

NEXT IAS

अनुभव 2024

(To be filled by candidate)

TEST CODE : ANV2401

Test No. : 01

Name of Candidate: NEELESH GOYAL.....Mobile No.

Roll No. : GSMACT24A1433..... Start Time 4:00..... End Time.....

Date of Examination: 10/09/24..... Medium : English ☒ Hindi ☐

Q. No.	Maximum Marks	Marks Obtained
1.	10	
2.	10	
3.	10	
4.	10	
5.	10	
6.	10	
7.	10	
8.	10	
9.	10	
10.	10	
TOTAL MARKS - 100		

Q. No.	Maximum Marks	Marks Obtained
11.	15	
12.	15	
13.	15	
14.	15	
15.	15	
16.	15	
17.	15	
18.	15	
19.	15	
20.	15	
TOTAL MARKS - 150		

GRAND TOTAL -/ 250

EVAL CODE: EVAL DATE:

GENERAL INSTRUCTIONS

1. Immediately on receipt of the QCA 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.
2. Candidates must mention all relevant details like Name, Email, Roll No, Mobile, etc. in the space allocated.
3. Candidate is expected to attempt all 20 questions within the given timeline.
4. Answers must be written in the medium authorized at the time of admission.
5. Candidates must write answers for the specific question under the respective question itself. Any answer written outside the space allotted may not be given credit.
6. Please write neatly. Avoid illegible writing.
7. Do not write/mark irrelevant matters in the QCAB.

सामान्य निर्देश

1. QCA पुस्तिका प्राप्त होने पर कृपया तुरंत जांच लें कि इस QCA पुस्तिका में कोई पृष्ठ या सामग्री आदि गलत छपी हुई या फटी हुई या गायब तो नहीं है। यदि ऐसा है, तो इसे एक नई QCA पुस्तिका से बदल लें।
2. अभ्यर्थियों को सभी प्रासंगिक विवरण जैसे नाम, ईमेल, रोल नंबर, मोबाइल नंबर आदि का आवंटित स्थान पर उल्लेख करना होगा।
3. अभ्यर्थियों से अपेक्षा की जाती है कि वह आवंटित समय-सीमा के भीतर ही सभी 20 प्रश्नों के उत्तर-लेखन का प्रयास करें।
4. प्रत्येक उत्तर, प्रवेश के समय चुनी गयी भाषा के माध्यम में ही लिखे जाने चाहिए।
5. अभ्यर्थियों को विशिष्ट प्रश्न के उत्तर संबंधित प्रश्न के नीचे ही लिखने होंगे। आवंटित स्थान के बाहर लिखे गए किसी भी उत्तर को क्रेडिट नहीं दिया जाएगा।
6. कृपया साफ-सुथरा लिखें। अपठनीय लेखन से बचें।
7. QCAB में अप्रासंगिक तथ्यों को न लिखें / न ही चिह्नित करें।

REMARKS:

1.

नये संसद भवन में पारंपरिक भारतीय कला और वास्तुकला का एकीकरण किस प्रकार भारत के सांस्कृतिक लोकाचार के प्रमाण के रूप में कार्य करता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

How does the integration of traditional Indian art and architecture in the New Parliament Building serve as a testament to India's cultural ethos? (Answer in 150 words) 10 marks

Ans

Recently unveiled new parliament building has several elements of traditional Indian art and architecture such as - made according to 'vastu', 'east-facing', main building of upper house in 'shape of lotus' etc.

Integration of traditional art & architecture elements: testament to India's cultural ethos

① Putting democracy on a higher pedestal
↳ parliament is 'temple of democracy'
↳ This temple is made with following 'vastu' principles:

② Ashok capital on the top of building
↳ lions guarding the democracy from all four directions.

③ Shape of lotus

↳ considered pious in Indian art
↳ signifies important of democracy

④ Sengol ('Rajdanda')

↳ signifies power of democracy
to bring about positive changes
in common citizen's life.

⑤ Building made with red sandstone

↳ Indian culture ethos of
'living in harmony with nature'

↳ use of local material in
construction.

⑥ Green building using natural
ventilation

↳ 'minimalistic' Indian
way of life

Therefore by incorporating
above elements of Indian traditional
art and architecture, we have uphold
our Indian cultural ethos of religiousness,
respect towards democracy, living in harmony
with nature etc.

2. संगम साहित्य में महिलाओं की भागीदारी के संदर्भ में चर्चा कीजिए। यह प्राचीन दक्षिण भारतीय समाज में महिलाओं की स्थिति और उनकी भूमिकाओं के बारे में क्या दर्शाता है? (उत्तर 150 शब्दों में दीजिए) 10 अंक

Discuss the representation of women in Sangam literature. What does it reveal about the status and roles of women in ancient South Indian society?

(Answer in 150 words) 10 marks

Ans

Sangam refer to gatherings of sages, poets, writers in ancient south India. We have knowledge of 3 sangam however, only a few literary evidences are available such as - Tollakapiyam, Pattutpattu, Ettutgai etc.

Representation of women in Sangam literature

- ① Majorly women are shown in 'mother-wife' role.
- ② Some of the kings are said to have female warriors and spies.
- ③ Women also worked as 'dancers' and 'singers' in temples
eg Madhavi in Sillapadikaram
- ④ Women are depicted as wise and eager to learn.

From these depictions, we can deduct the status and roles of women in Sangam age

- ① Society was largely patriarchal.
↳ women were dependent on men.
- ② However compared to North India, their situation seems to be much better.
- ③ Women were expected to be loyal towards their husband.
- ④ Though some of the women got the unconventional role of spies, bodyguards etc.
- ⑤ Women were given education, were to a limited extent.
- ⑥ Royal ladies had more freedoms compared to common women.
- ⑦ There are example of women saints such as - anthaman

Therefore Sangam age was providing opportunities to women in various fields.

