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(To be filled by candidate)

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Roll No. : PTTP220323

Registration Number : ..... Date of Examination : 1/9/23

Exam Centre : Old Rajinder Nagar ☑ Bhopal ☐ Online ☐

Test - 5

Code : TC075

MTS IGP Batch 2023

GENERAL INSTRUCTIONS

This Question-cum Answer (QCA) Booklet contains 56 pages. Immediately on receipt of the booklet, please check that this QCA booklet does not have any misprint or torn or missing pages or items, etc. If so, get it replaced by a fresh QCA booklet.

Candidates must read the instructions on this page and the following pages carefully before attempting the paper.

Candidates should attempt the questions strictly in accordance with the instructions specified in the question paper and in the space prescribed under each question in the booklet. Any answer written outside the space allotted may not be given credit.

Question paper will be provided separately and can be taken by the candidates after conclusion of the exam.

.....

SUBJECT/PAPER
GENERAL STUDIES

Invigilator's Sign. : .....

[To be filled by the STUDENT]

Student's Queries for the Evaluator (if any write them below)

[To be filled by the EXAMINER]

Evaluator's response

(For filling by Examiners only)

Evaluator Code :

Q.No	Pg No.	Maximum Marks		Marks	Total
1	1				
2	3				
3	5				
4	7				
5	9				
6	11				
7	13				
8	15				
9	17				
10	19				
11	21				
12	24				
13	27				
14	30				
15	33				
16	36				
17	39				
18	42				
19	45				
20	48				
Grand Total					

Signature

MACRO COMMENTS

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1. भारत को विदेशों से जोड़ने वाले प्राचीन व्यापारिक मार्गों ने संस्कृति के आदान–प्रदान और प्रसार में किस प्रकार योगदान दिया?
(150 शब्दों में उत्तर दीजिए) 10 अंक

How did the ancient trade routes connecting India to foreign countries contribute to the exchange and dissemination of culture?
(Answer in 150 words) 10 marks.

Ancient trade routes not only allowed trade of goods and services but also helped in dissemination and exchange of culture.

Trade routes connecting India to foreign countries

1.) Harappan links with Middle Eastern civilization
2.) North western connect via Khyber pass
3.) Silk route via Gandhar
4.) Maritime trade route to South & South east Asia

Trade routes as culture exchange and dissemination

1.) Linkages in term of civilizational growth, worship as seen in Harappa
2.) Indo-Greek contact : Development in Horoscope.

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3) use of Silk route for dissemination of Buddhist culture (eg) Fa Xian Tsuang Tang

4) Growth of Gandhara School with Graeco Roman influence.

5) Spread of Vaishnavism and Buddhist culture via maritime trade route

(eg) • Hindu temple @ Cambodia
• Ashoka's son and daughter sent to Sri Lanka.

6) Influence on script and language

(eg) use of Kharoshthi by Ashoka

7) Military and government state reflected ties (eg) Satrap style of Indo-Greek

Therefore, the trade routes had many benefits apart from trade.

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2. भारत छोड़ो आंदोलन वर्ग विभाजन से परे एक जन आंदोलन था, लेकिन यह महिला नेतृत्व ही था जिसने स्पष्ट छाप छोड़ी। विश्लेषण कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The Quit India movement was a people's movement cutting across the class divides but it was the women's leadership that left a clear mark. Analyse. (Answer in 150 words) 10 marks.

Quit India Movement was launched in August, 1942 with the motto of 'do or die'.

Quit India movement as People's movement

1) Arrest of Gandhiji and Top Congress leaders.
2) No guidelines given, as given in past
3) Huge participation of common mens cutting across class, caste and religion.
4) Establishment of volunteer corps, local governments.
5) Huge network of parallel underground activities.

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Women's Leadership mark on Quit India movement

1) Huge Number of participants.

2) At the forefront of picketing and violent activities.

3) Aruna Asaf Ali hoisting national flag

4) Women like Kalpana Dutta participated in underground activities.

5) Did not backed out despite violent repression from Britishers.

Therefore, Quit India movement was succesful in removing and transforming colonial rule to its last stage.

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3. 'स्वतंत्रता के पश्चात् के भारत की पहचान विज्ञान और प्रौद्योगिकी के क्षेत्र में इसकी उल्लेखनीय प्रगति रही है'। इस काल में हुए वैज्ञानिक विकास ने भारत को किस हद तक आधुनिकता के पथ पर अग्रसर किया?

(150 शब्दों में उत्तर दीजिए) 10 अंक

'The hallmark of post-Independent India has been its remarkable strides in science and technology'. To what extent did scientific development during this period put India on the path of modernity?

(Answer in 150 words) 10 marks

with completion of 75 years of Independance India has seen remarkable achievement in science and technology such as

1.) Development of space sector
   - ↳ ISRO
   - ↳ Mars mission, Chandrayan 3

2.) Establishment of Nuclear Technology
   - ↳ Nuclear arsenal
   - ↳ Nuclear power plants

3.) Green Revolution to make agriculture self sufficient

4.) Huge social capital trained in science and technology

5.) Indigineous development of warfare machinery, vaccine development

6.) Establishment of IITs.

