Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

NEXT IAS

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(To be filled by candidate)

Name of Candidate : Jaswant

NEXT IAS Roll No.: MT23FLTRA027 Date of Examination : 20/08/23

Exam Centre : Old Rajinder Nagar ☑ Bhopal ☐ Online ☐

Test Code : _____ Program : FLT ☐ FLT+ ☐

MAIN TEST SERIES 2023
(FULL LENGTH TEST-5)

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. : .....

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

(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

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

MACRO COMMENTS

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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.

Since the Indus Valley civilization (2500 BC), India has traded with many countries and regions through continental and maritime trade routes.

Trade Routes and Cultural Exchange

1) Mesopotamian civilization ~~trade~~ with Indus valley
   - ↳ use of ports lothal
   - ↳ New seals, scripts came into India
   - ↳ New cultural traditions and economic activities

2) Indo-Bactrian kingdoms during Mauryan Period
   - ↳ Theatre tradition
   - ↳ Horashastra (Astrology)
   - ↳ clothing changes
   - ↳ construction of pillars
   - ↳ Numismatic (coins) making

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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3) Persian trade via North-western frontiers	↳ Development of Language, scripts (Brahmi, persian) ↳ New cultural schools (Gandhara), ↳ construction of pillars
4) Roman trade during Sangam Age	↳ Development in cotton textile, ship building ↳ Translation of literature texts (Tiruvalluvar Kurals)
5) South-East-Asian Countries trade	↳ Hindu temple construction in Cambodia (Bhkavat) ↳ Ramayana based theatre in Thailand

The constant exchange that started in ancient India continued in medieval and modern India and influenced all sectors in society.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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.

The failure of Cripps Mission in 1942, led to the initiation of Quit India movement, anchored by Indian National Congress

People's Movement across Class Divide

1) All sections of society participated in great numbers

2) Labour Unions initiated strikes in Industrial cities (Mumbai, Calcutta)

3) Peasant groups refused to pay rents and revenue

4) Big Industrialists (like Birla, Tata) through Bombay plan participated.

5) Movement spread to all geographical areas

6) Setting up of alternate Governments

(eg) Chittu Pandey Ballia, Jatiya Sarkar Midnapur.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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Women's leadership left a mark

1) Role of leaders like Usha Mehta, Aruna Asif Ali in leading movement after arrest of congress leaders.

2) Kanaklata Barua in Assam raised National flag.

3) Kamaladevi Chattopadhya role in cultural revival and mobilisation of women.

4) Sucheta Kriplani in designing pamphlets, map mobilization and generating awareness

Limitations of Movement

→ ① Communist, Hindu parties did not participate

→ ② Turned violent in many places

The movement woke up British from their slumber, and made them realise their days are limited.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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

When India became independent, poverty was at 60%, life expectancy 32 years and literacy was below 20%.

Remarkable Strides in Science and Technology
- (1) India Nuclear programme
- (2) Space and technology
  - (3) Aryabhatta satellite
- (3) Green Revolution
- (4) IT revolution (high service exports)
- (5) Advancement in fundamental Research.

Scientific development transitioned to path of modernity.

1) Promotion of scientific temperament.

2) Helped in enhancing quality of life of its citizens
   - (3) Food security post green revolution

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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3) IT industry provided many quality jobs to woman ⟶ Woman Empowerment

4) Development of industrial cities and fastened Urbanization process (eg Bokaro)

5) Created a cosmopolitan identity, raising above caste, creed and religion

6) ~~Promoted~~ Break away from caste-based occupation in rural area to factory-shop floor.

Challenges Remaining

1) Manual Scavenging still practiced

2) Female labourforce participation low.

3) Role of religion in society high.
(eg) ISRO scientists visiting temples before launch

Overall, the development has been positive, and enhanced India's position at world stage.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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 Ex-president APJ Abdul Kalam has termed 'river linking project' as a panacea for myriad water problems in India

Scope and potential of Interlinking to resolve water stress

1) Solves problem of plenty and deficit

(eg) Constructing canals to link flood prone areas to drought prone.

2) Increased access to irrigation sources

(eg) Ken-Betwa river project will provide irrigation for 10 million hectares.