3.

उदारवादियों द्वारा ब्रिटिश औपनिवेशिक नीतियों की आर्थिक आलोचना ने भारतीय राष्ट्रवाद और व्यापक स्वतंत्रता आंदोलन के विकास में किस प्रकार योगदान दिया? (उत्तर 150 शब्दों में दीजिए) 10 अंक

How did the Moderates' economic critique of British colonial policies contribute to the development of Indian nationalism and the broader independence movement?

(Answer in 150 words) 10 marks

Ans)

Indian freedom struggle was in the control of moderates (1885-1905), which created feeling of nationalism in masses.

Moderates' economic critique of British policies

① Dadabhai Naoroji along with R.C. Dutt and other gave 'economic drain theory'

② According to this theory

i) Britishers are looting Indian resources.

ii) If employed in India, this capital can transform the country.

Role of This criticism in development of Indian nationalism and broader independence movement

① Exposed the unbritish character of british rule.

↳ people grew wary of this.

② Their demands from british government (for reforms)

↳ supported by common man

③ A new cadre of leaders emerged who took the reigns from moderates → entremists

④ Their writings → spread even in foreign → Many Irish nationalists and others supported Indian movement.

However, moderates' efforts had some shortcomings

↳ didn't involve masses.
↳ still didn't push british government much harder

Despite these shortcomings, Moderates created the base of national movement, which culminated in independence.

4.

हिमालय की भूगर्भिक संरचना किस प्रकार इस क्षेत्र को भूस्खलन के प्रति विशेष रूप से संवेदनशील बनाती है? इसमें शामिल प्राकृतिक व मानव-प्रेरित कारकों पर चर्चा कीजिए। (उत्तर 150 शब्दों में दीजिए) 10 अंक

How does the geological structure of the Himalayas make the region particularly prone to landslides? Discuss the natural and human-induced factors involved.

(Answer in 150 words) 10 marks

Ans

According to ISRO's land atlas, 12.6% territorial area is landslide prone, Himalayas and western ghats being most prominent.

Geological factors: making Himalayan Region landslide prone

① Natural factors

i) tectonic activity (zone-IV)

↳ Himalayas are sitting on plate convergence (Indian plate with eurasian plate)

ii) steep slopes disturbed by

excessive rains

suchas - cloudbursts

iii) Glacial melting

↳ causing moraines to come sliding down & cause devastations.

② Anthropogenic factors

i) Infrastructure development
↳ when exceeds the carrying capacity, landslides occur.

eg Silkyara tunnel collapse, UK

ii) Settlement on debris of previous landslides

eg Joshimath land subsidence

iii) improper drainage infrastructure

↳ water seepages cause cracks in underlying rocks

iv) Unsustainable tourism

↳ Increased pollution,
choked drains etc.

v) climate change

↳ Increasing temperature,
glacial melting, GLOF incidents

vi) Deforestation

↳ soil gets loosened
↳ increased landslides

As suggested by Nishara Committee report, proper EIA should be done before development in these regions.

5. विश्व के महासागरों में प्रमुख महासागरीय धाराएँ एवं उनसे जुड़े चक्र (Gyres) क्या हैं? पृथ्वी की जलवायु और समुद्री पारिस्थितिकी तंत्र को आकार देने में महासागरीय धाराओं के महत्त्व पर चर्चा कीजिए।

(उत्तर 150 शब्दों में दीजिए) 10 अंक

What are the major ocean currents and their associated gyres in the world's oceans? Discuss the significance of ocean currents in shaping the Earth's climate and marine ecosystems.

(Answer in 150 words) 10 marks

Ans

Ocean currents refer to circulation of ocean water from equatorial region to poles and vice-versa. It is facilitated by winds, temperature difference, salinity difference etc.