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Extent of scientific development in putting India on path of modernity

1) Energy security achieved by diversification

2) Huge and trained workforce.

3) Increased scientific temper among citizens

4) Increased GDP, reducing poverty and development of nation.

5) Food security help in achieving modern ideals of human development

6) Access to education leading to increased literacy.

Way forward
- reducing digital divide
- Increasing digital literacy
- Harnessing Industrial Revolution 4.0

Hence, strides in science and Technology can not only make us modern but also Vishwaguru.

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4. अन्य क्षेत्रों में जल संकट की समस्या को हल करने के लिए नदियों को आपस में जोड़ने की व्यवहार्यता पर चर्चा कीजिए।
(150 शब्दों में उत्तर दीजिए) 10 अंक

Discuss the feasibility of Interlinking rivers to resolve the issue of water stress in other regions.
(Answer in 150 words) 10 marks

As per Central Groundwater Authority per capita availability of water is less than 1400 m^3 per capita. This highlights water stress condition.

Interlinking of rivers refers to connecting river with excess water to river with low water availability.

Benefits of Interlinking of Rivers

1) Reducing water stress.
2) Ensuring access to clean and potable water to all.
3) Beneficial for agricultural productivity
4) Tackling climate change.
5) Preventing Drought like condition and migration of people.

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Challenges of Interlinking Projects

1) Huge requirement of capital.

2) Inter-state disputes and federal challenges. (Eg) Kaveri dispute

3) Ecological problems
   - submergence of area (Eg) Kuno National Park
   - obstruction of natural flow of river.
   - may affect biodiversity and ecosystem services.

4) Long gestation period.

5) Displacement and rehabilitation of indigeneous population

Way forward
- use of PPP route for funds
- EIA studies to study impact
- consulting every stakeholder.

Interlinking of rivers can help achieve SDGs and tackle climate change.

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5. कोयला आधारित विद्युत संयंत्रों से नवीकरणीय ऊर्जा उत्पादन की ओर गमन का संरचनात्मक परिवर्तन कोयला समृद्ध राज्यों में मानव विकास को कैसे प्रभावित करेगा? (150 शब्दों में उत्तर दीजिए) 10 अंक

How will the structural shift from coal-based power plants to renewable energy generation impact human development in coal-bearing states? (Answer in 150 words) 10 marks

India's Panchamitra mandates 50% energy from renewable sources by 2030. This demands a structural shift from current coal based power plant, with 52% current installed power supply.

Impact of shift on Human development in coal bearing states



Fig: coal producing states

Positive Impacts

1) Major coal bearing areas are densly populated by trees. It will reduce deforestation.

2) Increase quality of air and water bodies due to decreased mining activities.

3) No displacement of indigenous tribal groups in Jharkhand, Orissa

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Uttarakhand.

Negative Impact

1.) States heavily reliant on income from coal resources (Economic survey 2017)

2) may lead to job loss.

3) Decreased private investment and subsequent decreased CSR funds.

4.) Migration may lead to skewed sex ratio.

- Way forward
  - use of environmentally sound mining techniques
  - EIA before mining
  - Improving Eklavya model school and health centres
  - Improving grid connectivity to harness renewable energy generation.

Achievement of Renewable energy target is necessary to halt global warming as per Paris COP-15.

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6. तापमान और वर्षण किस सीमा तक मृदा के गुणधर्मों को निर्धारित करने वाले सबसे महत्त्वपूर्ण कारक हैं?
(150 शब्दों में उत्तर दीजिए) 10 अंक

To what extent temperature and precipitation are the most important factors that determine soil properties?
(Answer in 150 words) 10 marks

Soil refers to organic mineral aggregate essential for various ecosystem services.

Role of Temperature in determining soil properties

1) Biological activity : Higher temperature more active and vice versa.

2) Texture of soil particles : Temperature gradiation leads to weathering and thus breakdown of soil particles.

Role of Precipitation in determining soil Properties

1) organic component : Regions of high rainfall washes away organic component

2) mineral and Nutrient transport

(Eg) Podzolisation : Silica on top layer while iron and aluminium in lower layer

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Salinization : creation of 'Calcikors'

Leaching : Aluminium & Iron on top layer. while silica on bottom layer

3) Colour of soil : (Eg) Yellow soil changes colour on moisture addition

Apart from these two factor other factors that shape and determine soil properties are :

1.) Parent rock : Determine nature and texture of soil

2) Biological activity : (Eg) Bioturbation

3) Time : more time results in mature soil

4) Slope : Higher slope gradient thinner soil profile.

