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(To be filled by candidate)

Name of Candidate : S. Christopher Aimol

Roll No. : MT23RCAPA017

Registration Number : ..... **Date of Examination :** 30/08/23

Exam Centre : Old Rajinder Nagar ☐ Bhopal ☐ Online ☐

Test - 5 **Code : TC707**

RCA 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. Do not write your name or registration no anywhere inside this Question-cum-Answer Booklet.
2. Do not write anything other than the actual answers to the questions anywhere inside your QCA Booklet.
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1. Read the Instructions on the cover page and strictly follow them.
2. Write your registration number and other particulars, in the space provided on the cover of QCA Booklet.
3. Write legibly and neatly. Do not write in bad/illegible handwritings.
4. For rough notes or calculation, the last two blank pages of this booklet should be used. The rough notes should be crossed through afterwards.
5. If you wish to cancel any work, draw your pen through it or write "Cancelled" across it, otherwise it may be evaluated.
6. Handover your QCA Booklet personally to the invigilator before leaving the examination hall.

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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.

The ancient trade routes act as a bridge between India and other foreign countries leading to exchange and dissemination of cultures.

⇒ Ancient trade routes as the bridge

(1) Maritime routes between Indus & Mesopotamia reflected through seals and contributing to exchange of cultural ideas.

(2) Nalanda University - many disciples came to India through ancient trade routes to learn India's rich culture & heritage.

(3) Depict the socio-cultural values & ideas of the time.

Eg Nicolo-De-Conti visit to Vijayanagara empire - donation of charity to needy.

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(4) Through trade & commerce

(eg) Abdul Razaq during Vijayanagara empire.

Thus, ancient trade routes act as a crucial link of dissemination of culture & ideas. //

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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 1942 after the failure of the Cripps Mission.

⇒ Quit India movement – a people's movement

① Nationalism reached every nook and corner of the country – youth, old, women alike, students, princely states etc

② The Do or Die mantra by Gandhiji created a ripple effect in the mind of the people struggling for freedom from British yoke.

③ The movement made the Britishers realised that it was no longer possible to rule without the wishes of the people.

④ The war time miseries during the 1940s also made the people realised the need to bridge class divides.

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⇒ Women's leadership during the movement

(1) Underground movement started by Usha Mehta to dissiminate information by the people had a liberating effect

(2) Aruna Asaf Ali also played a crucial role during the movement breaking patriarchal norms and barriers.

(3) Parallel government in Tamluk, Satara, Ballia etc had many women participants, which left a clear mark of women leadership.

(4) Women leaders like Sarojini Naidu, Lakshmi Pandit etc displayed unparallel patriotism and leadership ensuring emancipation of women.

Thus, the Quit India Movement is one of the watershed movement which sowed the seed for women leadership in the years to come.

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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

Science & technology was given proper emphasis post-independence and today, India is one of the leading country in this domain.

⇒ Scientific development during this period

(1) formation of PM-STAC for scientific advisory to the ministries & department concerns.

(2) Formation of ISRO - one of the watershed event for science & technology in India.

(eg) Recent success of Chandrayaan-3 Mission, by becoming the only 4th country in the world.

(3) Idea of Homi Baba, Vikram Sarabhai in atomic & nuclear energy.

(e.g) Operation Smiling Buddha (1974)

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(4) Development of 3-stage nuclear energy reactor by Homi Babha is one of the pioneering work for scientific domain today.

(5) Space Missions - such as Aryabhatta, NISAR through active collaboration with other like minded countries.

(6) Formation of IN-SPACE, NSIL for increased private participation in the scientific technology.

(7) Technology spin off benefits from Gaganyaan Mission etc.

Thus, the science & technology have achieved a remarkable stride post-independence.

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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

The Ken-Betwa interlinking of river has been in news highlighting the prospects & challenges of the interlinking of rivers.

⇒ Feasibility of interlinking of rivers to resolve water crisis :

(1) Transfer of surplus water to deficit area, thus solving water crisis.

(e.g) Indo-Gangetic rivers with Peninsular rivers.

(2) Address flood & drought, ensuring effective management

(e.g) Damodar - Subernarekha

(3) Tap the concentration of rainfall in few months for times of water scarcity

This will also address agricultural water stress.

