### Key concepts in nutshells

- 1. Period:
  - i. Early Harappan culture Before 2600 BCE
  - ii. Mature Harappa culture 2600 BCE to 1900 BCE
  - iii. Late Harappa culture After 1900 BCE
  - iv. Extent of Harappan civilisation:
    - i. Northern boundary- Manda Southern Boundary- Daimabad
    - ii. Eastern boundary- Alamgirpur Western boundary- Sutkagendor Characteristics of the Harappan Civilisation.

Time Line 1		
Major Periods in Early Indian Archaeology		
2 million BP (Before Present)	Lower Palaeolithic	
80,000	Middle Palaeolithic	
35,000	Upper Palaeolithic	
12,000	Mesolithic	
10,000	Neolithic (early agriculturists and pastoralists)	
6,000	Chalcolithic (first use of copper)	
2600 BCE	Harappan civilization	
1000 BCE	Early iron, megalithic burials	
600 BCE – 400 CE	Early Historic	

# I. Subsistence strategies

- i. The Harappans ate wide range of plants and animal products.
- ii. Animal bones found at Harappan sites include those of cattle, sheep, goat, buffalo and pig.
- iii. The bones of wild species found suggest the Harappans hunted these animals themselves or obtained meat from other hunting communities. Bones of fish and fowl are also found.

# iv. Agricultural technologies:

- Representations on seals and terracotta sculpture indicate that the bull was known, and archaeologists extrapolate from this that oxen were used for ploughing.
- Terracotta models of the plough have been found at sites in Cholistan and at Banawali. Evidence of a ploughed field at Kalibangan has also been found.
- Traces of irrigation canals have been found at Shortugahi in Afghanistan.

 Traces of rainwater harvesting found in Dholavira in Gujarat through water reservoirs.

#### II. MOHENJODARO: A planned urban city Two Sections of settlement:-

- I. The Citadel
  - These were constructed on mud brick platforms and were walled, which meant that it was physically separated from the Lower Town
  - These include the warehouse a massive structure of which the lower brick portions remain.
  - The upper portions, probably of wood, was the Great Bath. It was a large rectangular tank in courtyard surrounded by a corridor on all four sides.
- II. The Lower Town
  - It had carefully planned drainage system. The roads and streets were laid out along an approximate "grid" pattern.
  - It provides examples of residential buildings. Many were centred on a courtyard, with rooms on all sides.
  - Every house had its own bathroom paved with bricks, with drains connected through the wall to the street drains.
  - The uniqueness of the structure, as well as the context in which it was found (the Citadel, with several distinctive buildings), has led scholars to suggest that it was meant for some kind of a special ritual bath.

# II. Social differences

- Burials: At burials in Harappan site, s the dead were generally laid in pits. Sometimes, there were differences in the way the burial pit was made. Some graves contain pottery and ornaments, perhaps indicating a belief that these could be used in the afterlife. Jewellery has been found in burials of both men and women.
- Looking for "luxuries": The artefacts are classified as utilitarian and luxuries by the archaeologists. Utilitarian objects are of daily use made fairly easily out of ordinary materials such as stone or clay. Luxuries are those items if they are rare or made from costly, non-local materials or with complicated technologies. The situation becomes more complicated when we find what seem to be articles of daily use, such as spindle whorls made of rare materials such as faience.

## III. Craft Production

- Chanhudaro is a tiny settlement exclusively devoted to craft production, including bead-making, shell-cutting, metal-working, seal-making and weightmaking.
- The variety of materials used to make beads is remarkable.
- Techniques for making beads differed according to the material.
- Nodules were chipped into rough shapes, and then finely flaked into the final form.
- Specialised drills have been found at Chanhudaro, Lothal and more recently at Dholavira.