Study of soil property is essential for sustainable usage and conservation activities

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7. अरब सागर में प्रचंड और तीव्र चक्रवात एक नियमित घटना क्यों बनते जा रहे हैं? उदाहरणों सहित सिद्ध कीजिए।
(150 शब्दों में उत्तर दीजिए) 10 अंक

Why are severe and intense cyclones becoming a regular phenomenon in the Arabian Sea? Substantiate with examples.
(Answer in 150 words) 10 marks

As per IPCC report the ration of cyclones in Arabian ~~Sea~~ sea and Bay of Bengal have increased from 1:4 to 2:4 highlighting rise of cyclonic phenomenon in Arabian Sea.

Reasons for rising number of severe and intense cyclones in Arabian Sea

1.) Rising sea surface Temperature
- due to global warming and climate change

2.) Positive Indian ocean dipole:
- Arabian sea more warm than Bay of Bengal



Fig 1: cyclonic systems and name

Candidates must not write on this margin

3) Presence of El-Nino modoki.

4) Low number of fresh river water addition to reduce temperature

(Eg) Bipargoy, Asani, Tauktae



Way forward

1) use of doppler weather antenna and GIS to early predict arrival.
2) creation of sea storm surges.
3) following NDMA guidelines.
4) creating of Disaster reducing / resilient infrastructure.
5) Capability training of local population

Limiting climate change

via reduced emissions can limit extreme events like cyclones.

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8. भारत में सांस्कृतिक विविधता के संदर्भ में, क्या हम शेष भारत की तुलना में दक्षिणी राज्यों को विशिष्ट सांस्कृतिक इकाइयाँ मान सकते हैं? अपने दृष्टिकोण के औचित्य को सिद्ध कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

In the context of cultural diversity in India, can we consider Southern states as distinct cultural units in comparison to the rest of India? Substantiate your view. (Answer in 150 words) 10 marks.

India is a nation marked with diversity in various cultural components like language, food habits, religion etc.

Southern States as distinct cultural units compared to Rest of India

1) Language spoken: Dravidan language family spoken in southern states

2) Temple architecture: Dravida architecture in contrast to Nagara of North

3) Racial similarity of Southern states is Dravidan, while North and North East Aryan and Proto mongloid.

4) Similar food habits with dominance of seafood.

5) Similarity in dressing tradition
   - (eg) dominance of lungi

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However there are certain differences among southern states also

1.) Difference in spoken language.
   ↳ each state have their own language

2) Different scripts used.

3) Religious groups also different in southern states.

4) Intra state different values

(Eg) Nayars of Kerala - matrilineal while rest patrilineal.

Despite differences and all culture adds to similarity

India's cultural capital and contributes to unity in diversity.

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9. गरीबी और जनसंख्या वृद्धि एक दुष्चक्र में फँसी हुई है, जहाँ गरीबी व्यक्तियों की इस चक्र से मुक्त होने की क्षमता को सीमित करती है, जबकि जनसंख्या वृद्धि संसाधनों पर दबाव डालती है। विवेचन कीजिए।

(150 शब्दों में उत्तर दीजिए) 10 अंक

Poverty and population growth are locked in a vicious cycle, where poverty restricts individuals' ability to break free from the cycle, while population growth strains resources. Discuss.

(Answer in 150 words) 10 marks.

Poverty refers to deprivation of essential items required for development of individual.

India become most populous nation in 2023. At the same time it uplifted 271 million people from poverty. However, still 280 million remain below poverty line.

Poverty & Population growth: vicious cycle

1) Poverty leading to population growth

↳ demand for more working hands

↳ lower access to healthcare services leading to high mortality. This creates need for more child birth

↳ lack of education access leading to low family planning awareness

↳ lack of skill / [illegible]

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2) Population growth leading to poverty

↳ limited resources (Eg) 17% population
4% land
2.5% water

↳ limited job opportunities leading to unemployment

↳ urban migration without job leads to slum formation.

Ways to break cycle

1.) Access to social security.
↳ healthcare expenditure
↳ Access to school education
↳ skill development

2) Family planning by Asha workers

3) Increasing financial inclusion via JAM trinity.

4.) Improving job ecosystem.

5.) Data led governance plan

Stable population growth with no poverty can help India achieve its target of 'Amrit Kaal'.