3) meeting drinking and other water needs

(eg) Krishna-Godavari linking project to provide for 5 million people.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) Ensure consistency and reliability of supply of water.

Challenges in River Interlinking

1) Displacement of people and land acquisition

2) Loss of Biodiversity

(eg) Panna tiger reserve affected due to Ken-Betwa

3) Huge Economic and Capital cost

(eg) All projects require ₹5-6 Lakh crore

4) Climate change led variation in rivers; difficult to predict regular flow.

Way forward

1) Take a case by case approach

2) Nitin Shah Committee → Develop green-blue Infra
→ Rain water harvesting

3) Manage demand → Climate resilient Agriculture

SDG-6 calls for water security for all.

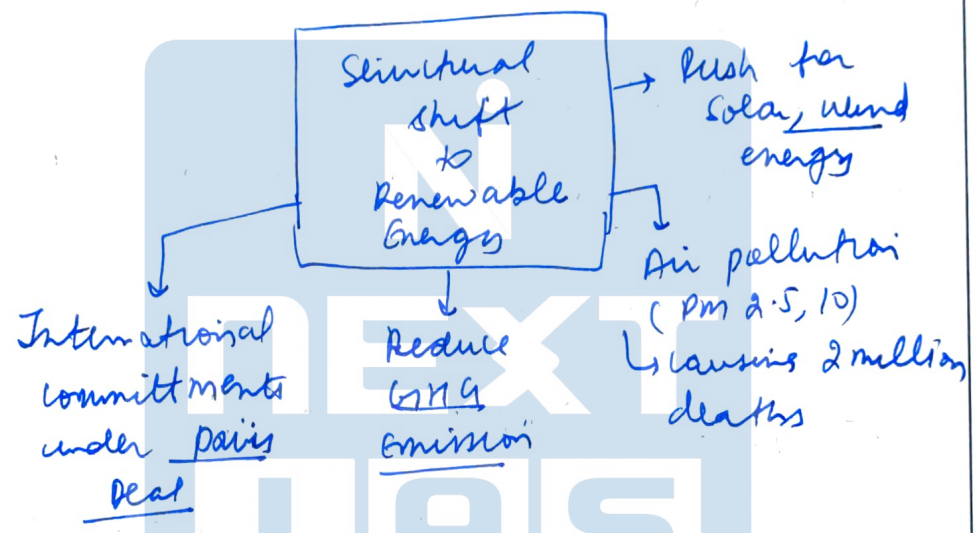
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5. कोयला आधारित विद्युत संयंत्रों से नवीकरणीय ऊर्जा उत्पादन की ओर गमन का संरचनात्मक परिवर्तन कोयला समृद्ध राज्यों में मानव विकास को कैसे प्रभावित करेगा? (150 शब्दों में उत्तर दीजिए) 10 अंक

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 with 9% of world coal reserves is 2nd largest producer in the world.



Transition Impact on Coal-Bearing States

1) Coal sector supports 40 lakh labour force with direct/indirect jobs.

2) Reduced growth potential of industrial cities like Bokaro, Bellari dependent on Coal

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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3) Interlinked to other industries like iron and steel, thermal plants etc

4) Coal Industry contributes to substantial freight share revenue of Railways.

5) Eastern India states (Jharkhand, Chattisgarh) hugely dependant on mining (coal)

6) Reduced government revenue led to lower social spending on health, education.

Need for Green and Inclusive Transition

1) Gradual phasing out of coal

2) Re-skilling and up-skilling of labor

3) Setting up new green industries
   (eg) Solar cell manufacturing

4) Provide transition grants to states

The energy security for all and inclusive development have to be taken care of in Coal transition.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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



Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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

Cyclones are atmospheric phenomena, involves rapid circulation of air around a low pressure centre.

Severe and Intense Cyclons : A regular phenomena in Arabian Sea

1) Rapid green house gas emissions (GHG) have increased the surface temperature of Arabian sea disproportionately
   (eg) Tauktae cyclone

2) Atmospheric phenomena like El-Nino and Souther Oscillation have ruptured the pressure equilibrium in Arabia sea
   (eg) Biparjoy cyclone affecting Gujarat

3) East flowing easterlies shift the cyclones originated in Bay of Bengal to Western Coast

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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in India

(eg) Yaas cyclone

The cyclones which used to be feature of Easter coast of India, have now starting affecting Western coast also.

