Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

NEXT IAS

NEXT IAS (Head Office) : 27-B, Pusa Road, Metro Pillar no. 118, Near Karol Bagh Metro, New Delhi-110060
Bhopal Centre: Plot No. 46, ZONE-2, M.P. Nagar, Bhopal-462011
Ph: 8081300200, 8827664612 | E-mail : mts@nextias.com | **Web:** www.nextias.com

(To be filled by candidate)

Code : TC071

Name of Candidate : RAHUL PATTER

Roll No. : PTTP220826

Registration Number : ..... **Date of Examination :** 17/July/23

Exam Centre : Old Rajinder Nagar ☐ Bhopal ☐ Online ☑

MTS IGP Batch 2023

GENERAL INSTRUCTIONS

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

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

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

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

.....

SUBJECT/PAPER
GENERAL STUDIES

Invigilator's Sign. : .....

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

(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: PTTP220826, TC071, 17-07-2023 04:27 PM

MACRO COMMENTS

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.1 भारतीय दार्शनिक चिंतन का ताना–बाना उत्तरी भारत का उतना ही ऋणी है जितना दक्षिण भारत का। स्पष्ट कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The fabric of Indian philosophical thought owes as much to Northern India as to Southern India. Elucidate. (Answer in 150 words) 10 Marks

While South India offered great philosophers like Shankaracharya, North India enriched the philosophical dialogue with likes of Guru Nanak, Kabir, Rovidas etc.

Significantly the philosophical development cannot entirely be credited to a single region as

↳ active engagement and exchange of thoughts with different parts of India.

South India's contribution

① Wisdom Sayings of Thirukural

② Alwars and Nayanars brought different dimension to the idea of Bhakti,

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

and Salvation

(3) Adi Shankaracharya, Ramanuja and others gave different Vedanta Philosophies

(4) Tukaram in Maharashtra.

Contributions of North India

(1) Starts from Ajivika monks, → then as Buddhism, Jainism by Buddha and Mahavira.

(2) Philosophies like Mimamsa, Yoga, Charvaka, Vaisheshika originated in north.

(3) In medieval times, Kabir and Guru Nanak gave idea of a formless god.

(4) Nizamuddin auliya and other Sufi saints made Delhi as their ground to spread idea of love.

So both South and North contributed in its own unique way to Philosophical developments.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.2 सामाजिक परिवर्तन और सुधार के लिए भारतीय समाज का आवेग औपनिवेशिक शासन के प्रति इसके विरोध की एक प्रतिक्रिया थी। परीक्षण कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The Indian society's impulse for social change and reform was a response to its opposition to colonial rule. Examine. (Answer in 150 words) 10 Marks

While a great deal of internal churning happened in 18th-19th century to fight social evils, one of the factor to this was colonial rule.

Colonial rule as a reason for social change :-

(1) Over zealous christian missionaries seen everywhere
→ they got support from the government
↓
created a fear of religious conversion
↓
∴ Need to reform the evils in present Religions.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

(2) The Educated middle class felt that :-

→ Social reform is necessary to gain meaningful independence

↓

Hence organisations like Indian Social conference were established.

(3) Unity and idea of Nation can be created only when people have fraternity

↓

needed to abolish untouchability

∴ Ambedkar, Periyar, Phule led this effort.

(4) Leaders like Gandhi also felt the need to develop

→ dignity of labour and equality to create a Stronger India.

So Social evils were seen as a reason for Colonial subjugation and stagnation in the society.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.3 रूसी क्रांति को प्रभावित करने वाले कारक कौन–कौन से हैं तथा इस क्रांति के क्या–क्या परिणाम हैं ? भारतीय राष्ट्रीय आंदोलन पर इसके प्रभाव की विवेचना कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

What are the factors that led to the Russian revolution and what are the consequences of this revolution? Discuss its influence on the Indian national movement. (Answer in 150 words) 10 Marks

Russian Revolution in 1917 had immense significance not just on WW-I but also throughout 20th century leading to Cold war and finally breaking up of USSR in 1990.

Factors responsible for Russian Revolution

① financial condition of Russia was poor
- high inflation and food shortages.

② This was a result of
(i) → defeat from Japan in 1904
(ii) lack of meaningful industrialisation

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

③ poor performance in WW-I
↳ Soldiers were not paid regularly and supplies like food were limited
↳ they started deserting.

④ [Rasputin Scandal] → showed that Monarchy is corrupt
→ that people close to Monarchy can gain.

Consequences of revolution's—

① Idea of communism gets central state
② tussle between Capitalism/free market camp between Russia
③ Russia withdrew from WW-I.
④ Policy of Appeasement ~~and~~ led to WW-II.

Consequences on Indian National Movement

① Ideas of socialism infiltrated Congress → Bose, Nehru etc.
② MN Roy and other leaders joined Communist party in Russia.

(33)

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.4 पृथ्वी की सतह पर तापमान के असमान वितरण के लिए उत्तरदायी विभिन्न कारकों की चर्चा कीजिए।
(150 शब्दों में उत्तर दीजिए) 10 अंक

Discuss the various factors responsible for the uneven temperature distribution on Earth's surface.
(Answer in 150 words) 10 Marks

The major determinant for heating up of Earth is Solar radiation.

→ Earth receives 2 Billionth of ~~Sol~~ Sun's energy.