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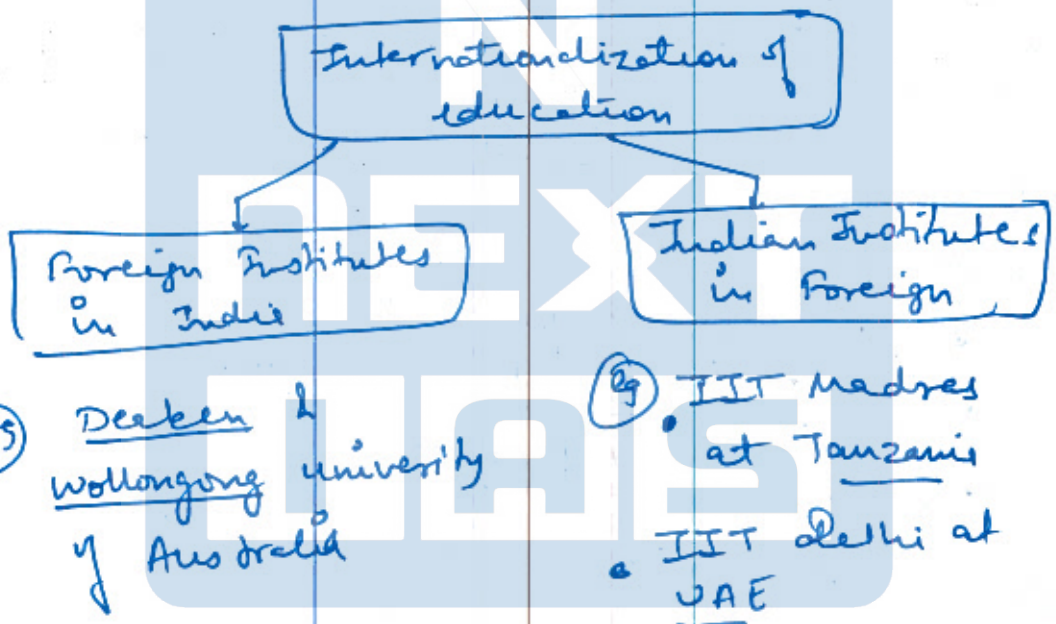
10. शिक्षा के अंतर्राष्ट्रीयकरण में भारत के पास एक समृद्ध विरासत है। इस संदर्भ में 'शिक्षा के अंतर्राष्ट्रीयकरण' पर हाल ही में दिया जा रहा बल समाज को कैसे प्रभावित करेगा और सांस्कृतिक आदान–प्रदान को कैसे बढ़ावा देगा?

(150 शब्दों में उत्तर दीजिए) 10 अंक

India has a rich heritage in the internationalization of education. In this context how will the recent push for the 'internationalization of education' impact society and foster cultural exchange?

(Answer in 150 words) 10 marks.

Having ancient institutes of Taxila, Nalanda & Vikramshila highlights India's rich heritage in internationalization of Education



Impact on society and fostering cultural exchange

(A) Society

1) Better education access.

2) Educated workforce can help reap economic dividend.

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1) Employability of students will increasing leading better lifestyle outcomes.

(B) Culture of exchange

1.) Development of global south cooperation

2.) Exchange of cultural values at campuses

3.) Student transfers can help cultural exchange

Way forward
- ensure stable regulatory regime
- Affirmative action so as no class divide
- culture of competition between colleges for better resource utilization

Along with these benefits Internationalization of education can help achieve SDG 4 : Quality Education

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11. यद्यपि गांधार और मथुरा कला के बीच कई अंतर थे, तथापि इन दोनों ने अमरावती कला शैली (अमरावती स्कूल ऑफ आर्ट) को पर्याप्त रूप से प्रभावित किया।' सविस्तार वर्णन कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

'Although there were many differences between the Gandhara and Mathura art, they considerably influenced the Amravati school of art.' Elaborate. (Answer in 250 words) 15 Marks

The Gandhara and Mathura school of art developed during Kushana rule and left incredible work on Indian art and cultural tradition.

Differences between Gandhara & Mathura Art

Gandhara art	Mathura art
1) Developed in North western Part of India	2) Developed in central India
2) use of blue green sandstone	2) use of Red sandstone
3) Influence of Greek and Roman traditions	3) Indigenously developed
4) Major focus on Buddhist art	4) Art developed for Buddhist, Hinduism and Jains tradition

Candidates must not write on this margin

5.) Buddha with wavy hair, beard and mustache

6.) Realism depicted

7.) Buddha similar to Greek and roman gods

5.) Buddha with curly hair, no beard and mustache

6.) use of idealism

7.) Buddha similar to Yaksha Yakshini design

Despite their differences, they influenced Amravati school of Art in following manner:

1.) Prominence of Buddhist traditions in Amravati Art.

2.) Depiction of Jataka story

3.) use of local available grey sandstone as raw material

4.) use of intrinsic designing and detailing.

Candidates must not write on this margin



Fig 1: location of all art schools

Therefore, All three schools enriched our cultural heritage

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12. 'इंग्लैंड की औद्योगिक क्रांति ने न केवल आर्थिक परिदृश्य को बदल दिया बल्कि इसके दूरगामी सामाजिक और सांस्कृतिक प्रभाव भी पड़े'। विवेचना कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

'England's Industrial Revolution not only transformed the economic landscape but also had far-reaching social and cultural impacts'. Discuss. (Answer in 250 words) 15 marks

England's Industrial Revolution began in late 18th and Early 19th century. It marked a shift from animate to inanimate source of energy.

Industrial Revolution transforming economic landscape

1.) use of inanimate source of energy.

2.) use of machines for production

(Eg) spinning jenny

3.) Establishment of Industries.

4.) shift from agrarian to industrial economy.

5.) Development of capitalism (Eg) Adam Smith

6.) Mass production of goods.