- Nageshwar and Balakot were specialised centres for making shell objects including bangles, ladles and inlay.
- **Centres of production**: Archaeologists identified centres of production by looking for raw materials and tools used.
- Waste is one of the best indicators of craft work. Sometimes, larger waste pieces were used up to make smaller objects.
- These traces suggest that apart from small, specialised centres, craft production was also undertaken in large cities such as Mohenjodaro and Harappa.

# IV. Strategies for procuring material

- **Procured from the subcontinent and beyond**: The Harappans procured materials for craft production in various ways.
- Terracotta toy models of bullock carts suggest that this was one important means of transporting goods and people across land routes.
- Another strategy for procuring raw materials may have been to send expeditions, which established communication with local communities.
- **Contact with distant lands**: archaeological finds suggest that copper was also probably brought from Oman, on the southeastern tip of the Arabian peninsula.
- Mesopotamian texts datable to the third millennium BCE refer to copper coming from a region called Magan, perhaps a name for Oman.
- Other archaeological finds include Harappan seals, weights, dice and beads which suggests contacts with regions named Dilmun (probably the island of Bahrain), Magan and Meluhha, possibly the Harappan region.
- It is likely that communication with Oman, Bahrain or Mesopotamia was by sea. Mesopotamian texts refer to Meluhha as a land of seafarers. Besides, we find depictions of ships and boats on seals.

## V. Seals, Script, Weights

- Seals and sealings were used to facilitate long distance communication. The sealing also conveyed the identity of the sender.
- An enigmatic script: Harappan seals usually have a line of writing, probably containing the name and title of the owner. Scholars have also suggested that the motif (generally an animal) conveyed a meaning to those who could not read.
- Most inscriptions are short, the longest containing about 26 signs. Although the script remains undeciphered to date, it was evidently not alphabetical as it has just too many signs – somewhere between 375 and 400. The script was written from right to left.
- Weights: Exchanges were regulated by a precise system of weights, usually made of a stone called **Chert** and generally cubical, with no markings.
- Metal scale-pans have also been found.

# VI. Ancient Authority

 There are indications of complex decisions being taken and implemented in Harappan society.

- Palaces and kings: A large building found at Mohenjodaro was labelled as a palace by archaeologists but no spectacular finds were associated with it. A stone statue was labelled and continues to be known as the "priest-king".
- Some archaeologists are of the opinion that Harappan society had no rulers, whereas other archaeologist feels that there was no single ruler but several rulers, Mohenjodaro had a separate ruler, Harappa another. While some believe that there was a single state.

# VII. The End of the Civilisation

- There is evidence that by c. 1800 BCE most of the Mature Harappan sites in regions such as Cholistan had been abandoned. Simultaneously, there was an expansion of population into new settlements in Gujarat, Haryana and western Uttar Pradesh.
- Several explanation for the decline of Harappan civilisation are climatic changes, deforestation, excessive floods, the shifting and/or drying up of rivers.
- The end was evidenced by the disappearance of seals, the script, distinctive beads and pottery, the shift from a standardised weight system to the use of local weights; and the decline and abandonment of cities.

# VIII. Discovering the Harappan Civilisation

- When Harappan cities fell into ruin, people gradually forgot all about them.
- Cunningham's confusion: The first Director-General of the ASI, Cunningham used the accounts left by Chinese Buddhist pilgrims who had visited the subcontinent between the fourth and seventh centuries CE to locate early settlements. A site like Harappa, which was not part of the itinerary of the Chinese pilgrims and was not known as an Early Historic city.
- A Harappan seal was given to Cunningham by an Englishman. He noted the object, but unsuccessfully tried to place it within the time-frame with which he was familiar. It is not surprising that he missed the significance of Harappa.
- A new old civilisation: In 1924, John Marshall, Director-General of the ASI, announced the discovery of a new civilisation in the Indus valley to the world.
- It was then that the world knew not only of a new civilisation, but also of one contemporaneous with Mesopotamia.
- Marshall tended to excavate along regular horizontal units, measured uniformly throughout the mound, ignoring the stratigraphy of the site. This meant that all the artefacts recovered from the same unit were grouped together.
- New techniques and questions: Since the 1980s, there has also been growing international interest in Harappan archaeology.
- Specialists from the subcontinent and abroad have been jointly working at both Harappa and Mohenjodaro.
- They are using modern scientific techniques including surface exploration to recover traces of clay, stone, metal and plant and animal remains as well as to minutely analyse every scrap of available evidence. These explorations promise to yield interesting results in the future.