Way forward

1) Building climate resilient infrastructure

2) Development of Early warning system, taking local weather details

3) Public Awareness and local capacity Building

4) Greater International collaboration with East Africa Nations

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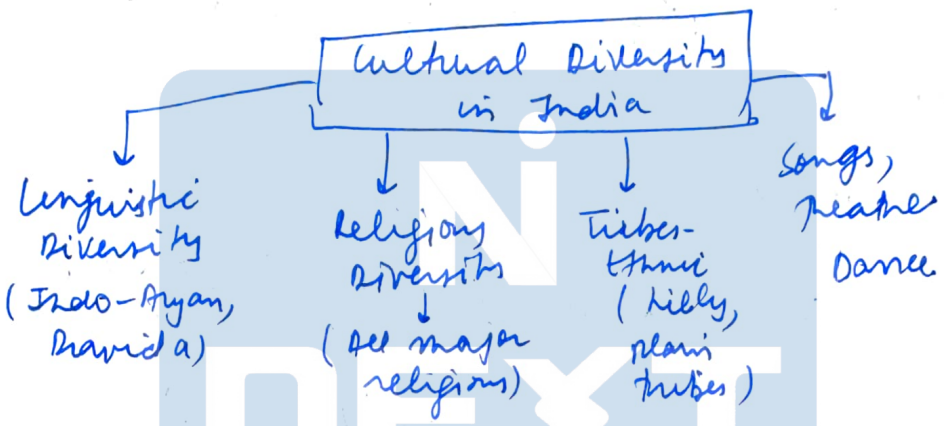
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8. भारत में सांस्कृतिक विविधता के संदर्भ में, क्या हम शेष भारत की तुलना में दक्षिणी राज्यों को विशिष्ट सांस्कृतिक इकाइयाँ मान सकते हैं? अपने दृष्टिकोण के औचित्य को सिद्ध कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

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.

Indian society since time immemorial has provided space to all types of cultures and traditions.



South India: A Distinct Cultural Unit

1) Dravidian languages like Tamil, Malyalam prevalent in society.

2) Food Habits (more preference to rice based dishes than wheat)

3) Clothing patterns (Veshti in Man, Saree in woman) while in North India Kurta-Pyjama and Salwar-Suit

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) Music and Dance

↳ Carnatic music in South India and Hindustani in North

5) Rich history of maritime trade with long coastal Boundary (more Industrialised)

6) Temple Architecture — Dravida (Brihadeshwara Temple) style in South while Nagara style in North India

Similarities

1) common religious traditions (Influence of Bhakti movement, Shaivism, Vaishnavism)

2) common constitutional practice and protection.

3) Festivals celebrated (Holi, Diwali, Eid etc) similar

The Indian society has unity in Diversity, protected by constitution, that contributes to Soft power.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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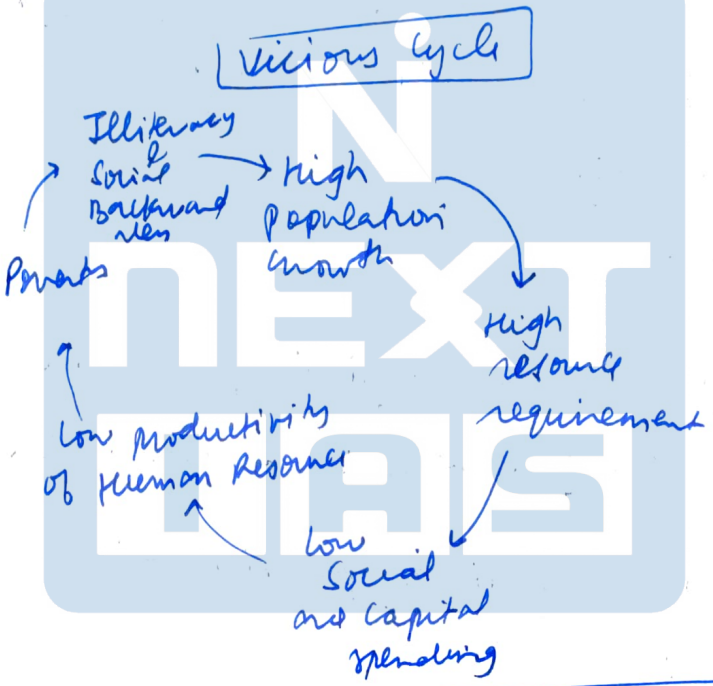
9. गरीबी और जनसंख्या वृद्धि एक दुष्चक्र में फँसी हुई है, जहाँ गरीबी व्यक्तियों की इस चक्र से मुक्त होने की क्षमता को सीमित करती है, जबकि जनसंख्या वृद्धि संसाधनों पर दबाव डालती है। विवेचन कीजिए।