Candidates must not write on this margin

7.) Establishment of colonies for two reasons:
- for raw material source
- act as market for finished goods

Socio-cultural impact of Industrial Revolution

1.) Closure movements freed up agricultural labourers.

2.) Shift in unit of production from home to factory.

3.) Introduction of urbanisation

4.) Rise in nuclear family shift from traditional joint families.

5.) Economic opportunities for women.

6.) Culture of consumption began

7.) Rise of slums due to inadequate housing facilities.

Candidates must not write on this margin

8.) Deteriorated conditions of workers.
→ low wage & high workload.

9) Child labour increased

10) Colonialism began leading to destruction of indigenous traditions
(Eg) Scramble for Africa.

11) Rationality, secular thoughts increased in society.

12) Inequality increased.

Therefore, Industrial Revolution is a watershed event in history not only economy but also socio-cultural sphere of society

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13. उन्नीसवीं सदी में पिछड़े पारंपरिक तत्त्वों और औपनिवेशिक संस्कृति के आधिपत्य के खिलाफ सामाजिक सुधार और वैचारिक संघर्ष ने एक विशिष्ट सांस्कृतिक पहचान और राष्ट्रीय चेतना के उद्भव को कैसे प्रभावित किया?

(250 शब्दों में उत्तर दीजिए) 15 अंक

How did the social reform and ideological struggle against the backward traditional elements and hegemony of colonial culture in the nineteenth century influence the emergence of a distinct cultural identity and national consciousness?

(Answer in 250 words) 15 marks.

19th century Indian subcontinent saw rise of reform movements in response to traditional backwardness and hegemony of colonial culture.

Movements against backward traditional elements

1.) Reforming religion
   - Raja Ram Mohun Roy : advocated monotheism
2.) Against disabilities for women :
   - Ishwar Chand Vidyasagar : widow remarriage
   - education for women was voiced
   - against Jati and child marriage.
3.) Against caste disabilities
   - (Eg) Satyashodhak Samaj by Jyotiba Phule
4.) Reforming Muslim community
   - (Eg) Aligarh movement

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Struggle against hegemony of colonial culture

1) Rise of revivalist movements
2) Arya samaj and its shuddhi movement
3) Deobandi movement showing an revivalist tendency to original tenants of islam
4) Orthodox community presented challenge to interferance of colonial rule in personal matters.

role of movements in influencing emergence of distinct culture and national consciousness

1) Removing blockages and transforming Indian society
2) Identification of colonial rule as common enemy
3) Removal of disabilities and promotion of equality generated feeling of

Candidates must not write on this margin

oneness.

4) Gaining strength via rediscovery of golden past

(Eg) use of Festivals by Tilak

5) Political and national cooperation & integration increased.

6) Masses binded by common goal of liberation.

7) Setup platform for future endeavours.

Limitations of movement
- Limited reach of movements
- compartmentalised view of history
- did not provided relief to local masses
- Did not took inspiration from literature, art and other sources

Despite their limitation these movement and struggles provided a sound infrastructure for future movements

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14. तापमान व्युत्क्रमण वायुमंडलीय दशाओं को कैसे प्रभावित करता है और स्थानीय मौसम प्रतिरूप और वायु प्रदूषण स्तरों के लिए इसके क्या निहितार्थ हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

How does temperature inversion affect atmospheric conditions and what are its implications for local weather patterns and air pollution levels? (Answer in 250 words) 15 Marks

Temperature inversion refers to increase in temperature with increasing heights

Temperature inversion impact on atmospheric conditions

1.) Does not follow environmental lapse rate

2.) High pressure condition at ground level

3.) Prevalence of anti-cyclonic conditions

4.) Clear skies and cloudlessness prevails.

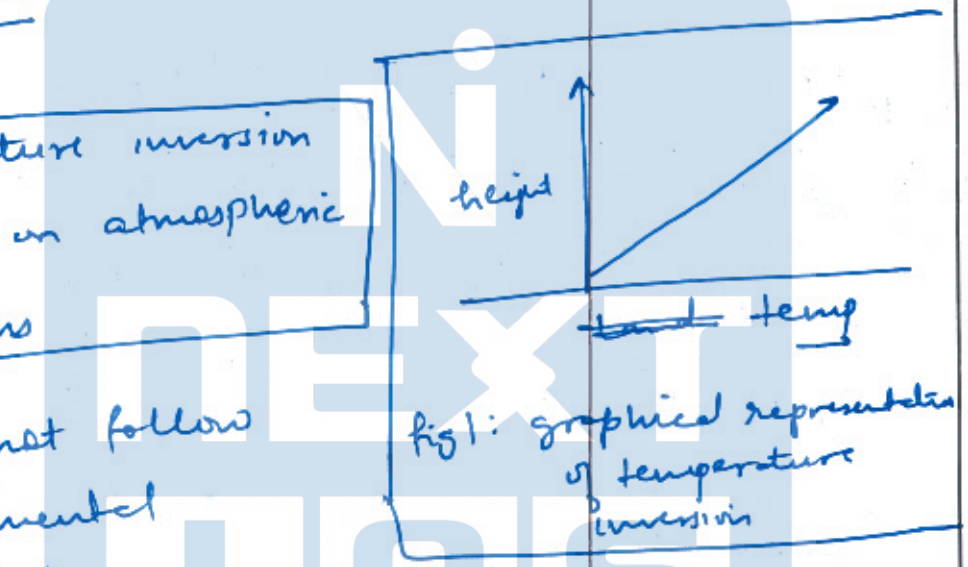


fig1: graphical representation of temperature inversion

Examples of temperature inversions
- during clear night after day's bright sun
- Mountain breeze

