

U.P.S.C.

प्रश्न संख्या

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इस भाग में कुछ
न लिखें
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in this part)

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Roll no. - 1910099700

Test - 880064 (Test 24)

ANSWER WRITING FOCUS GROUP 2025

TEST #24 - (Test Code: 880064)

Instructions to Candidates -

- There are 7 Questions in this Question paper.
- All Questions are Compulsory.
- For all updates, please visit the noticeboard <https://forumias.com/blog/awfg2025/>

अभ्यर्थियों के लिए निर्देश -

- इस प्रश्न पत्र में 7 प्रश्न हैं।
- सभी प्रश्न अनिवार्य हैं।
- सभी अपडेट के लिए कृपया नोटिसबोर्ड देखें - <https://forumias.com/blog/awfg2025/>

Allotted Time : 1 Hour

Total Marks : 95

Q.1) What are 'atmospheric rivers'? Discuss their impact on regional climate and human settlements. (10 Marks, 150 Words)

'वायुमंडलीय नदियाँ' क्या हैं? इनके क्षेत्रीय जलवायु और मानव बस्तियों पर प्रभाव की चर्चा कीजिए। (10 अंक, 150 शब्द)

Q.2) How does plate tectonics theory help in explaining the formation of Himalaya? (10 Marks, 150 Words)

प्लेट विवर्तनिकी सिद्धांत हिमालय के निर्माण की व्याख्या करने में कैसे मदद करता है? (10 अंक, 150 शब्द)

Q.3) What are Global Capability Centres (GCCs)? Account for the factors influencing the location of GCCs in India. (10 Marks, 150 Words)

वैश्विक क्षमता केंद्र (GCCs) क्या हैं? भारत में GCCs के स्थान को प्रभावित करने वाले कारकों का लेखा-जोखा दें। (10 अंक, 150 शब्द)

Q.4) Explain the factors that influence temperature distribution of the oceans and discuss its multi-dimensional impacts. (10 Marks, 150 Words)

महासागरों के तापमान वितरण को प्रभावित करने वाले कारकों की व्याख्या करें और इसके बहुआयामी प्रभावों पर चर्चा करें। (10 अंक, 150 शब्द)

Q.5) Describing the distribution of palm oil producing countries, indicate the major environmental issues faced by them. (15 Marks, 250 Words)

ताड़ के तेल (पाम ऑयल) उत्पादक देशों के वितरण का वर्णन करते हुए, उनके द्वारा सामना किए जाने वाले प्रमुख पर्यावरणीय मुद्दों को इंगित करें। (15 अंक, 250 शब्द)

Q.6) How are local winds different from planetary winds? Discuss the role of local winds in influencing the climate, agriculture and livelihood in various regions. (15 Marks, 250 Words)

स्थानीय पवनें ग्रहीय पवनों से किस प्रकार भिन्न हैं? विभिन्न क्षेत्रों में जलवायु, कृषि और आजीविका को प्रभावित करने में स्थानीय पवनों की भूमिका पर चर्चा करें। (15 अंक, 250 शब्द)

Q.7) Discuss the critical factors contributing to water stress in Indian cities. Elaborate on the major impediments to the formulation and implementation of a holistic water management strategy. (15 Marks, 250 Words)

भारतीय शहरों में जल-संकट में योगदान देने वाले प्रमुख कारकों की चर्चा कीजिए। समग्र जल प्रबंधन रणनीति के निर्माण और क्रियान्वयन में प्रमुख बाधाओं पर विस्तार से विचार कीजिए। (15 अंक, 250 शब्द)

Ans 1)

Atmospheric rivers are narrow invisible streams of moisture in clouds that carry substantial amount of water in them like the famous Puncapple Express.

Impact on regional climate

- 1) Leads to moderation of temperature by rainfall.
- 2) Causes humidity in the atmosphere.
- 3) Could cause concentrated rainfall leading to cloudbursts.

Impact on human settlements

- 1) Could cause mass destruction due to concentrated rains.
- 2) Leads to loss of life and damage to property.

37 In moderate amounts, it aids agriculture
and alleviate drought like situations.

Challenges of atmospheric rivers

- i) Difficult to track
- ii) Sudden passing of such rivers
from a place.
- iii) Poor equipments used by IMO to
track this phenomenon effectively.
- iv) Lack of sufficient monitoring
stations

Why forward

International weather
agencies collaborate

Tracking river circulation
patterns

Installing new weather
stations

Atmospheric rivers are a global
phenomenon that cause rainfall and
could alleviate dry seasons' effects.

Ans 27

Plate tectonics theory claims that there are various plates of the crust on top of asthenosphere which move due to convectional currents of magma.