Factors for uneven temperature

① **latitude** → changes the angle of incidence of sun's ray ↓ decreasing intensity and hence temperature.

∴ Equator records high temperatures throughout the year.

② **Cloud Cover** → The highest temperatures are recorded not on equator but in tropics due to ~~Sub~~-tropical high pressure belt and no cloud cover.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

③ **Albedo**

→ Shows how much radiation is reflected back.

⇒ fresh snow & clouds have high albedo

↓

Snow melting is increasing temperature of earth.

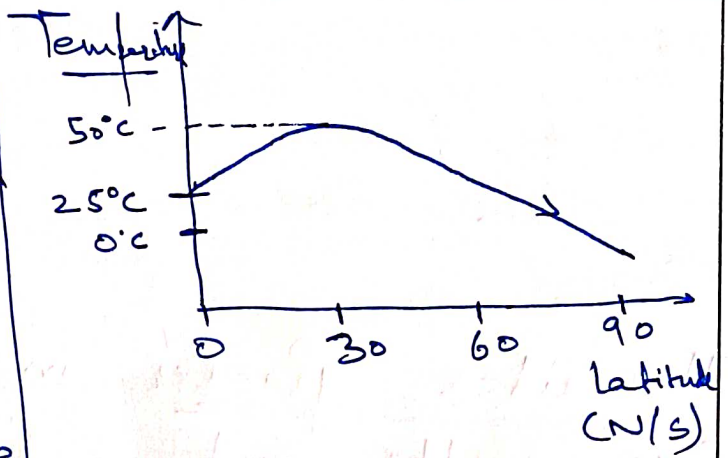
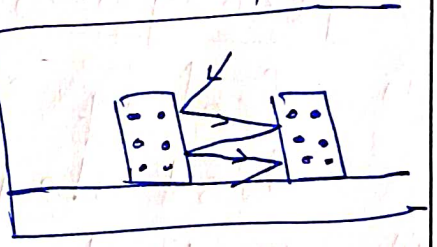


fig: variation of temperature with latitude

④ **Urban Heat Islands** traps Solar radiation by large buildings.

∴ urban temperatures are 4-5°C higher than surroundings.



⑤ **Ocean Currents** → North Atlantic drift responsible for warmer British climate.

⇒ Norwegian Currents prevents freezing in arctic ports.

⑥ **Winds** → like Blizzard cause cold wave like situation even in Texas

∴ temperature distribution is a complex phenomenon.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.5 जलवायु परिवर्तन के कारण हिमनदों के पिघलने का पारिस्थितिकी तंत्र और मानव समाज पर गंभीर प्रभाव पड़ता है। हिमनदों के पिघलने के कारण पर्यावरण पर पड़ने वाले प्रभावों और इस मुद्दे के समाधान के लिए किए जा सकने वाले उपायों पर चर्चा कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The melting of glaciers due to climate change has serious implications for the ecosystem and human society. Discuss the effects of melting glaciers on the environment and the measures that can be taken to address this issue. (Answer in 150 words) 10 Marks

Thwaites glacier in antarctica can melt, as per reports, which can lead to ocean level rise by upto 3mts.

Implications of melting of glaciers

① Ecosystem

(i) Ecology of polar region disturbed.

(ii) Disturbance in oceanic circulations ↓

- affects cycle of migrations of fishes
- Dead zones :- as fish migrates

(iii) Albedo decreases → Arctic Amplification ↓

- Arctic heatwaves.
- harmful for local flora (Arctic lightning seen in recent years)

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

(iv) Ocean Heatwaves → coral bleaching
→ Study found :- males number in green turtles reduced due to ocean heatwaves.
(feminisation)

---

② Human & Society

(i) Sea level rise ⇒ Displacement
(ii) Marine food chain Disturbed
[FAO] → 15% protein needs of 45% population from marine food.
(iii) Extreme weather events.
→ floods.
→ Droughts.

Measures to tackle this

① Reduce emissions & global warming
② Cirrus cloud thinning.
③ Iron fertilisation → to increase phytoplanktons to absorb more CO_2.
④ Artificial low height clouds
⑤ Space mirrors

Global warming poses threat on Biodiversity & human welfare.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.6 श्वेत क्रांति भारत के पश्चिमी भाग में सर्वाधिक सफल रही। श्वेत क्रांति की इस क्षेत्रीय सफलता के कारकों की विवेचना कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The White Revolution was most successful in the Western part of India. Discuss the factors for this regional success of the White Revolution. (Answer in 150 words) 10 Marks

The success of white revolution can be traced from the success of AMUL in Gujarat and later several initiatives were taken on lines of AMUL like opening of Mother diary etc.

Reasons of Success in West

(1) Western Society has been more Pastoralists since centuries.

⇒ while east and south depended on sea food for proteins

(2) Success of Green Revolution provided Capital and people to launch White revolution

⇒ integrated farming.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

③ Land holdings were larger

④ Government support & state government policies.

→ helped in creation of state Cooperatives, public sector undertakings etc.

⑤ knowledge system and extension services already established well in west & north because of green revolution.

Why not in other regions

① Milk not preferred much in N. East.

② East → Lagged in development & Suffered from Naxalism.

Central India

③ S. India → again milk not active part of diet.

