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PREFACE

MANDOLI is located towards East of Yamuna River near Nand Nagari, Delhi about 14 km from Delhi Railway Station on Delhi-Ghaziabad highway. Taking into account the potentiality of the site, the author excavated the site after taking prior approval of the Competent Authority. Archaeological Survey of India also granted permission to excavate the site as per the provisions under the AMASR Act, 1958.

During the field seasons from 1987-88 and 1988-89, the site was excavated and discovered the cultural profile starting from the Late Harappan and Painted Grey Ware cultures from the stratified layers for the first time in Delhi thus pushing back the history of Delhi to proto-historic times approximately 1500 BC. The excavation also unfolded Black-slipped Ware culture and thereafter, Sunga, Kushan and Gupta periods respectively. The materials discovered from the site were once displayed in the Archaeological Museum at Dara Shukoh Library Building, Kashmere Gate under the administrative control of Govt. of NCT of Delhi.

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Sarva Shri Pritam Singh, the then Draughtsman prepared site drawings while Shri Jaspal Singh, Surveyor prepared site plan and contour map whereas Shri Yashjit Singh, the then Modeller prepared pottery and antiquity drawings. Shri Anil Tiwari, the then Assistant Archaeologist and Shri Gajanan Katade, the then Chemical Assistant assessed & analyzed pottery & antiquities in detail and assisted me in preparation of the preliminary report. I am thankful to all of them. A word of appreciation is to be recorded here for Shri Jaspal Singh and Smt. Meena Rani, the then Assistant Archaeologist who have taken active role in connection with the preparation of the final report. Shri Tejpal Singh, the then Foreman (Works), Shri I.M. Tikoo, the then Sr. Photographer, Late Shri Jassu Ram Batra, the then Sr. Draftsman, Late Shri Vijay Kumar Arora, the then Drawing Officer and Shri Rattan Lal have made their contributions in their respective fields. The academic and intellectual efforts of the innumerable technical staff from within the department and outside the department made this report viable to the scholarly world. My sincere thanks are due to all the above mentioned colleagues.

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CHAPTER-I

INTRODUCTION

TOPOGRAPHY

The Union Territory of Delhi is a narrow strip of Indo-Gangetic Plain lying between 28° 25′ and 28° 53′ North latitude and 76° 50′ and 77° 22′ East longitude. It is bounded on North and East by Uttar Pradesh and on South and West by Haryana. Yamuna is the only river which passes through Delhi on its eastern border in a North South direction (Fig.-1A). The average elevation of the city is 213 m above main sea level. The climate of this area is characterized by high chill in winter and dry scorching summer with maximum ranges from 43° to 47° C and annual average rainfall of 66 cm.

HISTORICAL BACKGROUND:

Delhi being one of the most ancient historic cities of India, has been the Capital of mighty Empires and powerful Kingdoms. The ruins of Delhi mark the sites of various cities both ancient and medieval. The origin of the name of Delhi is lost in antiquity and the early history of Delhi is shrouded in mystery.

Indraprastha, recorded in Mahabharata mentions the city built along the bank of the river Yamuna is generally identified with the present Purana Qila. It was also known under alternative names of Yoginipura and Khandava Prastha. The forest known as Khandava Prastha came into possession of the Pandavas after the division of their ancestral estate. Indraprastha is generally believed to be one of the five Prasthas asked by the Pandavas, the other four are known as Panipat, Sonepat, Baghpat, Tilpat.

Delhi is referred for the first time during 2nd century A.D. by Ptolemy, the Geographer who visited India at that time has identified Daidala close to Indraprastha which was midway between Mathura and Thaneswar. However, Firishta, author of Tarikh-i-Firishta in the 7th century A.D. mentioned that Delhi derived its name from Raja Dhilu of early times whose date is not definitely known.

Whatever the fact may be, it is fairly certain that Delhi was a city of little importance during the time of imperial Mauryas, whose capital was Pataliputra. However, there is an inscription of Ashoka, the third Mauryan Emperor (273-236 B.C.) engraved on a rock near Srinivasapuri in Delhi which shows that Delhi was under Mauryan hegemony.

As per the reliable tradition, Delhi was founded in 736 A.D. by Tomars, a clan of Rajputs. The name Dhillika occurs for the first time in the inscription of 1170 A.D. from Bijolia, District Udaipur which mentions the capture of Delhi by the Chahamanas. The Pehowa inscription of the Prathihara King Mahendra Pala-I mentions that the Tomaras ruled over the Hariyana country with Dhillika as their capital. Palam Baoli inscription of 1276 A.D. refers Dhillika in the Hariyana country. Another inscription of 1328 A.D. found in the village Sarban, five miles south of modern Delhi contains a sketch of the history of Delhi from the earliest times till the date of the inscription. According to this inscription, Delhi was founded by the Tomar Rajputs. Anang Pal, the Tomar Ruler of Delhi built a fort known as Lalkot in the 11th century AD. Tomars were over thrown by the Chahamana King, Vigraharaja IV (1153-63 A.D). The greatest monarch of this dynasty was his nephew Prithviraja III or Rai Pithora (1179-92 A.D). During his reign, the Fort of Lalkot was further strengthened by an exterior wall and was known as Qila Rai Pithora. In 1191 A.D., Muhammad Ghouri invaded and defeated by Prithviraja. In 1192 A.D., Muhammad Ghouri invaded again with a reorganized force to avenge his defeat. This time, Prithviraja was defeated, captured and killed in cold blood.

Five dynasties known as Sultanate, ruled thereafter from Delhi (1206 A.D. to 1526 A.D.) were Mamluk, Khalji, Tughluq, Sayyid and Lodi. Later on, the Mughals came into the picture who ruled till 1857 A.D.

In 1857, there was an organized fighter for the country's independence from the British regime who occupied Delhi after the Mughals and ruled up to 1947 A.D. till the country attained independence.

THE SITE AND ITS ENVIRONMENT

The ancient mound situated in East Delhi is a small village known as Mandoli located towards East of Yamuna river about 14 km from Delhi Railway Station on Delhi Ghaziabad highway near Nand Nagari. The maximum available height of the mound before excavation was 5.50 m. It lies to the South West of Mandoli village and to the South of Saboli village (FIG.-1B). Some portion of the mound at the time of excavation was occupied by a modern temple, a grave yard and a few modern structures.

DISCOVERY OF THE SITE

Mandoli was explored earlier by Dr. D.V. Sharma of the Archaeological Survey of India during 1980 discovered late Harappan sherds from the site. Dr.B.S. Rajendra Babu, the present author during his subsequent exploration in 1987 while working in Govt. of Delhi had an opportunity to explore the mound extensively and revealed that the site contained potential archaeological remains confirmed the sequence of the site and finally decided to excavate the site from 1987-88 & 1988-89 and discovered late Harappan and Painted Grey Ware cultures with the following main objectives:

- (i) To investigate the nature and extent of late Harappan element,
- (ii) To find out the horizon of the Painted Grey Ware culture and
- (iii) To establish the cultural sequence of the site.

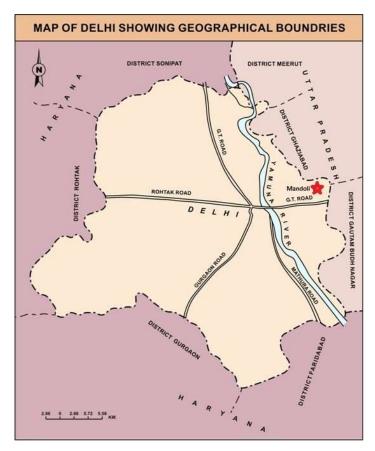


FIG. -1A UNION TERRITORY OF DELHI SHOWING THE BOUNDARIES

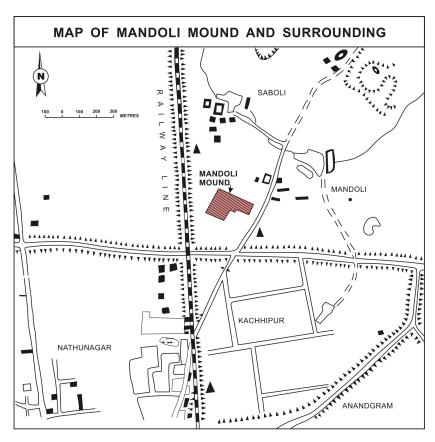


FIG. 1B: MAP SHOWING MANDOLI MOUND AND ITS SURROUNDINGS.

CHAPTER-II

LAYOUT AND CUTTINGS

PLANNING AND LAYOUT

On the basis of previous explorations, the Department of Archaeology, Govt. of Delhi under the directions of the present author had taken up the work at the site and excavated for two successive seasons during the years 1987-88 & 1988-89. The main aim of the excavation was to get the picture of cultural sequence of the site and to study the settlement pattern.

The contour plan of the existing mound was prepared showing its extent including modern structures and adjoining area (FIG.-2). The maximum height of the mound from the adjoining plain area was 5.50 m and the highest point of contour is 211 m. The surface area of the mound and its periphery was marked into grids of 10 m. Each square was further sub-divided into four quadrants leaving 1 m baulk. The trenches were laid out in a row in North-South and East-West directions. General view of the mound and view of the excavated trenches may be visualized at PLATE-I.

NOMENCLATURE AND CUTTINGS

After taking into account the highest point of the mound, the pegs along the East-West direction were given A,B,C,D,E series.

In the first season during the year 1987-88, the excavation was confined to the area limited to all four quadrants of square nos. ZB 2, ZA 2, YA 2, XA 1, A 1, B 1, quadrant nos. 1, 2 & 4 of YC 1, quadrant no.4 only of XB1, YB 1, and YA 1.

In the second season during the year 1988-89, the excavation was taken up in quadrant no. 3 of YA 4, quadrant nos. 2 & 3 of ZA 3, quadrant nos. 1, 2 & 3 of YA 3, quadrant nos. 1 & 3 of YC 2, quadrant 1, 2 & 3 of D 1

and quadrant nos. 1 to 4 of E 1. It is pertinent to mention here that natural soil was encountered in quadrant no. 1 of D 1 and quadrant no. 3 of YA 4.

As many as 30 quadrants among 10 squares were excavated in the year 1987-88 and 15 quadrants among 6 squares in the year 1988-89. Corresponding to the trenches laid out, pottery yard was planned to ascertain the pottery sequence of the mound.

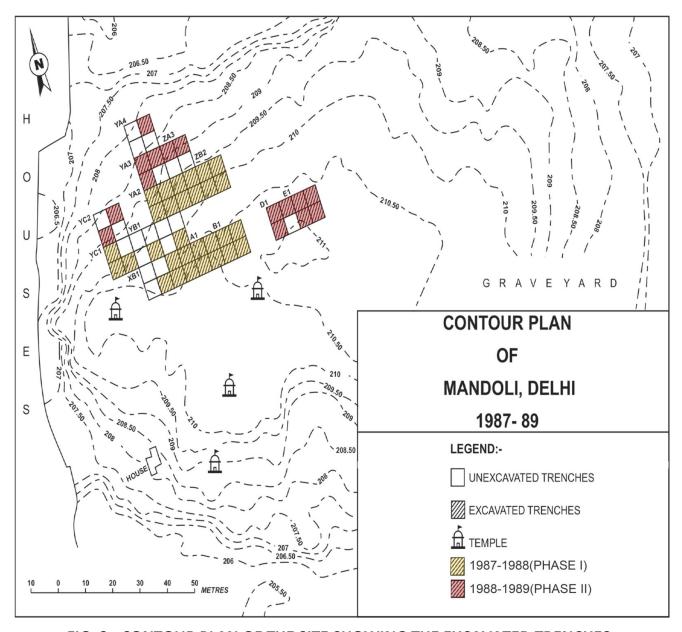


FIG. 2: CONTOUR PLAN OF THE SITE SHOWING THE EXCAVATED TRENCHES.

CHAPTER-III

STRATIFICATION

The study of stratification is mainly confined at two places.

- (1) Trenches XA-1, A-1 and B-1, section facing North (FIG. 3) and
- (2) Trenches A-1 and B-1, section facing South (FIG. 4)

TRENCH XA1 SECTION FACING NORTH

- Layer No.1: 22 cm humus layer.
- Layer No.2: Potteries recovered from Kushan period which include bowl, cooking vessel, dishes, storage jar. This layer measures 22 to 41 cm.
- Layer No.3: Loose soil mixed with ash and brick bats, pot shreds were of Kushan period. A wall was noticed running towards western side with five courses of mud bricks. Depth of this layer was 41 cm to 100 cm.
- Layer No.4: It measures 100 cm to 132 cm. Soil is very loose, mixed with ash and brick bats. Six courses of burnt brick structure were found. The base of the structure was of rammed earth with Kushan period potteries.
- Layer No.5: It measures 132 cm to 145 cm belongs to Sunga period showing mud lumps of a house complex.

TRENCH A1 SECTION FACING NORTH.

- Layer No.1: This layer has average thickness of 22 cm has loose humus.
- Layer No.2: It was compact in nature and potteries were recovered from Kushan period has thickness from 22 cm to 53 cm.
- Layer No.3: This layer starts from 53 cm. At the depth of 82 cm, a floor level compact in nature and brick bats here and there was noticed. Pit was sealed by layer 2. Six courses of brick structure (STR-1) were exposed. It seems that some portion of the brick structure was cut by pit and this pit has yielded some potteries of Kushan period.
- Layer No.4: The thickness of this layer varies from 108 cm to 120 cm. The earth was compact in nature. A floor level was exposed.
- *Layer No.5:* Six courses of Kushan brick structure came across.

TRENCH B1 SECTION FACING NORTH.

- Layer No.1: It has an average thickness of 18 cm. It is humus layer.
- Layer No. 2: It has thickness from 18 cm to 41 cm, the soil was loose and ashy in colour with some pot shreds of Kushan period. Shapes include bowls, dishes, cups etc. Some of them decorated on rim portion.
- Layer No. 3: It varies from 41 cm to 56 cm in this layer. Noticed small portion of patches of sand from the section. The nature and purpose of the sand patches with ash is not known. Potteries belonging to Kushan period like dishes, bowls, terracotta wheel and copper bangle pieces and an inscribed pot shred of Kushan period were recovered. A floor level of Kushan period was exposed which was compact in nature. Kushan pot shreds were also found from pit sealed by layer 3.
- Layer No. 4: It has a thickness varying from 56 cm to 118 cm. The layer was compact having brick bats with burning activity.
- Layer No. 5: Varies from 118 to135 cm. Soil was yellowish. Six courses of burnt brick structure of Kushan period was exposed.