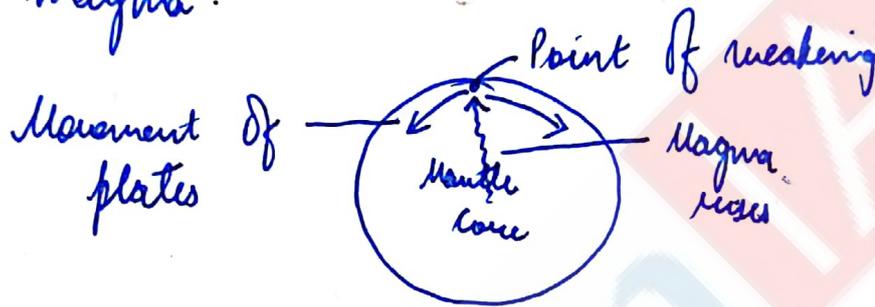
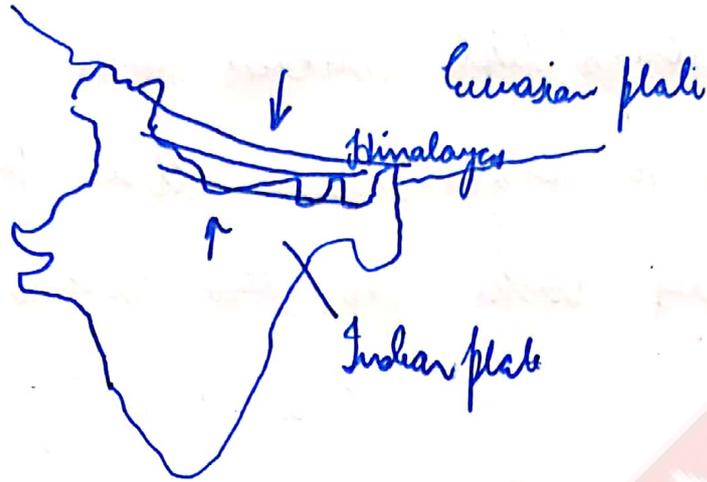


Plate tectonics theory helping explain formation of Himalayas

- 1) Analysis has shown that Himalayan sediments are old that could have been a part of Tethys sea
- 2) There is a fault between the Indian plate and Eurasian plate which collides and causes earthquakes in North India.



- 3) The height of Himalayas has been rising and has increased by a few inches.
- 4) The Himalayas are parallel to the two plates.
- 5) Convergence of 2 continental plates causes upliftment due to similarity of density of plates.

Plate Tectonics propounded by Wegener is the most promising theory that explains the movements on the surface of the earth.

Q.37

Global capability centres are resource centres for organisations that perform necessary tasks for the functioning of IT infrastructure, thus providing services for the functioning of the IT ecosystem. Wipro is one such company with bccs in India.

Factors influencing location of bccs

- 1) Low cost labour - India has low wages.
- 2) Moderate to high skills - About 68% demography is in the working age population with skills present.
- 3) Command over language - Indians speak English to a great extent.

4) Share of IT sector - contributed about 9% to the GDP and is already resilient.

5) Flexible labour laws compared to the west.

6) Readily able to integrate into various markets.

Challenges

a) Low skill of labour.

b) India could become low skilled outsourced partner with low value addition.

c) Techno feudalism is leading the large IT companies being able to influence governments.

Global capability centres provide a promising opportunity to employ, lead to skill growth and aid the growth of the nation.

Ans 4

The temperature of oceans varies according to varying geographies which also affects its salinity and productivity.

Factors influencing temperature distribution of oceans

- 1) Proximity to land - As land heats up faster, it heats water due to radiation reflection.
- 2) Shape of water body - Areas like gulf that are narrow and surrounded by land have higher temperature.
- 3) Presence of glaciers - Ice melt reduces temperature of water in poles.
- 4) Outlet of rivers - Long rivers like Amazon, Ganga reduce the temperature.
- 5) Latitude affects the amount of radiation received.

Impact Of Temperature distribution

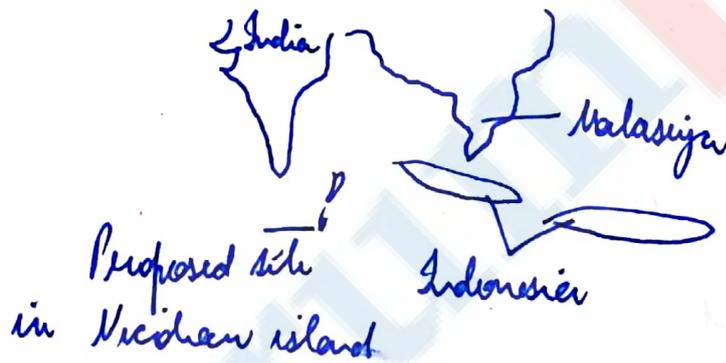
- 1) Convergence of warm & cold currents make the most productive fishing grounds.
eg) New foundland in USA, Japan
- 2) affects the temperature of land by sea breeze.
- 3) Determines the amount of convectional rainfall received by adjacent land masses.
- 4) Corals are found in water in the range of 27-32°C temperature.
- 5) Cold water currents often lead to dry atmosphere while warm & moist lead to development of diseases.