White revolution has been instrumental in fulfilling protein needs of the country and fighting Malnutrition and undernutrition.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.7 पृथ्वी की आंतरिक संरचना की हमारी समझ में भूकंपीय अनुसंधान किस हद तक योगदान करता है? इसके महत्व का विस्तार से विश्लेषण कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

To what extent does seismic investigation contribute to our understanding of the Earth's interior structure? Analyze its significance in detail. (Answer in 150 words) 10 Marks

Seismic investigation is an 'indirect way to under the interior of Earth.

[Ways to Analyze]

① Shadow zones of S, P-wave

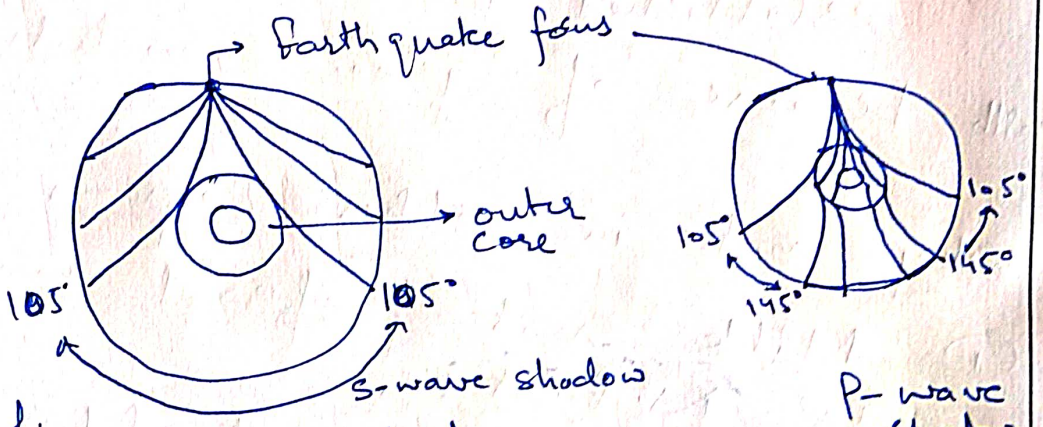


fig: S-wave shadow zone

P-wave shadow

→ [S-wave shadow] → S-wave can't travel in liquid. (105°)

∴ outer core is liquid

⇒ [P-wave shadow] → from 105-145°

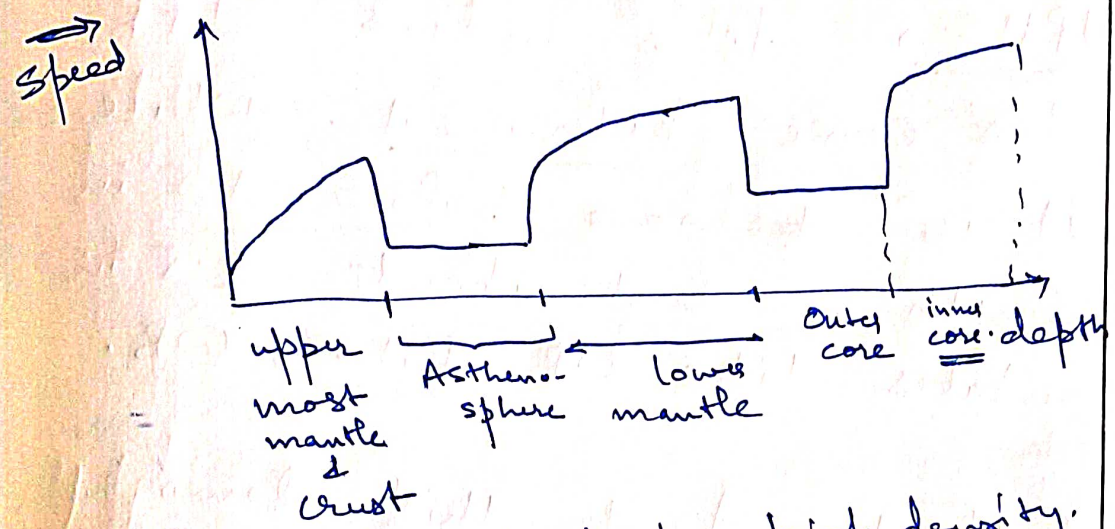
↳ shows varying densities and hence refraction

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

of P-wave causing shadow.

② **Speed** of waves



⇒ Speed is high in high density.

∴ Asthenosphere and outer core is liquid.

Limitations

① Data points limited and hence analysis inadequate.

② It is hard to find exact composition of interior using this

⇒ only an estimate.

However, Seismic waves have helped in developing understanding of interior where all other methods have even more limitations.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Cand write

Q.8 जनसांख्यिकीय संक्रमण की गति भारत के विभिन्न राज्यों में भिन्न–भिन्न है, जिससे जनसंख्या वृद्धि दोधारी तलवार बन जाती है। टिप्पणी कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The pace of demographic transition varies across different states of India making population growth a double-edged sword. Comment. (Answer in 150 words) 10 Marks

NFHS-5 tells India's TFR has come below 2.1. While it is ~~below~~ below 1.5 in South, but about 2.5 in States like UP, Bihar, WB.

Implications of this demographic transition.

① Political

→ Southern States' representation can decrease in Parliament after next delimitation.

② Economic

↳ Population ageing will happen in South and hence lesser Demographic Dividend.

↳ workforce will reduce.

↳ In North, it can become demographic Disaster if

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

workforce is not trained.