Candidates must not write on this margin

Temperature inversion implication on local temperature

1) Anti cyclonic pressure conditions
2) Air drainage via mountainbreeze protects crop in valley

3

Temperature inversion implication on air pollution levels

1) Increased pollution in lower troposphere
2) Formation of Smog (Fog + Smoke)
3) Reduced visibility during winters
4) Issue of air pollution due to stubble burning in Punjab seen in Delhi NCR
5) Affect health of individuals.

Candidates must not write on this margin

Therefore, Temperature inversion has multiple implications on both local climate and pollution level.

NEXT IAS

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15. भारत में मैंग्रोव वनस्पति के लिए कौन से भौगोलिक कारक उत्तरदायी हैं? जलवायु परिवर्तन भारत में मैंग्रोव वनस्पति के लिए किस प्रकार खतरा उत्पन्न करता है? (250 शब्दों में उत्तर दीजिए) 15 अंक

What are the geographical factors responsible for mangrove vegetation in India? How does climate change pose a threat to mangrove vegetation in India? (Answer in 250 words) 15 Marks

Mangrove vegetation represents salt tolerating plant species acting as intermittent zone between two ecosystems.

Geographical factors responsible for mangrove vegetation in India

1) Presence of sea water in form of Arabian sea & Bay of Bengal.

2) Deposition of silt by rivers at deltas provide nutrients

(Eg) Mangroves in Bay of Bengal (Sunderbans)

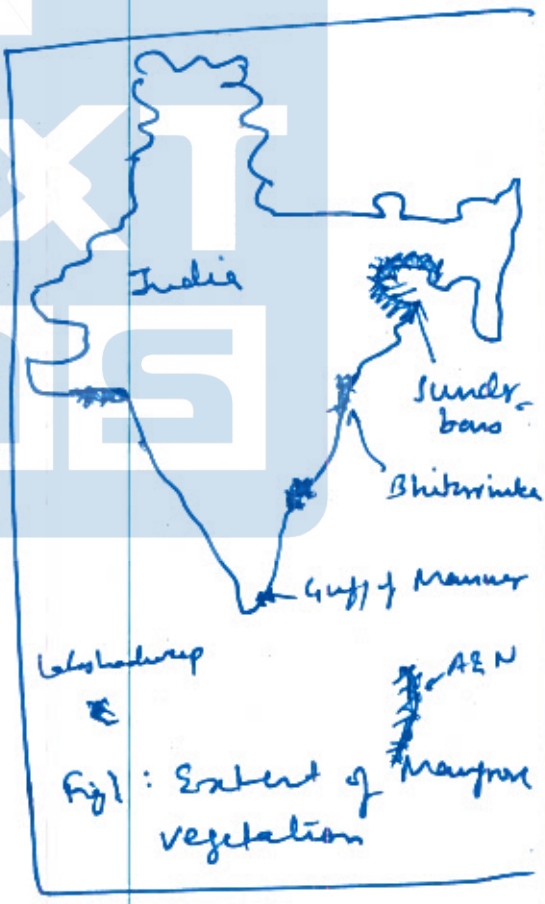


Fig1: Extent of vegetation

3) Large continental shelf provides stable level of sea water

Candidates must not write on this margin

4.) Subtropical location of India provides optimum temperature condition.

Recent IUCN reports highlighted the rising threat and vulnerabilities of these mangrove vegetation due to climate change.

Climate change affecting mangrove vegetation

1) Increased salinity of ocean water
2) Rising sea level water.
3) Increased sea surface temperature
   - reduced CO_2 absorption
4) Affect biodiversity of ocean disturbing mutualism between mangrove and ocean biodiversity
5) Increased instances of cyclones, Tsunamis

Candidates must not write on this margin

6) Marine heatwaves and urban heatwaves can affect growth -

Ways to address

1) Mitigating effects of greenhouse gases by adopting cleaner fuels

2) Implementation of Green India Mission

3) creation of storm surge barrier

4) International collaboration like CDRI.

5) Sustainable agricultural practices

6) use of technologies like GIS mapping for monitoring vegetation.

- The recent announcement of MISHTI scheme is a step in right direction for mangrove vegetation protection

Candidates must not write on this margin

16. चीनी उद्योग की अवस्थिति को प्रभावित करने वाले भौगोलिक और आर्थिक कारक कौन–कौन से हैं, और वे भारत और विश्व के विभिन्न भागों में इस उद्योग के विकास में किस प्रकार योगदान करते हैं?