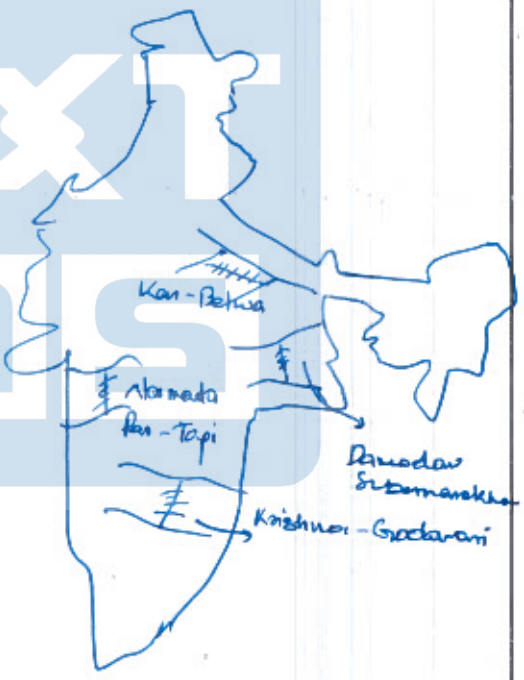


fig Interlinking of rivers

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(4) Ensuring inland water navigation and all year round availability of water.

Challenges

- inundation of forest, threat to biodiversity
  - e.g. Ken-Betwa → Panna Tiger Reserve
- High economic cost for the project, may not be feasible
- issue of Climate Change and impact on hydrological cycle.
  - e.g. Gangetic rivers even facing water crisis
- displacement of people, especially the tribals without proper rehabilitation.

Therefore, interlinking of rivers has both its pros & cons and way forward is to assess its shortterm & longterm impact by addressing concerns of all stakeholders.

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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

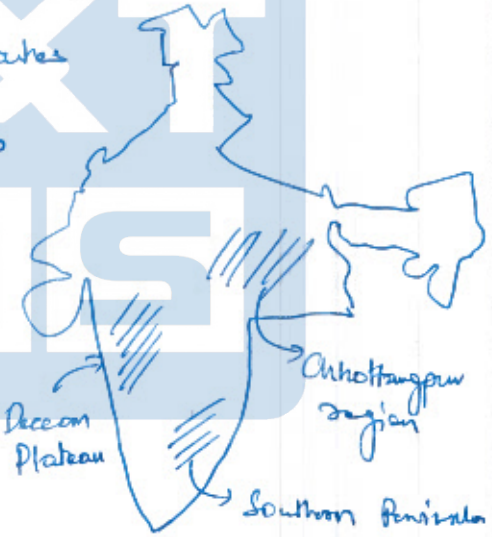
How will the structural shift from coal-based power plants to renewable energy generation impact human development in coal-bearing states? (Answer in 150 words) 10 marks

As climate change is becoming a reality, there is an urgent need for energy transition to cleaner fuels and means.

⇒ Structural shift to renewable energy impact in coal-bearing states:

(1) Coal based power plants contributes nearly 50% of our energy needs at present. This shift can have significant impact on Employment of these states.

(e.g) Jharkhand - unemployment can decrease human development



(Fig) Major coal producing regions.

(2) De-industrialisation of these states and impact on the Growth pole and Growth centre Concept of economic development.

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(3) Shift to renewable energy can also contribute positively to life expectancy - one of key parameter of Human development.

e.g Diseases such as lungs problems for workers & locals can reduce

(4) Address environmental concerns such as soil, water, air pollution etc. Thus, improve the Living standard of the people.

(5) Shift to renewable energy can lead to more employment opportunities and Industrialization in the long run.

Challenges

- Not all coal bearing states have potential for renewable states (Thus inter-state inequalities & inter-personal inequalities)
  - e.g Jharkhand - low level of renewable energy potential
- technology still at nascent stage & lack of human resource etc

Thus, the energy transition brings both prospects & challenges for these states.

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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

Temperature & precipitation plays a crucial role in the terrestrial ecosystem and shape the properties of soils.

⇒ Temperature & precipitation - determining soil properties

(1) Temperature & precipitation impacts weathering of rocks, which is the essential process in formation of edaphic properties such as soil.

(2) Initiates chemical process of soil formation

(e.g) Poor humus of soil in equatorial region due to quick bacterial action of high precipitation & rainfall

(3) Different soil such as red soil, alluvial soils, black soils etc are decided based on varying temperature & precipitation.

(e.g) Areas recieving >200cm have red & yellow soils.

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(4) High temperature, humidity and high precipitation decides the acidity/alkanity of soils.