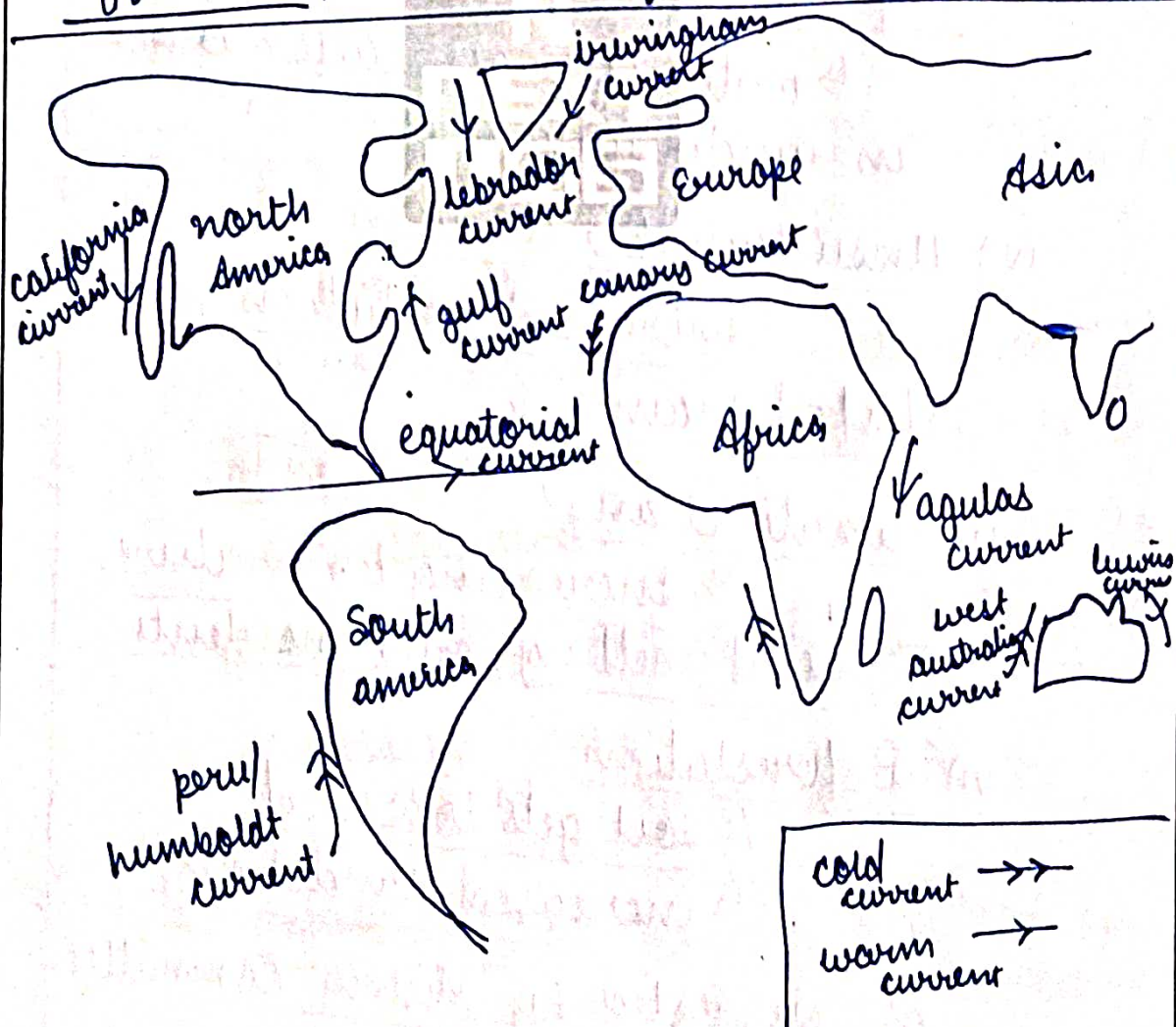


fig major ocean currents in the world

Significance of shaping earth's climate and marine ecosystems

- ① Canada's grand bank
↳ famous as a 'fishing ground'
↳ availability of nutrients as
warm and cold current mix
here

- ② Peru current (cold current)
↳ responsible for dry climate
of peru and chile.

eg 'chukikamata' - peru - driest place
on earth.

- ③ British climate
↳ North atlantic drift (a.k.a
blanket of Europe) saves them
from extreme winters.

- ④ canary current (cold)
↳ responsible for sahara desert

Therefore the ocean currents are
responsible for thermohaline circulation,
that ensures temperature is under control
and nutrients are distributed.

6.

भारत में मृदा के प्रकारों में भिन्नता ने कृषि पद्धतियों एवं उत्पादकता में क्षेत्रीय विषमताओं में किस तरह योगदान दिया है?
(उत्तर 150 शब्दों में दीजिए) 10 अंक

How have variations in soil types across India contributed to regional disparities in agricultural practices and productivity?
(Answer in 150 words) 10 marks

Ans

India has many types of soil available - black, red, alluvial, laterite, arid etc.

variation in soil types: contributing to different agricultural practices

① Black soil

↳ found in deccan plateau region

↳ suitable for cotton, groundnut, sugarcane

② Alluvial soil

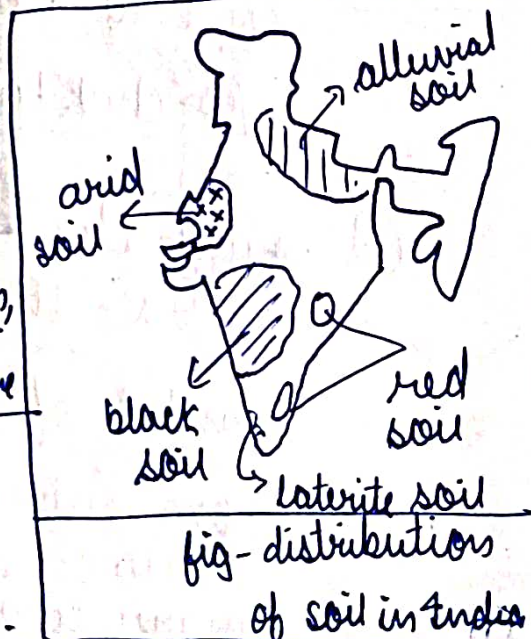
↳ found in river plains ~~eg~~ Gangetic plains - UP, UK

↳ suitable for rice, wheat, jute etc.

③ Red soil

↳ Mainly found in some districts of telangana, tamilnadu

↳ suitable for cotton, maize, rice etc.



- ④ Arid soil
 ↳ western India - Rajasthan, Gujarat
 ↳ suitable for millets such as - Bajra

- ⑤ Saterite soil
 ↳ in high rain, high temperature areas eg - Kerala
 ↳ suitable for coffee plantation

Variation in soil : contributing to different productivity

- ① Arid soil is less productive
 ↳ therefore Rajasthan not among the highest food producers
 ↳ However with irrigation facilities, it can be improved.
 ↳ eg Indira Gandhi canal → improved productivity in Rajasthan.

- ② Black soil is highly productive but lack of water → makes it less productive
 ↳ Satur region in Maharashtra

- ③ Alluvial soil is most productive, mainly due to easy water availability ↳ UP, Bihar region
 ↳ Therefore India should focus on microirrigation to enhance productivity of agriculture

7.

द्वीप पर्यटन भारत के अंडमान और निकोबार द्वीप समूह व लक्षद्वीप जैसे द्वीपों की अर्थव्यवस्था को किस प्रकार प्रभावित करता है? इस पर्यटन को संधारणीय बनाने के लिए कौन सी चुनौतियाँ और अवसर विद्यमान हैं?

(उत्तर 150 शब्दों में दीजिए) 10 अंक

How does island tourism affect the economy of India's islands like the Andaman and Nicobar Islands and Lakshadweep? What challenges and opportunities exist to make this tourism sustainable?