③ Social

→ migration from North/East to South/West

↓

↳ Increasing Regionalism / son of soil policy.

however it has benefits too

① Broader window of Demographic dividend to country overall.

② Cooperative federalism.

③ More exchange of ideas and culture

↓

∴ Multicultural society.

④ South can lead in knowledge sectors / IT while north and East can propel Make in India.

∴ Role specialisation.

Proper health and Education should be given to youth to make them productive. Public expenditure on these should rise.

Next IAS ID: PTTP220826, TC071, 17-07-2023 05:27 PM

Q.9 भारत में नृजातीय और सांस्कृतिक विविधता हमेशा से एकता के सूत्र में बँधी रही है। भारत की सांस्कृतिक एकता में योगदान करने वाले प्रमुख कारकों की चर्चा कीजिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The ethnic and cultural diversity in India has always been bound by the thread of unity. Discuss the major factors that have contributed to the cultural unity of India. (Answer in 150 words) 10 Marks

While India has immense cultural diversity, there are unifying factors that facilitated unity for 1000s of years in sub-continent.

factors leading to Unity

① Geography → entity
- Himalayas in north and Indian ocean in south.
- Monsoon type of climate → creates similar festivals centred around monsoon.

② Religion & scriptures → like Mahabharat, Ramayan have been translated in regional languages.
- → unifying and assimilation in Hinduism.

③ Temple Culture → char

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Dham in 4 directions

⇒ Pilgrimage

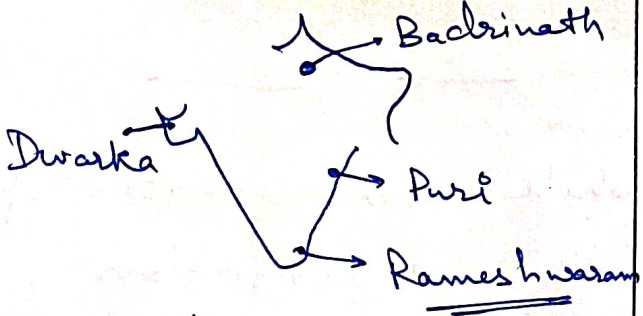


fig: Char Dham

④ Caste

unites across state boundaries.

⑤ Popular Media, Culture etc.

↳ S. Indian movies dubbed in hindi

↳ Punjabi music

⑥ Historically :- Many a times whole India under a single power ↓ develops common culture.

While diversity is appreciable, a check should be kept on

↳ Regionalism & Son of soil policy ↓ due to lesser jobs.

↳ Racism especially against people of North East in North India.

↳ recognition of local languages in administration.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.10 भारतीय समाज में विद्यमान सार्वजनिक और निजी जीवन में द्विभाजन जाति के उन्मूलन के लिए एक प्रमुख बाधा के रूप में कार्य करता है। औचित्यपूर्ण उत्तर लिखिए। (150 शब्दों में उत्तर दीजिए) 10 अंक

The dichotomy in public and private life in Indian society acts as a major barrier to the annihilation of caste. Justify. (Answer in 150 words) 10 Marks

While untouchability was abolished by constitution, and right to equality and affirmative action was given to SC/ST etc, there exist discrimination when it comes to private affairs

1 Dichotomy in public and private life

① Inter-caste Marriage → less than 5%.

② Misuse of special marriages act to moral police the couples doing inter-caste marriage.

③ Inter-dining → House helpers etc. are served food, they often eat while sitting on ground.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

④ Reaction to reservation by upper castes and hence increasing discrimination against lower caste.

BR ambedkar held that annihilation of caste requires

① Inter caste marriages.

② Inter-Dining

⇒ When people are basing their decision on parameters other caste in marriages.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.11 स्वतंत्रता के बाद भारत को कई युद्ध लड़ने के लिए विवश किया गया था। हमारे द्विपक्षीय संबंधों पर भारत–पाक और भारत–चीन युद्धों के कारणों और प्रभावों पर प्रकाश डालिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

India was forced into numerous wars post Independence. Highlight the causes and impact of the Indo-Pak and Indo-China wars on our bilateral relationships. (Answer in 250 words) 15 Marks

India fought 1st war with Pakistan in 1948 soon after independence when both armies' chief were British.

Indo-Pakistan wars → 1948, 65, 71, 99

Causes.

① **Kashmir** → pakistan's continuous attempts to unite Kashmir with itself.

⇒ 1999 → war ~~on~~ in Kargil for Siachen glaciers.

② while Kashmir remained the ultimate objective other reasons included

↳ defeat in 1962 war and thus Pakistan saw India weakened.

↳ India's support to Bangladesh

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

and help in its creation in 1971

③ Proxy war through state-sponsored terrorists in Kashmir and Punjab.

*Impact on bilateral relationships

① SAARC's failure.
→ No Regional connectivity & trade between India and Pakistan.

② India maintains → terrorism and talks can't go hand in hand.

③ Degraded diplomatic relations
→ half strength in embassy.
→ ~~Pakistan~~ ~~Pakistan~~

④ Boycott of Pakistan Players in IPL.

⑤ hampers India's connectivity to Central Asia.