(e.g) Laterite soil found in high temperature & high rainfall regions.

(5) They decide the soil genesis and soil profile

(e.g) temperature & precipitation causing physical, chemical & biological weathering of rocks.

Other factors of soil properties

- Climate of the region and vegitation also plays crucial role
- biological factor apart from temperature & precipitation decides soil properties
- Time is also another crucial factor (Zonal & Azonal soils)

Therefore, while temperature & precipitation plays crucial role, they are not the only deciding factor.

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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

The intensity and frequency of cyclones have increased over recent years in Arabian sea, compared to Bay of Bengal

⇒ Severe & intense cyclones in Arabian sea - Reasons

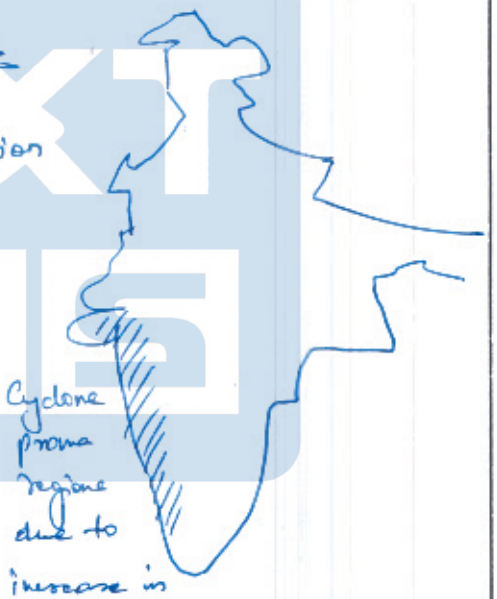
(1) Rise in Sea-surface temperature in the region, giving pre-condition to formation of cyclone (>27°C)

(2) Arabian Sea is enclosed on 3 sides, except the southern part.

(3) Less influx of rivers, freshwater in the region. Arabian sea

(4) El-Nino impact causing warming of SOMALI CURRENT and being driven into Arabian Sea.

(e.g Recent cyclones like Okchi, Tauktae.



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(5) Intensity & frequency w.r.t. to Bay of Bengal have reduced from 2.5 to 1.7 over the last decades.

(6) Recurving of tropical cyclones to the Arabian Sea and hitting the west coast.

e.g. Recent cyclone of Vayu, Tauktae etc

(7) Anthropogenic factors - such as increase maritime trade leaving carbon footprint and warming of the region.

Remedies

- Implementation of NDMA guidelines such as capacity building, awareness
- Increase weather forecasting & advanced information dissemination
- Coordination between countries of the Arabian sea (relief & rescue).

In the years to come, Arabian sea will witnessed more cyclones and need of the hour is to be prepared beforehand (proactive disaster management)

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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 often described as Unity in Diversity and that is true as far as cultural dimension is concerned.

⇒ Cultural distinctiveness of Southern States

(1) Different race compared to rest of India (ethnicity)

(e.g) Dravidian race as compared to Aryan, Mongoloids

(2) Distinct language and uniqueness, recognised in the classical Language

(e.g) Malayalam, Kannada, Telugu etc

(3) Religion & cultural wise, distinct art and temple architecture.

(e.g) Prevalence of Dravidian architecture (religious, educational & cultural centres).

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(4) Unique festivals and socio-cultural practices

(e.g) Onam, Jalikattu practices prevalent in Southern States.

(5) Distinct climate and topography, generating distinct cultural identity.

(e.g) Prevalence of tropical climate, less diurnal range reflected in their cultural diversity.

Similarities with rest of India

→ reinforces the concept of Mosaic Model of diversity (mix of several culture)

→ geographical similarities (e.g. Monsoonal influences)

→ similar constitution, thus together bound by similar values & goals.

Southern states, therefore, are unique in their own way and reinforces the idea of India's national integration. 4

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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.

According to Malthus, population growth and poverty are very much interlinked and interconnected.

