

## INDUS VALLEY CIVILIZATION

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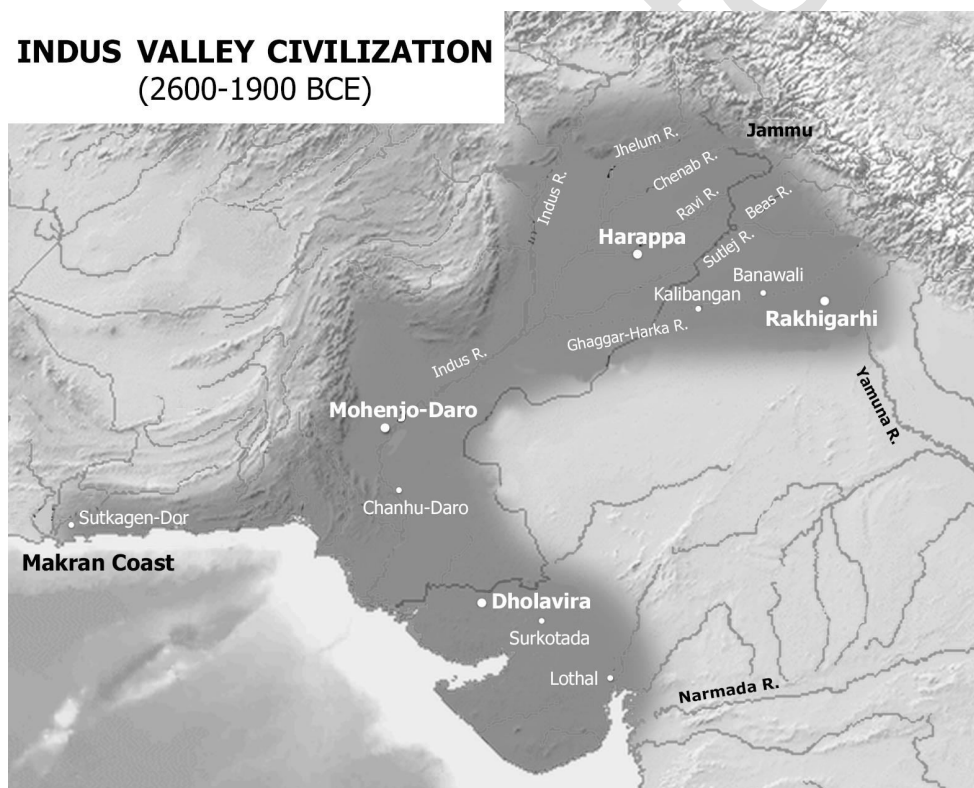
Indus Valley civilization is one of the oldest civilizations, which is believed to exist from 3300 BC to 1300 BC. Indus Valley civilization is called so because the civilization emerged around Indus and its tributaries. Some of the settlements also emerged around Ghaggar-Hakra river. Indus Valley civilization is also referred as the Harappan Civilization because the first city to be excavated (digging up) was Harappa. It was discovered in 1921 at the present day Harappa by the archaeologists Dr Raj Bahadur Daya Ram Sahni and John Marshall. At about the same time, R.D. Banerjee excavated the site of Mohenjodaro in Sindh. Large-scale excavations were carried out at Mohenjodaro under the supervision of Marshall in 1931.

The people of this civilization used bronze predominantly and thus, this time period is referred to as the Bronze age (bronze is an alloy of copper and tin) or Chalcolithic age.

### Geographical Extent

The geographical extent of Indus Valley civilization is bigger than ancient Egypt and Mesopotamia. It rose from the Northwest part of the Indian subcontinent and spread Southward and Eastward. It extended from Jammu in the North to Narmada Valley in the South, and from the Makran coast of Baluchistan in the West to Yamuna in the East.

### INDUS VALLEY CIVILIZATION (2600-1900 BCE)



The Indus Valley civilization is classified into three phases:

1. The early phase from 3300 BC to 2600 BC
2. The mature phase (when the civilization was at its peak) from 2600 BC to 1900 BC
3. The late phase from 1900 BC to 1300 BC

So far, nearly 1400 Harappan sites are known in the subcontinent. These belong to early, mature, and late phases of the Harappan culture. However, the number of the sites belonging to the mature phase is limited. Of these, limited sites can be regarded as towns and these towns are Harappa in Pakistan Punjab; Mohenjodaro (literally means Mound of the Dead Men) Chanhudaro in Sindh, Pakistan; Lothal, Dholavira, and Surkotada in Gujarat; Banawali and Rakhigarhi in Haryana; and Kalibangan in Rajasthan.