TRENCH A1 SECTION FACING SOUTH

- Layer No.1: The nature of soil is gravel loose earth with yellow patches here and there has thickness of 21 cm.
- *Layer No.2:* The thickness varies from 21 to 50 cm of Kushan period.
- Layer No.3: The earth is compact with patches of ash, floor patches and brick bats, the depth of this layer is 50 cm to 93 cm. At the depth of 65 cm, a floor level of compact in nature was exposed. Potteries of Kushan period were recovered. Shapes includes small pots, jars, plates and bowls. A huge pit sealed by layer 3A was noticed.
- Layer No.4: The thickness varies from 93 cm to120 cm and the earth is compact and yellowish. Potteries recovered from this level were of Kushan period. No structure was traced. Brick bats were exposed.
- Layer No.5: This layer appeared with sand dunes and no pottery and antiquities were recovered from this level.

TRENCH B1 SECTION FACING SOUTH

- Layer No.1: The thickn6ess of this layer is 15 cm soil is compact in nature mix with gravel and brick bats.
- Layer No. 2: The thickness of this layer is 15 to 48 cm and composed with loose ashy colour mixed with gravel and pot sherds belongs to Kushan period.
- Layer No. 3: The thickness of this layer varies from 48 to 91 cm. At the depth of 67 cm, a floor was noticed and this layer has yielded potteries from Kushan period.
- Layer No. 4: The earth is compact yellowish earth with brick bats, pot sherds.

 This belongs to Kushan period.
- Layer No. 5: This layer appeared to be very loose with sand dunes. No antiquity or pottery was recovered from this level.
- Layer No.6&7: Both were sterile layers. The total depth of this trench from humus to the natural soil was 2.65 m.

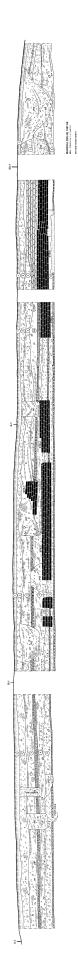


FIG. - 3: TRENCHES XA-1, A-1 AND B-1, SECTION FACING NORTH

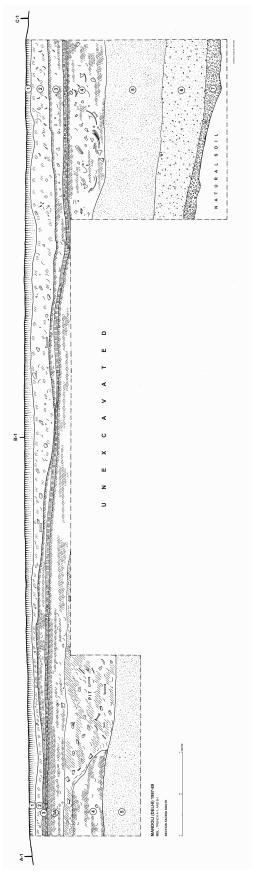


FIG. - 4: TRENCHES A-1 AND B-1, SECTION FACING SOUTH

In addition to the above, a few trenches with relevant layers of importance are also given hereunder for general study:

YA-2 Q-2: At the depth of 2 m, Late Harappan mud floor was exposed with a circular hut. The floor was of very compact in nature. This layer has yielded a terracotta cake. Post-holes and ashy patches were noticed over the floor. This layer numbering 7 was exclusively of Late Harappan period.

ZA-2 Q-2: At the depth of 1.96 m, a floor was exposed which was of compact and yellowish on which some pot shreds were also seen with post-holes. The layer was numbering 6 belonging to Late Harappan period. A terracotta bead of this period was recovered. Sand was noticed mixed with the earth in this layer **(FIG.-5)**

ZB-2 Q3: Layer 4 yielded few potteries of Black Slip and Grey Ware. Layer 5 contains no evidence of habitation but had sand deposits. The depth of this trench was 1.49 m.

YC-1 Q-2: Layer 4 consists of Black Slip, Grey Ware and Painted Grey Ware pottery. Cooking vessels and storage jars were recovered. Elongated barrel shaped bead of agate was recovered from this layer. Layer 5 was yellowish and contained less ash but more sandy. Total depth of this trench excavated was 1.52m.

YA-2 Q-3: At the depth of 89 cm as floor level was noticed but was disturbed by a pit in the south-western quadrant. The floor was of medium yellowish compact earth with post-holes occurred in layer 3 of Kushan period. A circular coin was recovered at this level **(FIG. - 6).**

YA-3 Q-4: At the depth of 84 cm. a floor was exposed consisting of a few pot shreds and brick bats. This was of Kushan period (**FIG. - 7**).

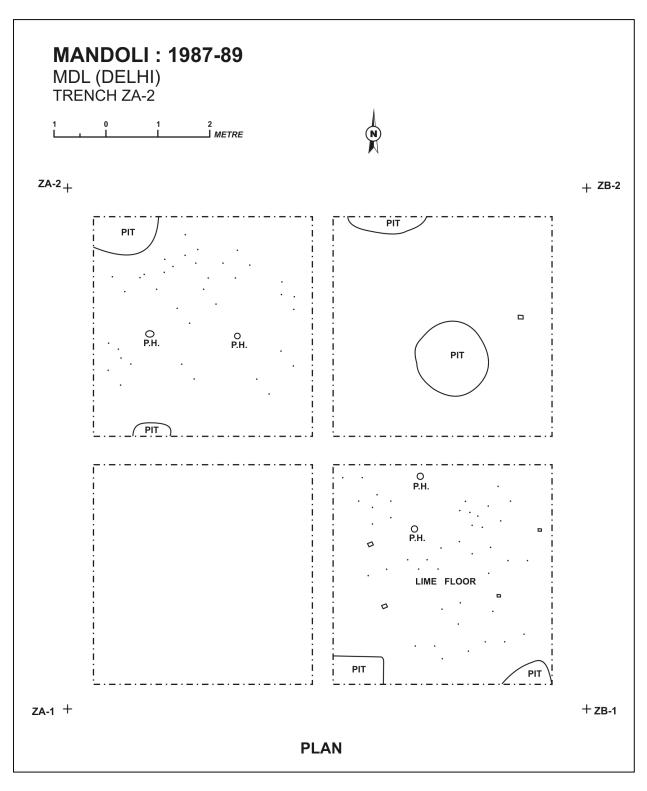


FIG. - 5: TRENCH ZA-2 SHOWING LIME FLOOR WITH POST-HOLES OF LATE HARAPPAN PERIOD

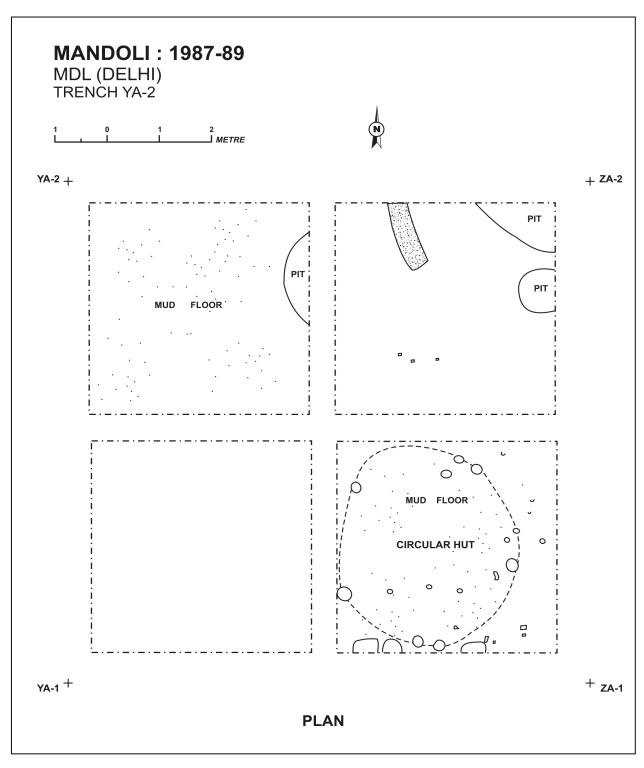


FIG. - 6: TRENCH YA-2 SHOWING MUD FLOOR WITH POST-HOLES OF A CIRCULAR HUT PERTAINS TO KUSHAN PERIOD.

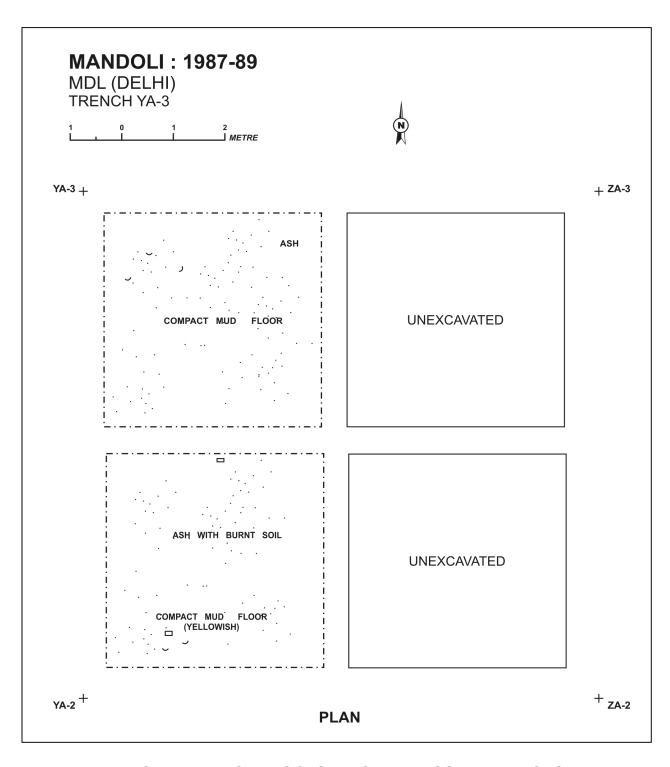


FIG. - 7: TRENCH YA-3 SHOWING MUD FLOOR PERTAINS TO KUSHAN PERIOD

CHAPTER - IV

CULTURAL SEQUENCE AND MAIN CHARACTERISTICS OF DIFFERENT PERIODS

SETTLEMENT PATTERN

PERIOD – I:

Late Harappan settlement was found at the lowest level. It appears to be a rural settlement and got its own limitation. The occupation appears to be small in size as no structural vestiges by way of house complex was noticed. Yet, yellow colour rammed earth floor with post holes in circular and arc fashion traced in couple of trenches give an idea of the late Harappan residential pattern here.

It is interesting to note that an in situ burnt terracotta object was found on this mud floor, coarse in fabric along with traces of ash, perhaps the remains of a hearth in trench No. YA-3. Shapes of pottery reconstructed from shreds from this level include jars with splayed out or beaded rim, vase with disc base etc. All the shreds showed evidence of water logging caused by flood activity during this period. This inference is supported by the evidence of thick deposit of 30 to 35cm water borne silt and sand immediately overlying the late Harappan settlement.

Pottery was all fast wheel-thrown with regular striation marks. The ceramics have been turned out of well-navigated clay and of fine and sturdy fabric, kiln-fired and occasionally coated with dull red slip. Antiquities of this period include a biconical bead and a circular terracotta cake.

However, it may be observed that the late Harappan culture represents a transformed stage which can be easily identified but the continuity with the mature phase of Harappa was broken. No doubt, the late Harappan culture appears to be the out come of the normal process of cultural transformation in the Harappan culture and the internal interactions of the society due to economic

decline, it has witnessed a general decline in the civic standards of the mature Harappan like planned houses which were replaced by inferior structures. The material such as pottery and antiquities were also of inferior quality. Different pottery types and other cultural traits unconnected with each other emerged in an individual pattern.

PERIOD-II:

After a little gap, the site was inhabited once again by the people using Painted Grey Ware. The fabric of this pottery is very fine, the colour ranges from ashy to dark grey. Most of the pots are wheel-turned. Common forms are bowls and dishes with straight or convex sides. Simple designs like dots, dashes, loops, concentric circles, wavy lines, strokes etc. were painted usually with a black pigment. In some cases, reddish brown colour with a group of black wavy lines both internally and externally and a dark ashy well-baked shred of a bowl of fine fabric with a dull red coloured thick horizontal rim band were noteworthy.

It is associated with a fine thin grey ware and red ware. Such pottery types of PGW have been reported earlier from Hastinapur, Mathura, Atranjikhera and Kausambi. Residential vestige comprised of rammed mud floor and postholes were found in trench No. ZA-2 and suggest that wattle and doab structures might have been used by Painted Grey Ware people.

Large scale horizontal excavations were not carried out at any PGW site. Thus one cannot get a detailed picture of the everyday life of the people. However from whatever little is known, it appears that these people played the game of causer indicated by the discovery of typical gamesmen—used in this game. The children perhaps played hopscotch with terracotta disc. Women bedecked with necklaces of beads of agate, carnelian and jasper etc. They also used ear studs. But most notable is the usage of bangles.

Among important antiquities discovered were terracotta animal figurines, ghata-shaped beads, discs decorated with designs at the edges, pyramid-shaped hollow ivory piece, ivory button, beads of banded agate including etched carnelian bead, antimony rod and nail cutter made of copper, besides some iron slags.

PERIOD-III:

This period is represented by the people using black- slipped ware associated with plain red ware and Black and Red Ware. Bowls, vases, jars, dishes, basins are some of the types of the ceramics. Mud floors of the previous period continued.

Terracotta animal and human figurines, beads, disc, shell bangles, ear studs etc. are some of the antiquities found from this period.

PERIOD-IV:

This phase is distinguished as Sunga and is characterized by simple hand-made and wheel-turned potteries of red ware, of medium to coarse fabric, featureless rim, with stamped and incised designs recalling the Ahichhatra type.

Terracotta animal figurines, gamesman, shell objects, ear studs, fishing net weights are some of the antiquities found from this level. House complex with mud lumps was noticed in one of the trenches. Overlying the structure was Kushan burnt brick structure indicative of the succeeding period.

PERIOD-V:

This phase is characterized by Kushan period indicated by well constructed houses of burnt bricks. A house complex was exposed with bricks measuring 33 x 22 x 6; 31 x 22 x 5; 32 x 21 x 6 cm in trench No XA 1 quadrant No.1 to 4. Two successive floors of mud and lime were also noticed associated with an oven in one of the rooms in trench No. XA 1 quadrant No.2. It is also interesting to observe that mud bricks were seen underneath in one of the trenches. Mandoli appears to have been a prosperous town during this period.