	Time Line 2
	Major Developments in Harappan Archaeology
Nineteenth Century	Report of Alexander Cunningham on Harappan seal
1875	
Twentieth Century	M.S Vats beings excavations at Harappa
1921	
1925	Excavations begin at mohenjodaro
1946	R.E.M wheeler excavates at Harappa
1955	S.R Rao beings excavations at Lothal
1960	B.B Lal and B.K Thapar being excavations at Kalibangan
1974	M.R Mughal beings exploration in Bahawalpur
1980	A team of German and Italian archaeologists beings surface exploration at mohenjodaro
1986	American team beings excavations at Harappa
1990	R.S Bisht beings excavations at Dholavira

## I. Problems of Piecing Together the Past

- It is not the Harappan script that helps in understanding the ancient civilisation. Rather, it is material evidence that allows archaeologists to better reconstruct Harappan life. This material could be pottery, tools, ornaments, household objects, etc.
- Organic materials such as cloth, leather, wood and reeds generally decompose, especially in tropical regions. What survive are stone, burnt clay (or terracotta), metal, etc.
- Classifying finds: One simple principle of classification is in terms of material, such as stone, clay, metal, bone, ivory, etc. The second, is in terms of function. Archaeologists have to decide whether, for instance, an artefact is a tool or an ornament, or both, or something meant for ritual use.
- Sometimes, archaeologists have to take recourse to indirect evidence. For instance, though there are traces of cotton at some Harappan sites, to find out about clothing we have to depend on indirect evidence including depictions in sculpture.
- **Problems of interpretation**: Early archaeologists thought that certain objects which seemed unusual or unfamiliar may have had a religious significance.
- Attempts have also been made to reconstruct religious beliefs and practices by examining seals, some of which seem to depict ritual scenes.
- Others, with plant motifs, are thought to indicate nature worship.
- Several reconstructions remain speculative at present.

#### Chapter 01 Bricks, Beads and Bones The Harappan Civilisation

#### Answer in 100-150 words

1. List the items of food available to people in Harappan cities. Identify the groups who would have provided these.

#### Ans.

Food	Groups who provide these food items
Products taken from plants	Food gatherers
Flesh and fish	Hunter groups
Wheat maize, millet, pulses, rice, and other eatable products	Agricultural groups

#### 2. How do archaeologists trace socio-economic differences in Harappan society?

**Ans.** Following examples can be cited to show the existence of social and economic variations in the Harappan society:

- i. Study of burials is one example. In the Harappan sites, the deads were usually laid in pits. There were differences in the way burial pits were made. At some instances, the hollowed-out spaces were lined with bricks. But these may not be taken as an indication of social differences.
- ii. In some graves pottery and ornaments have been found. Jewellery has been found from the graves of men and women as well. These findings can point out social and economic differences.
- iii. The artefacts have been classified into two categories, Utilitarian and Luxurious. Objects of daily uses and objects made of ordinary materials made of clay or stone come under utilitarian category. Ordinary articles consisted of querns, pottery, fleshrubbers and needles. These have been found distributed throughout settlements.
- iv. Objects of luxuries were rare and made from precious, non-local materials. The technology used was advanced and complicated. Little pots of faience were considered precious. They were also not easy to make. These show the existence of social and economic variations in the Harappan society.

# 3. Would you agree that the drainage system in Harappan cities indicates town planning? Give reasons for your answer.

**Ans.** Yes, I agree with that the drainage system in Harappan cities which indicates the town planning. I can cite the following reasons in support of my answer.