(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.

Recently India has surpassed China to become the world's most populous country with 1.4 billion+ population.



Poverty Restricts Individual's abilities

1) Resource poverty prevents access to basic necessities (food, shelter)

2) Malnutrition stunts cognitive development, life long loss in productivity.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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3) Social and political poverty prevents full participation in governance.

4) Skill and education poverty → low quality jobs → Restricts social mobility.

Population Strains Resources

1) Subsidy Burden has crossed 2.5% of GDP in India

2) Administrative challenges (Law & order etc).

3) Jobless growth (Number of entrants > Number of Jobs created)

4) Restricts capital expenditure → long term growth affected.

Utilising Demographic Dividend : Way forward

1) Ensure basic needs are fulfilled

2) Woman Education and Empowerment → Reduce fertility Rates

3) Continuous upskilling and re-skilling to enhance productivity.

Population should been seen as a dividend and not deficit to attain $5 trillion economy goal.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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.

Internationalization of education implies greater exchange of students, increased collaboration between domestic and foreign universities.

Rich Heritage in Internationalization of Education

① Universities of Nalanda, Taxila world class education centres in Gupta period

② Monasteries of Vikramshila, Somnathpura during Pala rule

The New education policy (NEP, 2020) has strengthened the push for internationalization

1) Inviting Top global universities to set up campuses.

2) Incentives to IIT, IIMs to open off-shore campuses

3) Digital Education : collaboration for online courses, co-design and co-development

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Impact on Society and Cultural Exchange

1) Exposure to new cultural ideas and values
   (eg) #MeToo movement for gender justice
2) Development of new forms of environment ethics
   (eg) #Fridays for future movement against climate change
3) Co-development and collaborative research and development
   (eg) Vaccine manufacture, to enhance health outcomes
4) Diffusion and integration of new technologies like AI, Blockchain.
5) Cultural exchange with student visits, promotion of local culture.

Initiatives like Ek Bharat Shreshtha Bharat, Visit my Country etc can further enhance cultural exchange.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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 entry of Indo-Bactrian and Persian rulers influenced and gave rise to new schools of Art and culture.

Difference between Gandhara and Mathura Art

Gandhara	Mathura
1) Majorly influenced by Greek, Indo-Bactrian styles	Influenced by Central Asian and local cultures
2) Used greyish blue stone for architecture	2) Used Red sandstone
3) Buddha Represented in human form with Hellenistic features resembling Greek Gods (Appolo)	3) Buddha sculpture is mostly in seated position, with wavy hair.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) Patronized by Indo-Bactrian rulers

5) Religious Influence only Buddhism

(eg) Bamiyan Buddha.

4) Kushan Kingdom (Kanishka) promoted Mathura School.

5) Along with Buddhism, Hindu architecture also

Influced Amravati School

1) located in present State of Andhra Pradesh.

2) Patronized by Satvahana Kingdom.



3) use of white sandstone for architecture

4) panels inspired from Jataka stories of Buddha from previous Birth.

5) Human form of Buddha representation learnt from Gandhara and Mathura Schools.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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The three schools of ancient India art and culture influenced the temple architecture, sculpture and painting styles in Gupta and Chola kingdoms.

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Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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

The Industrial revolution happened in England in mid 18th century

Transformed Economic Landscape

1) Invention of steam Engine revolutionized transportation networks → promoted long distance trade

2) Spinning Jenny transformed the cotton textile industry.
   - Lancashire and Manchester became ~~textile~~ cities/hubs for the world.