### **Town Planning and Urban Architecture**

The ruins of the towns of Indus Valley civilization show signs of remarkable town planning and excellent sanitation system. The towns were usually divided into two parts—citadel, which was constructed on an elevated place and was fortified, and the remaining town. The citadel was built on top of a mound of bricks almost 12 meters high. A large staircase ran up the side of this mound.



*Figure 5 Citadel at Mohenjodaro*

Several large buildings and structures on the citadel mound suggest that this area may have been used for public gatherings, religious activities, or important administrative activities. Small buildings which were probably homes do exist on the citadel mound; however, they are not common.



The houses inhabited by the common people followed grid system. The streets used to run from North to South and East to West, intersecting each other at right angles. The drainage system was very impressive. Every house had its own courtyard and bathroom. Drains from bathroom were connected to street drains. The street drains were equipped with manholes. Perhaps, no other civilization gave so much attention to health and cleanliness as Harappan did.

### **Town planning**

There were no stone-built houses in the Indus cities. Most of the houses were built of burnt bricks. Unburnt sun-dried bricks were also used in those portions of the houses where the chances of contamination through the water were least. The bricks used to be of the same size. The staircases of big buildings were solid and the rooftops were flat.

Some of the major structures which were found in this civilization are "Great Bath" in Mohenjodaro and "Granary" at Harappa.

### **Great Bath**

The "Great Bath" is a public water tank. The tank measures approximately 12 meters long and 7 meters wide, with a maximum depth of 2.4 meters. Two wide staircases, one from north and one from south, lead down into the tank.



*Figure 2 The Great Bath, Mohenjodaro*

The floor of the tank is water tight due to finely fitted bricks and use of gypsum plaster on the edges of bricks. To make the tank even more water tight, a thick layer of bitumen (natural tar) was laid along the sides of the tank and presumably also beneath the floor. Two large doors lead into the complex from the South.

A series of rooms are located along the Eastern edge of the building and in one room there is a well that may have supplied some of the water needed to fill the tank. Rainwater may also have been collected for filling the tank, but no inlet drains have been found.

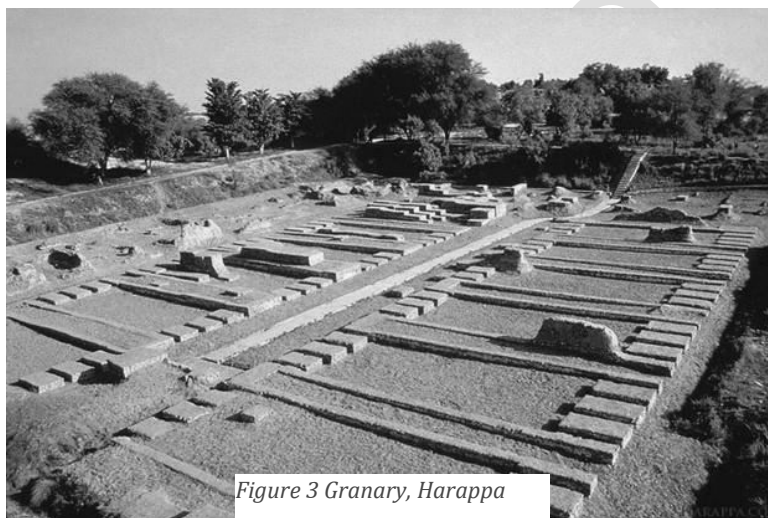
Most scholars agree that this tank would have been used for special religious functions, where water was used to purify and confer the well-being on the bathers.

### **Great Granary**

The remains of great granary have been found at Harappa. The granary measures over 45 meters long and 45 meters wide.

Two rows of six rooms are arranged along a central passageway that is about 7 meters wide. Each room measures 15.2 by 6.1 meters. The rooms were possibly occupied by workers. A wooden superstructure supported by large columns was possibly built on top of the brick foundations, with stairs leading up from the central passage area.