(250 शब्दों में उत्तर दीजिए) 15 अंक

What are the geographical and economic factors that influence the location of the sugar industry and how do they contribute to the growth of the industry in India and different parts of the world?

(Answer in 250 words) 15 Marks

India is 2nd largest producer and largest consumer of sugar worldwide.

Geographical and economic factors influencing location of sugar industry

1.) Latitudinal extent between tropical and subtropical climatic zone
   - ↳ better harvest
   - ↳ longer crushing season
   - ↳ more sucrose content

2.) Rainfall extent influence need minimum 100 mm rainfall

2.) Weight loosing raw material
   - ↳ closer to crushing mills to prevent loss of sucrose.

4.) Closeness to market and labor availability

Candidates must not write on this margin

5.) South India better cooperative system
↳ leads to better price discovery
hence, more in southern states

6.) Role of State advisory pricing

7.) Access to electricity, road infra-structure

8.) Favourable government policies.

9.) Mechanisation of sugar mills attract more sugar industry

Growth of Industries in India

1.) More concentrated in Southern India due to favourable geographic location
↳ tropical nature
↳ more sugar content
↳ longer crushing season

2.) Cooperative system developed in southern India

Candidates must not write on this margin

3.) Mills better mechanised in South India

4.) Government policies of SAP & better access to irrigation leads to sugar industry in Western UP.

5) Availability of irrigation and capital and labour in Punjab

Growth of Industries in world

1) Brazil one of largest producer
   - tropical location
   - diversion to ethanol blending

2) African nations produce due to land availability

3) Sugar industry in SE Asia.

Hence, the above mentioned factors have led to growth of factories in India and other parts of world.

Candidates must not write on this margin

17. शुष्क और अर्ध–शुष्क क्षेत्रों में जल की कमी को दूर करने और कृषि उत्पादकता को अधिकतम करने के लिए शुष्क–भूमि कृषि में उपयोग की जाने वाली मुख्य रणनीतियाँ क्या हैं? साथ ही, भारत में शुष्क–भूमि कृषि को बढ़ावा देने की आवश्यकता पर भी चर्चा कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

What are the key strategies used in dryland farming to overcome water scarcity and maximize agricultural productivity in arid and semi-arid regions? Also, discuss the need to promote dryland farming in India. (Answer in 250 words) 15 Marks

Dryland farming techniques are used to practice sustainable agriculture in dryland areas with low precipitation

Key strategies used in Dryland Farming

1) use of local and hardy crops
   ↳ for better adaption to local climate
2) use of mulching techniques
   ↳ to retain soil moisture.
3) use of efficient water resources
   ↳ (Eg) Drip irrigation system
4) Selection of proper cropping system with different crops for nutrient cycling
5) Check dams and indigeneous rain water harvesting system for water storage (Eg) Kunds, Zabo

Candidates must not write on this margin

Need to promote dryland farming

1) Huge dependence on monsoon rainfall
   - (eg) 52% of net sown area dependent on S-W monsoon
2) Increasing instances of drought and dry spells.
3) For sustainable agriculture
   - (eg) currently 85% groundwater extracted for agriculture
   - Low water use efficiency of current system
   - dominance of rice wheat system
4) Supports small and marginal farmers
   - 86% farmers small and marginal have low capital for investment
5) Reduced input cost and higher returns
6) Promotion of hardy crops like millet for nutrition security.

Candidates must not write on this margin

Challenges of dryland farming

1) dryland generally areas of low rain and low water holding capacity

2) Nutrient deficient soils make input cost high

3) scattered and small land holding.

4) low infrastructure development and market access makes it less lucrative.

Way forward
- Access to credit under like an credit card
- Infrastructure gap be filled
- Extension service be provided
- Promotion of Natural farming
- R&D services for better variety of crop suitable to dryland region

Dryland farming overcoming its challenges can aid in achieving nutritional security and SDG 2 & SDG 3 of no hunger and quality healthy

Candidates must not write on this margin

18. समकालीन महिला आंदोलन ने पारंपरिक पद्धतियों से परे विविध दृष्टिकोणों को कैसे सम्मिलित किया है? साथ ही, समकालीन महिला आंदोलन के अनूठे योगदान और चुनौतियों पर भी प्रकाश डालिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

How has the contemporary women's movement encompassed diverse approaches beyond traditional methods? Also, highlight the unique contribution and challenges of the contemporary women's movement.

(Answer in 250 words) 15 marks.

Women's movement refers to collective action aimed at safeguarding securing rights and benefits necessary for safety and development of women.