3) Provision for easier electricity production Enhanced productivity and efficiency in other industries

4) Began the age of mercantilism and exploration of new markets and regions for raw materials.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

Far-reaching Social and Cultural Impacts

1) Impact on Woman

- Greater participation in economic sphere
  - (eg) opening of textile units in all parts of country
- Shifting to urban areas → moved away from family → greater choice and control over marriage.

2) Large scale migration from rural hinterlands to cities → Development of slums.

3) Increased inequality in society

4) Exploitation of labor without effective regulations

5) Absence of a robust social security network led to further deprivation

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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of marginalized.

6) Environment damage with blind exploitation of forests, rivers.

7) Reduced influence of religion and church in society.

8) Greater migration both domestic and international → exchange of new language and culture.

9) Inspired and inspired revolution in other parts of Europe and America.

The industrial revolution in England built the base for colonialization and imperialist endeavours of British empire.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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

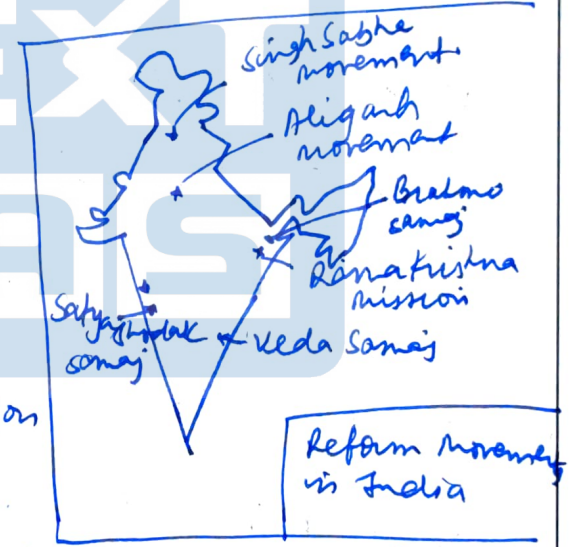
How did the social reform and ideological struggle against the backward traditional elements and hegemony of colonial culture in the nineteenth century influence the emergence of a distinct cultural identity and national consciousness?
(Answer in 250 words) 15 marks.

The 19th century India suffered from various social evils like Sati, female foeticide and cultural imperialism of British Empire.

Social Reform and Ideological Struggle

1) The formation of Atmiya Sabha (1814) in Calcutta led to Anti-Sati movement

(eg) 1829 Sati Regulation



2) Caste discrimination was fought through efforts of Satya Shodak samaj, created by Mahatma Phule.

3) Issues of ritualisation of religion and purdah system, "going back to Vedas"

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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raised by Arya Samaj (1875).

4) In Punjab, Sikh Sabha movement initated reform of cultural and social practices incompatible to Nanak's teaching.

5) Aligarh movement → modernise Islam practice, scientific temper.

6) Revivalism of glorious Ancient Indian culture to challenge British hegemony.

(eg) Gupta empire as golden period'

7) Increased translation and dissemination of ancient sanskrit texts

(eg) Upanishad, Gita etc.

Emergence of District Cultural Identity

1) Built self confidence and made people proud of rich India's past.

2) Exposed exploitative colonial policies

(eg) Drain Theory by Naoroji

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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3) Use of press, literature to build a pan-Indian Identity by projecting British as common enemy.

4) Celebration of composite culture of Ganga-Jamuni Tehzeeb.

5) Political awareness and participation increased with formation of Indian National congress.

Limitations of Social and Ideological Struggle

1) Restricted in Social base (Upper caste, English speaking)

2) Partioning History (Ancient → Hindu, Medieval → Muslim) sowed seeds of communalism

3) Major social reform movements led by men only.

The social movements created consciousness and awareness on which Gandhi with congress built a national movement in 20th century.

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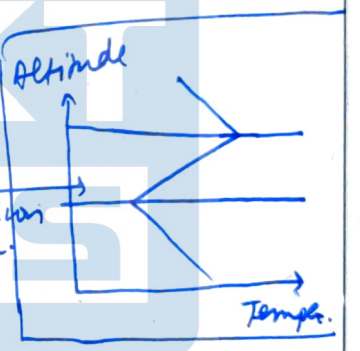
14. तापमान व्युत्क्रमण वायुमंडलीय दशाओं को कैसे प्रभावित करता है और स्थानीय मौसम प्रतिरूप और वायु प्रदूषण स्तरों के लिए इसके क्या निहितार्थ हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

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 of temperature with the increase of altitude. It is opposite of Normal lapse rate.