The granary neither possess charred grains nor any storage containers have been found. The interpretation of such structures as granaries is based on comparisons with Roman buildings.



*Figure 3 Granary, Harappa*

### **Agriculture**

Agriculture is believed to be the main occupation of the Indus Valley people. The discovery of granary lends support to this belief. Most of the agriculture took place during winter. The Indus Valley people produced wheat, barley, rai, peas, sesamum, mustard, rice, and cotton. The Indus Valley people were the earliest people to produce cotton. The Greeks called it Sindon (derived from Sindh) because cotton was first produced in this area.

The important crops cultivated were wheat and barley. The evidence of wheat and barley has been found at Mohenjodaro. In the early times, the region of Indus Valley possessed high natural vegetation. The ruins show no signs of canal irrigation. Iron was discovered around 1000 BC and thus, people of this region used wooden plough.

The houses were constructed at a slightly raised platform, as compared to the streets. The raised houses may be an indication of regular floods in rainy season. Thus, agriculture was

severely hampered during summers.

### **Domestication of Animals**

Although the Harappans practiced agriculture, animals were kept on a large scale. Dogs, cats, oxen, buffaloes, goats, sheep, elephants, and pigs were domesticated. The humped bull was favorite among Harappans. Asses and camels were used to carry loads.

Earlier, it was believed that horses were not tamed by the Indus Valley people but later on the bones and skeletons of horses were found in some regions of the civilization. This made the historians believe that perhaps at the later stage of the civilization, horses were domesticated. The existence of wild animals like rhinoceros, tiger, and bison has also been confirmed.

### **Trade**

Indus Valley civilization was a trading society. Instead of metal money, they followed barter system. Traders had their own seals. They used a uniform script, and standard weights and measures.

There is evidence that the Harappans carried trade within India as well as outside Indian subcontinent. Trade links have been found up till Mesopotamia and Turkey. The Mesopotamian records refer to Indus region as Meluha.

The Harappan cities did not possess the necessary raw material for the commodities they produced and hence depended upon important metals and nonmetals imported from distant places.

Main exports were agricultural products and finished products, such as cotton goods, carnelian beads, pottery, shell, and bone inlays.

### **Weight system of Harappans**

Excavators have found number of balance weights made up of chert. These weights are in the shape of cube. The most basic weight found most commonly was about 13.65 grams. The other weights were sub-divisions or multiples of this weight. The weights proceeded in a series, first doubling from 1, 2, 4, 8 to 64 and then in decimal multiples of 16. The relation of the common weight with other weights is described below.

Multiples of the smallest unit	1	2	4	8	16		32	64		
Multiples of the 13.65 g unit	1/16	1/8	¼	½	1		2	4		
Idealized Weight	0.85 g	1.75 g	3.45 g	6.85 g	13.65 g		27.35 g	54.65 g		
Larger by a factor of 10					160	200	320	640		
					10	12.5	20	40		
					136.5 g	170.6 g	273.5 g	546.5 g		
Larger by a factor of 100, 100 unit increments					1600		3200	6400	8000	12,800
					100		200	400	500	800
					1.365 kg		2.73 kg	5.46 kg	6.83 kg	10.92 kg

### Measurement System

The Harappans also followed measurement system. The length of foot was 13.2 inches and of cubit was 18 inches or 44 cm. Several sticks with measure marks, including one made of bronze, have been discovered. Cubit refers to length of the arm from the elbow to the tip of the middle finger.

### Religious Practices

There is no evidence of temple or any other religious structure except the Great Bath and the fire altars at Kalibangan and Lothal.

On the basis of the material remains, it can be deduced that religious practices of Harappan people had many features of the later Hinduism, such as worship of the Mother Goddess, Pashupati Siva, animal worship, tree worship, etc.

A terracotta figure of Mother Goddess has been found at Harappa. A plant is shown growing out of the womb of a woman. The figure represents the goddess of earth.



*Figure 4 Terracotta figure of Mother Goddess*

The male deity has been depicted with two horns, sitting in a cross-legged position (sitting posture of a yogi). He is surrounded by four wild animals, an elephant, a tiger, a rhinoceros, and a buffalo, and beneath his feet appear two deers. This deity appears similar to Siva of later Hinduism.



*Figure 5 Pashupati seal*

Moreover, phallic worship was an important element of Harappan culture. Numerous cylindrical cone-shaped stones were found which shows that people worshipped lingam—a symbol of lord Shiva.