Indo-China war → 1962

* Causes.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

① Different perceptions of boundaries
→ Maps were not exchanged.
② India's Dalai lama policy.
→ we gave him refuge in 1959 despite strong reaction from Beijing.
③ Concerns in China that India is planning with USA to create secession of Tibet.
④ Domestic issues in China.
→ Great leap forward etc.
⑤ Cuban Missile Crisis ⇒ world engaged in Cuba.

Implications on bilateral relations:

① Mutual Distrust.
② More mobilisation along LAC since Doklam crisis.
③ Boundary settlement pending.
④ India looking at Japan, USA, Australia to diversify away from China.

Boundary disputes should be settled to prevent future wars.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Q.12 बंगाल के समेकन की प्रक्रिया, जो प्लासी के युद्ध के बाद शुरू हुई तथा बक्सर के युद्ध में समाप्त हुई। क्या आपको लगता है कि अंग्रेज़ों के लिए प्लासी की तुलना में बक्सर का युद्ध अधिक महत्त्वपूर्ण था?

(250 शब्दों में उत्तर दीजिए) 15 अंक

The process of consolidation of Bengal, which started after the Battle of Plassey culminated in the Battle of Buxar. Do you think the Battle of Buxar was more important for the British than Plassey?

(Answer in 250 words) 15 Marks

Battle of Buxar in 1764 was a concerted effort by Mughals, Awadh and Bengal to defeat East India Company. [EIC]

Significance of Plassey.

1. Puppet ruler of EIC in Bengal.
   → Share in revenue of Bengal to EIC.
2. Meaningful hold of EIC first time Indian subcontinent.

Significance of Buxar battle

1. After the battle, Awadh became EIC's most loyal disciple
   ⇒ provided soldiers

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

→ had a resident placed.

② Mughal authority diminished.
⇒ Ruler ~~restricted~~ pensioned.
→ only titular head limited to delhi.

③ Marathas emerge as major power in North, central and west India.

④ Dual administration
→ Niramat and Diwani to EIC
↓
Revenue can be used to expand empire in other parts of India.
→ Bengal under complete control and no attempts here onwards to overthrow EIC's rule here.

⑤ Increased control of EIC in trade outside Bengal too.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

While Plassey was the beginning of subjugation of Bengal, it was completed in Buxar.

Both battles have their own significance in history. one lead to another.

⇒ EIC without having won Plassey could not have won Buxar.

Both battles were decisive in sealing the fate of subcontinent for next 180-185 years. After these, the empire expanded first by subjugating Mysore, allying Hyderabad and crippling Marathas in 1818. With conquering Punjab in 1848 and Sindh, EIC came to rule who of Indian sub-continent.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.13 संस्कृत साहित्य सामान्य रूप से और विशेषतः गुप्त काल में प्राचीन भारत के साहित्यिक इतिहास के लिए एक उच्च मानक स्थापित करता है। विवेचना कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

Sanskrit literature in general and particularly in the Guptan age set a high watermark for the literary history of ancient India. Discuss. (Answer in 250 words) 15 Marks

Guptan age was instrumental in the development and codification of Sanskrit literature.

Contributions of Gupta age to Sanskrit literature.

① Navratans of Chandragupta

↳ Kalidasa wrote various poems, plays etc. like Abhigyanshakuntalam.

② Asthadhayi, Yogasutra, etc. were codified.

③ In field of science, literature on medical science, astronomy (Aryabhatt) etc were

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

written

(8) → Bhahmagupta, Aryabhatt discovered pie, zero etc.
→ showed helio centric theory.

In Earlier times

(1) Rig veda and other vedas enriched sanskrit literature

(2) Puranas, upanishads, Aranyaka etc gave depth to vedas.

(3) Epics like Mahabharat & ramayana were written.

(4) Natyashastra on dance forms led to development of classical dance forms.

(8)

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

In the post Gupta times by

→ Adi Shankaracharya

→ ~~[illegible]~~

→ Ratnavali by harsha.

→ Brahma spoot siddhanta

So Sanskrit literature got development in various phases starting from Rig-Veda. Most codification happened during Gupta Period.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Q.14 महासागरीय नितल का विन्यास उन भूगर्भीय प्रक्रियाओं के बारे में आवश्यक जानकारी प्रदान करता है जिन्होंने पृथ्वी की सतह को आकार दिया है। महासागरीय नितल की प्रमुख विशेषताओं और समुद्र विज्ञान के अध्ययन में उनके महत्त्व की चर्चा कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

The configuration of the ocean floor provides essential information about the geological processes that have shaped the Earth's surface. Discuss the major features of the ocean floor and their significance in the study of oceanography.

(Answer in 250 words) 15 Marks

Study of ocean bottom reliefs was significant first in development of sea floor spreading theory and later Plate tectonic theory.