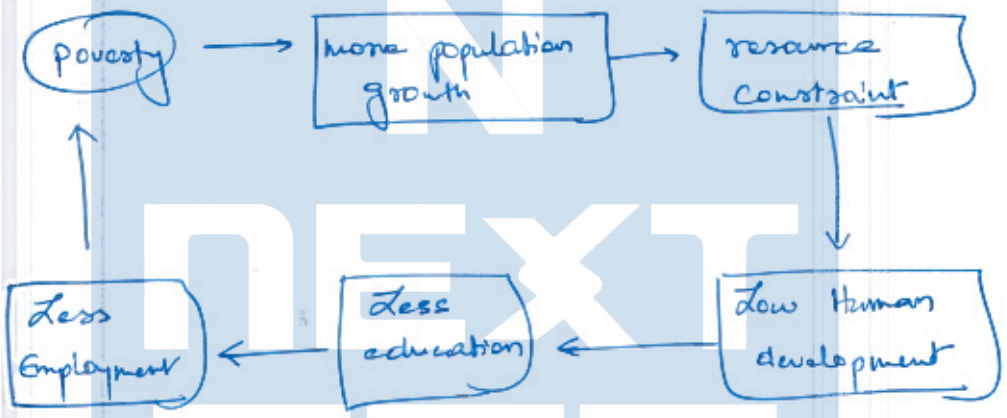


fig. Vicious cycle of poverty & pop^{n}. growth

⇒ Relation between poverty and population growth

(1) Poverty contributes to less human development (education, living standard) and hence less investment for socio-economic development.

(2) Less awareness of family planning → less use of contraceptives and lack of family planning.

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(3) More population growth creates resource constraint leading to decreased human development.

(E.g) Issue of unemployment prevalent in high population growth countries of Africa [decadal growth - 3.7 (TFR)]

(4) Poverty & population growth also leads to increased squatter settlement, deprivation of basic amenities in urban areas.

(E.g) Mumbai Dharavi slum settlement.

Way forward

→ promote family planning according to National Popn. Policy 2000

→ Poverty
- → PMGKY
- → ICDS, MDM schemes
- → MNREGA – rural employment
- → Nutritional aspects – PDS, NFS Act 2013, PM Shree Anna etc

To break the vicious cycle, these two key problem is necessary to achieve UN SDGs 1, 2, 3, 4 etc.

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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.

In the wake of globalisation, internationalization of education becomes necessary to foster cultural exchange and cross-fertilization of ideas.

Rich heritage of internationalization of education
- → Nalanda University (internationally renowned)
- → Vikramshila University (one of reputed institution in ancient times)

⇒ Push for internationalization of education – impact on society & cultural exchange :

(1) Exchange of ideas and promotion of India's Soft power.

(e.g) Buddha's idea through Nalanda University with Asian countries.

(2) Address the shortage of faculties in Indian universities by bring in faculty from various

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parts of the world.

(3) Exchange of cultural idea and promoting Vaishudheva Kutumbakkam.

(eg) Indian Cultural Centre Exchange - Ministry of External Affairs.

(4) Cross-fertilization of ideas - positive impact on society - shedding ignorance, promoting tolerance Contributing to harmony & social capital.

Challenges
- Outdated educational curriculum in India
- Focus more on diaspora, less on other regions
- Lack of budgetary allocation (just 3% of GDP)

- The need of the hour is to enhance budgetary allocation (Kothari Commission & NEP 2020) to 6%

so that internationalization of education will have positive impact -//

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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

Gandhara, Mathura & Amravati were distinct school of art present in various parts of India

⇒ Differences between Gandhara & Mathura Art

Gandhara	Mathura
→ Influence of Greece & Roman art. (eg) Humanified form of sculptures.	→ Indigenous form of School of Art
→ Prevalent in North west part of the country	→ Prevalent in Indo-Gangetic part of the country
→ Use of different element of Sculptures & non-presence of Yakshas & Yakshis.	→ Use of monolithic sculptures & presence of Yakshas & Yakshis

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Influence on Amaravati school

↳ Amaravati school adopted both form of school of Art and made it their own.

↳ Prevalent in the Southern part of India around the Krishna Godavari Basin.

↳ Purely indigenous form of school of Art built by the Pallavas & Cholas.

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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 started in the mid-17th century and had far reaching impact not only in England but other parts as well.

⇒ England-IR transforming economic landscape

(1) Promoted Rapid industrialisation, thus giving impetus to economic growth & development in England.

(2) Increased employment opportunities, thus creates huge prospect for economic transformation

(3) Creation of Haves-Havenots leading to inter-personal & inter-regional disparities

(4) Invention of machinery, Steam Engine, Spinning Jenny etc Setting the stage for economic landscape transformation.

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⇒ Far reaching social - cultural impact

(1) Social division based on class - who owns unit of production and who didn't own - social disparities.

(2) Increasing influx to urban areas from rural regions (migration & social assimilation, cultural assimilation too.)