The excavation brought to light a good number of antiquities. Notable among them include artistically executed voluptuous female figurine, a rim portion of vase inscribed in Kushana Brahami characters. Besides terracotta human and animal figurines, other antiquities found include beads of some-precious stones, shell objects, terracotta plumb- bob, dabbers, copper rings, iron objects like arrow-head, sickle, spear and a copper coin belonging to Vasudeva-II. The ceramics include carinated handis, spouted vessels, spouts and miniature vessels.

PERIOD-VI:

The mound was finally occupied by the people of Gupta period as evidenced by the typical red polished ware and other artifacts of contemporary affiliations. Ceremics include red slip stamped spouts, incurved bowls with flaring sides. Note worthy find is a well baked terracotta sealing with a few lines in Gupta Brahmi characters decorated with a conch at the top.

IMPORTANCE OF THE MANDOLI ARCHAEOLOGICAL SITE

The main aim of the excavation was to get complete sequence of the culture and to study the settlement pattern. The result of the excavation was much rewarding to the expectation. The site has yielded vestiges of both late Harappan and Painted Grey Ware cultures.

Occurrence of Painted Grey Ware from the stratified layers in Delhi for the first time is note worthy. This evidence shows that people of ancient Delhi were in contact with neighbouring settlements like Hastinapur, Sonipat, Panipat, Indrapat, Tilpat and Mathura etc. On the basis of similarities of the ceremics of this period with other sites, the Painted Grey Ware culture of Period II at Mandoli can be assigned to a time bracket of 1100 and 600 B. C.

Similarly, discovery of late Harappan pottery from the stratified layers here again for the first time is also significant. Some scholars rose eyebrows after hearing late Harappan element from Delhi for the first time but it should be seen in a wider perspective. From a study of the distribution pattern of late Harappan sites it is clear that there was a large scale migration of these people from the west towards the east resulting in a considerable increase in the number of sites in Haryana and western UP. There are about 120 sites in UP alone spread over Saharanpur, Muzaffarnagar, Meerut and Bulandshehar districts on the river Yamuna and its tributaries.

Hence it can be safely assumed that Mandoli might be one of the settlements in Ganga-Yamuna doab. It may be noticed that most of the Harappan cultural traits disappeared in this phase. The uniformity in Harappan culture has been diversified in the later stage giving place to a few pattern and pot-forms during the late Harappan culture. This aspect can be very well noticed when we study some of the sites like Kaseri, Ambkheri, Alamgirpur, Hulas, Atranjikhera and Bahadrabad.

Therefore, Mandoli should not be taken in isolation, but as one of the centres established during the migratory process. The date of late Harappan period at Mandoli may be fixed tentatively somewhere between 1500 to 1200 B.C. based on the pottery types of similar period of other late Harappan sites around Delhi and elsewhere.

CHAPTER - V CHRONOLOGY

An analysis of pottery from period-1 indicates that the pottery discovered in the trench YA-3 slightly appeared like ochre colour due to flood activity which is evidenced by silt deposit immediately after this period and infact a few pottery pieces were also traced in this deposit. It appears that the Painted Grey Ware people occupied some other area nearby which was suitable for them slightly away from the earlier settlement of the Late Harappan in view of flood activity and virtually there is no stratigraphic break at the site. Only due to this flood activity, it appears that there is no continuous occupation of the Late Harappans and PGW people in some pockets which is proved by silt deposit immediately after the Late Harappan period. In some pockets where there is no flood evidence, PGW people and Late Harappan people lived at the same spot one after the other.

It is interesting to note that Iron is not associated with the present site Mandoli as in the case of other sites like Bhagawanpura and Dadheri. However, copper objects were found at all these above mentioned sites including Mandoli. This would place the PGW culture at a stage prior to Hastinapura and Attranji Khera. This would explain why there was no overlap between the late Harappan culture and the PGW culture as in the case of Alamgirpur and Hulas. In view of the above, the late Harappan culture at Mandoli may be assigned to the same period of Alamgirpur and Hulas.

Painted Grey Ware people succeeded the late Harappans at Mandoli. Bowls, dishes with straight or convex sides and having designs like dots, dashes, loops, concentric circles, wavy lines, strokes etc. have been found painted usually with black pigment along with fine thin grey ware and red ware. The pottery was wheel thrown and well lavigated, thin to medium section. PGW was a matured phase here as in the case of other important PGW sites like Hastinapur, Mathura, Kausambi, Ahichchattra may be assigned to the same period.

In trench XA-2, evidence found that the Black Slip Ware culture people succeeded immediately after PGW. The material culture associated with Black Slip Ware suggests that it had acquired some knowledge of superior technology. There is no trace of NBPW at the site during the present excavation. However, during earlier exploration made by the officials of Archaeological Survey of India, Painted Grey Ware, Black-slip Ware, Black-and-red Ware and Northern Black Polished Ware shreds were recovered in fairly large number. Sunga, Kushan and Gupta phases were established by the present excavation. As such, chronologically, Mandoli has continuous occupation from Late Harappan period down to the Gupta period.

Chronologically, the following are various periods as revealed from the MANDOLI archaeological excavation.

Period-I : LATE HARAPPAN

Period-II : PAINTED GREY WARE

Period-III : BLACK-SLIP WARE

Period-IV : SUNGA

Period-V: KUSHAN

Period-VI : GUPTA

CHAPTER - VI STRUCTURES

Period I (LATE HARAPPAN): The excavation shows that the earliest occupants at Mandoli were the Late Harappan inhabitants at the lower most level. Though the excavation did not yield any substantial habitation remains, yet yellow rammed earth floor with post holes in circular and arch fashion were traced in couple of trenches suggest that the earliest settlers at Mandoli lived in houses made of wattle and daub. It is interesting to note that a mud floor in trench YA-3 with burnt terracotta object course in fabric along with traces of ash, perhaps the remains of a hearth. The ceramics showed evidence of water logging caused by flood activity during that period. The inference is supported by the evidence of thick deposit of 30 to 35 cm water born silt and sand immediately overlaying the Late Harappan settlement (PLATE – II).

Period II (PAINTED GREY WARE): The Painted Grey Ware culture which succeeded Late Harappan culture at Mandoli did not yield any structures. Yet, rammed mud floor and post holes in circular and arch fashion discovered in couple of trenches with the evidence of post-holes give an idea of settlement pattern of Painted Grey Ware inhabitants who used wattle and daub structures at Mandoli like their predecessors. It appears that the Painted Grey Ware culture was essentially a village culture of agricultural-cum-pastoral base. There are no signs of urbanization such as town planning, large scale trade and commerce, coinage, writing etc. found in this culture.

Period III (BLACK-SLIP WARE): Period III at Mandoli is represented by the people using Black Slip Ware, co-existed with plain red ware and black-and-red ware. Only mud floors have been found in couple of trenches but in damaged condition.

Period IV (SUNGA): In this phase, a house complex with mud lumps have been noticed in trench no. XA-1 Qdt.-1 (PLATE –III a) Some of the antiquities like terracotta animal figurines, gamesmen, shell objects, ear studs, fishing net and weights were recovered from this level. Hence, a separate phase is attributed to Sunga period.

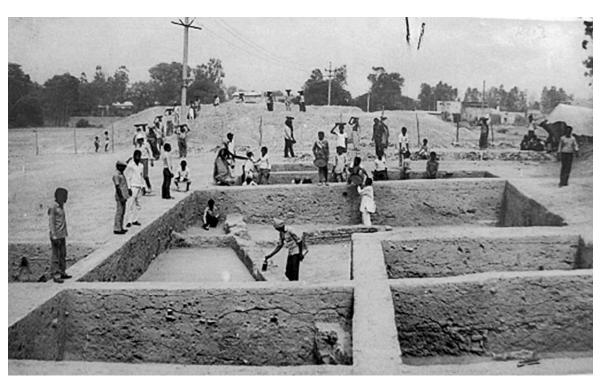
Period V (KUSHAN): This phase at Mandoli is indicated by well constructed houses of burnt bricks measuring various sizes viz. 33x22x6, 31x22x5 and 32x21x6 cm. Two successive floors of mud and lime were noticed associated with an oven in one of the rooms in trench no. XA-1 (**PLATE – IV**). It is also interesting to note that mud bricks were seen underneath the burnt brick structure in this trench (**PLATE – III b**). Mandoli appears to be a prosperous town during this period.

Period VI (GUPTA): Mandoli yielded mud floor in one of the trenches. A brick wall was also found on the eastern side of the trench. The note worthy finding of this period is a terracotta well baked sealing with few lines in Gupta Brahmi characters decorated with a conch at the top of the inscription.

MANDOLI SITE PHOTOS

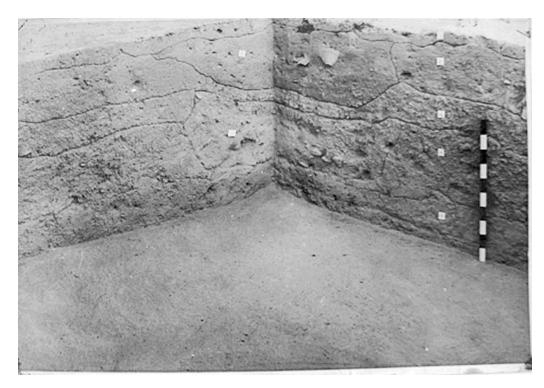


GENERAL VIEW OF THE MOUND



VIEW OF THE EXCAVATED TRENCHES

PLATE - I



SECTION FACING NORTH-EAST CORNER OF TRENCH YC-1 QUADRANT-2 SHOWINGS AND DUNES (FLOOD EVIDENCE) AFTER PERIOD-I (LATE HARAPPAN)

PLATE - II



MUD LUMPS OF A HOUSE COMPLEX, PERIOD-III (SUNGA PERIOD)

PLATE – III a



MUD BRICKS & BURNT BRICKS FROM PERIOD-IV (KUSHAN PERIOD)

PLATE - III b



HOUSE COMPLEX OF PERIOD-IV (KUSHAN PERIOD)



SECTION FACING SOUTH-EAST CORNER OF TRENCH XA-1 SHOWING AN OVEN AND MUD WALL OF THE SAME PERIOD.

PLATE - IV

CHAPTER - VII

POTTERY

Pottery was the largest bulk available from the excavation. It was one of the essential components of the day-to-day life in ancient days as it was a necessity of daily usage. As pottery was cheap and easily available, it was the most important domestic material for the common man. The range of fabric, technology and typology is quite immense. The ceramics unearthed from different levels at this site are as follows:

- 1. Red Ware
- 2. Painted Grey Ware
- 3. Grey Ware
- 4. Black Slip Ware
- 5. Black and Red Ware
- 6. Rouletted Ware
- 1. RED WARE: The earliest level has yielded Late Harappan pottery of red ware coated with red slip. The ceramic showed evidence of water logging caused by flood activity during that period and as a result the pottery appears to be slightly degenerated. It is clear that some of the Harappan elements did not entirely die and some pottery types emerged. When reconstructed from the shreds, they included jars with splayed out or beaded rim and vases with disc base etc.
- 2. PAINTED GREY WARE: Painted Grey Ware is the main ceramic of the period-II at Mandoli. This culture has been christened after its very distinctive ceramic industry. Made of fine grained and well navigated clay, the ware is grey in colour having been fired under reducing conditions in kiln. The pots are often painted in black pigments with designs which include dots and dashes, vertical oblique and criss-cross lines, concentric circles and semi-circles, a chain of short

spirals, and sigma etc. The colour of the pottery ranges from ashy to dark grey. Common forms are bowls and dishes with straight or convex sides. In some cases, reddish brown colour with group of black wavy lines both internally and externally and an ashy well baked shreds of a bowl of fine fabric with dull red coloured thick horizontal rim band were note- worthy. The Painted Grey Ware co-existed with grey ware and red ware in this period.

- **3. GREY WARE:** There are different shades in this ware like dark grey, dull grey and black grey. The shapes in this ware are dish, bowl, vase, jar and basin.
- **4. BLACK SLIP WARE:** Black slip ware has been found to be associated with plain red ware and black and red ware in period-III at Mandoli. Black slip ware as its nomenclature suggests is a pottery which contains a black slip surface. The black coloured slip is smooth and applied on both inner and outer of the pot. The most common shapes of this ware are bowls, dishes, vases and basins etc.
- **5. BLACK AND RED WARE:** This type of pottery is prepared by inverted firing technique, while exposing the outer portion to air thus producing the basic characteristic feature of black and red ware.
- 6. ROULETTED WARE: The technique of decoration consisted of revolving a toothed nail on the wet surface of the pit thus producing symmetrical pricked decorations. There are many forms of rouletting like concentric circles, minute triangles, diamonds, parallelograms, uprights, crescents, dots etc. The typical shapes of this ware are dishes and vases. Various types of pottery belonging to different periods as mentioned above are dealt with by a detailed study here under.

LATE HARAPPAN POTTERY

BASINS

Fig. - 8

- 1. A deep basin externally beaded rim, ill fired sturdy body, convex side treated both the surfaces with a light ochre wash and slip.
- 2. A shallow basin with externally beaked undercut rim, slightly convex sides, treated with dull red slip, of fine fabric
- 3. A shallow basin with an incurved and externally drooping rim and convex profile of medium fabric, treated with brownish red slip on both sides.
- 4. A basin having short vertical neck, with out-turned externally thickened rim, carination above from the base. Sturdy body, well fired, of medium fabric treated with dull red wash.
- 5. A shallow basin having horizontally splayed out rim with a short vertical neck carnation below the base, couple of horizontal grooving at the inner edge of the rim, of medium sturdy fabric treated with red slip on both sides.
- 6. A shallow basin having out turned externally thickened rim, short vertical neck, carination at the shoulder part, course fabric, sturdy body treated with red slip on both sides.