Causes of Temperature Inversion

1) Long wintery nights causing loss of surface insolation



2) Cloudless nights for faster loss of heat

3) Dry surface wind

Temperature Inversion Affect Atmospheric Condition

1) Reduces possibility of convection rainfall as inversion layer prevents upward movement of clouds.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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2) Leads to foggy conditions, As inversion layer prevents free movement of air and moisture.

3) The temperature at valley areas drops drastically in night

4) Presence of suspended particles at hill areas in the air.

Implications for local weather Patterns and Air pollution

a)

1) Foggy conditions lead to development of Smog in cities

2) Air drainage along slopes lead to frosting of crops in lower areas.

3) Reduced visibility affects transport and communication systems.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) Inversion layer also affects formation and movement of air mass and air fronts → increases volatility in atmosphere.

with profound implications on human economic activities, need to develop a multi-dimensional solution to mitigate effects of temperature inversion.

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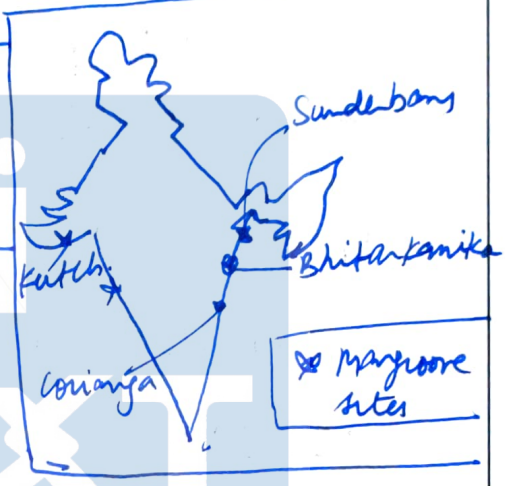
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15. भारत में मैंग्रोव वनस्पति के लिए कौन से भौगोलिक कारक उत्तरदायी हैं? जलवायु परिवर्तन भारत में मैंग्रोव वनस्पति के लिए किस प्रकार खतरा उत्पन्न करता है? (250 शब्दों में उत्तर दीजिए) 15 अंक

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

Mangroves are salt-tolerant species of trees found in coastal areas of India.

Geographical factors responsible for mangroves



1) Present as a ecotone zone between marine and continental ecosystems.

2) Located at intertidal zones between river deltas and marine areas

3) Require proper salinity balance in clear marine water

4) Temperature has be between 18° - 30° + C (tropical regions of the world)

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5) Access to insolation for major part of the year.

Climate change : Threat to Mangroves

1) Enhanced occurences of extreme weather events

(eg) Cyclones violently destroys mangroove ecosystem.

2) Variability in rainfall affects hydrological flow of rivers and contribute to salinity dis-balance.

3) Increase in both land temperature and sea-surface temperature negatively effects the mangrove growth.

4) High temperature creates condition for pest attack and invasion of invasive species

5) Ocean Acidification ~~and~~ impacts salinity balance

6) Other Anthropogenic factors like

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

surface waste runoff, unplanned urbanisation, conversion to rice fields, and others have led to huge loss of mangroves (30% reduction in area in last 100 years).

Way forward

1) Adopt climate resilient agriculture practices
2) Rapid Afforestation of local species
3) Proper treatment of waste (urban + Industrial)
4) Promotion of sustainable fisheries culture

Mangroves provide carbon sink, livelihood, biodiversity promotion. Needs to be preserved and promoted.

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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 has emerged as the largest producer of sugarcane and second largest producer of suga in the world.