(Answer in 150 words) 10 marks

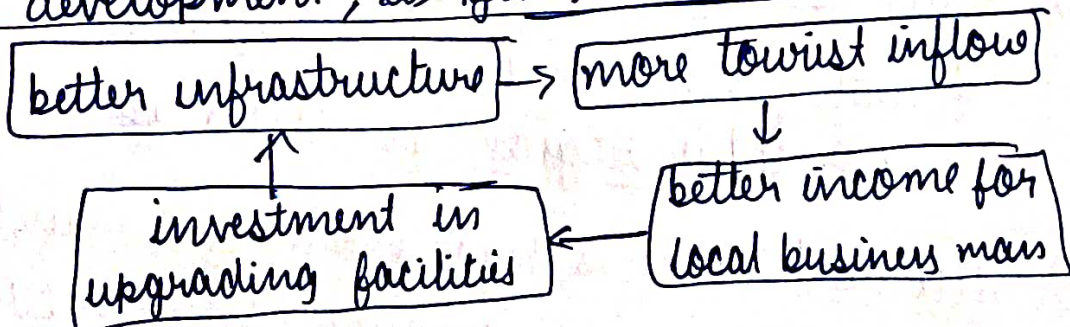
Ans

Indian islands of Andaman and Nicobar and Lakshadweep are one of the most desired destinations of Indian as well as foreign tourists.

Island tourism : affecting the economy of India's islands

① Increased tourism → better income for local businessmen, tourist-guides, hotel industry, transporters etc.

② It creates infrastructure development which sets off a chain reaction of development, as given below



③ Island tourism creates employment opportunities for local people.

Challenges to make this tourism sustainable

- ① Tourism is often more than carrying capacity of ecosystems.
- ② Island tourism contributes to climate change and harm to local biodiversity.
- ③ Dumping of waste into ocean.
- ④ Use of plastics (lack of strict implementation of policies)

Opportunities to make this tourism sustainable

- ① Involvement of local population.
eg Odisha model → instead of hotels, guests stay in homes.
- ② Strict rules and regulations on tourists, businesses in the region.
↳ 'polluter pays principle'
- ③ Restricted tourism
eg Amarnath pilgrimage - certain number only at a time.
- ④ Higher charges on tourists
↳ to develop clean energies.

Therefore island tourism is a great opportunity to ensure sustainable development.

8. जनसंख्या नियंत्रण से लेकर परिवार कल्याण और महिला सशक्तिकरण तक की नीति में बदलाव ने भारत में जनसंख्या वृद्धि को किस प्रकार प्रभावित किया है? (उत्तर 150 शब्दों में दीजिए) 10 अंक
How has the shift in the policy from population control to family welfare and women's empowerment impacted population growth in India? (Answer in 150 words) 10 marks

Ans

As a result of India's population policies, we have achieved TFR of 2.0, which is even less than the replacement TFR.

Shift in policy: population control to family welfare and women's empowerment

① From coercive methods of sterilization to persuasive methods.

↳ increasing awareness - ASHA works
distributing contraceptive

② Focusing on women empowerment

↳ increased education levels

↳ increased average age of marriage

(prohibiting child marriage)

↳ agency of reproductive choices

③ Institutional delivery promotion.

Impact of these policies : reduced population growth in India

① Reduced IMR, child mortality

↳ reduced TFR, as probability of survival of this child is high.

② Higher education levels among women

↳ focus on women's reproductive health.

↳ Reduction in unwanted pregnancies → contraceptive usages

③ Women empowerment

↳ reduced 'son-meta preference' leading to reduced TFR

④ Government schemes such as PM matru vandana yojna, janani suraksha yojna, sukanya samriddhi yojna etc.

↳ benefits upto 2 childs only

Therefore the persuasive efforts of government with the help of civil societies has helped achieve desirable results.

9. भारतीय धर्मनिरपेक्षता के मूल सिद्धांत क्या हैं तथा भारतीय समाज के संदर्भ में उन्हें किन चुनौतियों का सामना करना पड़ा है?
(उत्तर 150 शब्दों में दीजिए) 10 अंक
- What are the core principles of Indian secularism, and how have they been challenged in the context of Indian society?
(Answer in 150 words) 10 marks

Ans

Indian secularism unlike western secularism (rigid separation of religion and politics) provides equal respect to all religions.

Core principles of Indian secularism

- ① 'Sarva Dharma Samakhya'
↳ treating all religions with equal respect
- ② Indian state can intervene, when human rights are violated in the name of religion
↳ Sabriamala temple case
Triple talag case
- ③ Article 25-28
↳ freedom of religion to all citizens
- ④ Article 30
↳ positive discrimination towards minorities → to setup education institutions

challenges to secularism : recent examples

① Religious intolerance towards other religions.

eg Nuh riots, 2024

UP Kanwar Yatra route

↳ administration ordered to

showcase name of shop owners

↳ SC overturned this decision

② Resistance to change to ensure gender equality

eg opposition to UCC Article 44

③ Seperatists causing disharmony in society

eg Khalistani seperatists

J&K → increasing violence by seperatists

④ Karnataka hijab controversis

↳ Right to education of young girls affected.

Despite above challenges, India has remained a secular nation and continued to protect its citizens.

10. भारत में वर्तमान प्राथमिक शिक्षा प्रणाली किस सीमा तक सामाजिक असमानताओं को संबोधित या सुदृढ़ करती है तथा अधिक समावेशी शैक्षिक वातावरण बनाने के लिए किन रणनीतियों की आवश्यकता है? (उत्तर 150 शब्दों में दीजिए)
10 अंक

To what extent does the current primary education system in India address or reinforce social inequalities, and what strategies are needed to create a more inclusive educational environment?