Major features of ocean floor & their significance

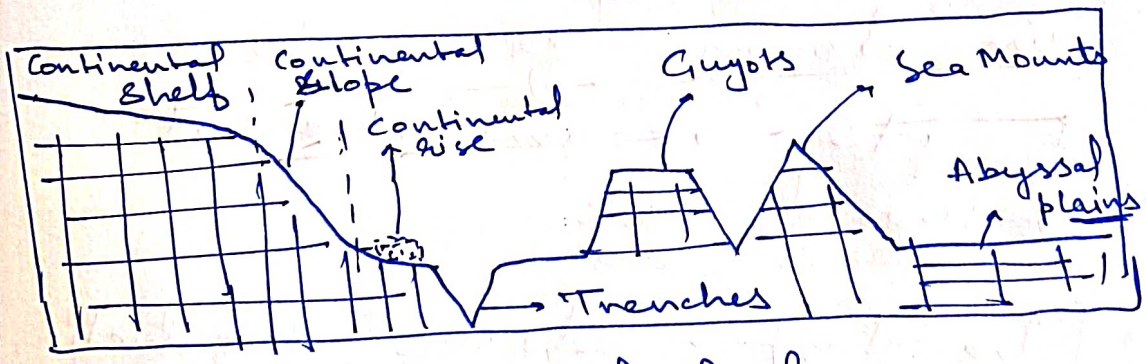


fig: Ocean relief features

(A) Continental shelf → 1–3° slope
→ extension of continent into ocean.
→ Submerged coast or due to wave action.

↑ Significance

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

① tourism ⇒ & recreational activities.

② Bio diversity
→ Coral reefs → 2% area & 75% ocean life
- needs shallow water
- photic zone.

③ Minerals → oil
↳ Poly metallic nodules
↳ Methane gas hydrates.

④ Ports → as no cold ocean currents and hence ships are stable

Ⓑ Continental slope → sediments run down from here & gets accumulated at continental rise

Ⓒ Trenches → shows subduction of denser plate
⇒ proves Plate tectonic theory. & volcanism along coasts
Eg Pacific ring of fire.

Ⓓ Mid Oceanic Ridges (MOR) → divergent ocean plate boundary.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

→ due to divergent convective currents in Asthenosphere.

(i) Polarity of rocks equidistant from MoR is same.

(ii) Age of oceanic crust is 200mn years old whereas continental crust is 3.2 Bn years old

↓

Show creation of new crust from MoR and distruction in trenches.

(iii) Sediments decreased in height away from MoR

↓

erosion with time.

(E) Sea Mounts → can even come out of ocean.

eg Iceland.

(F) Abyssal Plaints → vast flat plains

Study of features enriches the study of Plate Tectonic theory and understanding of shallow earthquakes, Volcanism and Island formations

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.15 दुर्लभ पृथ्वी तत्त्वों (दुर्लभ मृदा धातुएँ) की बढ़ती माँग के साथ, उनका वितरण वैश्विक अर्थव्यवस्था का एक महत्त्वपूर्ण पहलू बन गया है। वैश्विक स्तर पर दुर्लभ पृथ्वी तत्त्वों के वितरण, उनके उपयोग और उनके निष्कर्षण के पर्यावरणीय प्रभावों पर चर्चा कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

With the growing demand for rare earth elements, their distribution has become a critical aspect of the global economy. Discuss the distribution of rare earth elements across the world, their uses, and the environmental impact of their extraction. (Answer in 250 words) 15 Marks

Rare earth elements are essential components in manufacture of Electronics, Powerplants, wind turbines and batteries.

So their availability has economic, geo-political and social ramifications.

{Distribution}

① Majority (80%) of rare earths are present in China.

② Central Asian republics also have significant quantities.

③ Also present on ocean bottom reliefs.
→ Poly metallic nodules in Arctic

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin



fig: distribution of rare earth.

Demand has increased because

(1) focus on electrical vehicles
- → used in Motors
- → fuel cell
- → batteries

(2) Electronic & semiconductor boom.

(3) Crypto currency mining and AI etc. needs large computing powers
↓
Electronics demand rise.

(4) Space applications.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Environmental impacts

① They are present in low quantities
↓
Needs a lot of Refining
↓
leads to effluents
↓
These can be toxic having heavy metals like Mercury, Arsenic lead etc.

② Energy intensive mining as lot of Refining.
→ Mined in small quantities.

③ Destruction of landscapes & forests.

④ Emissions are high due to Energy intensive

This limited distribution has created dependancy on China as it controls 90% of global supplies.
↓
India, USA and others have come together to source alternative suppliers for rare earth.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Q.16 पहाड़ी राज्यों में पर्यटन, इस क्षेत्र की पारिस्थितिक वहन क्षमता से अधिक हो जाने का खतरा है। इस प्रवृत्ति के लिए योगदान करने वाले कारकों का विश्लेषण कीजिए और इस घटना के संभावित पर्यावरणीय प्रभावों का मूल्यांकन कीजिए। इन राज्यों में धारणीय पर्यटन को सुनिश्चित करने के लिए क्या उपाय किए जा सकते हैं?

(250 शब्दों में उत्तर दीजिए) 15 अंक

Tourism in the hilly states is threatening to exceed the ecological carrying capacity of the region. Analyze the factors contributing to this trend and evaluate the potential Environmental impacts of this phenomenon. What measures can be taken to ensure sustainable tourism in these states?

(Answer in 250 words) 15 Marks

There has been a sudden increase in tourists in hilly regions for reasons like recreation, pilgrimage etc.

factors responsible for rise in tourists

① Government policies favouring tourists ↓ to create jobs for locals.

② Projects like Char Dham road widening and others have made these regions easily accessible.

③ Social Media ↓ a drive to recreation by visiting such spots.

⇒ chain reaction.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

(iii) # affects the Carrying Capacity of Ecology.

① Ecology is already fragile.
→ High Bio diversity.

② Pollution → emissions
↳ plastic pollution.
↳ river effluents

③ More hotels, industries etc.