Geographical factors Affecting Sugar Industry

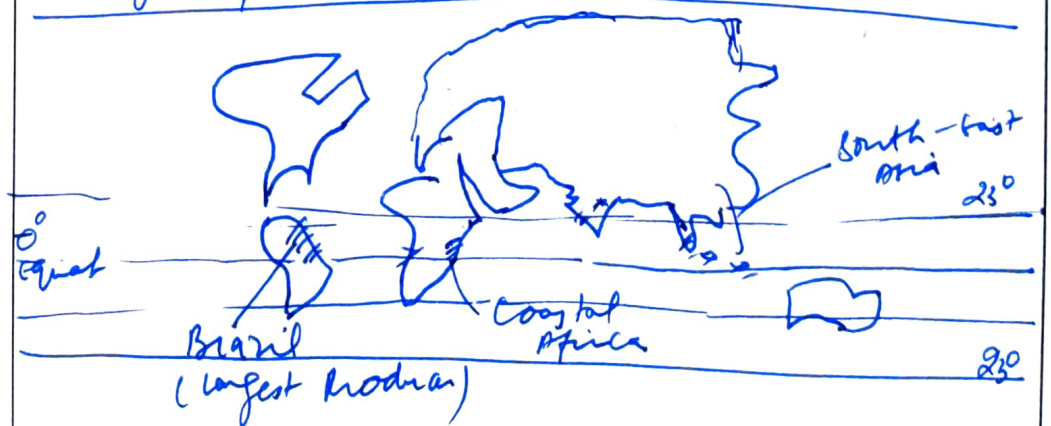
1) Presence of nutrient rich soil

(a) Alluvial in North India, Black soil in West India.



2) Access to moderate to high rainfall (100-200cm), with continuous irrigation support

3) Temperature and climatic conditions of tropical areas



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Economic factors

1) Capital Intensive industry, require affordable credit (eg Mumbai capital supports Maharashtra)

2) Efficient logistic and transport system to move weight loosing raw material.

3) Access to new markets, supply and export of sugar.

4) Ease of doing business → easier land Acquisition
   - Light Government Regulation
   - Easier & simple Labor Laws

5) Semi-skilled labor supply at affordable rates. (eg sugar industry in UP.)

6) Technology integration to enhance efficiency.

7) Location along other Industries
   (eg) Biofuel production

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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The sugar industry has also issues like environment pollution, reduced water level, high unpaid dues to farmers. These need to be resolved for sustainable sugar Industry.

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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 refers to cultivation of crops in areas with reduced water availability and scarcity.

Key Strategies used

1) Precision agriculture techniques to reduce leakage and enhance efficiency
   (eg) use of nano-urea.

2) Sprinkle and micro-irrigation techniques to mitigate water-stress.

3) Growing of climate-resilient crops to reduce risk and maximize productivity
   (eg) millets like bajra in Rajasthan

4) Crop Rotation technique
   (eg) grow pulses for nitrogen fixation.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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5) Mulching of soil to reduce soil erosion.

6) Integrated farming with social forestry

7) Livestock and animal husbandary, honey production to support farmers.

8) Shelter Belts of trees to prevent wind led soil erosion.

Need to promote Dryland farming

1) 30-% of land area degraded in India

2) 52-1. of net cultivable area in India is rain fed.

3) **Environment Sustainability**
   - → Falling water levels in Haryana, Punjab
   - → Salinization of soil

4) Supports small and marginal farmers

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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5) Promotes food security and nutritional security

(eg) cultivation of millets

6) Resuscitate and revitalize soil fertility through zero-budget natural farming

Way forward

1) Increase farmer awareness about technologies ((eg) DD Kisan channel)

2) Build forward-backward linkages

Dry land farming can help in doubling farming income and strengthen food security.

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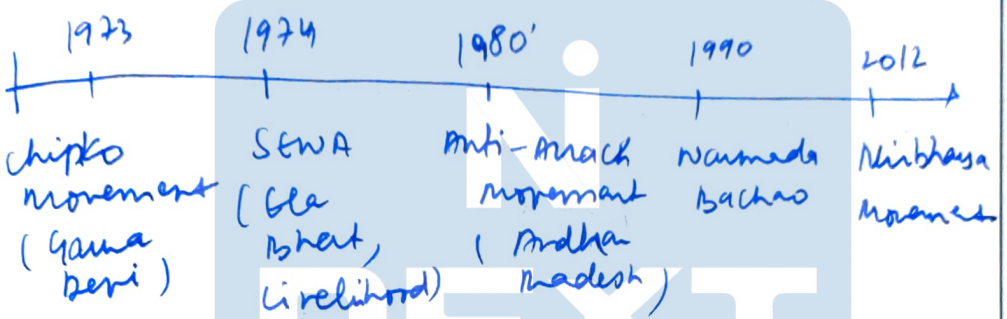
18. समकालीन महिला आंदोलन ने पारंपरिक पद्धतियों से परे विविध दृष्टिकोणों को कैसे सम्मिलित किया है? साथ ही, समकालीन महिला आंदोलन के अनूठे योगदान और चुनौतियों पर भी प्रकाश डालिए।

(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.

