Q2(b)

Discuss the Paleolithic environment in light of available evidences with special reference to India.

UPSC Civil Services Mains 2023 · Anthropology GS 1 · 15 marks · Paleolithic

(i) Paleolithic

Core demand of the question

- Discuss the Paleolithic environment in light of available evidences with special reference to India
- Write at 15-mark length

Revision summary

India's Paleolithic climate is monsoon and drought inside global Pleistocene cycles.

Attirampakkam shows early Acheulian in the south.

Hunsgi-Isampur show factory sites on limestone.

Didwana records Thar palaeolakes and dunes.

Hathnora places a hominin in Narmada river fauna.

Toba ash at Jwalapuram is a marker whose demographic effect is debated.

Bhimbetka and Son-Belan track later shelter and valley use.

Introduction

The Indian Paleolithic was lived in Pleistocene climates driven more by monsoon and drought than by European ice sheets. Environment must be read from sediments, fauna, dunes, and dated sites, not from a copied Alpine glacial list.

Body

Pleistocene setting

- Global glacial-interglacial cycles still set sea level and temperature, but in India the practical rhythm is stronger and weaker monsoon, wetter and drier Thar, and shifting rivers.
- Siwalik and Narmada deposits, and Himalayan loess and terrace sequences, give the long terrestrial clock for that Pleistocene.

Evidence, with Indian sites

- Acheulian occupations at **Attirampakkam** in Tamil Nadu, dated by **Shanti Pappu's** team to well over a million years, show hominins already in a monsoon peninsula, not only in a northern ice-edge world.
- The Hunsgi-Baichbal valleys and **Isampur** in Karnataka preserve Acheulian factory landscapes on limestone, which implies water, raw stone, and game in a savanna-woodland mosaic.

• The Soanian pebble-tool debate in the Siwaliks records a different northern raw-material and terrace setting, whether or not every collection is now accepted as a culture.

• Thar evidence from **Didwana** and the 16R dune profile shows palaeolakes and dune building, so Paleolithic groups used wet pulses in an arid belt.

• **Hathnora** on the Narmada yielded a hominin calvaria in a riverine Pleistocene fauna of elephant, horse, and cattle kin, which is an environmental as well as a fossil fact.

• Toba ash at **Jwalapuram** and related southern sites is a volcanic time-marker; whether it caused a long Indian bottleneck is debated by **Michael Petraglia** and others, but the ash is still an environmental event in the record.

• **Bhimbetka** and the Son-Belan sequences studied by **G. R. Sharma**, later teams, and rock-shelter palynology show later Pleistocene to Holocene shifts toward microliths as forests and grasslands reorganised.

• **Fauna, pollen, and isotopic work together indicate mosaic habitats:** grassland, gallery forest, and seasonal water, not a single jungle or a single desert.

How to use the evidence

• Environment is reconstructed from dated stratigraphy first, then from tools as behaviour inside that setting.

• India does not copy the European sequence of named glaciations; monsoon proxies and local basins are the right language.

Flow diagram

Pleistocene monsoon -> Rivers Narmada Son

Pleistocene monsoon -> Thar dunes lakes

Pleistocene monsoon -> Hunsgi Attirampakkam

Rivers Narmada Son -> Occupation

Thar dunes lakes -> Occupation

Hunsgi Attirampakkam -> Occupation

Conclusion

Indian Paleolithic environments were Pleistocene monsoon landscapes of river, dune, plateau, and shelter. Attirampakkam, Hunsgi, Didwana, Hathnora, Jwalapuram, and Bhimbetka are the evidence, not a borrowed ice-age textbook.

Facts & figures

Attirampakkam
Tamil Nadu Acheulian site with early dates published by Shanti Pappu and colleagues.

Hathnora
Narmada locality of a Pleistocene hominin calvaria in a river fauna.

Didwana 16R
Thar dune and palaeolake sequence used to read arid-wet pulses for Paleolithic occupation.

Jwalapuram
Southern site with Youngest Toba Tuff used as a Pleistocene environmental and archaeological marker.

Bhimbetka
Vindhyan rock shelters with a long prehistoric sequence from Acheulian toward Mesolithic and later paintings.