④ Construction activities, dams hinders natural flow of rivers.

⑤ Landslides, avalanches and flash floods witnessed

people are encroaching sensitive slopes, flood plains etc.

⇒ The ecology can not handle large population.

Measures that can be taken

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

① Issue permits for famous temples.

↳ allow only a limited number of devotees to visit

② Ban use of Plastics in sensitive places.

→ higher fines and better execution to change behaviour towards pollution.

③ Sustainable development

↳ use of more Run off power plants than Dams.

↳ Limited construction activities.

④ Promote electric vehicles to ~~avoid~~ prevent emissions.

⑤ Check light and noise pollution

Hilly regions offer various ecological services and their Bio-diversity should be conserved.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.17 भारतीय मानसून विभिन्न जलवायविक कारकों से प्रभावित एक जटिल परिघटना है। भारत में मानसूनी वर्षा की तीव्रता और वितरण के निर्धारण में महासागरीय और वायुमंडलीय कारकों की भूमिका का आलोचनात्मक परीक्षण कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

The Indian monsoon is a complex phenomenon influenced by various climatic factors. Critically examine the role of oceanic and atmospheric factors in determining the intensity and distribution of monsoon rainfall in India. (Answer in 250 words) 15 Marks

The Indian monsoon is crutal to agriculture ~~and~~ as India receives more than 70% annual rainfall between June and September.

factors influencing Monsoon

(A) Ocean

(1) ~~Elnion~~ El-nino / La-nina.

Elnino reduces Monsoon intensity while La-Nina increases

∴ Role of ocean currents (humboldt) in Monsoon.

(2) Ocean Suface temperature

more evaporation

More intensity of Monsoon

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

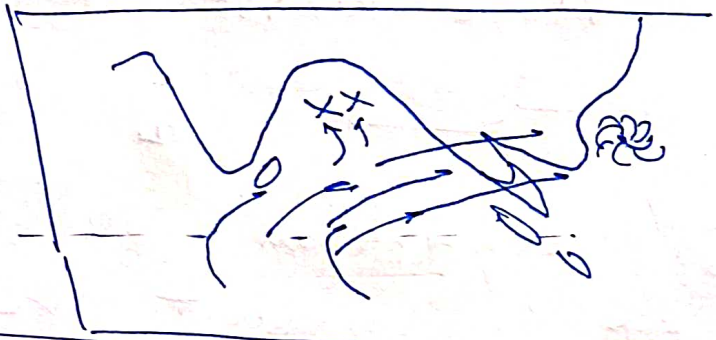
(B) Atmosphere & weather Phenomenon.

(1) Cyclones

(i) if present in pre-monsoon in Arabian sea ⇒ Delays Monsoon.
e.g. Biparjoy.

(ii) in S. East Asia e.g. reduce Bay of Bengal branch.
e.g. Mawar

⇒ Pulls winds towards it.



(2) Upper Air circulation

⇒ Tropical easterly jet (TEJ) ⇒ burst of Monsoon

⇒ pulls cyclones towards India from Bay of Bengal.

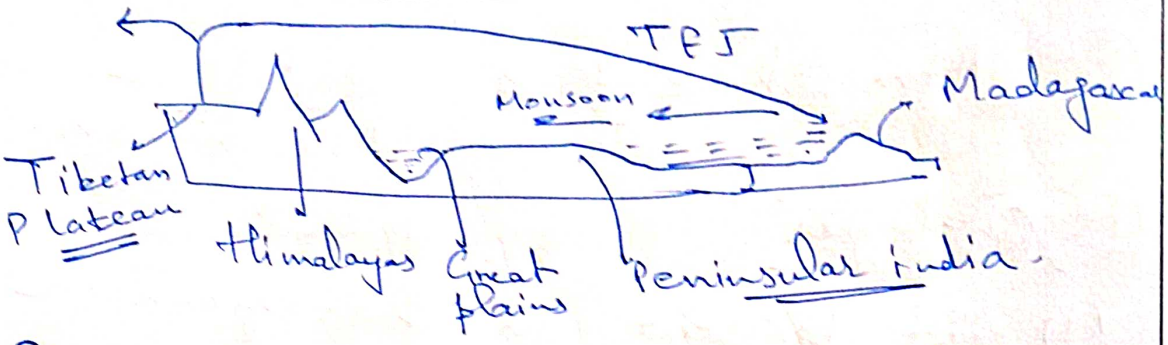
fig: impact of cyclone.



(3) Mascrenes High

→ High pressure near Madagascar & thus pushes more winds towards India.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM



④ Indian Ocean Dipole. (IOD

→ positive IOD warms western Indian ocean

⇓

More moist winds into India.

⑤ Madellan Jullian oscillation

→ If present in western Indian ocean

⇓

increases intensity of Monsoon.

Distribution variation

① Due to varied land use

→ urban heat island.

② Barriers → mountain & hills leads to rainfall on windward side

→ eg Western Ghats & Himalayas.

→ Aravalis → winds blow parallel to it and hence Rajasthan dry.

