution of rainforests

- ① Rainforests are found around equatorial regions (0-10°N/S)
- ② In S. America → Amazon forest in Brazil
- ③ Western Africa around Congo Basin

- ④ South East Asia → Indonesia, Malaysia & Pacific islands
- ⑤ Western Ghats & North East in India.

Characteristics

- ① Layered structure → trees arrange as per height due to limitation of sunlight on ground (dense canopy)
- ② Excessive rainfall & high sunlight leads to tall & dense forests
- ③ NOT ~~so~~ fertile soil due to high ~~base~~ microorganisms activity
- ④ High biodiversity → One of biodiversity hotspots due to high endemism.



Threats faced

- ① Deforestation → for agriculture,
timber for industries etc.
(eg → large scale decline of Amazon)
- ② shifting cultivation → slash & burn /
Jhum
- ③ Monoculture → Plantation crops
replacing diversity (eg Oil Palm
in Indonesia)
- ④ Weak afforestation programs
— Can't replace diversity.

Way forward

- adhere to Bonn Challenge
& New York Declaration
- strict regulation & penalties
- global cooperation

19. Indian cities are not only mimicking the social and cultural structures of inequality and exclusion found in rural areas but are also creating fault lines for future conflicts. Discuss. (250 words) 15

भारतीय शहर न केवल ग्रामीण क्षेत्रों में पाई जाने वाली असमानता और बहिष्करण की सामाजिक और सांस्कृतिक संरचनाओं की नकल कर रहे हैं, बल्कि भविष्य के संघर्षों के लिए दोषपूर्ण स्थिति का भी निर्माण कर रहे हैं। विवेचना कीजिए।

Urbanisation is not just increasing proportion of urban population but also an adoption of 'urban way of life'.

Mimicking inequality of rural areas

- ① Caste structures → Eg discrimination in higher education institutions, universities are not uncommon.
(Eg cases of discrimination in IT firms)
- ② Gender inequality → Urban women face increased crime leading to lower labour force participation than rural.

- ③ Class structures → Poor are excluded in slums & dilapidated housing (Eg Dharavi)
- ④ Religion → minorities face ghettoisation, lower education & health (Justice Sachar Committee report)
- ⑤ Ethnicity → segregation by language, tribe, ~~the~~ native state.

Fracture lines for future conflicts

- ① Contrasting skyscrapers vs ~~the~~ proliferating slums create relative deprivation.
- ② City based riots due to heterogeneous population (Eg Delhi riots).

- ③ Scarcity of urban land leading to high prices on one land, which lavish use on other (e.g. golf courses, farm houses)
- ④ Environment → Solid waste, industrial discharges etc. are harming poor the most.
(e.g. → Delhi pollution harms outdoor workers)
- ⑤ Over-urbanisation → Concentration in one area surpassing industrialisation.
→ Breakdown of civic amenities
→ High unemployment (e.g. Agripath protests)

Indian cities must have planned urbanisation with equity & inclusiveness for Sabka Saath & Sabka Vikaas.

20. Examine the multi-dimensional impact of globalisation on tribal development in India. (250 words) 15

भारत में जनजातीय विकास पर वैश्वीकरण के बहुआयामी प्रभाव का परीक्षण कीजिए।

Globalisation is the interconnectedness & interdependence of world in social, political & economical fields such that change in one part affects the other.

Impact on tribal development

Positive

- ① Increased avenues for tribal products marketing
Eg exports by TRIFED
- ② Bringing tribals into mainstream pacing development.
- ③ Global education & health facilities (tribal literacy ~ 59%
lower than 75% avg.)

- ④ Increased incomes of tribal art safeguarding culture & increasing income (Eg Gond paintings)
- ⑤ International NGOs, organisation support (Eg → UN policies on indigenous population)

Negative

- ① Encroachment on land by MNCs (Eg → Korea steel POSCO in Orissa)
- ② Increased pollution, deforestation leading to loss of 'Jal, Jungle, Jameen'
- ③ Cultural colonialism → due to loss of traditional customs (Eg death of Bo language)
- ④ Neo liberal Govt policies to attract MNCs, leading to

Land ~~acquit~~ acquisitions

- ⑤ Increased mining, ~~dams~~ dams in tribal areas leading to displacement ($\sim 42\%$ $\rightarrow$ ^{til} 1990)

⑥ Way forward

- ① Selective globalisation following Nehru's Panchsheel
 - ② Implementation in letter & spirit of Forest Rights Act, 2006
 - ③ Training & marketing facilities to keep pace with globalisation
 - ④ Engaging civil society to bring into mainstream gradually
- Tribals must not be forced but carefully saved from difficulties of globalisation.