(3) Exploitation of labour & worker, unhealthy working conditions, low paying leading to increased trouble b/w employers & employees.

(4) Rapid industrialisation - change from rural economy to urban economy.

(5) Adoption of scientific & modernistic view & cultural transformation of the people.

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(6). Spread of IR to other parts of the world later like Italy, Germany etc.

(7) Colonialisation – due to demand for raw material, labour etc.

Thus, IR in England changed the economic, social & cultural landscape around the world.

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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.

The social reform and ideological struggle were conditioned by colonial presence but not created by it.

⇒ Social reform & ideological struggle in the 19th century

(1) Challenged social evils and unnecessary rituals and religious doctrines.

e.g. Brahmo Samaj → preached monotheism and rational thinking by RR Roy.

(2) Against discrimination meted out to women

e.g. Practice of Sati was challenged by Raja Ram Mohan Roy eventually leading to its abolishment in 1829.

Candidates must not write on this margin

③ Preached fraternity and brotherhood, respect for all religion, against Brahmanical domination

(eg) By Shri Narayan Guru.

"One God, One religion, One humanity"

⇒ Emergence of distinct cultural identity & national consciousness:

① Adoption of both modern & traditional (amalgamation) of ideas. Neither a rejection nor a total break emphasize.

② Against discrimination of lower caste, thus promoting social philosophy of national consciousness

③ Realisation that colonial presence had led to degeneration of cultural identity, hence promotion and revivalism of common identity.

(e.g) Dayanand Saraswati - Arya Samaj.

Candidates must not write on this margin

(4) Colonial hegemony imparted absentee sovereignty thus ideas of people from different parts got linked together → promoting nationalist ideas.

(5) Challenging Brahmanical & upper caste domination and promotion of egalitarian values.

Thus, the 19th century socio-religious movement had distinct impact.

Candidates must not write on this margin

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 means reversal of the Normal Lapse Rate of 6.5°C/km in the atmosphere.

⇒ Impact on atmospheric conditions

① Reversal of Normal Lapse Rate leads to concentration of atmospheric phenomena on the lower atmosphere.

(e.g) Replacement of atmospheric condition in mountain valleys.

② It can lead to advectional temperature inversion creating airmasses from the source/underlying regions. (e.g) Creation of warm atmospheric airmass.

⇒ Implications for local weather patterns & ~~atmospheric~~

① Creation of atmospheric instability



→ Thus the local weather pattern undergoes subsequent changes

Fig. Temperature inversion in mountain valley.

Candidates must not write on this margin

② Negatively impact vegetation of the region

(e.g) Presence of cold airmass in lower reaches can lead to devegetation of the area.

③ The night temperature of the region, due to inflow of cold airmass in contact with the land & presence of warmer air above, can increase.

④ The frontal inversion of temperature in mid-latitude region creates temperate cyclones.

(e.g) Western disturbance witnessed in NW India is due to frontal temperature inversion.

⇒ Implications on air pollution levels

① Fogginess in the lower atmosphere impacts the air quality.

(e.g) Delhi winter air pollution due to smog is one example.

Candidates must not write on this margin

(2) The Concentration of Particulate matters such as PM 2.5 & PM 10 can increase, due to temperature inversion.

(3) Due to haziness & mist in the region, visibility reduces which have significant impact on vegetation of the region.

(4) Can lead to de-habitation of flora & fauna

(5) Temperature inversion due to winds like ~~Snow~~ Blizzards/~~Cater/Doctor~~ of America is beneficial for air quality.

Thus, temperature inversion is a unique geographical phenomena.

Candidates must not write on this margin

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 are an important ecotone which marks transition from terrestrial to aquatic ecosystem.

⇒ Geographical factors responsible for it in India:

(1) Tropical & sub-tropical climate (as highlighted by Koeppen) provides conducive condition for mangrove.

(2) Presence of extensive coastline (≥ 7500 km) thus, provides the ecotone for mangrove.

(3) Discharge of freshriver waters into oceans, creating wetlands, deltas at the mouth.

(Eg) Mangrove in Sunderbans.

(4) Adequate temperature & precipitation in the sub-continent for growth of mangrove vegetation.