PLATE, DISH AND BASINS

- 1. A shallow plate of dull red ware with an out-turned horizontally thickened rim and slightly carinated at the lower portion, sturdy fabric, treated with red slip.
- 2. Dish of dull red ware with an out-turned flanged beaked undercut rim, sturdy fabric, convex side treated with red slip.
- 3. Shallow basin having externally thickened with prominent flanged beaked under-cut internally, convex side, sturdy body well fired and treated with dull red slip.
- 4. A deep basin of dull red ware with an out turned flaring under-cut rim, of sturdy medium fabric, convex sides,

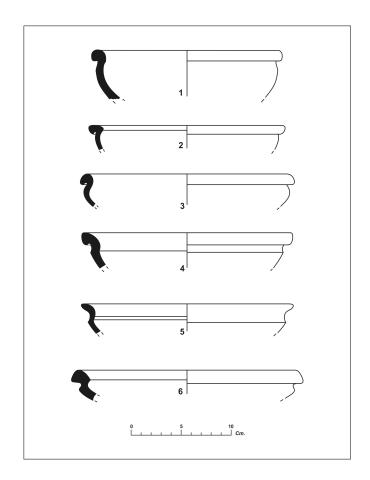


FIG. - 8 & PLATE - V LATE HARAPPAN BASINS FROM PERIOD-I



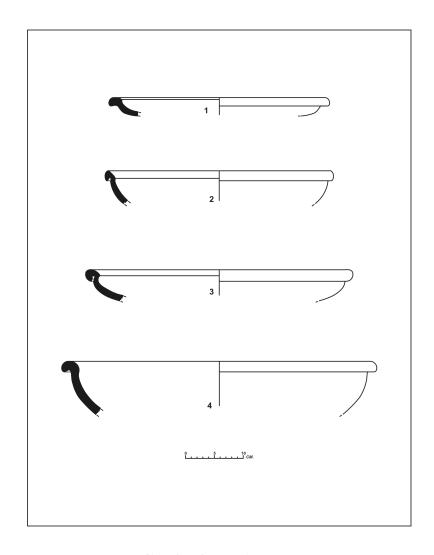


FIG. - 9 & PLATE - VI
(1) PLATE (2) DISH (3 & 4) BASINS FROM PERIOD-I



LATE HARAPPAN POTTERY

STORAGE JARS

- 1. Storage jar of elliptical body with under-cut neck and flaring shoulder, orange ware of medium fabric.
- 2. Storage jar of elliptical body with under-cut neck and flaring shoulder, medium fabric, treated with wash.
- 3. Storage jar with an externally beaked rim, short neck, flaring shoulder, of uniform medium fabric, treated with dull red wash.
- 4. Storage jar of dull red ware with an elliptically collared rim without neck and flaring shoulder, uniform course and sturdy fabric. Treated with red slip externally.

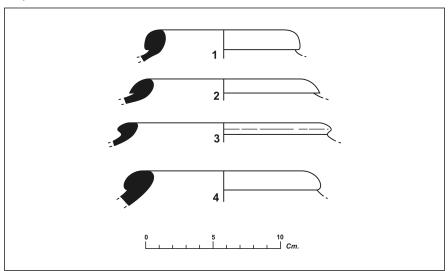


FIG.- 10 & PLATE - VII STORAGE JARS FROM PERIOD-I



LATE HARAPPAN POTTERY

BOWLS

- 1. Bowl of dull red ware with an in-curved and externally oval collared rim and in-curved sides, medium to fine fabric, treated with red slip externally
- 2. Base fragment of bowl of dull red ware with an uneven discular base showing thread mark, of medium fabric, flaring side, devoid of any wash and slip.
- 3. Base fragment of a bowl with concentric corrugation inside the bottom portion having a discular base and flaring sides.
- 4. Base fragment of a small deep bowl, convex sides ending to a narrow elongated flirt base, of medium fabric, treated with red slip externally.

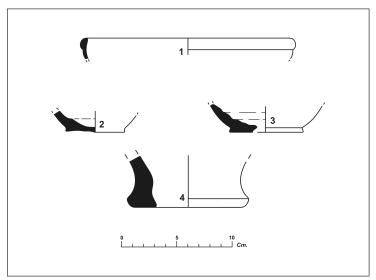


FIG. - 11 & PLATE - VIII BOWLS FROM PERIOD-I



BOWLS PAINTED EXTERNALLY

- 1. Bowl of grey ware with internally sharpened rim and straight sides of fine fabric treated with slip. Painted in black with medium thick horizontal rim band and a design of a hook pattern.
- 2. Bowl of grey ware with internally sharpened rim and in-curved sides, of fine fabric, treated with slip, painted in black with intersecting oblique strokes and also a horizontal rim band.
- 3. Bowl of grey ware with internally sharpened and slightly convex sides devoid of slip, painted in black with six vertical strokes below the rim band running towards the base.
- 4. Bowl of grey ware with incurved featureless rim and convex sides. Painted in orange colour with three horizontal strokes at middle part of the body running from left to right.
- 5. Vertical bowl with featureless rim and tapering sides, of medium fabric treated with slip. Painted in black with five slanting strokes starting from rim portion thinning towards lower end. There is a groove band on shoulder part of the bowl in three rows in double line. A grooving is also made below the rim portion internally.
- 6. Bowl of grey ware with vertical featureless rim with hemi-spherical sides, decorated in black with a thick horizontal rim band while the oblique strokes falling downwards.
- 7. Bowl of grey ware with slightly incurved featureless rim fine fabric having convex sides. Painted in black with oblique strokes starting from rim to middle of the body.

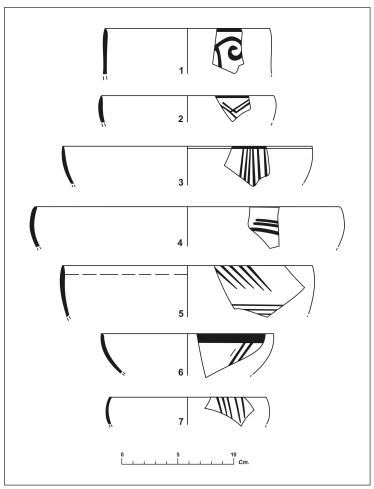


FIG.- 12 & PLATE - IX BOWLS PAINTED EXTERNALLY, PERIOD-II



BOWLS PAINTED INTERNALLY

- 1. Bowl of grey ware with featureless incurved rim and convex sides with a horizontal rim band and vertical strokes painted in black starting from rim edge towards base. Uniform medium fabric and treated with slip externally
- 2. Vertical bowl of grey ware internally sharpened rim and almost vertical sides of thin fine dark grey fabric. Painted in black with horizontal rim band followed by group of vertical dotted strokes parallel to each other starting from rim band towards base on ashy grey slip.
- 3. Bowl of grey ware with a vertical internally sharpened rim and straight sides of fine slipped fabric. It is painted in black with two intersecting loops starting from rim portion. It has striation like horizontal grooves on external side below the rim.
- 4. Grey ware bowl of medium fabric with a vertical internally sharpened rim. Painted in black with medium thick horizontal rim band followed by parallel vertical strokes falling towards base.
- 5. Bowl of grey ware with a vertical internally sharpened rim and straight side of fine slipped fabric. Painted in black with two strokes joining each other at the bottom in a loop pattern.
- 6. Bowl of grey ware with a vertical sharpened rim and slightly tapering sides with fine mild grooves externally. It is painted in black with a group of roughly vertical strokes parallel to each other falling thin to thick towards the base of uniform fine grey fabric and treated with slip on both sides.

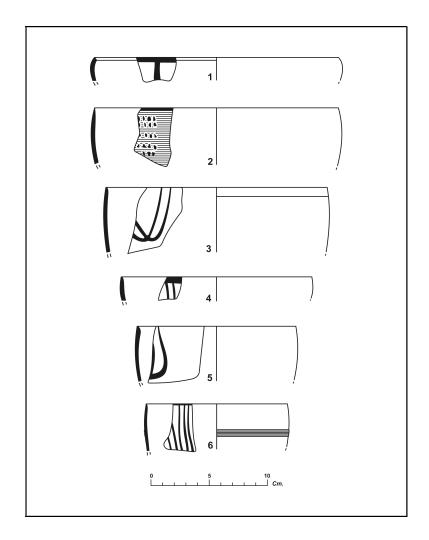


FIG.- 13 & PLATE - X BOWLS PAINTED INTERNALLY, PERIOD-II



BOWLS PAINTED BOTH EXTERNALLY AND INTERNALLY Fig.- 14

- 1. Bowl of grey ware with vertically sharpened rim and with slip on both sides. Painted in black with horizontal rim band on both sides.
- 2. Bowl of grey ware with internally sharpened rim having vertical sides. Painted in black with horizontal rim band on both sides with two oblique strokes on outer side and one on inner side.
- 3. Bowl of grey ware with internally sharpened rim and incurved sides, medium to thin fabric with well slip on both sides. Painted in black with uneven thickness of rim band on either side.
- 4. Bowl of grey ware with vertically, roughly sharpened rim with almost straight vertical side to rounded body. Fine thin grey fabric treated with ashy grey slip and painted in black with thin horizontal band on the rim part on both sides.
- 5. Bowl of grey ware with vertically internally sharpened rim and rounded side, of fine thin fabric and well slipped on either side. Painted in black with oblique strokes externally and vertical strokes internally on the waist part of the bowl.

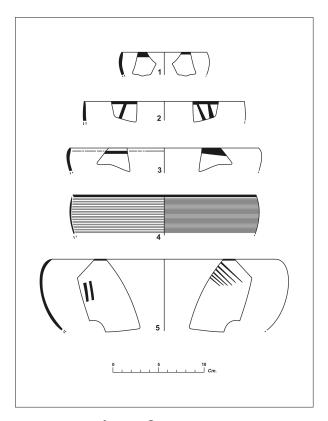


Fig. 14 & PLATE - XI
BOWLS PAINTED BOTH EXTERNALLY AND INTERNALLY, PERIOD-II



DISHES

- 1. Dish of grey ware with an incurved featureless rim with convex sides carinated to a sager base, painted in black externally with a group of intersecting strokes starting from rim to middle of the body. Treated with fine slip.
- 2. Dish of grey ware with in-turned featureless rim with convex sides carinated to a sager base, painted externally in black with a group of oblique strokes starting from the rim part thinning towards the lower ends. Treated with fine slip.
- 3. Dish with in-turned featureless rim and convex sides. Medium fabric. Painted externally with a group of oblique strokes in black. The outer surface of the dish is treated with fine orange colour where as the inner surface is of grey with the rim band of orange colour.
- 4. Dish with in-turned featureless rim and convex sides carinated to a sager base. Fine fabric. Painted in black internally of parallel vertical lines starting from painted rim of horizontal band to the centre of the sager base.
- 5. Dish with sharply in-turned featureless rim and convex sides, of medium fabric. It is painted externally with two oblique strokes near the rim. The outer surface of the dish is treated with pale orange slip where as the inner side is the usual grey with a thick rim band in pale orange colour.

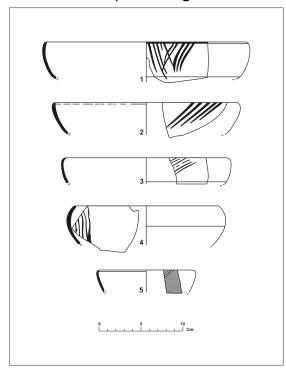




FIG.- 15 & PLATE - XII DISHES OF PERIOD-II

FRAGMENTS

- 1. Bowl fragment of grey ware, convex side, painted in black with unequal distance roughly five parallel lines of almost same thickness.
- 2. Fragment of grey ware painted in a group of two sets of vertical strokes, medium course of thick fabric
- 3. Fragment of grey ware painted in black with five vertical strokes parallel to each other.
- 4. Grey ware shred of fine medium fabric, slipped, painted with two rows of dots.
- 5. Base fragment painted with thickened strokes starting at the same point towards down, well slipped.
- 6. Fragment of grey ware painted with three curved strokes.
- 7. Fragment of grey ware of fine fabric painted with a group of two oblique rows of dots with each row consisting of four and six dots respectively.
- 8. Fragment of grey ware painted in black with a group of four vertical varying thickened strokes.
- 9. Base fragment of grey ware painted with five horizontal strokes parallel to each other.
- 10. Base fragment of grey ware painted with a group of four vertical strokes of varying thickness.
- 11. Fragment of grey ware painted with a row of three dots, fine fabric.
- 12. Base fragment of grey ware painted with oval shape loop filled with rows of dots internally, well slipped.
- 13. Fragment of grey ware painted with three slightly curved strokes.
- 14. Base fragment of grey ware painted with three dots enclosing one loop.
- 15. Fragment of grey ware painted in black with four parallel oblique lines of almost same thickness ending at the same point.
- 16. Fragment of carinated part of grey ware painted in black with two rows of four dashes.
- 17. Fragment of grey ware of fine slip painted in black with two curved strokes.
- 18. Base fragment of grey ware painted in black with two intersecting loops consisting of dots in floral design externally, medium fabric.
- 19. Base fragment of grey ware painted in black with two slightly oblique thickened strokes filled with dots.
- 20. Base fragment of grey ware painted in black with two vertical strokes almost same thickness.
- 21. Base fragment painted in black with two rows of dots and dashes.

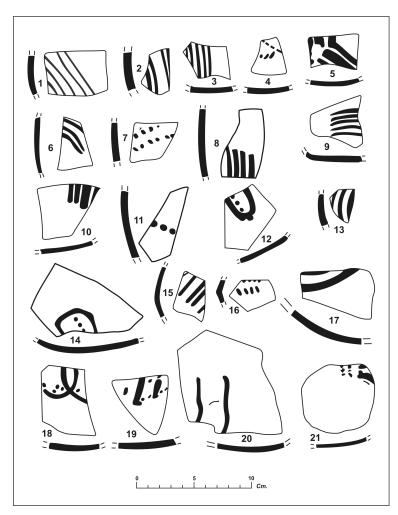


FIG.- 16 & PLATE - XIII PAINTED GREY WARE SHREDS FROM PERIOD-II



FRAGMENTS

- 1. Fragment of grey ware of fine fabric painted with seven concentric circles.
- 2. Base fragment of grey ware painted with four oblique strokes thinning towards the lower end.
- 3. Fragment of grey ware painted on both sides internally with one horizontal line attached with three vertical strokes where as externally one horizontal line is depicted.
- 4. Fragment of grey ware painted in black with five oblique strokes thinning towards the upper portion. The lower portion of the pot has carination.
- 5. Base fragment of grey ware having painted in black with three vertical strokes thickened at the upper portion.
- 6. Fragment of grey ware of fine fabric painted in black with four vertical strokes thickened at the lower portion.
- 7. Fragment of grey ware of fine fabric painted in black with four thickened vertical strokes.
- 8. Fragment of grey ware painted in black with three oblique strokes.
- 9. Carinated part of grey ware painted in black with two vertical parallel strokes.
- 10. Base fragment of grey ware painted in black with four concentric circles of fine fabric treated with orange slip.
- 11. Fragment of grey ware painted in black with four oblique strokes of uneven thickness.
- 12. Fragment of grey ware with an inturn featureless rim and convex sides, treated with slip, painted in black with rim band on both sides. Two oblique strokes appear externally.
- 13. Fragment of grey ware painted in black with the design consisting of four slightly oblique strokes on both sides.
- 14. Bowl fragment of grey ware painted in black with design consisting of three wavy lines internally whereas externally painted with six oblique strokes, treated with chocolate colour slip.