(Answer in 150 words) 10 marks

Ans According to a report by ministry of education, nearly 99% of primary students had school within 1 km radius of their residence.

Current Primary education: reinforcing social inequalities

① Gender inequalities

↳ females are depicted in books either in kitchens or in care work.

↳ most of primary school teachers are women - [pink collar jobs]

② Caste inequalities

↳ in some remote areas, dalits students are made to sit in back row.

③ Class inequalities

↳ EWS reservation in private schools not followed in law and spirit.

current primary education: addressing social inequalities

- ① children are encouraged to wear uniforms
↳ discourages inequality.
- ② children treated equally in class
irrespective of caste, class, gender.
- ③ Regular PTMs → parents encouraged to
not let their bias seep in child's
mind.

However, despite above efforts, following strategies can be adopted, to create a more inclusive educational environment:

- ① Gender neutral uniforms and books
↳ as adopted in a few Kerala schools.
- ② Incultation of ethical values
↳ examples of role models
such as - Gandhiji, Dr. Ambedkar
etc.
- ③ Encouraging extra curricular activities
eg - painting, singing etc.
↳ will help in breaking gender barriers
in student minds.

Thus, we can create India of tomorrow.

11.

भारत में गांधीवाद-पूर्व चरण के किसान आंदोलनों की प्रकृति की तुलना गांधीवादी चरण के किसान आंदोलनों से कीजिए। स्वतंत्रता संग्राम के दौरान महात्मा गांधी के नेतृत्व ने भारत में किसान आंदोलनों की प्रकृति और दिशा को किस प्रकार प्रभावित किया? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Compare and contrast the nature of peasant movements in India during the pre-Gandhian phase with those in the Gandhian phase. How did Mahatma Gandhi's leadership influence the nature and course of peasant movements in India during the freedom struggle?

(Answer in 250 words) 15 marks

Ans

British policies of land revenue, religious conversions etc. forced peasants to ~~not~~ revolt against them. There are innumerable peasant movements that were not even recorded in history.

Peasant movements in India

Pre - Gandhian phase (1800 - 1915)	Gandhian phase (1915 - 1947)
① Marred with <u>violence</u> against <u>british</u> , <u>moneylender</u> <u>zamindars</u>	① Largely <u>non-violent</u> in character eg <u>champanan satyagrah</u> (1917)
② <u>Regional</u> in character eg <u>Sanyasi revolt</u>	② earlier <u>regional</u> , later spread to <u>national level</u>
③ Easily suppressed by <u>british</u>	③ Due to mass involvement, difficult for british to suppress

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pre-gandhian phase	Gandhian phase
④ Combined several agendas - <u>religious</u> , <u>economic</u> , <u>political</u>	④ Focused only on matter on hand i.e. <u>grievances of farmers</u>
⑤ Not a major success	⑤ To a great extent, these movements were resounding success

Mahatma Gandhi's leadership: influenced the nature and course of peasant movements

- ① Adoption of peaceful means
 ↳ truth and non-violence
- ② Well-defined leadership and plan
 ↳ Bardoli satyagrah, Gujarat (1917)
 ↳ Gandhiji handed over responsibility to Sardar Patel
- ③ Participation of masses; including women and students
 ↳ created more pressure on british.
- ④ Used arrest and subsequent court hearings to send a message to british.

⑤ Gandhiji, integrated farmer's
cause with cause of independence

⑥ Gandhiji valued farming as a
way of life, hence encouraged
freedom fighters to stand with
their cause.

⑦ He instructed Congress ministries,
to keep in mind the interests of
farmers in decision making.

These efforts of Gandhiji resulted into

① British took corrective actions
against coercive indigo
farming

↳ remission of taxes in
Bardoli

② Post independence - India abolished
Jamindari, land-reforms undertakes,
land ceiling decided etc.

The methods of struggle and
principles Gandhiji suggested, became the
foundation for Indian policies, post independence.

12.

मंदिर वास्तुकला की होयसल और नागर शैलियों की तुलना कीजिए और उनके बीच अंतर बताइए। ये अंतर अपने समय के सांस्कृतिक, धार्मिक और क्षेत्रीय प्रभावों को किस प्रकार प्रतिबिंबित करते हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Compare and contrast the Hoysala and Nagara styles of temple architecture. How do these differences reflect the cultural, religious, and regional influences of their time?

(Answer in 250 words) 15 marks

Ans

India is known for its extraordinary heritage of temples - be it Nagara style, Vesara style or Dravida style. Hoysala temples follow Vesara style of temple architecture.

Features of temple architecture

Nagara style	Hoysala style
① <u>Panchayatana style</u> ↳ one main diety, four dietys in four corners ↳ <u>Dashavatara temple</u>	① Focus on <u>main</u> <u>shrine only</u> ↳ <u>Hoysaleswara</u> <u>temple</u>
② Made of <u>sandstone</u>	② Either <u>rock cut</u> or <u>steatite stone</u>
③ <u>shikhar</u> over <u>girbhagrikh</u> and <u>mandapas</u>	③ no ' <u>mandapas</u> ' shikhar is much smaller

Nagar style	Hoysala style
④ No water source inside temple	④ water source inside temple
⑤ Plan of temple is <u>rectangular</u>	⑤ <u>Star-shaped</u> plan

Differences reflecting cultural influences of their time

- ① Hoysalas were more influence with astronomy → star shape of temples
- ② Northern states, due to excessive availability of water, did not feel the need to build water source inside temple complex.
- ③ Panel carvings on Hoysala temple walls, indicate the influence of dance, music in their culture.
- ④ Mandapas indicate, temples in northern states, as a place of social gathering.