Candidates must not write on this margin

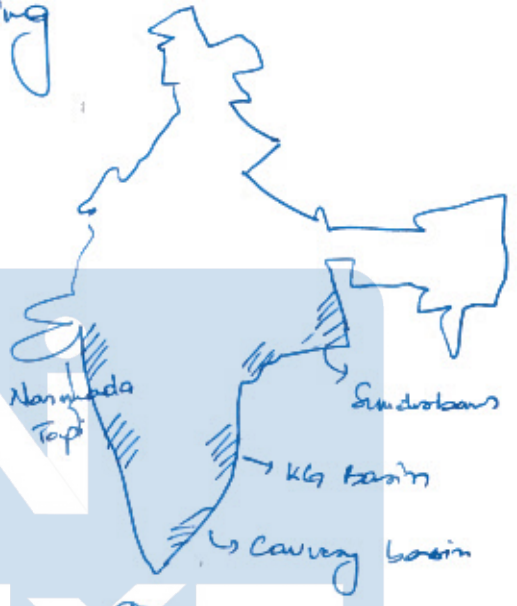
Threat due to climate change

(1) Rise in Sea level inundating mangrove vegetation.

(e.g) Sundarban mangrove have witnessed increased inundation.

(2) Change in hydrological Cycle, less flow of rivers.

(e.g) Decreased flow of rivers water in the Gangetic plains.



(fig) Mangrove regions in India

(3) Floods & Droughts due to climate change creating stress for vegetation.

(4) Increased intensity & frequency of cyclones

(e.g) Arabian Sea, Bay of Bengal → threat to mangrove vegetation, Tsunami 2004 → mangrove destruction in Andaman & Nicobar Island.

Candidates must not write on this margin

Anthropogenic factors
- → deforestation
- → land use changes pattern
- → population pressure
- → unmindful exploitation.

Steps taken
- → IUCN led Mangrove Alliance
- → Protection of wetland in mangrove vegetation (eg. PM Amrit Dharohar of Budget 2023)
- → Cooperation with other countries such as Bangladesh for conservation.

Mangrove are important shelter & habitat for all life & non-living being and therefore needs urgent steps for its conservation.

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

Sugar industry contributes effectively to economic growth and industrialization of the country and therefore holds significance.

⇒ Factors influencing sugar industry location

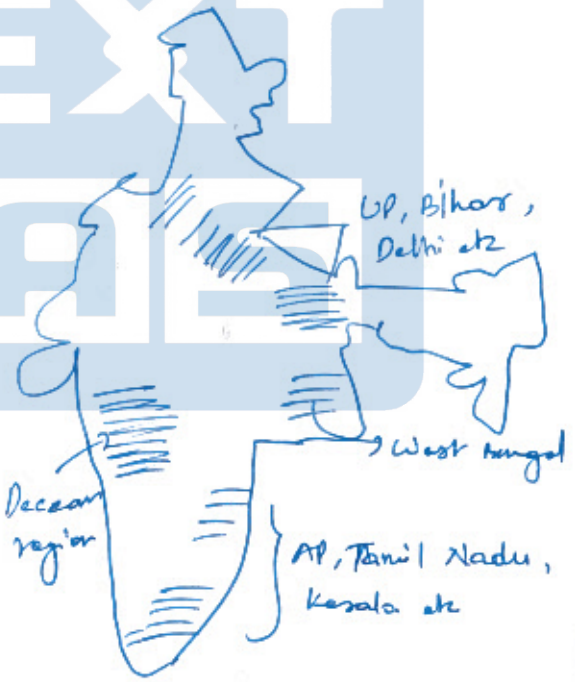
(A) Geographical factors

↳ Availability of raw materials – sugar cane

↳ Climate & weather (humid & moderate rainfall) necessary for sugar industry

↳ Availability of water (sugarcane - water intensive crop)

↳ Edaphic factor (soil), alluvial soil, loamy soil etc preferred.



(Fig) Major sugar producing states

Candidates must not write on this margin

(3) Economic factors

→ Availability of connectivity & transportation (sugarcane - weight loosing)

→ Cheap labour force for the industry

→ Technology - equipments & machinery

→ Access to Capital is one of key factor

→ Nearness to market & raw-material

⇒ Contribution to industry growth in India & other parts of the world :

(1) Foreign exchange - through import & export of sugar, earning foreign exchange & economic growth of industry.

(2) India - 2nd leading producer of sugar, thus high prospects for investment and growth.

Candidates must not write on this margin

(3) Raw material for other industries (e.g) Biofuel thus contributing to Bio economy.

(4) Contributes to agglomerative benefit for industries, reinforce Growth pole & Growth Theory concept

(5) Employment opportunities in the industry. Its growth is labour intensive — thus can address jobless growth.