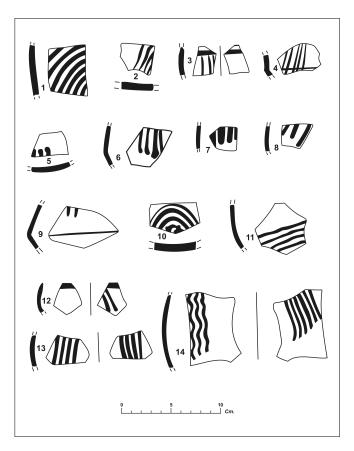


FIG.- 17 & PLATE - XIV PAINTED GREY WARE SHREDS FROM PERIOD-II



BOWLS Fig.- 18

- Bowl of dull red ware with vertically sharpened rim and slightly straight sides, of fine fabric and treated with brown slip internally (ill fired).
- 2 Bowl of dull red ware vertically sharpened rim slightly straight sides, treated with dull red slip on both sides.
- 3 Bowl of dull red ware with vertically internally sharpened rim with slightly straight sides, of uniform fine fabric.
- 4 Fragment of bowl with an internally sharpened rim, tapering sides, of fine thin course fabric, devoid of any wash and slip.
- 5 Bowl of dull red ware with incurved featureless rim and convex profile, of medium fabric, treated with orange slip on both sides.
- 6 Bowl of dull red ware with almost vertically sharpened rim and convex profile, of medium uniform fabric, treated with dull red slip on both sides.



PLATE No.- XV BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

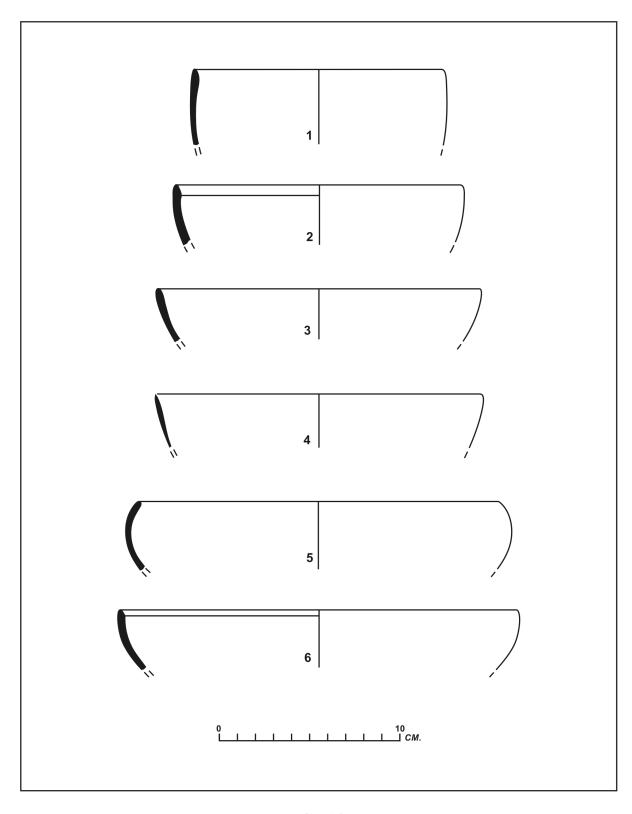


FIG. -18 BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

BOWLS

- 1 Bowl of dull red ware with incurved featureless rim, flaring sides, of fine fabric having depression internally just below the rim, treated with slip, externally thickened towards base.
- 2 Bowl of red ware incurved rim, flaring sides and featureless rim, having depression internally below the rim, treated with red slip.
- 3 Bowl of dull red ware with an incurved sharpened thickened rim, flaring sides, devoid of any wash and slip, of medium fabric.
- 4 Bowl of red ware with flaring and featureless rim. It is treated with orange slip externally and greyish internally, of fine fabric.
- 5 Bowl of red ware with an internally featureless rim, incurved sides, treated with orange colour externally and greyish internally, of fine fabric.
- 6 Bowl of red ware with flaring sides, externally thickened rim, of course fabric, devoid of any wash and slip.



PLATE - XVI BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

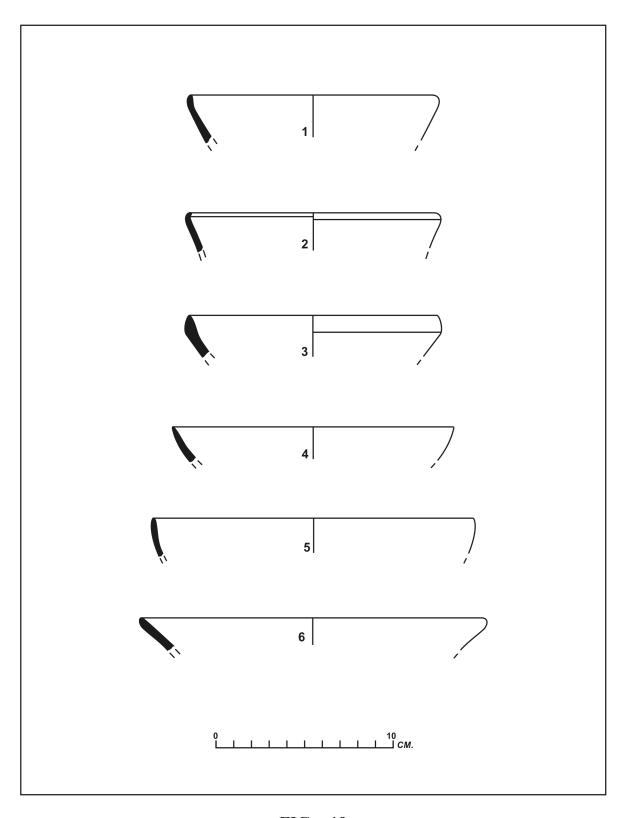


FIG.- 19 BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

BOWLS

- 1 Bowl of red ware with flaring featureless rim and tapering sides devoid of any wash or slip, of medium fabric.
- 2 Bowl of red ware with flaring sides, externally thickened rim, treated with wash, of medium fabric.
- 3 Bowl of red ware with vertically sharpened rim, tapering sides, treated with wash, of medium fabric.
- 4 Bowl of red ware with vertically slightly sharpened rim, tapering sides, devoid of wash and slip.
- 5 Bowl of red ware with vertically sharpened rim, of fine fabric, treated with red lustrous slip.



PLATE No.- XVII BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

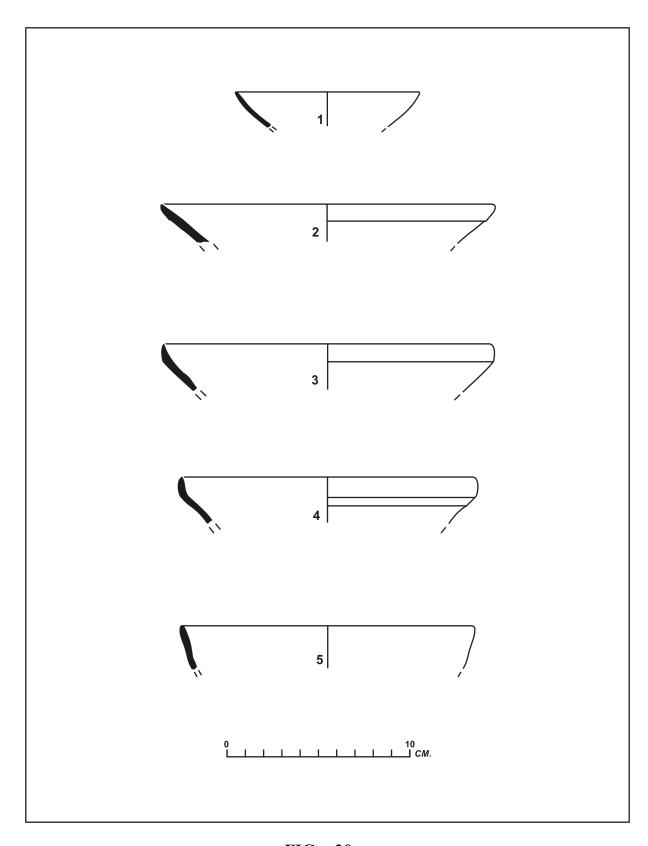


FIG.- 20 BOWLS OF ASSOCIATED RED WARE OF PERIOD-II

VASE Fig.- 21

- 1. Vase of dull red ware with an out-turned flanged under-cut rim, fine fabric.
- 2. Vase of dull red ware with splayed-out rim (featureless) with almost vertical neck of uniform medium fabric treated with fine red colour slip on both sides.
- 3. Vase of dull red ware with an out-turned flanged under-cut rim with grooved internally below the rim, of medium fabric.
- 4. Vase of dull red ware with an out-turned externally collared and thickened rim, short concave neck, of dull red ware devoid of any wash and slip.
- 5. Vase of dull red ware with an out-turned and externally bevelled having rough horizontal groove externally, short concave neck, of dull red ware and devoid of any wash and slip.
- 6. Vase of dull red ware with an out-turned thickened flanged under-cut rim, short curved neck, sturdy fabric, treated with red slip.
- 7. Vase of dull red ware with an out-turned externally collared rim, short concave neck of dull red ware, devoid of any wash and slip.
- 8 Vase of dull red ware with an out-turned thickened flanged under short curved neck, sturdy fabric, treated with red slip.
- 9. Vase of dull red ware with an out-turned thickened rim collar under-cut rim, short curved neck, with a slight depression on the neck, sturdy fabric, treated with red slip.
- 10. Vase of dull red ware with a horizontally splayed out with groove externally indentation below rim elongated neck, of uniform medium fabric, yellowish red in colour.
- 11. A Vase with a horizontally splayed out rim externally with elongated neck, yellowish red medium fabric un-slipped, external groove at the junction point of the neck.
- 12. Vase of red ware with a prominent horizontally splayed out groove rim with concave neck of uniform medium fabric. Treated with red slip.
- 13. Vase of red ware with an out turned externally roughly collared rim, concave neck of medium fabric, Treated with red slip.
- 14. Vase of dull red ware with an out-turned thickened beaked groove internally, under-cut rim, of medium fabric.
- 15. Vase of dull red ware with an out-turned featureless thickened rim with carinated neck, treated with slip.
- 16. Vase of red ware with an out-turned thickened rim, short concave under-cut slightly beaked rim, medium fabric, treated with orange slip.

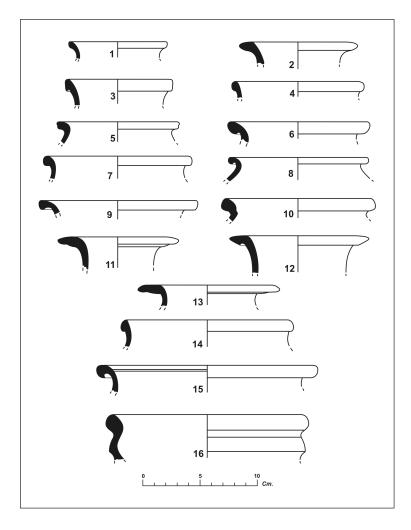


FIG.- 21 & PLATE - XVIII VASES OF ASSOCIATED RED WARE OF PERIOD-II



VASES

- 1. Out-turned externally thickened rim with a weak depression internally, of medium fabric and devoid of any wash or slip.
- 2. Fragment of dull red ware out-turned externally thickened, slightly concave neck, of medium fabric treated with slip on both sides.
- 3. Vase of red ware of medium fabric with out-turned externally clubbed rim and short concave neck of dull red ware.
- 4. Out-turned externally thickened rim, concave neck, of medium fabric, treated with wash.
- 5. Fragment of a vase of medium fabric with flaring mouth and concave neck, treated with slip.
- 6. Fragment of a vase of course dull red ware ill-fired with a horizontal splayed-out beaded rim with grooves and concave neck.
- 7. Slightly splayed-out and externally thickened and a prominent rib on the rim with short neck, dull red ware, of coarse fabric.
- 8. Vase of dull red ware with vertical externally beaked rim and elongated concave neck of fine medium fabric, treated with wash.
- 9. Vase of red ware with out-turned externally clubbed rim and a groove at the top with flaring neck of medium fabric treated with wash.
- 10. Splayed-out horizontal rim with a groove externally, flaring neck, treated with red slip on both sides.
- 11. Fragment of a vase of dull red ware with an out-curved external rim. It is distinguished by a weak rib on the upper portion of the neck, of medium fabric, treated with slip on both sides.
- 12. Out-curved beaked rim with short concave neck. Red ware of medium fabric treated with dull red slip.
- 13. Fragment of a vase of dull red ware with an out-turned externally bended rim with concave neck of red ware, of medium fabric treated with slip on both sides.
- 14. Fragment of vase of red ware out-turned externally beaked rim, elongated neck with a groove on the shoulder, of medium fabric treated with slip and wash.
- 15. Fragment of a vase roughly oval collared out-curved neck dull red ware of medium fabric, slipped
- 16. Vase of red ware with a rim and concave neck of fine medium fabric, treated with wash.