There is evidence to prove that people of the Indus Valley civilization also worshipped trees and animals. On one seal, picture of a deity is represented in the midst of the branches of the peepal tree. Peepal tree is worshipped even to this day.

Animals were also worshipped. The most important of them is the humped bull. The inhabitants of the Indus region thus worshipped gods in the form of trees, animals, and human beings.

### Burial Practices

Cemeteries at various sites have proven particular burial practices of the Harappans with slight variations. For instance, three types of practices have been found at Mohenjodaro:

1. Complete burials (burial of the whole body along with goods)
2. Partial burials (burial of some bones after the exposure of the body to wild beasts and birds)
3. Post-cremation burials

Another type of burial has been found at Lothal, a pair of skeletons, one male and one female in each case, buried in a single grave. Bodies were placed in the North–South direction, with the head pointing to the North.

### Technology

The Harappan civilization is a Bronze Age civilization. Apart from stone tools and implements, people were well acquainted with the use of bronze.

Objects of gold were common. Gold exists in nature as free metal. Thus, it was naturally available. Silver was used for the first time in the Indus civilization and was relatively more common than gold. Arsenic, lead, antimony, and nickel were also used by the Harappan people.

Bronze implements at mass scale have been found, such as axes, chisels, knives, spearheads, etc. The Harappans also practiced boat making.

### Seals and Terracotta Figures

Seal is a piece of material with an individual design stamped onto it. Seals are accurate in their size and design. About 2000 seals have been found; these seals were small in size. While most of the seals were square-shaped, rectangular and circular seals were also found. Two main types of seals are seen—first, square with an image and inscription; second, rectangular with an inscription only.

Steatite (in nature of soft mineral) was the most common material used to make seal. Other materials used include agate, chert, copper, and clay. Seals made of gold, silver, and ivory were also found.



*Figure 6 Square seal depicting a nude male deity found at Mohenjo-daro Dimensions: 2.65 x 2.7 cm, 0.83 to 0.86 thickness*



Most seals have inscriptions in a pictographic script written from left to right. But in some cases the script is written from right to left as well. Seals were primarily used for commercial purpose and might have been used as amulets or for educational purpose.

Terracotta figurines have also been reported from various sites. Figurines made of fire-baked clay are called terracotta which were either used as toys or objects of worship. Terracotta was used mainly by the common people.

### **Polity and Society**

There is no clear idea about the political organization of the Harappans. There is no sign of any central authority. The total absence of internal wars speaks volumes about the peaceful administration of the Indus state.

### **Sculpture**

Two main sculptures that were extracted from the ruins of Indus Valley are—(i) priest in limestone and (ii) a statue of a "Dancing Girl" in bronze. These sculptures exhibit the level of expertise that the artists of Harappan civilization had achieved in making sculptures.

The ornament on the forehead of the famous "priest-king" sculpture appears to represent an eye bead, possibly made of gold with steatite inlay in the center.



*Sculpture of Priest-King found at Mohenjodaro*



*Dancing girl found at Mohenjodaro*

The red sandstone figure of a male torso is another specimen of rock sculpture.



*Male torso found at Harappa*

## Pottery

Harappans were great potters as well. The potteries made by the Harappans can be classified into four types—(i) plain pottery, (ii) painted pottery (which is also known as red and black pottery), (iii) polychrome pottery (very rare), and (iv) perforated pottery. The purpose of different types of pottery was as follows:

- Plain pottery was used for household purpose, mainly for storage of grains and water.
- Miniature vessels were used for decorative purpose.
- Perforated pottery (large hole in the bottom and small holes across the sides of the vessel) might have been used for straining liquor.

## Dressing style

Men and women wore clothes of wool and cotton. Men wore robes which left one shoulder bare. Women wore a short skirt that reached up to the knee and it was held by a girdle—a string of beads. Upper classes wore garments with elaborate designs.

## Hairstyles

The hair styles of the women were often elaborate, and pigtails were also popular, as in present-day India. Men and women alike had long hair. Men wore beard and moustaches.

## Fashion

Bronze mirrors were common. Females at Mohenjodaro used collyrium (eye shadow), face-paint, and other cosmetics. Chanhudaro provides evidence of lipsticks. Bronze razors of various types were used by males.