Challenges in India
- → less export due to high consumption
- → Raw material availability affected due to climate change
- → Old industry — technological backwardness
- → highly water intensive → water crisis

The sugar industry, thus, plays a crucial role not only in India but also different parts of the 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 is practice in regions where rainfall is below 75 cm. They have high potential for addressing agricultural distress.

⇒ Key strategies used in dryland farming

(1) Mulching of field with straws to reduce soil moisture loss

(2) Pulverisation of soils repeatedly so as to reduce evapotranspiration.

(3) Conservative agriculture practices is being followed as rainfall is less than 75 cm.

(4) In sync with Natural farming.

Minimal anthropogenic intervention needed.



Candidates must not write on this margin

(5) Practice of drip irrigation strategies wherever possible to reduce water wastage & increase efficiency.

(6) Contour bunding along slopes to conserve rainfall and increase percolation of water.

⇒ Need for promoting dryland farming in India

(1) Contributes nearly 40% of all agricultural produce in India

(2) Nearly 20–30% of pulses comes from the dryland farming.

(3) Irrigation cover is less - only 40% in India, thus the region have high prospects.

(4) Cultivation of millets - both major & minor millets possible (Nutritional Security)

(e.g. Jowar, Sorghum, Bajra crops etc.

Candidates must not write on this margin

(5) Dominance of small & marginal farmers in India (86%), thus requires less input and capital for its cultivation.

(6) Can contribute to Animal Husbandary for livestocks such as food & fodder, enhancing farmer's income.

Steps taken by Govt

- PM Shree Anna - cultivation of millets in dryland farming
- PM KISAN - credit for farmers
- Promotion of Contract farming to address farmers issue in that region.

Therefore, the dryland farming have huge potential to meet our food & nutritional security and can lead to doubling of farmer's income.

Candidates must not write on this margin

18. समकालीन महिला आंदोलन ने पारंपरिक पद्धतियों से परे विभिन्न 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.

The Contemporary women's movement have had a liberating effect and ensure their emancipation in many ways.

⇒ Diverse approaches beyond traditional methods

(1) Women development to women led development

(e.g) SHGs have ensured women lead at the forefront

(2) Breaks patriarchal norms and gender stereotype

(e.g) Initiative of SEWA NGO – empowerment of women.

(3) Participate actively, rather than passively in environmental movements.

(e.g) Chipko movement, Appiko Movement for environmental conservation

Candidates must not write on this margin

(4) Extend to digital domain of women repression.

e.g #MeToo Movement witnessed over recent times.

(5) Assume leadership role in socio, eco. & political domain.

Eg President Murmu – role model for women and women movement.

(6) Against social evils & superstitious ideas & practices

e.g Sabarimala Case (women voiced their concerns actively).

⇒ Unique contribution of contemporary women movement

(1) Against sexual abuse & harassment at workplace

e.g SHE Act 2012, (in accordance with Vishaka guidelines)

(2) Environmental movement and climate change

e.g Greatha Gutherberg, fight for climate change

Candidates must not write on this margin

(3) Using digital technology proactively to raise their voices.

e.g. #MeToo Movement created ripple effect.

(4) Educational domain — STEM (science, tech, engineering & maths) to not only increase women literacy but also diversified presence).

Challenges
- → patriarchal society & mindset
- → low political participation (MPs only 9% women), Sarpanch Pati practice
- → Online harassment, bullying etc.
- → Low literacy compared to male (65% for women, men – 82%)
- → Gender Gap (WEF report)

Addressing these challenges is necessary to ensure UN SDG 5 and all round participation of women.

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.

The eradication of social evils in Indian society through forces of modernisation has had both possible & negative impacts.

⇒ Forces of modernisation threatening cultural values & ethos :

(A) In agreement with the view

(1) Erosion of cultural identity by promoting Western culture & identity → leading to cultural identity crisis.

(2) Ashramisation of Tribals (Xaxa Committee), therefore tribals are increasing losing there culture & ethos.