- The drainage system needed a planning for its execution. It seems that first drainages were laid out and then houses were built along with the drains. Every house was supposed to have at least one wall along a street to allow the domestic waste water to flow out in the street drains. The plans of the lower town show that roads and streets were laid out along an approximate grid pattern, intersecting at right angles.
- It appears that human settlement was made by planning from the beginning. The city was restricted to a fixed area on the platforms.
- Bricks, sundried or baked, were of standard ratio. The length and breadth of bricks were of four times and twice the height respectively. These bricks were used at all the settlements of the Harappan Civilisation.

# 4. List the materials used to make beads in the Harappan Civilisation. Describe the process by which any one kind of bead was made.

**Ans.** Making beads was an important craft of the Harappan people. It was mainly prevalent in Chanhudaro.



A tool and beads

Materials for making beads included beautiful red coloured stone-like carnelian, jasper, crystal, quartz and steatite. Besides these, use of copper, bronze, gold, shell, faience, terracotta or burnt clay was also used.

#### **Process of making beads**

Making of beads differed as per the materials used. Beads had variety of shapes. They did not make geometrical shapes like one made of harder stones.

Nodules were to be chipped for making rough shapes. They were finally flaked into the final form.

By firing the yellowish raw material, the red colour of carnelian was obtained. Grinding, polishing and drilling constituted the last phase. Chanhudaro, Lothal and Dholavira were famous for specialized drilling.

# 5. Look at figure 1.30 (See NCERT page-26) and describe what you see. How is the body placed? What are the objects placed near it? Are there any artefacts on the body? Do these indicate the sex of the skeleton?

Ans. Following observations can be obtained after looking at the figure:

• Body has been kept in North-south direction in a pit.

- Many graves contain pottery and ornaments which include jar.
- Yes, jewellery like bangles are there on the body.
- Yes, this indicates towards the sex of the skeleton, i.e. it is the body of a woman.

It is concluded that there were great social or economic differences among the people living within the area of the Harappan Civilisation. But as a whole it appears that the Harappan did not believe in burying precious things with the dead.

# II. Write a Short Essay (About 500 words) on the following:

## 6. Describe some of the distinctive features of Mohenjodaro.

**Ans. Planned City:** Harappa was a planned urban centre. It had two parts. One part of the city was small. It was built on a higher place. The second part was comparatively large. It was built on a lower place. The first part was designed as citadel and the second part was as lower town. The citadel owed its height to the fact that it was built on mud brick platforms. It had walls on all sides and these walls were separated from the lower town.

**The Lower Town:** It was also a walled town. Most of the buildings were built on platforms. In fact, these platforms were considered as foundation stones. It required huge quantity of labour force to build these platforms. It is obvious that settlement was first planned and then implemented as per the building plan. Quality of sun-dried bricks or baked bricks also prove the concept of planning.

All the bricks were of standard ratio. The length and width was four times and twice the height of the bricks respectively. These bricks were used in the settlements of the Harappan Civilisation.



**Drainage System:** The drainage system was well planned. All the roads and streets were laid out on a grid pattern. They intersected one another at the right angles. It seems that streets featuring drains were laid out first and houses were built thereafter along with them. To make the flow of domestic water, every house had at least one wall along the street.

**The Citadel**: There were many buildings in the citadel. These buildings were used for many special public purposes. The Warehouse and the Great Bath were the two most

important constructions.



# 7. List the raw materials required for craft production in the Harappan Civilisation and discuss how these might have been obtained.

**Ans.** Following is the list of materials required for craft production in the Harappan Civilisation:

Stone, clay, copper, tin, bronze, gold, faience, shell, carnelian, jasper, crystal, steatite, quartz, timber.

Some of the raw materials were locally available whereas some were purchased from the distant places. Soil and wood were locally available raw materials. Stones, fine quality wood, metals were procured from distant places.