Differences reflecting the religious influences

- ① Nagara - panchayatana style
refers to the importance of many
deities.
- ② Hoysala temples indicate importance
of gandharvas - used as protectors
of the main shrine.
- ③ Nagara style - main deity is
accompanied by male/female consort

Difference reflecting regional influences

- ① Use of regionally available
material for construction
~~to~~ sandstone in Nagara style
- ② Idols' facial features are different
in these 2 styles - depicting regional
differences.
- ③ Hoysala temples are somewhat
inspired by dravida style - a regional
influence.

Recently Hoysala temples were nominated
to be included in UNESCO world heritage list.

13. भारत में लॉर्ड विलियम बेंटिक की नीतियों ने देश के सांस्कृतिक और बौद्धिक परिदृश्य को किस प्रकार प्रभावित किया? प्रमुख सुधारों के संदर्भ में चर्चा कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक
- How did Lord William Bentinck's policies in India influence the country's cultural and intellectual landscape? Discuss with reference to key reforms.

(Answer in 250 words) 15 marks

Ans Lord William Bentinck was the first governor general of India, made by Indian charter act of 1833.

Lord Bentinck's policies: influencing the country's cultural and intellectual landscape

① Education

↳ under his governorship, he sanctioned Rs. 1 lakh/year to be spent on native's education.

② This effort created several beneficial impacts as

↳ separate fund was allocated

↳ western education was not imposed

↳ It provided psychological boost to Indians.

③ However, this policy was not so effective, as

↳ Fund remained largely un-utilized.

↳ No efforts from British government to bring ground changes.

④ ② Christian missionaries

↳ Though present, from the very beginning, his policies gave them official recognition.

⑤ This increased the interference of these missionaries in social and religious life of Indians

↳ led to Santhal rebellions

⑥ Forceful conversions were common

⑦ Open competition for civil services

William Bentick tried to open them for all, However not successful due to opposition

from board of control of east
India company.

Reasons: why Lord kentick's reforms
were not effective

① It was not the intention of
british to bring ground level
changes

↳ under the garb of reforms
they maximized the exploitation.

② It was still rule of east India
company

↳ which was at core
a business enterprise.

③ opposition from conservative
sections of Indian &
european society.

Therefore Lord william kentick
was not able to much influence the
country's cultural & intellectual landscape

14. भारतीय शहरों में नगरीय बाढ़ एक आवर्ती चुनौती बनती जा रही है, भारत में नगरीय बाढ़ में योगदान देने वाले अंतर्निहित कारकों का विश्लेषण कीजिए। इसके प्रभाव को कम करने के लिए कौन से व्यापक उपाय किए जा सकते हैं?

(उत्तर 250 शब्दों में दीजिए) 15 अंक

With urban flooding becoming a recurrent challenge in Indian cities, analyze the underlying factors contributing to urban flooding in India. What comprehensive measures can be taken to mitigate its impact?

(Answer in 250 words) 15 marks

(Ans)

Urban flooding refers to excessive waterlogging in cities, that causes upheaval in daily life of citizens.

Underlying factors: contributing to urban flooding

① Improper city planning

↳ encroachment of water bodies

↳ water accumulates, instead of draining

↳ Yamuna plain encroachment in Delhi, caused 2023 floods

② Drainage blocking

↳ no maintenance / desilting

OR

↳ plastic clogging

OR

↳ encroachment → illegal construction

③ Cloudburst

↳ due to excessive rains, urban flooding can occur.

④ Tsunami

eg Chennai flooding, 2004

⑤ Improper construction

↳ not following natural drainage slope

eg Guwahati → situated in aravali hills drainage path -

↳ due to improper construction, problem of urban flooding.

Comprehensive measures to mitigate its impact

① Early warning system (EWS) for natural events such as - Tsunami or cloudburst

↳ so that evacuation of people can be done.

② Proper urban planning:

Such as - no encroachment in
water bodies

- ensure drains are free flowing

③ connecting city drainage with
natural drainage (after proper
treatment)

④ System of rainwater harvesting
↳ excess water is trapped
inside homes / buildings
↳ reduced load on drainage.

⑤ Proper arrangement of dewatering
pumps and other infrastructure

⑥ Availability of personnel
including medical team to
mitigate the harmful effects.

By mitigating the impacts of
urban planning we can ensure that
life of common citizens and economic
activities are uninterrupted.

15. जैसे-जैसे 21वीं सदी तेल के लिए संघर्ष से महत्वपूर्ण खनिजों के लिए प्रतिस्पर्धा में परिवर्तित हो रही है, वैश्विक आपूर्ति श्रृंखला में योगदान देने में भारत के महत्वपूर्ण खनिज संसाधनों की क्षमता का आकलन कीजिए। भारत के लिए इन संसाधनों के रणनीतिक निहितार्थ क्या हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक
- As the 21st century shifts from battles over oil to competition for critical minerals, assess the potential of India's critical mineral resources in contributing to the global supply chain. What are the strategic implications of these resources for India?

(Answer in 250 words) 15 marks

Ans

Critical minerals such as - lithium, copper etc. have replaced oil in the top order of priority of humankind. Reason being their application in emerging technology such as - EV, chips, electronic industry etc.

Potential of India's critical mineral resources in contributing to global supply chain

① Lithium reserves

↳ we have discovered large deposits in J&K, Chhattisgarh primary.

↳ Deposits will make India, one of the largest reserves holder

↳ However, lack of extraction expertise, may become roadblock

② Copper reserves

- ↳ in Rajasthan primarily
- ↳ India is working on extraction techniques to become part of global value chain.

③ Monazite sand

- ↳ available in abundance on Indian coastline.
- ↳ contains Th-232
- ↳ usable in Stage-III of India's nuclear mission

④ Other critical minerals such as - Ni, Pd etc.

- ↳ At present, we don't have huge deposits
- ↳ import-dependency on other countries.