Temperature of oceans impact the lives, natural weather patterns immensely.

Ans 57

Palm oil is one of the most widely used oil in India for baking, cooking and blending of fuel oil. India imports about 60% of its edible oil and palm oil makes up 65% of this.

Distribution of palm oil producing countries



- 1) Malaysia - One of the largest producers.
- 2) Indonesia - Due to proximity to sea with large islands hence suitable for growth.
- 3) Cambodia & Laos - Grow palm to a certain extent.

Major environmental issues faced

- 1) Water scarcity - As it is a water guzzling crop, leads to depletion of water table.
- 2) Invasion in nature - Competes with natural flora as was seen in Orissa.
- 3) Large patch of land required - For effective plantation that destroys agriculture.
- 4) Degradation of natural forests like the one in Great Nicobar island cause.

Benefits of growing oil palm

- a) Reduces import dependence
- b) The productivity is 10 times higher than mustard.

- c) Could reduce the disease burden caused by Non communicable diseases.
- d) Would ^{prevent} lead to coastal erosion and ingress of water
- e) Would lead to more balanced growth and employment of local
- f) Integration into global value chain.

Palm oil is one of the most used and imported edible oil in India.

Self sufficiency in growth of the same could lead to health, financial and social benefits.

Ans 67) Local winds are localised wind patterns that blow in certain geographies which could be warm or cold and affects the overall climate & agriculture of the region.

Local winds different from planetary winds

1) Planetary winds blow all over the earth while local winds in localised places.

eg) Loo in Rajasthan, Sirocco in Morocco.

2) Local Planetary winds have the impact of planetary winds.

eg) Looch flows accordingly

3) Local winds may not necessarily follow the same direction of flow all over the place.

- 4) Local winds are often seasonal and do not blow all over the year.
- 5) Local winds could cause swelling of the sea while planetary winds usually cause waves & tides.

Role of local winds

Climate

- 1) Affects the temperature of the region
eg) Mistral is cold, Sirocco is warm.
- 2) Humidity is affected
eg) Rainfall is greater in Mediterranean due to local winds as one factor.

Agriculture

- 1) Viticulture or grapes are grown in Mediterranean region due to plenty of rain in winters and

dry summers.

17 In Rajasthan, mostly millets are grown as they can withstand the warm heat.

• Sheep

17 In warm ^{dry} regions, cultivation is difficult and people depend on cattle, sheep etc.

27 Areas of abundant rainfall like Mediterranean have rich climate, vine fields that makes them prosperous.

Local winds are greatly affected by planetary winds and both affect the climate of a place.

Ans 77

Water stress refers to the unavailability or shortage of water to meet the needs of people satisfactorily.

Factors contributing to water stress

- 1) Agriculture unsustainability - High water demanding crops are grown in dry areas.
eg) sugarcane in the Vidharba, long staple cotton in Punjab.
- 2) Overusage & inefficiency of agriculture - Uses about 85% of the overall water used but the water use efficiency is only 38% (Dahai panel).
- 3) Pollution - Of water bodies leading to unusability.
eg) Chhatrapur in Ganga during Mahakumbh.

- 47 Drought - Due to excessive heat
- 57 Concreteization - Unability of water to percolate into the ground.
- 67 Population centralization - The population of Delhi is about 2 crores.

Impediments to formulation & implementation of water management strategy

- 17 Poor planning - Of cities and not allocate sufficient green areas.
- 27 Poor drainage system - That causes flooding and contamination of surface water bodies.
- 37 Indian Easement Act - allows retraction of water below a person's property.
- 47 District Planning Committee challenges - Unable to draw effective water shed management plans

due to conflicts in meetings with
panchayat & municipal officials.

57 Encroachment of flood plains - By people
eg) Yamuna bank in Delhi

Way Forward

17 Indicatively following Niti Agyog's Composite
Water Management Index.

27 Rejuvenation of water bodies using
drumit Sarovar scheme, wetland
restoration.

37 Creating water storage structures.

eg) Vidya Goyal has stored water
in 5% of farmers' fields can
lessen water stress

Water stress could be a major challenge as
21 out of 30 megacities of India may
face water stress by 2030 accordg
to Niti Agyog.