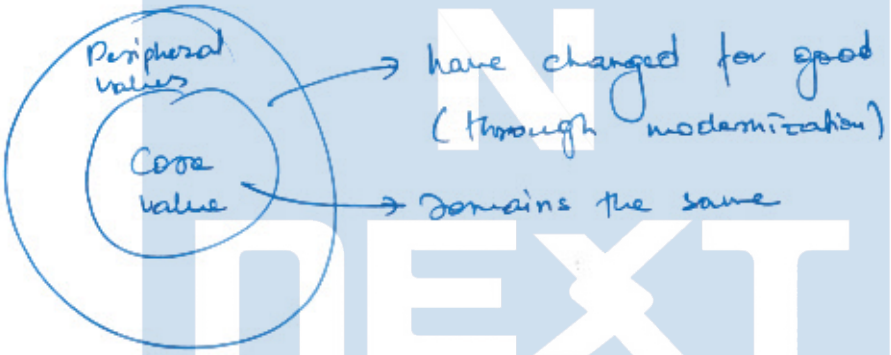
(3) Development induced projects – displacement of people from their place leading to assimilation with majoritarian culture – Xenophobia.

Candidates must not write on this margin

(4) Forces of modernization for eradication of social evil have led to loss of roots of cultural values & ethos → erosion of unity in diversity

(B) In disagreement with the view

(1)



e.g Belief in superstition no longer exist, promotes rationalism & logical reasoning (peripheral value)

(2) Modernization has enabled us to preserve our cultural values & ethos and even its promotion

e.g Soft power diplomacy.

(3) Modernization has shed our belief on rituals and unscientific doctrines.

e.g Burrying of infant with dead mother among Khasis — no longer practiced.

Candidates must not write on this margin

(4) It has also led to discovery and overcoming of our own ignorance, promote tolerance and respect for other cultural values & ethos.

(e.g) Vaishudeva Kutumbekam concept.

Thus, solution lies in effective assimilation of forces of modernisation for the greater good.

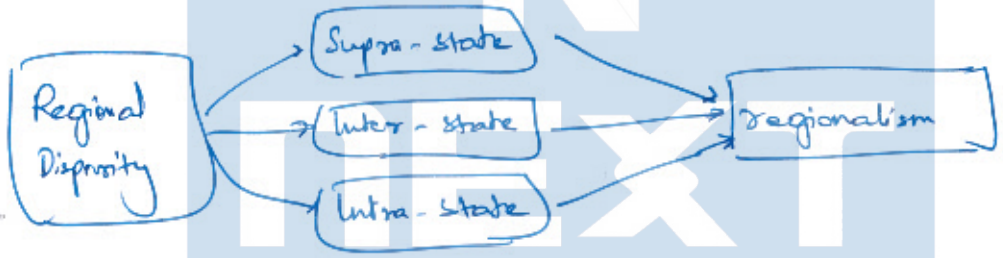
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20. भारत में राज्यों के संदर्भ में क्षेत्रीय विषमता और क्षेत्रीयता की भावनाओं के बीच संबंधों का मूल्यांकन कीजिए। क्या क्षेत्रवाद राष्ट्रवाद के विचार का विरोधी है? (250 शब्दों में उत्तर दीजिए) 15 अंक

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 is a political attribute where there is a strong attachment with one's region, culture and ideas.

⇒ Relationship between regional disparity & regionalism



(1) Relative disparity & deprivation

(eg) Vidharbha, Marathwada region vis-a-vis other parts of Maharashtra (Inter-state) in terms of socio-economic & political development.

(2) Ethnicity and Racism (Supra-state)

(e.g) NE States vis-a-vis other parts of India due to racial abuse and socio-eco. underdevelopment.

Candidates must not write on this margin

(3) Regional disparity in terms of Language, culture etc (both inter & intra-state)

(eg) Southern States vis-a-vis others

Demand for Gorkhaland from west Bengal.

(4) Lack of industrialisation and economic development

(eg) Jharkhand formation from Bihar.

⇒ Is regionalism antagonistic to nationalism idea

Yes

→ threat to national integration (tendency to develop sub-nationalistic idea) (e.g. NSCN-IM)

→ Can lead to social disharmony, vote bank politics and social polarisation

→ deprivation vis-a-vis others leads to discontentment and sense of inferiority

→ Against constitutional ideals

(eg) Preamble - fraternity.

Candidates must not write on this margin

No

→ Regionalism in itself not bad, only excessive attachment is detrimental

→ promotes balanced regional development by bringing their concerns

→ Demand for regionalism not necessarily secessionist & against nationalism idea

(e.g Gorkhaland)

→ Reinforces idea of Unity in Diversity through promotion of regionalism.

The need is to address these concerns with the constitutional limit and promote the idea of national integration (e.g through National Integration Council).

Candidates must not write on this margin

Space for Rough Work

NEXT IAS