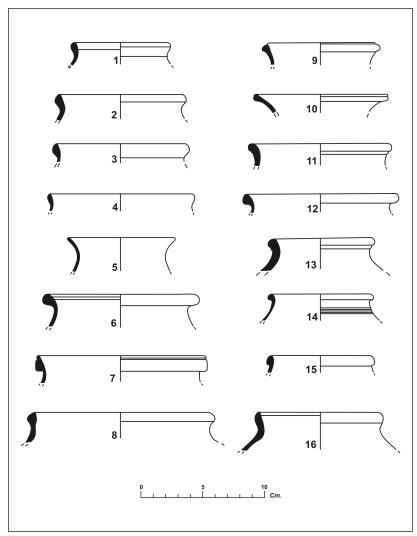


FIG.- 22 & PLATE - XIX VASES OF ASSOCIATED RED WARE OF PERIOD-II



BASINS

- 1. Basin of red ware with an incurved and oval collared rim, roughly convex side budging in the middle having horizontal groove at the middle of the rim, medium fabric treated with red slip.
- 2. Basin of red ware with an incurve oval collared rim with multi grooves on it as well as below the rim externally, treated with orange slip, of medium fabric.
- 3. Fragment of basin of dull red ware with an arrow based and multi grooved rim, with convex profile having triple weak horizontal grooving on the exterior, of medium fabric.
- 4. Fragment of a basin of red ware with an incurved externally oval collared and grooved rim, of course fabric, treated with brown color slip on both sides.
- 5. Fragment of basin of red ware having slightly flattened top and oval collared rim convex profile, of thick course fabric, treated with red slip on the both sides.
- 6. Basin of red ware with a slightly incurved obliquely thickened profile, having groove just below the rim, convex sides, treated with slip on both sides.
- 7. Basin of dull red ware with horizontally splayed out beaked rim slightly bevelled internally, roughly convex sides.

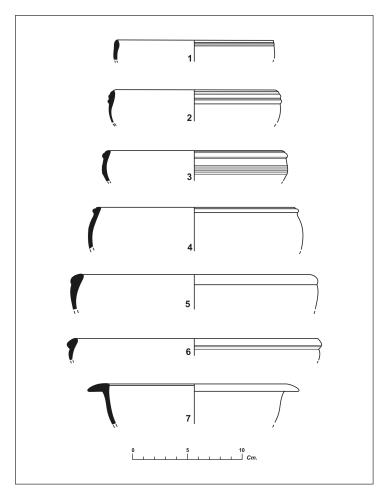


FIG.- 23 & PLATE - XX
BASINS OF ASSOCIATED RED WARE OF PERIOD-II



BLACK SLIP WARE POTTERY

BOWLS & VASES Fig.- 24

- Bowl with an out-turned with roughly vertically sharpened 1. convex sides, of treated with brown slip internally whereas externally upper portion with brown and bottom with black slip, of medium fabric.
- 2. Bowl with an out-turned and internally thickened featureless rim, roughly convex sides, of medium fabric, treated with black slip. External portion is painted with black towards the base and brown towards the rim.
- 3. Bowl with roughly vertically sharpened rim with convex sides, of medium fabric treated with black slip internally and externally with black and red.
- Vase with an out-turned externally thickened beveled rim, short concave 4. neck, vertical sides, treated with black slip, having two ghooves below the rim fully incised body, of uniform medium fabric.
- Vase with flaring and featureless rim, flaring sides slightly concave neck, of medium fabric, treated with black slip.



PLATE - XXI BOWLS & VASES OF BLACK SLIP WARE POTTERY

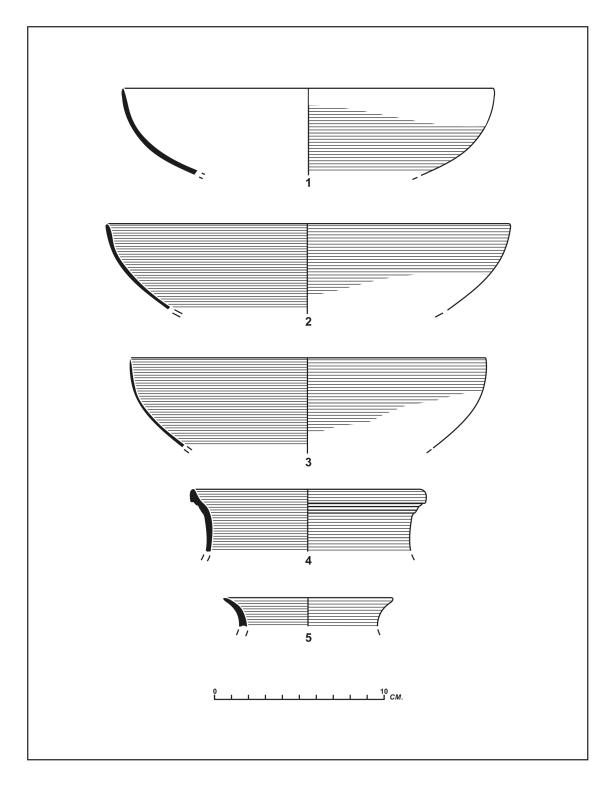


FIG. - 24
BOWLS (1 TO 3) AND VASES (4 TO 5) OF BLACK SLIP WARE POTTERY, PERIOD-III

BLACK SLIP WARE POTTERY

BOWLS

- 1. Bowl with almost vertical and internally thickened and sharpened rim, slightly convex sides, of medium fabric, treated with black slip.
- 2. Bowl with vertical featureless thickened clubbed rim, incurved sides, of medium fabric treated with black slip.
- 3. Bowl with roughly vertical sharpened rim, Incurved sides, of medium fabric treated with black slip.
- 4. Bowl with slightly out-turned internally thickened and sharpened rim, convex sides, of medium fabric, treated with black slip.
- 5. Bowl with vertically and internally thickened and sharpened rim, convex sides, treated with black slip.



PLATE No.- XXII BOWLS OF BLACK SLIP WARE POTTERY

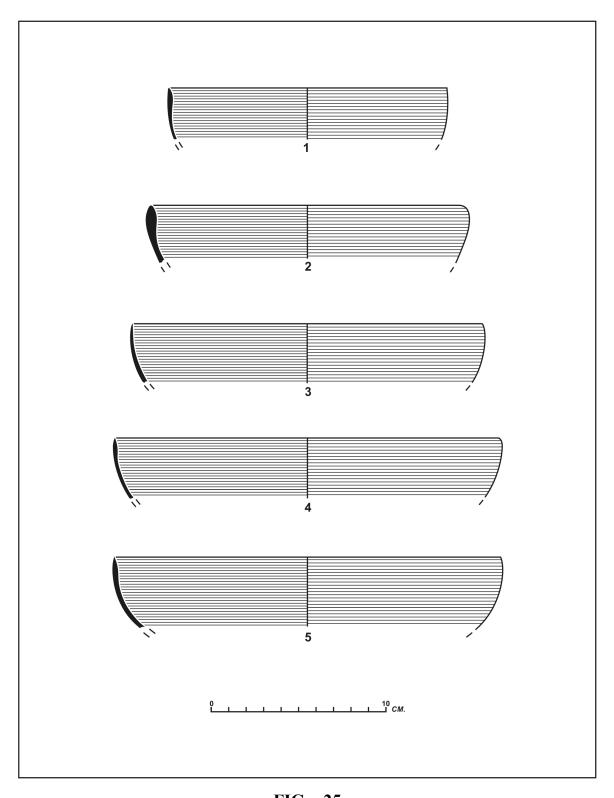


FIG. - 25 BOWLS OF BLACK SLIP WARE POTTERY FROM PERIOD-III

EARLY HISTORIC POTTERY - SUNGA PERIOD

VASES Fig.- 26

- 1. Vase of red ware prominently out-turned and featureless rim, outneck, convex sides and flattened base having one groove above the base, of medium fabric, treated with wash.
- 2. Vase of red ware with an out-turned externally thickened and roughly beaked rim, elongated neck with one groove and convex sides, conical thickened base dull red, of course fabric, devoid of any wash or slip.
- Vase of red ware with an out-turned rim less, concave neck and flat base 3. having one groove internally on the neck, of medium fabric, rough surface.

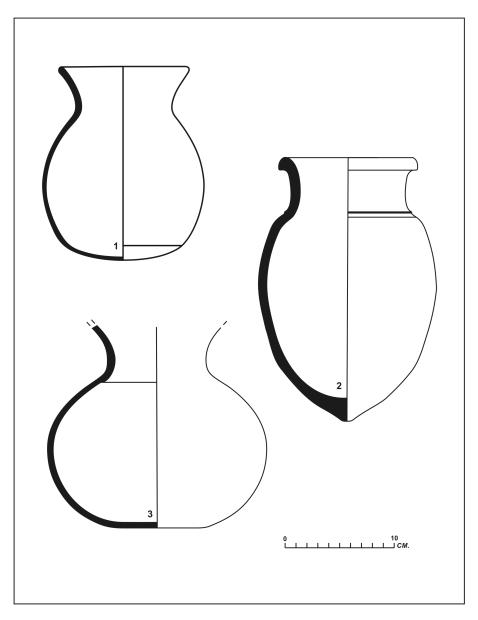


FIG.- 26 EARLY HISTORIC POTTERY VASES FROM SUNGA PERIOD –IV



PLATE - XXIII EARLY HISTORIC POTTERY VASES FROM SUNGA (PERIOD –IV)

KUSHAN PERIOD

BOWLS

- 1. Bowl of red ware with vertical featureless grooved rim incurved sides, decorated with Stamped design of dots in panel, of medium fabric, treated with red slip.
- 2. Bowl of red ware with an out-turned featureless rim having slightly depression just below the rim and the incurved sides are decorated with stamped design. Down below, there is a row of plants on the stamped design of dots. Treated with red slip and dusted with mica having rough carination and flat thickened base.
- 3. Bowl of red ware with an out-turned roughly convex sides, featureless rim having slightly carination at the lower part with a design formed by elongated plant starting from one horizontal line at the bottom, treated with red slip.
- 4. Bowl of dull red ware with slightly out-turned featureless rim, convex sides and rounded body with thickened base having stamped design formed by creeper joined each other in row at the top and bottom filled with a few dots in between the top and bottom rows.
- 5. Small bowl of red ware with vertical featureless rim tapering to flat thickened base. It is decorated with a design formed by four vertical strokes and some figure. It is treated with red slip.



PLATE- XXIV STAMPED POTTERY FROM PERIOD -V

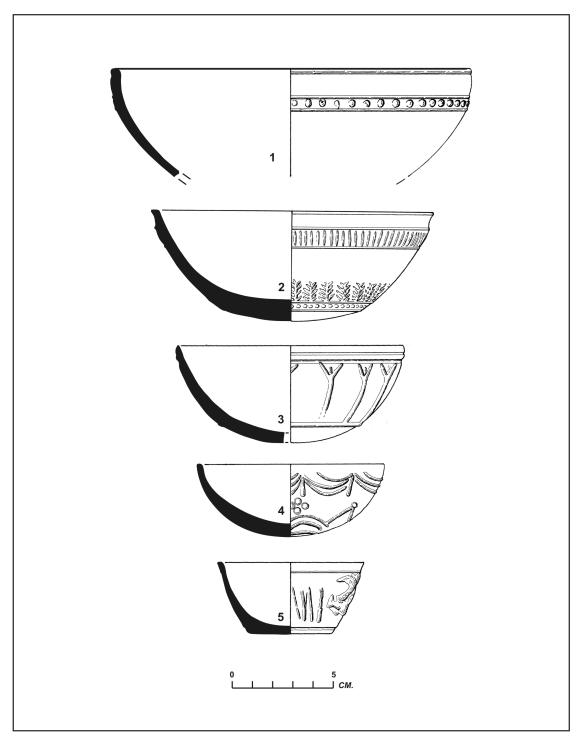


FIG. - 27 STAMPED POTTERY FROM PERIOD –V

BOWLS Fig. - 28

- 1. Bowl of red ware with vertical featureless rim slightly conical base. It is decorated by molded formed dots in panel enclosed panel of creeper and bold line circle, treated with red slip, fine fabric.
- 2. Bowl of red ware with slightly vertical featureless rim tapering side and rough surface on outer side. It is decorated in molded design formed by conch shell, petals with flower at the centre in panel and row of dots below the design. It is blackish due to smoke, treated with red slip.
- 3. Bowl of dull red ware with slightly vertical featureless rim and rounded thickened base, slightly tapering side. It is decorated with group of dots in row with bold line with four bold dots.
- 4. Bowl of red ware with vertical featureless rim and slightly convex side decorated by triangles join each other in panel enclosing two row of loops in panel, treated with wash.
- 5. Bowl of red ware with vertical featureless rim, slightly convex side and thickened base. Decorated in molded design formed by row of dots with in lines and three vertical rows of dots with bold lines. Dusted with mica.

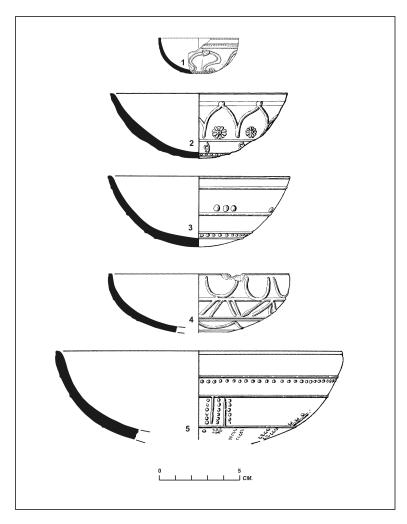


FIG. - 28 & PLATE- XXV STAMPED POTTERY FROM PERIOD -V



VASES, BOWL & LID Fig. – 29

- 1. Fragment of vase of red ware with splayed out externally thickened flattered top rim having prominent ridge on the mid part (incurved side). It is decorated with incised design from by row of triangular above the incised curved lines, treated with red slip.
- 2. Bowl of red ware with an out turned thickened featureless rim and roughly convex side externally grooved profile. It is decorated in stamped design {formed by dot in centre enclosing by dot in circle, medium fabric dusted with mica.
- 3. Vase of red ware with a splayed out prominently externally thickened rim, carinated neck, flaring side red ware of medium fabric, treat with slip. It is decorated with incised design rim on exterior.
- Lid of dull red ware with flared horizontally featherless rim, sharp carination 4. making on inner central cup little depression having constricted base medium fabric, ill fired, having incised design (chequer pattern) on hanging incised triangle.