## Ornaments

Harappan people loved ornaments. Both men and women wore ornaments like necklaces, fillets (a band or ribbon worn for binding the hair), armlets, and finger rings. Girdles (belt), earrings, and anklets were worn only by women. Beads made from cornelian, amethyst, quartz, and steatite were produced at a large scale from the factories at Lothal and Chanhudaro. Amulets have been found in large numbers. Probably, the Harappans believed in ghosts and evil forces.



*Figure 7 Ornaments used by Indus Valley civilization people*

### **Amusements**

Children played with toys made of terracotta. Children also played with marbels made out of jasper and chert. Music and dance were popular. Hunting and fishing were common activities. On a few seals, hunting of wild rhino and antelope is shown. Dice was used in gambling.

### **Harappan Script**

The Harappan script (also known as the Indus script) has not yet been deciphered. The characters are largely pictorial and seem to be in form of meaningful signs. The number of principal signs is about 400.

The inscriptions are mostly written from right to left. This is proven from the fact that many times the symbols were compressed on the left side. This usually happens when the writer is running out of space at the end of the row.

The Harappan inscriptions containing signs are extremely short, making it difficult to judge whether or not these signs constituted a script used to record a language, or even symbolise a writing system. The average length of the inscriptions is less than five signs, the longest being only 26 signs long. There is no known bilingual inscription to help decipher the script, nor does the script show any significant changes over time. In spite of many attempts, 'the script' has not yet been deciphered, but efforts are going on.



*Figure 8 Script on a seal*

### **Decline of Harappan Culture**

Harappan civilization came to a sudden end. The exact reason for collapse of this civilization is not known; however, various reasons are hypothesized behind collapse of this civilization:

- Floods may have resulted in collapse of Indus Valley civilization. Earlier, civilization emerged near water bodies. As a result, large floods could have possibly wiped-out Indus Valley civilization.
- Geographically, the region occupied by the Harappan civilization was prone to earthquakes. Repeated earthquakes can be a reason behind decline of the Indus civilization.
- We know that Harappans were traders and not warriors. Thus, the people of the civilization were not prepared for an invasion. The emphasis was on prosperity through economic

development. Unburied skeletal remains were found in Mohenjodaro. Such remains are signs of an aggressive invasion. Aryan invasion may be reason behind the decline of Indus Valley civilization.

- Other possible reasons behind end of this civilization may be drought and spread of disease.

### Difference Between Harappan and other West Asian cultures

Harappan culture	Mesopotamian culture
The towns were well planned.	The towns were haphazardly planned.
Had a well-maintained drainage system.	Not much preference was given to sanitation.
Rectangular house with brick-lined bathrooms.	No particular shape for the houses.
Did not have a particular language.	Had their own language.

### List of important sites of Indus Valley civilization

Site	District	Province/ State	Country	Excavations/findings
Banawali	Fatehabad district	Haryana	India	Barley, terracotta plough, saw two cultural phases, pre-Harappan and Harappan, similar to that of Kalibangan
Chanhudaro	Nawabshah district	Sindh	Pakistan	Bead-making factory, use of lipstick, only Indus site without a citadel
Dholavira	Kutch district	Gujarat	India	Figure of chariot tied to a pair of bullocks and driven by a nude human, water harvesting and number of reservoirs, use of rocks for constructions, all the three phases of the Harappan culture
Harappa	Sahiwal district	Punjab	Pakistan	Granaries, coffin burial, lot of artifacts, first town which was excavated and studied in detail
Kalibangan (literally meaning black bangles)	Hanumangarh district	Rajasthan	India	Baked/burnt bangles, fire altars, Shiva lingam, small circular pits containing large urns and accompanied by pottery, bones of camel
Lothal	Ahmedabad district	Gujarat	India	Bead-making factory, dockyard, button seal, fire altars, painted jar, earliest cultivation of rice (1800 BC)

Mehrgarh		Balochistan	Pakistan	Earliest agricultural community
Mohenjodaro	Larkana District	Sindh	Pakistan	Great Bath, Great granary, Bronze dancing girl, Bearded prince-king, terracotta toys, Bull seal, Pashupati seal, three cylindrical seals of the Mesopotamian type, a piece of woven cloth, largest site covering 500 hectares.
Surkotada	Kutch district	Gujarat	India	Bones of a horse (only site)
Sutkagendor		Balochistan	Pakistan	Coastal city like Surkotada
Rakhigarhi	Hissar district	Haryana	India	All the three phases of the Harappan culture, second largest site, with an area of 250 hectares

