

- The law of association is useful not only in the ordering of site historiographies, but also in the construction of local regional sequences.
- According to the basic geomorphological situation or the type of deposits involved, archeological sites can be geologically classified as follows:
  - (a) Alluvial sites: artifacts, fossils, occupational floors and the like found within former stream deposits.
  - (b) Lacustrine sites: archeological materials found in former lake beds, in ancient bogs, swamps, or spring deposits.
  - (c) Aeolian sites: archeological materials found in or under wind-borne sand or loess, or found in relation to features resulting from deflation or wind scour.
  - (d) Cave sites: archeological materials found in direct relation to erosional or depositional phenomena associated with former coastlines.
  - (e) Costal sites: archeological materials found in caves with some form of geologic or archeological stratigraphy.
  - (f) Surface sites: the great mass of scattered archeological materials and sites found at the surface, with little possibility of direct association with any geomorphic event.

#### Q.5 What are dating methods? Discuss one absolute method and one relative methods in detail. 20

- **Definitions**
- **Sub types- Relative and absolute and their definition**
- **Significance of**
- **Contrast between the 2**
- **Discuss one relative and one absolute method**
- **Newer developments**

Dating methods are procedures used by scientists to determine the age of rocks, fossils, or artifacts.

#### Relative Dating:

- Relative dating techniques identify the order in which sites or artifacts were used in a sequence from earliest to latest.
- It is ordering of events in the absence of any written record or evidence.
- In relative dating the duration of the event is unknown, so also the elapsed time between events is very difficult to determine.
- Furthermore, the temporal distance between any past event and the present cannot be determined

**Absolute Dating:** Absolute (or chronometric) dating techniques that try to establish an exact or approximate calendar date for a site or artifact.

Dates termed absolute are really of two separate categories. Those, which are stated in terms of years in our calendar, are true absolute dates. The true absolute dates may be derived from tree rings, ancient calendrical systems, coins, and varves where traced directly back in time from present. The other category consists of techniques, which yield dates expressed in years with an associated probability factor. These methods depend on knowing the rate of change and the amount of change, the number of years that have elapsed since the process of change began

The progress in dating methods during the past two decades has significantly improved the possibility to constrain the timing of geological processes, climate, environmental change and human evolution. Due to the availability of modern dating approaches prehistoric history have had to be re-written and we now have a