Post Independence Indian history has a rich legacy of woman movements in diverse spheres.



Contemporary movements with Diverse Approaches

1) Greater use of social media tools to mobilise and raise awareness (eg) #MeToo movement

2) Raising new issues of criminalise marital rape, same-sex marriage etc.

3) Greater International collaboration, with exchange of ideas and strategies.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) use of political parties to push for women agenda

(eg) BJP women wing pushed for Triple-Talaq abolition.

Unique contribution of contemporary movements

1) Enhanced safety and security of women at workplace

2) creation of new women leaders

(eg) Pinjra Tod movement in colleges of North India

3) Integrate women concerns in broader environmental movements

(eg) Climate movements to save water

4) Rising women representation in political, and corporate levels

5) Enhanced female labor force participation rate (33% in PLFS-2021)

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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Challenges of Movements

1) Unable to accomodate and represent diverse interests Dalits, tribal women.

2) Over dependent on online, social media, than ground based mobilization.

3) Restricted growth in rural areas (Pundah, ghungat still prevalent)

4) Even though progress in labor force, political representation happened but still below global average.

SDG-5 goal for Gender Equality calls for enhanced woman representation and participation at all levels.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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 the process of transitioning from rural, subsistence and socially backward society to urban and industrial one.

Forces of Modernization	Eradication of Social Evils
1) Constitution protection and rule of Law	↳ Reduced gender discrimination in workspace
2) legislative Acts	↳ Anti-Dowry provision ↳ Domestic violence Act
3) Modern Education systems	↳ Greater female Literacy ↳ political Empowerment ↳ Eliminate regressive practices of child marriage

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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4) Technological and Scientific advancements
- ↳ Better maternal Health
- ↳ Awareness about female-gender mutilation practices
- ↳ Enhanced Bodily Autonomy

5) Modern Economy [IT, services, hospitality]
- ↳ Greater Woman labor force
- ↳ Financial Independence

Threats to Cultural values and Ethos

1) Joint family system to nuclear family system

2) Rise of divorce rates (1/1000 → 13/1000 in last 2 decades)

3) New forms of cohabitation (Live-in relationships)

4) Promotes individualism and materialism over collectivism and spiritualism.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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5) Care of Elderly neglected.

6) |

Modernization is a double-edged sword. Need to imbibe the positive values and practices and preserve traditional culture.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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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 refers to extreme attachment and loyalty towards a region even at the costs of national interest and other region.

Relationship between regional disparity and Regionalism

1) Feeling of relative deprivation
   (eg) Bundelkhand region in UP
2) Disproportionate sharing of developmental costs and Benefits
   (eg) Jharkhand created from Bihar state
3) Reduced role and participation in economy
   (eg) movement of Telagana to create separate state.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

5) "Son of soil" syndrome in times of reduced economic opportunity

(eg) 75% reservation in Haryana

6) Conflict over scarce resources

(eg) water- conflict between Tamil Nadu and Karnataka.

Regionalism Bad for Nationalism

→ (1) Threatens national security

→ (2) promotes secessionism (eg) Khalistan

→ (3) Internal security and order (eg) Naxal-Movement

→ (4) Adopt Anti-Constitutional means (eg) Naga Independence movement.

Regionalism strengthens nationalism

1) creates sub national solidarity → focussed development of region

(eg) Baroda model of welfare.

Next IAS ID: MT23FLTRA027, TC005, 21-08-2023 08:15 AM

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2) Promotes decentralisation and bottom-up development approach

3) Enhances diversity of representation in polity.

Way forward

↳ Leverage institution like NITI Aayog, Inter-State council

↳ Cultural programmes like "Ek Bharat Shreshta" Bharat to bridge religion divide.