## Practice Questions

1. Which one of the following animals was not represented on the seals and/or terracotta art of the Harappan culture?  
(a) Cow  
(b) Elephant  
(c) Rhinoceros  
(d) Tiger
2. The earliest evidence of silver in India is found in the  
(a) Harappan culture  
(b) Palaeolithic culture  
(c) Vedic civilization  
(d) None of the above
3. The Indus or the Harappan culture is  
(a) Neolithic culture  
(b) Palaeolithic culture  
(c) Chalcolithic culture  
(d) Post-Chalcolithic culture
4. Which one of the following archaeologists initially discovered the Mohanjodaro site of the Indus Valley civilization?  
(a) Sujohn Marshall  
(b) Daya Ram Sahni  
(c) Rakhal Das Banerjee  
(d) Sir Mortimer Wheeler
5. The Harappa site showing evidence of two cultural phases. Harappan and pre-Harappan, is  
(a) Lothal  
(b) Mohenjodaro  
(c) Chanhudaro  
(d) Banawali

## Perfecting past prelims

1. Regarding the Indus Valley civilization, consider the following statements: (2011)  
1. It was predominantly a secular civilization and the religious element, though present, did not dominate the scene.  
2. During this period, cotton was used for manufacturing textiles in India.  
Which of the statements given above is/ are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
2. Which of the following characterizes/ characterize the people of Indus civilization? (2013)

1. They possessed great palaces and temples.
2. They worshipped both male and female deities.
3. They employed horse-drawn chariots in warfare.

Select the correct statement/ statements using the codes given below:

- (a) 1 and 2 only
- (b) 2 only
- (c) 1, 2, and 3
- (d) None of the statements given above are correct.

3. With reference to the difference between the culture of Rigveda Aryans and Indus Valley people, which of the following statements is/are correct? (2017)

1. Rigvedic Aryans used the coat of mail and helmet in warfare, whereas the people of Indus Valley civilization did not leave any evidence of using them.
2. Rigvedic Aryans knew gold, silver, and copper, whereas Indus Valley people knew only copper and iron.
3. Rigvedic Aryans had domesticated the horse, whereas there is no evidence of Indus Valley people having been aware of this animal.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2, and 3

4. Which one of the following is not a Harappan site? (2019)

- (a) Chanhudaro
- (b) Kot Diji
- (c) Sohagaura
- (d) Desalpur

5. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs? (2021)

- (a) Dholavira
- (b) Kalibangan
- (c) Rakhigarhi
- (d) Ropar

## Answer Keys

### Practice Questions

1. (a)	2. (a)	3. (c)	4. (c)	5. (d)
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### Perfecting Past Prelims

1. (c)	2. (b)	3. (a)	4. (c)	5. (a)
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## Solutions

### Practice Questions

1. (c) R.D. Banerji was an Indian historian and a pioneer of archaeology. He is popular for unearthing Mohenjodaro and for noting similarities between the site at Mohenjodaro and Harappa.

2. (d) Kalibangan (means black bangles) is situated in Northern Rajasthan and Banawali is situated in Hissar district in Haryana. Both the sites saw two cultural phases, pre-Harappan and Harappan.

### Perfecting Past Prelims

1. (c) Statement 1 is correct. The only evidence found with any strong connection with religion is "The Great Bath." Though the sculptures of some deities were found but they do not suggest that the Harappan society was dominated by religion.

2. (b) Statement 1 is incorrect because no palaces and temples have been discovered from Harappan sites.

Statement 3 is incorrect: There is little evidence of horse and there is no evidence of horse driven chariot.

3. (a) Statement 2 is incorrect: Harappan men and women wore ornaments made of gold, silver, copper, bronze, and semiprecious stones. So, the Indus Valley people knew the use of copper, bronze, silver, gold, but not iron. Iron was discovered much later around 1000 BC.

Statement 3 is incorrect: Evidence of horse was found at Indus Valley civilization.

4. (c) Sohgauna in Uttar Pradesh is a Mauryan period site.