Strategic implications of these resources for India

① Strategic autonomy

- ↳ not dependent on import for tech development.
- ↳ As China controls majority

of the supply chain for critical minerals

↳ help in decoupling with china

② Economic growth

↳ As these will help in emerging tech such as - electric vehicles, electronics etc.

③ Transitioning towards clean energy

↳ help reduce coal/oil consumption -

④ Better relations with other countries

↳ trade for these minerals

⑤ Reduced current account deficit

↳ reduced imports, increased exports

Steps taken by India

↳ Khanij videsh nigam limited (KVNL)

↳ collaboration with south america for leasing mines (Li)

→ Increased efforts for deposits finding and extraction → involvement of private sector -

These critical minerals have the potential to fuel the vision of Viksit Bharat 2047

16. तापमान व्युत्क्रमण की परिघटना और विभिन्न क्षेत्रों के मौसमी प्रतिरूप और सूक्ष्म जलवायु पर इसके प्रभाव की व्याख्या कीजिए। साथ ही, कृषि और मानव बस्तियों पर इसके प्रभावों की भी चर्चा कीजिए।

(उत्तर 250 शब्दों में दीजिए) 15 अंक

Explain the phenomenon of temperature inversion and its impact on weather patterns and microclimates in different regions. Also, discuss its implications for agriculture and human settlements.

(Answer in 250 words) 15 marks

Ans

Temperature inversion refers to a situation when temperature of air, closer to ground is lesser compared to air above it.

Conditions necessary for temperature inversion

① clear cloudless sky

↳ radiations reflected by earth goes back to space.

② long winter night

↳ so that earth can cool down

③ no vertical wind

↳ otherwise it will disturb the temperature.

Also in mountain regions during night under influence of anabatic winds (mountain breeze),

conditions of temperature inversion occur.

temp = 5°C
←
temp = 3°C ✓ ✓ ✓ ✓ ✓ ✓

fig - temp. inversion

Impact of temperature inversion on microclimate and weather patterns

① In mountain region

↳ leads to excessive cold atmosphere
in valley region, especially in
lower slope regions.

② In plains/planes

↳ during winter → may cause
frost → leading to excessive cold.

③ Temperature inversion caused,
excessive cooling of the ground

④ In rural areas, impact on weather
is more compared to urban areas.

Implications ^{on} ~~of~~ agriculture: Temperature inversion

① Most of the times harmful for
standing Rabi crop

↳ dew and frost

↳ due to excessive low temper-
ature, it may be destroyed.

② However for certain crops such as wheat → a limited amount of dew is helpful
↳ also called golden drops

③ Generally farmers hope for no temperature inversion.

Impact of temperature inversion on human settlements

- ① In hilly areas, human settlements are avoided in lower hilly slopes.
- ② In planes → human settlements are clustered to minimize the impact of temperature inversion.
- ③ Sufficient heating arrangements are provided to bear this.
- ④ walking barefoot in this times, can cause frostbite.

Therefore temperature inversion, as a scientific phenomena, has multiple effects on weather and human settlements.

17. पर्यावरण और भारतीय संस्कृति के संदर्भ में गंगा नदी तंत्र के महत्व की चर्चा कीजिए। इस महत्वपूर्ण नदी तंत्र की सफाई और कायाकल्प (पुनरुद्धार) के समक्ष प्रमुख चुनौतियाँ क्या हैं? (उत्तर 250 शब्दों में दीजिए) 15 अंक

Discuss the significance of the Ganga river system on the environment and Indian culture. What are the key challenges in cleaning and rejuvenating this vital river system?

(Answer in 250 words) 15 marks

Ans

Ganga river considered as the lifeline of north and east India is reeling under severe crisis due to anthropogenic activities.

Significance of Ganga river system on environment

① Supports huge biodiversity

eg Ganges dolphin
crocodile etc.

② Hydrological cycle

↳ high temperature → water vapour

↑ recharge ← rain

③ Sundarbans delta

↳ ecological services

Significance of Ganga river system in Indian culture

① Considered most pious river

↳ called 'Ganga maiya'
(mother Ganges)

② Ganges' ghats are considered ideal for last rites ~~for~~ Manikarnika ghat
↳ as an alternative, ashes are immersed in this river.

③ Gangajiat → considered sacred
↳ used in rituals

key challenges in cleaning and rejuvenating this river system

① East expansion of river
↳ from uttarakhand to west Bengal

② very high level of pollution
~~from~~ leather industries
in Kanpur

↳ in Yamuna → Delhi contributing highest in pollution.

③ Religious beliefs

↳ people throwing coins, coconut, flowers, plastics, ashes for ritual.

④ Reduced water levels

↳ due to climate change

⑤ Lack of funding

↳ under 'Namami Gange
program', this problem is
observed.

⑥ Lack of technical expertise

↳ for waste collection,
recycling and disposal

↳ Support from private
sector is required.

⑦ collaboration with local public

↳ lack of awareness and
interest → leading to half
hearted efforts.

Action taken by government

① Namami Gange project

↳ for cleaning and rejuvenation
of Ganga river system

② International collaboration

↳ as a side deal of G-20

Therefore revival of Ganges will
boost our tourism sector and overall well-being

18. भारत में वैज्ञानिक खोज ऐतिहासिक रूप से संस्कृति और धर्म के साथ जुड़ी हुई है, जिसमें प्रायः वैज्ञानिक शोधों को धार्मिक प्रथाओं के साथ जोड़ा जाता है। इस संदर्भ में, वैज्ञानिक प्रगति सदियों पुरानी रूढ़ियों व अंधविश्वासों को संबोधित करने में पारंपरिक मान्यताओं और आधुनिक सोच के बीच के अंतर को किस प्रकार कम करती है?

(उत्तर 250 शब्दों में दीजिए) 15 अंक

Scientific pursuit in India has historically intersected with culture and religion, often blending scientific inquiry with religious practices. In this context, how do scientific advancements bridge the gap between traditional beliefs and modern thinking in addressing age-old taboos and superstitions?