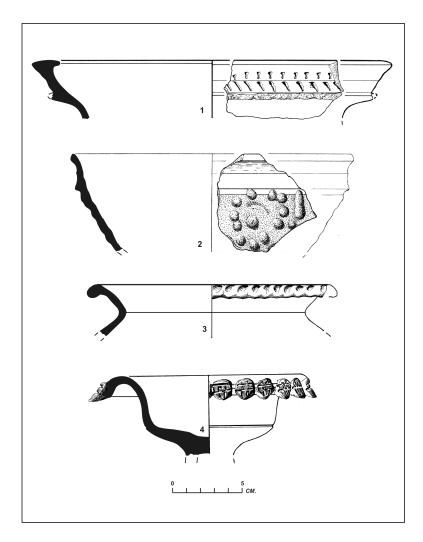


FIG. - 29 & PLATE - XXVI STAMPED POTTERY FROM PERIOD -V



BOWL AND VASE FRAGMENTS Fig. - 30

- Bowl fragment of red ware with an in-turned and featureless rim and 1. prominent convex side with grooves externally and round base. decorated in stamped design in dots and two bold lines in circle.
- 2. Bowl fragment of red ware convex side decorated by rounded design formed by flowers and leaf.
- 3. Fragment of vessel of red ware with convex side with a design formed by two curved line filled by row of dots with small concentric circle enclosing dot in stamped form medium fabric dusted over with mica.
- Fragment of small curved base, decorated with incised four the vertical 4. slightly curved lines and three horizontal lines, treated with red slip.
- Lower portion of bowl decorated with stamped design formed by flowers in 5. panel enclosing two bold lines above leafs and bold lines. It is treated with red slip, of medium fabric.
- Vase fragment of red ware with concave neck decorate with incised lines in panel above incised groove around the body it is treated with red slip.
- 7. Vase fragment of red ware decorated with incised design two lines with wavy lines and four rows of dashes below the design, treated with red slip.
- 8. Fragment of vessel of red ware decorated with wavy line below two horizontal lines and nine rows of dashes in vertical pattern. It is treated with red slip.

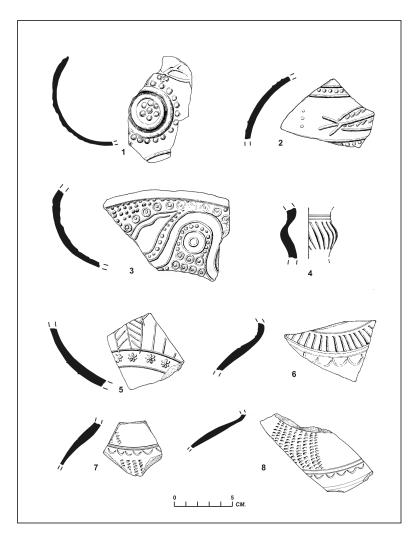


FIG. - 30 & PLATE - XXVII STAMPED POTTERY FROM PERIOD -V



SPRINKLERS AND SPOUTS

- 1. Basin of red ware with an incurved and featureless externally thickened grooved rim attached with thickened spout decorated with grooves on external part of the spout.
- 2. Terrocotta spout with out-turned collared rim, oblique neck and round body.
- 3. Bottle neck sprinkler without rim, of medium fabric.
- 4. Bottle neck sprinkler of red ware, decorated with a horizontal line, having some design on the base part.
- 5. Bottle neck sprinkler with vertically featureless rim, elongated body, decorated with grooves externally at three parts thickened at the bottom, of medium fabric.
- 6. Bottle neck sprinkler with vertically grooved rim and concave neck, of medium fabric.
- 7. Spout of red ware distinguished by prominent ledge on the mid part and decorated with incised horizontal line externally, of medium fabric, treated with red slip.

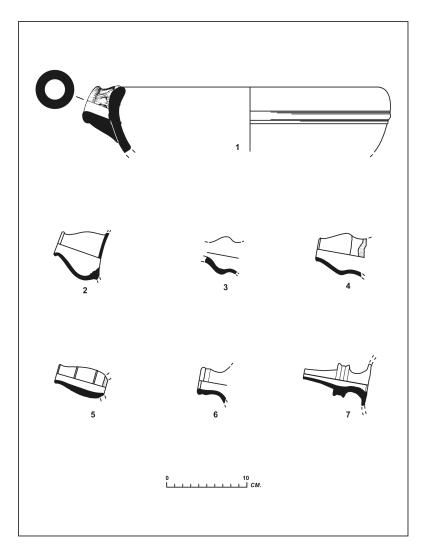


FIG. - 31 & PLATE - XXVIII SPOUTS FROM PERIOD –V



SPOUTS

- 1. Spout with elongated side, featureless rim thickened at the bottom.
- 2. Spout with elongated side rimless, having grooves on the neck portion and decorated with U shape design at the bottom.
- 3. Small spout of red ware, elongated side, vertical featureless rim, of medium fabric.
- 4. Spout with elongated side with sharpened featureless rim having grooves below the rim, of medium fabric.
- 5. Bottle neck sprinkler with a flanged rim top and conical knobbed opening of fine fabric, treated with bright red slip.
- 6. Bottle neck sprinkler having an obliquely cut flanged rim, convex top and straight side of fine fabric.
- 7. Spout with flared with an out turned thickened rim, concave at the lower portion, treated with red slip, of medium fabric.
- 8. Spout with straight side and featureless rim, varying thickened at the lower portion, of medium fabric.

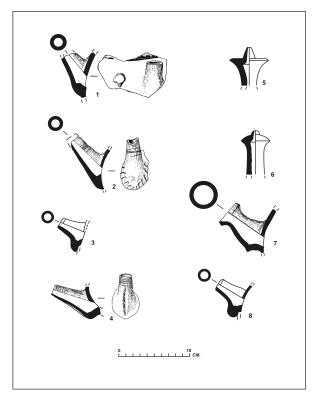


Fig. - 32 SPOUTS FROM PERIOD -V

SPOUTED VASES

- 1. Miniature spouted vase of red ware with an out-turned externally bevelled rim, having externally grooves on the neck and shoulder part, concave neck and flat base, treated with wash, having striation mark of wheel.
- 2. Spouted vase of red ware with an out-turned externally riveted rim with grooves, elongated oblique neck, globular body with flat base, it is treated with red slip and wash.
- 3. Spouted vase of red ware with an out-turned externally thickened and grooved rim and concave neck, globular body, it is decorated on the shoulder with an incised design formed by triangular shape below the rim and painted in black with band on the rim neck and mid part of the body, It is treated with red slip and wash.

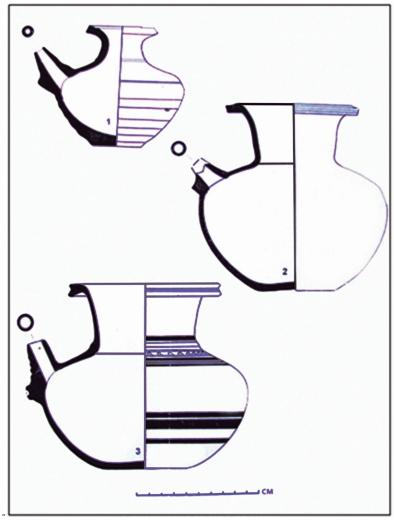


FIG. - 33 SPOUTED VASES FROM PERIOD –V



PLATE XXIX SPOUTED VASES FROM PERIOD -V

VASE, HANDI AND STAND

Fig. – 34

- . 1. Vase of red ware with an out-turned externally thickened rim decorated with a cord design at by twisting at two opposite places of the rim, having prominent ledge at the shoulder part and groove at the neck part, of medium fabric, treated with red slip up to shoulder, ill fired, short concave neck to saggar vase.
- 2. Handi of red ware with an out-turned obliquely beveled rim having one groove on internally on the neck and prominently ribbed on the central part, convex side and round base treated with red wash.
- 3. Pot of grey ware rimless with externally two groups of groove below the rim shoulder part slightly carination waist and round base, treated with black slip.
- 4. Vase of red ware with an out-turned featureless concave rim, neck, having groove internally, globular body, of course fabric and rough surface.
- 5. Stand of red ware with an out-turned flaring featureless rim distinguished by a prominent ridge on neck and cylindrical side with flat base.

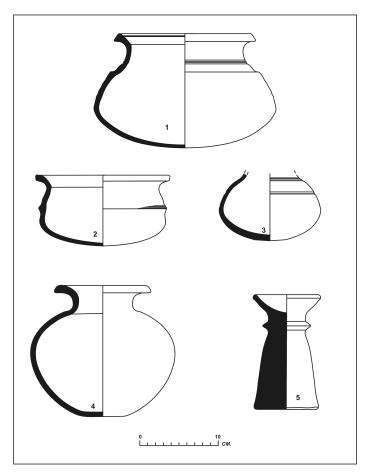


FIG. - 34 & PLATE XXX POTTERY FROM PERIOD-V



BOWLS

Fig. -35

- 1. Bowl of red ware with an incurved featureless rim externally thickened distinguished by a couple of grooving on the rim with incurved side and flat base, of medium fabric, treated with red slip on both sides.
- 2. Red ware medium size plate with splayed out rim having a single horizontal groove in the centre of the rim internally and flat base, of medium fabric, treated with red slip on both side.
- 3. Bowl of red ware with a vertical obliquely cut rim, tapering side, flat base, of medium fabric, treated with a wash corrugated profile.
- 4. Bowl of dull red ware flared horizontal flattened rim having single groove below the rim on inner side tapering side flat thickened base of medium fabric, treated with only wash.
- 5. Perforated bowl of red ware with an out-turned featureless thickened groove rim meant for perforating water, incurved side having flat heavier base.

BOWLS

1. Shallow bowl of dull red ware with a featureless rim and

flaring sides,

- grooved inner base, of medium fabric, treated with a wash.
- 2. Bowl of dull red ware with a flared horizontal featureless rim, sharp carination making an inner central cup like depression having constricted thickened base, of medium fabric, treated with wash and slip on both sides.
- 3. Bowl of red ware with a vertical featureless rim, straight sides and thick flat base having thick ridge at the middle part, treated with red slip.
- 4. Bowl of red ware with an out-turned thickened rim, a bold ridge on the shoulder part and flat thickened base, of medium fabric, treated with wash.
- 5. Bowl of dull red ware with splayed out featureless rim, corrugated profile and flat base, devoid of any wash and slip.

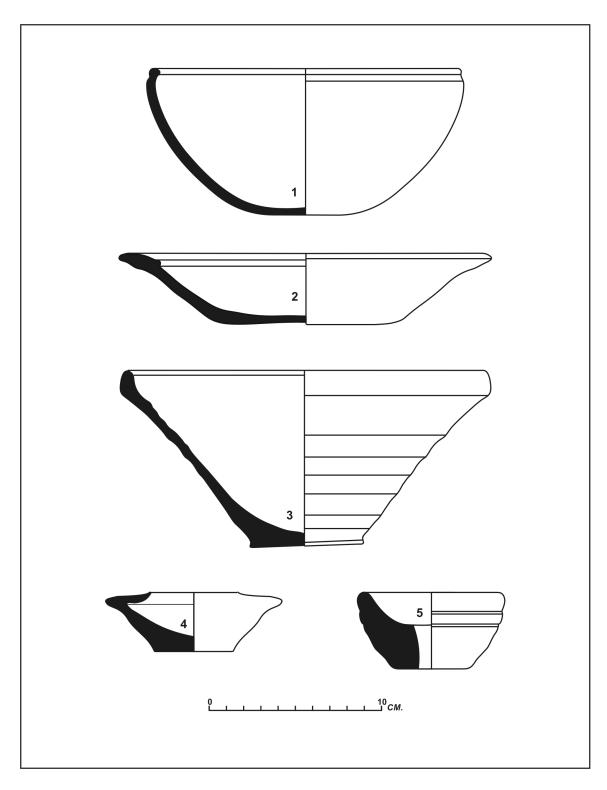


Fig. - 35 BOWLS FROM PERIOD -V

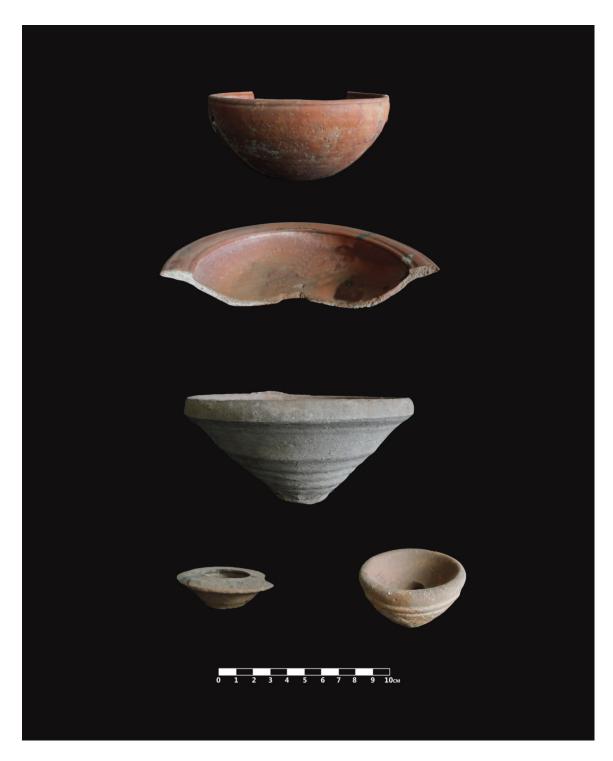


PLATE - XXXI BOWLS FROM PERIOD -V

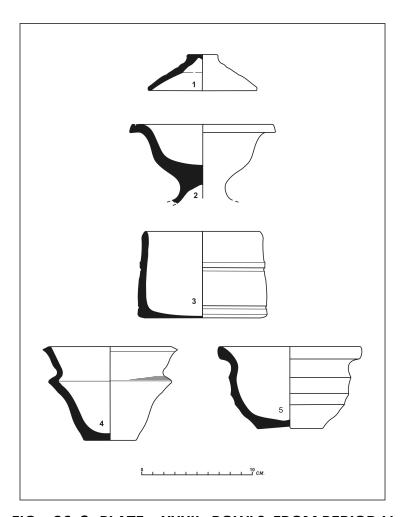


FIG. -36 & PLATE - XXXII BOWLS FROM PERIOD-V



VASE Fig.37

- 1. Miniature vase of red ware with an out-turned featureless rim, concave neck, oblique shoulder, slightly corrugated profile, flat thickened base.
- 2. Miniature vase of dull red ware with an out-turned rim and carinated body and flat thickened base, treated with wash.
- 3. Miniature vase of dull red ware with an out-turned rim, concave neck, globular body and narrow flat base. It is distinguished by a week ledge on the body having square shoulder and heavier base.
- 4. Miniature vase of dull red ware with rim-less and concave shoulder having externally one groove, ovoid body, thickened flat base, of medium fabric.
- 5. Miniature vase of red ware with vertical featureless rim, closing mouth concave shoulder with externally grooved, ovoid body and thickened flat base, of medium fabric.
- 6. Miniature vase of red ware with an out turned rim and concave neck, globular body and narrow flat base. It is distinguished by a week ledge on the body of medium fabric.
- 7. Miniature vase of red ware with an out-turned rim, concave neck of a globular body and narrow flat base. It is distinguished by a weak ledge on the body, of medium fabric, treated with wash.
- 8. Vase of red ware with an out turned, featureless rim, concave neck of a globular body and flat thickened base, having one groove externally on shoulder part.
- 9. Miniature vase of red ware with an out-turned featureless rim, concave neck, carinated body and flat heavier base, of medium fabric, treated with wash.