Settlements of the Harappans were situated at such places where raw materials were easily available. Nageshwar and Balacot were famous for shell. Some places were famous for Lapis Lazuli like Shortughai in Afghanistan. Rajasthan and Gujarat were famous for copper. Lothal was famous for carnelian.

Another way of obtaining raw material was sending expeditions to different places. Evidences show that expedition was sent to Khetri region of Rajasthan for copper and to South India for Gold. Through these expeditions local communities were contacted. Harappan evidences found at these places indicate contacts between each other. Evidences found at Khetri region were given the name of Ganeshwar Jodhpura Culture by archaeologists. Huge reserves of copper products were found here. It is assumed that inhabitants of these area sent copper to Harappan people.

#### 8. Discuss, how archaeologists reconstruct the past.

**Ans.** Archaeologists excavate the sites of the ancient past related to culture or civilization. They find out the art and craft such as seal, material, remains of houses, buildings, pots, ornaments, tools, coins, weights, measurements and toys, etc.

Skulls, bones, jaws, teeth of the dead bodies and materials kept with these dead bodies are also helpful for archaeologists. With the help of the botanists, and zoologists, archaeologists study the plants and animal bones found at different places.

Archaeologists try to find out the tools used in the process of cultivation and harvesting. They also try to find out traces of wells, canals, tanks, etc. as they served means of irrigation. Different layers of sites are observed to find out different things. These things give the picture of socio-economic condition such as religious life and the cultural life of the people. Tools, unfinished products, waste materials, help in identifying the centres of craft production. Indirect evidences also help the archaeologists in reconstructing the past. Archaeologists develop frames of references, It can be better understood by this fact that the first Harappan seal that was found could not be understood till archaeologists had a context in which to place it-both in terms of cultural sequence in which it was found and in terms of a comparison with finds in Mesopotamia.

Examination of seals help in constructing the concept of religious belief of the period. Seals depict religious scenes. Some animals such as the one-homed animal, often called the unicorn depicted on the seals appear mythical, composite creatures. In some seals, a figure has been shown sitting crossed legs in a yogic posture. All these represent the religious concept of the period.

# 9. Discuss the functions that may have been performed by rulers in Harappan society.

**Ans.** There are different views on the Harappan society. One group of archaeologists suggest that the Harappan society had no rulers and so everybody enjoyed equal status. The other group of archaeologists are pf the opinion that there was no single ruler but several ones. The third theory seems the most suitable. It suggests that it is unlikely that entire communities could have collectively made and implemented such complex decisions.

Evidences show that complex decisions were taken and implemented in the Harappan society. Extra ordinary uniformity of Harappan artefacts as evident in pottery, seals, weights and bricks show the complex decisions.

Plans and layouts of the city were prepared under the guidance and supervisions of the rulers. Big buildings, palaces, forts, tanks, wells, canals and granaries were constructed. Cleanliness was the responsibility of the ruler. Roads, lanes and drains were also constructed.

The rulers also looked after the welfare of the economy. They used to inspire the farmers to increase agricultural production. They also motivated the craftsmen to promote different handicrafts. External and internal trade were both promoted by the ruler. The ruler used to issue common acceptable coins or seals, weights and measurements.

Rulers were expected to provide relief during natural calamity. During flood, earthquake, epidemics, the ruler provided grains and other eatables to the affected people. During foreign aggression, the rulers defended the city.

#### III. Map Work

10. On the given map, use a pencil to circle the sites where evidence of agriculture has been recovered. Mark an X against sites where there is evidence of craft production and R against sites where raw materials were found.

**Ans.** (i) Sites of agriculture; Harappa, Banawali, Kalibangan, Mohenjodaro, holavira (Gujarat).

- (ii) Sites of craft production: Chanhudaro, Nageshwar, Balakot.
- (iii) Sites of raw material: Nageshwar, Balakot, Khetri.