Next IAS ID: RTR220826_TC071, 17-07-2023 04:27 PM

Q.18 हमारे समाज में परंपराएँ परिवर्तन को क्यों बाधित करती हैं? प्राचीन रीति–रिवाज़ों पर आधारित मूल्य–मान्यताओं के विरुद्ध सामाजिक विधान किस सीमा तक सहायक हो सकते हैं? (250 शब्दों में उत्तर दीजिए) 15 अंक

Why do traditions in our society impede change? To what extent can social legislation be instrumental against old customary practices? (Answer in 250 words) 15 Marks

Candidates must not write on this margin

while status quo is desired by many sections of society, the constitution seeks to develop progressive values among citizens.

Society's reaction to social change.

① fear of loss of tradition and identity.

→ language, clothing etc.

② Cultural lag → our peripheral values are changing but core values still traditional.

⇒ Social conformity forces person to act in line with peripheral values.

↓

Clash when conflict with core values.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

(Eg) Women's freedom
↓
Society giving equal education opportunity
↓
but clash
- clothing :- if she wears western
- choosing partner of choice.

↓
Creates Paradoxes & Dilemma in society's consciousness.

(Eg) buying car but ~~with~~ on special day., doing a "pooja"

(3) Role of Religious institutions and priests.

⇒ have interests in keeping various rituals alive.

→ Strong voice against gender equality legislations like on triple talaq.

Role of Social legislations

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

① External locus of control
↓
limited effectiveness

e.g. Still child marriages practised.

(NFHS-5 : 23% women between 20-24 were married before 18).

② However, gives rights to oppressed. like women in temple entry, equal rights in inheritance etc.

⇒ hence a UCC is demanded (Supreme court and law commission)

③ {Awareness} → about fair practices and rooting out social evils.

④ Behavioural change slowly.

⑤ Making access to Justice.

→ only after legislation does as social evil is recognised as such.

A middle path of legislation & societal awareness is needed.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Q.19 मलिन बस्तियाँ ऐसी 'समस्याएँ' नहीं हैं जिनका 'समाधान' किया जाना है – बल्कि वास्तव में, ये बुनियादी ढाँचे के प्रावधान और सामाजिक–आर्थिक मुद्दों को शामिल करने वाली असंतुलित और स्वार्थपरक नगरीय नीतियों का एक परिणाम हैं। विश्लेषण कीजिए। (250 शब्दों में उत्तर दीजिए) 15 अंक

Slums are not 'problems' that have to be 'solved' – but are indeed a result of lopsided and vested urban policies covering infrastructure provision and socio-economic issues. Analyse.

(Answer in 250 words) 15 Marks

Slums are human habitation with poor facilities like water, space, electricity. They have become a permanent part of our cities.

These are result of various actions and inactions of government.

{Reasons}

① Unplanned Urbanisation.
⇒ only focus on increasing land use & its quality is ignored.

② public transportation poor.
→ hence people start living close to work sites.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

③ failure of housing policies of government

④ Inadequate infrastructure in region of slums.

⟹ failure to provide basic facilities.

⑤ Mostly slums are housed by Migrants, refugees etc.

↓

lack of focus on their welfare.

⑥ Exhorbitant rents and real estate prices.

⑦ lack of decentralised development

↓

∴ create jobs in place of source of Migrants,

→ in villages etc.

⑧ They have no political representation.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

→ as no voting card in destination region

↓

Concerns are not heard.

Way forward

① Redevelop slums and provide basic facilities.

② Consider slum dwellers as beneficiaries.

→ It is the responsibility of government to provide them with housing.

③ Focus should not be just limited to maximising available land.

Slum dwellers suffer from diseases due to lack of sanitation and healthy spaces. This increases scope of petty crimes and lowers social capital. Hence slums have to be made vibrant places.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Q.20 साम्प्रदायिकता आर्थिक अभाव से बल प्राप्त करती है, और सामाजिक बहिष्कार के वातावरण में फलती–फूलती है, जिससे असंतोष और विभाजन के लिए उर्वर भूमि तैयार होती है। टिप्पणी कीजिए।

(250 शब्दों में उत्तर दीजिए) 15 अंक

Communalism gains strength from economic deprivation, and thrives in environments of social exclusion, creating fertile ground for discontent and division. Comment.

(Answer in 250 words) 15 Marks

The British used differential development among Hindus and Muslims to create competition of limited jobs on the basis of religion.

⟹ (1909) → separate electorates.

→ 1935 → communal award.

Economic Deprivation fertile ground for communalism.

① People wants good livelihood

↓

shown way to get jobs through religious mobilisation

↓

Create identity on the basis of religion

↓

common Discontent

↓

against well off other

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Social → exclusion creates deprivation

↓ if this is based on Religion

↓

feeling of common deprivation against "other"

Deprivation can be in:-

① Political representation due to first past the post system

↓

less.

② Jobs → not accessible as the whole community is not having sufficient skillsets and education.

③ fear of subversion from majority

↓

used by political leaders to develop more fear of subjugation of culture or faith.

↓

lesser educated & unemployed youth's brain washed.

Next IAS ID: PTTP220826, TC071, 17-07-2023 04:27 PM

Candidates must not write on this margin

Tackling the menace of Communalism.

(1) Development
↳ Equitable & job creation.
↳ provision of quality Education and health to all.

(2) Promote platforms to exchange ideas, cultures etc.
⇒ Religious leaders can take lead.

(3) Tolerance imbibed.
⇒ showing mutual existence of different religions possible.

(4) Use sports as a unifying factor.
→ also media can play a constructive role.

Communalism has the potential to derail a country's progress by lowering Social Capital which is must for economic prosperity.