Traditional methods used in women's movement
- opinion generation
- Rally, organising meetings
- petition and letter to government

Methods of contemporary women's movement
- use of social and digital space (Eg) #METOO movement
- Interoperability and intersectionality with different movements (Eg) Chipko movement both environmental & women movement
- acting as pressure group
- leadership from within women community

Candidates must not write on this margin

Unique contribution of contemporary women's movement

1.) Pressurising legislature to pass women centric law

(Eg) Prevention of Dowry Act

Prevention of Domestic Violence Act

2.) Empowerment of women

↳ leadership capability of women improved

3.) Improving workplace environment

4.) Voicising concerns of every section of women. Earlier movements divided on caste and class.

5.) upholding equality principle

↳ (Eg) Shah Bano case and Shimala case

6.) use of digital space to create awareness

(Eg) #METoo #Feminist or ugly

Candidates must not write on this margin

Challenges of contemporary women's movement

1) limited awareness
2) Lack of effective participation from rural and urban slums.
3) Patriarchal attitude of society.
4) Digital divide affecting participation

Despite their challenges contemporary women's movement have upheld women's right and are essential for SDGs : Gender equality

Candidates must not write on this margin

19. क्या आपको लगता है कि आधुनिकीकरण की ताकतें, जिन्होंने भारतीय समाज में सामाजिक बुराइयों के उन्मूलन को उत्प्रेरित किया, ने हमारे सांस्कृतिक मूल्यों और लोकाचार को भी खतरे में डाल दिया है?

(250 शब्दों में उत्तर दीजिए) 15 अंक

Do you think that the forces of modernization that catalyzed the eradication of social evils in Indian society have also threatened our cultural values and ethos? (Answer in 150 words) 15 marks.

Modernization refers to process of change that occured in social, economic and political sphere of society.



Forces of modernization catalyzing eradication of social evils

1) Laws : banning of Sati and child marriage

2) constitution : Removal of untouchability

3) Education : Promotion of rationality and scientific temper

Candidates must not write on this margin

4.) Liberal values: promoted equality and common brotherhood

5.) Technology: providing access without discrimination (Eg) Social media Internet

6) Social reform movement: Removing backward nature of society.

Forces of modernization as threat to cultural values and ethos?

(A) Yes, a threat

1.) Technology being used for wrong purposes such as communal post, fake news against Sarva Dharma Sambhav.

2) Education becoming limiting in nature with focus on literacy only
↳ no focus on ethical values of past

3.) Laws are bypassed and subverted for illegal means.

Candidates must not write on this margin

4.) Rising instances of derogatory post and videos against women and minorities against ideas of Vasudhaiv Kutumbkam

5.) Homogenisation of culture under global forces.

(B) No, not a threat.

i.) Emergence of glocalisation as hybrid value and culture.

ii.) Revival of local value system like Yoga and Ayush

3) Spread of ideals via technology possible (eg) Youtube etc

4) NEP 2020 focus on ethical values also.

Hence, need is to regulate and ensure forces of modernisation do not pose ~~threat~~ to our cultural values and ethics.

Candidates must not write on this margin

20. भारत में राज्यों के संदर्भ में क्षेत्रीय विषमता और क्षेत्रीयता की भावनाओं के बीच संबंधों का मूल्यांकन कीजिए। क्या क्षेत्रवाद राष्ट्रवाद के विचार का विरोधी है? (250 शब्दों में उत्तर दीजिए) 15 अंक

In the context of states in India evaluate the relationship between regional disparity and sentiments of regionalism. Is regionalism antagonistic to the idea of nationalism? (Answer in 150 words) 15 marks.

Regionalism refers to attachment to one's regional identity over greater whole.

Relationship between Regional disparity and sentiments of regionalism

1.) Linguistic representation due to fear of hindi imposition
↳ (Eg) formation of Andhra in 1953
Reorganisation of states in 1956

2) Development deficit in North-East along with ethnic diversity led to creation of states carved out from Assam

3.) ~~help~~ Separation of Gujarat and Maharashtra.

4.) Formation of Uttrakhand, Chhattisgarh, Jharkhand due to demand

Candidates must not write on this margin

for regional development.

5) Formation of Telangana in 2014 from Andhra Pradesh.

6) Demand for separation of Vidarbha and Eastern UP due to development Deficit.

Regionalism not antagonistic of Nationalism

1) Reduces tendency of fissures and strengthen unity.

2) Lead to development of Region
   (eg) Uttrakhand.

3) Promote protection of culture and tradition.

4) Following Pre independence promise of linguistic ~~Reformation~~ reorganisation

5) Principle of subsidiarity and decentralisation
   ↳ more power closer to people better is their participation

Candidates must not write on this margin

Regionalism antagonistic of Nationalism

1.) Promotes regional interest at the behest of national interest

2) Secessionist and extremist tendencies threat to Sovereignty and unity

(Eg) Khalistan and Nagalim

3) Promotes inter-state dispute

(Eg) Border dispute between Maharashtra and Karnataka

4.) Creates insider v/s outsider feeling

(Eg) North-East isolated due to limited connectivity

5) Promotion of regional politics on minority interest of state.

Regionalism is two edged sword. Need to tackle so that unity and sovereignty are protected at the same time promote regional development to reduce fissures and crack in union.

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Space for Rough Work