(Answer in 250 words) 15 marks

Any

Fundamental duty under Article 51A, requires Indian citizens to inculcate scientific temper and spirit of enquiry.

Scientific pursuit in India: blending scientific enquiry with religious practices

- ① Ramanujans, a maths genius
 - ↳ an equation has no meaning for me, unless it is a thought of god.
- ② Suyabhatta, a great mathematician
 - ↳ gave trigonometry formulas
 - ↳ calculated spatial distances
- ③ Brahmagupta, a devotee of Vishnu
 - ↳ gave '0', necessary for mathematics.

Scientific advancements: bridging the gap between traditional beliefs and modern thinking

① East-facing house was considered auspicious.

Science proved that sunrays enter house from west to east in morning → thus beneficial for gaining energy and vitamin D

② Cow was given the status of 'mother'

↳ science proved the availability of 'Keratin' in cowmilk

↳ beneficial for humans

③ Touching feet of elders given prime importance in Indian culture

↳ psychology deduced that it inculcates 'humility'

④ putting a layer of 'cowdung' considered good.

↳ science found out it has antibacterial properties.

On the other hand, science has also helped in addressing age old taboos and superstitions

① Taboo of not crossing seas

↳ science made it easy to survive on months long voyages.

② Taboo of caste discrimination

↳ science helped get it away with in Indian society.

③ superstition → breaking glass is auspicious / cat crossing path is inauspicious

↳ done away with scientific explanations.

④ Myth of idols drinking milk

↳ explained by science as a process of cavitation.

Therefore as Einstein said -
Science without religion is lame, Religion without science is Blind.

we must ensure their balance.

19. अनौपचारिक क्षेत्र में सामाजिक असमानताओं की चुनौतियों पर प्रकाश डालिए। चर्चा कीजिए कि गिग अर्थव्यवस्था किस प्रकार इन मुद्दों का समाधान कर अधिकतम सामाजिक सशक्तिकरण में योगदान कर सकती है।

(उत्तर 250 शब्दों में दीजिए) 15 अंक

Highlighting the challenges of social inequalities in the informal sector, discuss how the gig economy can resolve these issues and contribute to greater social empowerment.

(Answer in 250 words) 15 marks

Ans

Gig economy refers to working taskwise i.e. worker has a contract with employer to complete a certain task and receive a certain payment. There is no permanent employment.

Challenges of social inequalities in the informal sector:

① No social security to informal worker
↳ in case of job loss, illness or any other accident of life
↳ slips into abject poverty.

② lesser pay
↳ Recent research survey found the gap in pay of formal and informal employees - as high as 55%.

③ No skill upgradation

↳ earning potential remains low and gets trapped in vicious cycle of poverty -

④ Gender dimension

↳ majority ~~are~~ of women's are employed in sectors like - construction

↳ perpetuates their subordination

Gig economy: can help resolve these issues

① women

↳ can take up 'work from home' in IT sector - freelancing

↳ greater employment opportunities with same pay as their male counterparts.

② skill updation

↳ 'flexi-working' provides worker with time to upgrade his/her skills.

③ No ceiling on pay

↳ work as much you want/ as much you can

④ Choice of work

↳ compared to conventional informal sector, Gig economy provides real choices such as -
IT, e-commerce, ed-tech etc.

However, there are several challenges in gig economy as well :

① No social security to workers

② Harsh conditions of work

↳ Quick commerce - 10 min delivers

③ Due to excessive labour availability, payment offered is very low.

Way ahead

↳ Rajasthan gig workers act 2023

↳ provides benefits to gig workers.

↳ Binding regulations on employers

to provide employee welfare

↳ Zomato → maternity leaves

Therefore, by using above steps we can ensure inclusive growth of workers.

20. भारतीय समाज में धार्मिक प्रभावकों और आध्यात्मिक नेताओं के नेतृत्व में नए-युगीन के अध्यात्मवाद के पुनरुत्थान के क्या कारण हैं? भारतीय समाज पर इस परिघटना के प्रभावों का मूल्यांकन कीजिए। (उत्तर 250 शब्दों में दीजिए) 15 अंक
- What are the reasons behind the resurgence of new-age spiritualism led by religious influencers and spiritual leaders in Indian society? Evaluate the impact of this phenomenon on Indian society.

(Answer in 250 words) 15 marks

Ans

New age spiritualism

refers to common people following a 'charismatic personality' claiming to have various supernatural powers.

Reasons behind resurgence of new-age spiritualism

① Use of technology

'teleevangelists' are using mass media platforms such as - social media, TV, radio to propagate their message.
eg youtube channel, Instagram page of various 'gurus'

② Political reasons

↳ certain politicians to consolidate their vote bank are supporting these 'spiritualists'

③ Materialism → ironically, people are

seeking help of these 'spiritualists' to achieve materialistic goals.

④ Events such as COVID19 :->

increased uncertainties bring people in the refuge of religion.

⑤ Money factor

↳ In the name of charity, these institutions may be engaged in money laundering of big personalities
↳ getting support from powerful

Impact of this phenomenon on Indian society

① Misguidance into superstitions.

② Danger to democracy

↳ these influencers decide ticket distribution as well as voting patterns of public

③ Mishaps like Rathnas stampede

↳ 123 innocent lives lost
(many women and children)

④ In many cases, they turn out to be criminals.

~~Let~~ Ram Rahim, Asaram

However, there are several genuine new-age spiritual leaders, also, they help in

① Spiritual guidance of people.

② Establishing peace of mind

③ social service activities such as -
orphan homes, food service etc

④ In the event of crisis, they calm the people down.

Therefore, in modern society, it is necessary to encourage genuine spiritual leader and strictly punish the criminal elements who hide behind the dress of 'sadhu'.