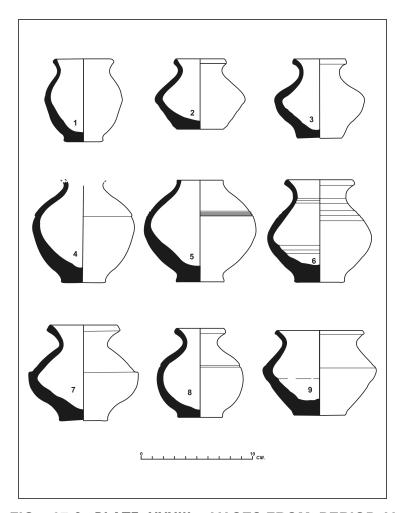


FIG. - 37 & PLATE -XXXIII VASES FROM PERIOD V



VASE Fig. - 38

- 1. Vase of red ware with an out-turned featureless rim, concave neck, flat thickened base and prominent corrugated profile body.
- 2. Vase of dull red ware with rimless, constricted mouth, oblique shoulder with flat heavier thickened base.
- 3. Miniature vase of red ware with an out-turned rim, a ledge shoulder and round body with flat thickened base.
- 4. Handi of red ware out-turned thickened beveled rim having prominent carination at the base part and three grooves on shoulder around body to saggar base of course fabric treated with red slip and wash.
- 5. Vase of red ware with slightly out-turned featureless rim having one groove on inner side on the neck, small curved neck, round body and saggar base with smooth surface, ill fired
- 6. Vase of dull red ware with an out-turned rim, having an oblique shoulder, a low girth and prominent ledge, of medium fabric, treated with wash having heavier thickened flat base.
- 7. Miniature vase of red ware with a flared featureless rim, short oblique neck, ribbed waist and rounded base, of medium fabric having grooves on the shoulder part.

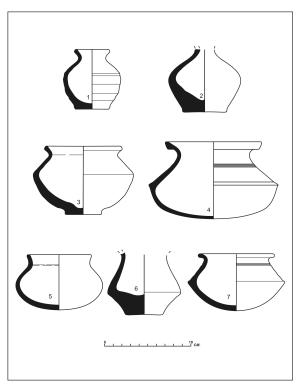


Fig.- 38
VASES FROM PERIOD-V

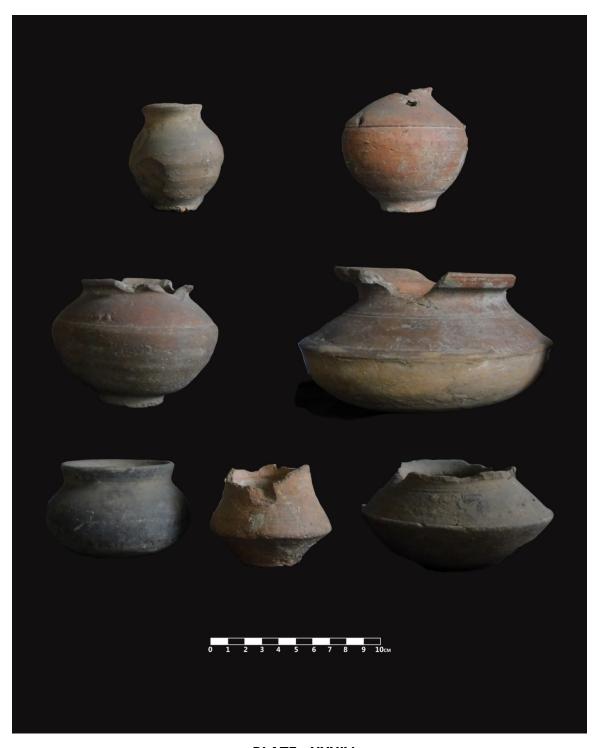


PLATE - XXXIV VASES FROM PERIOD-V

BOWL Fig. - 39

BOWL FRAGMENTS of stamped Red Ware with an out-turned featureless rim, incurved thickened sides and roughly flat base and is decorated with an impressive design consisting of rows of flowers in vertical manner and leaves in circle with incised round line on inner side where as on outer side, four terracotta nails attached with bowl on the rim portion, of medium fabric, treated with red slip from Period-V. (KUSHAN PERIOD)

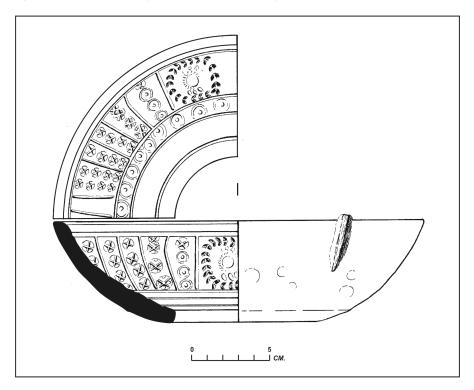


Fig. 39 & PLATE -XXXV



FINIAL Fig. - 40

FINIAL having holes at the bottom portion all around.

Unstratified (Probably of Kushan Period)

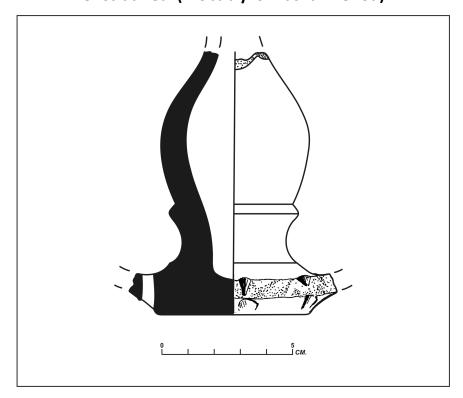


FIG. - 40 & PLATE - XXXVI



GUPTA PERIOD

DECORATED POTTERY

Fig. - 41

A **DECORATED PIECE IN THE SHAPE OF A "BOAT"** with flaring featureless rim with flat thickened knob, looking like a boat divided into two equal haves. The second half is missing. The exterior is decorated with flower and leaf pattern and interior consisting of vertical stamped band. (Probably of Gupta Period)

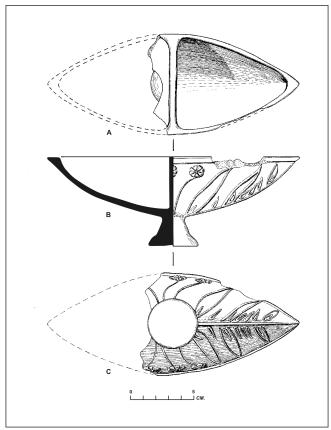


FIG. - 41 & PLATE - XXXVII



CHAPTER VIII

OTHER FINDS

In this chapter, minor antiquities are being dealt with which were made to meet the needs of day-to-day life of the people of bygone ages. They include terracotta objects, objects made of shell, ivory and bone, copper and iron implements, beads, coins and other miscellaneous items.

Terracotta objects: It is well known factor that clay being plastic, gets any required shape very easily. Due to its easy availability and being non-expensive, it always met the demand of the common man in ancient India. Hence, terracotta objects were made to meet the needs of day-to-day activity. They supply valuable information about the life and culture of the people of a particular period. In fact, they are integral part of general masses and being the source material which not only acquaint us with day-to-day life of particular era but also their feelings clearly brought out by the creators of this plastic art. A large number of terracotta objects were recovered from the excavation. They occur in all the levels right from the late Harappan period. They include animal and human representations, personal ornaments, house-hold objects and other miscellaneous items.

Of all the terracotta human figurines discovered at the site two are worth mentioning. An interesting figure is a plaque of a female figure with the right hand rests on her waist and the left hand kept on back side, having prominent breast (PLATE-XXXVIII). A female figure with dressed hair and very sharp features of eyes, nose, lips and having prominent breast is also interesting (PLATE-XXXIX).

Out of the animal figurines, bulls are large in number. Some of them have prominent hump. Transverse hole on the nose for the festering the string is shown for some of the bulls, perhaps, they might have used as toys. There are some ornaments made of terracotta like ear studs, beads (ghat-shape, arecanut or pear shape, circular and globular) and bangles. Other items like hop scotch, disk, cart wheel, crucible, reel, dabber, plum bob with transverse hole for tying the thread, dice, and net sinkers having prominent groove for being tied to the fisherman's nest. are noteworthy. Terracotta potter's stamp is designed in such a way to hold it with fingers in the grew with a comfortable grip is interesting. (PLATE - LVIII)

Ivory, Bone and Shell: Tools made of ivory, bone and shell recovered from the excavation. The shell bangle pieces are decorated either with horizontal grooving are with incised design. A shell bangle decorated with a bird at the junction point is interesting (PLATE-LII). There are some interesting items like pendent, button, ring (all made of shell) and an ivory socket (PLATE-LIV). Bone was mainly used for making stylus. The technique of manufacturing of the bone objects is to flake off the bone to required shape. This is evident because of flake scars. They are smoothened, sharpened and polished.

Metallic objects: In all, 19 objects were recovered (PLATE-LVII) consisting of arrow head, antimony rod, needle, hooked pin, ring and bangle all were made of copper. Most of them come under personal ornaments or utility ware. Iron objects include weapons, implements and house hold objects were recovered from period V which include arrow-head, spear-head, chisel, axe, knife, hook, clamp, shaft and tongs.

Semi-precious beads: Total of four beads of this category were recovered and banded agate barrel shaped bead from period II, Lapis Lazuli bead with finished edges having a fine drilled hole from period V , a carnelian bead and a sky blue opaque glass bead both from period VI.

Coins: 17 coins were unearthed from Mandoli excavation in two seasons. Some of them are of Kushan and others are of Kota coins. One important coin was that of Vasudev of Kushan dynasty (Plate-LXIII).

T.C. HUMAN FIGURINES.

Fig.42

- 1. Front view of a terracotta head-less male figurine with a necklace and prominent stomach, both the arms are broken. Period-V
- 2. Terracotta crude human figurine with missing head, hand and legs. Period-IV
- 3. Terracotta red slipped plaque of female figurine with profile breast and reduced wrist, dressed hair, wearing ear rings, slightly looking towards her left where as her right palm resting on her right thigh. She wears bangles and necklace. Period-V
- 4. Terracotta fragment of a female figurine with a profile breast and reduced waist, roughly slipped. Broken. Period-V

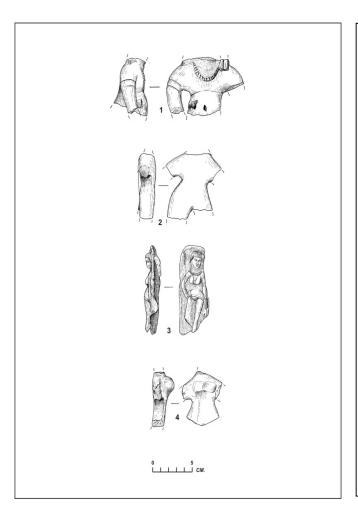




FIG.- 42 & PLATE - XXXVIII: T.C. HUMAN FIGURINES.

T.C. HUMAN FIGURINES

- 1. Terracotta plaque of female figurine with the right hand rests on the waist and the left hand kept on back side, having prominent breast, treated with red slip. Period-V
- 2. Terracotta female figurine with dressed hair and very sharp features of eyes, nose, lips and having prominent breast, treated with dull red slip. Period-V

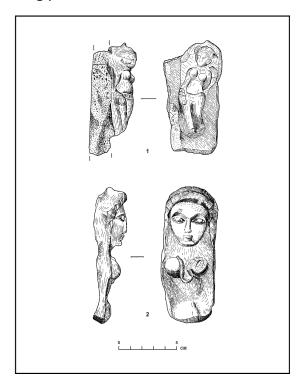


FIG.- 43 & PLATE -XXXIX: T.C. HUMAN FIGURINES



T.C. HUMAN FIGURINE

Fig. -44

TERRACOTTA CRUDE HUMAN FIGURINE of grayish fabric probably of a soldier with an applied cross- belt wearing from right to left. Period-III

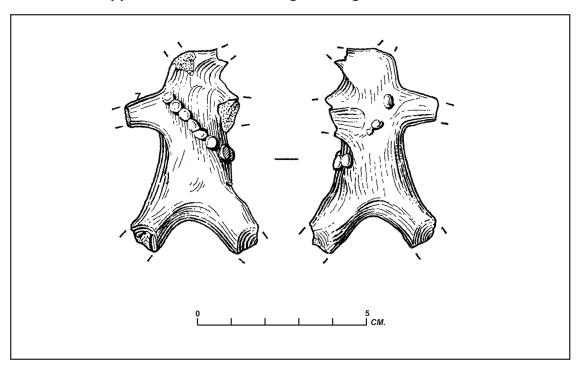


Fig.- 44 & PLATE – XL: T.C. HUMAN FIGURINE



T.C. HUMAN FIGURINE

Fig. -45

TERRACOTTA HEAD-LESS FEMALE FIGURINE SITTING ON A MODA. Her right hand and right breast are missing. The left breast is projected with incised decoration.

Likewise, her palm is shown with grooving. Period-V

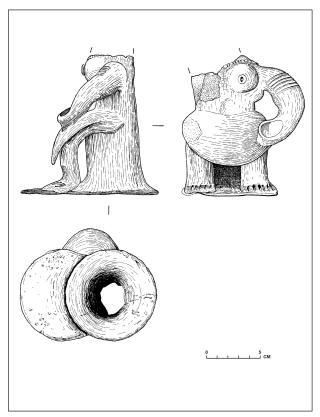


Fig.- 45 & PLATE- XLI: T.C. HUMAN FIGURINE



T.C. TOY FIGURINE Fig. -46

TERRACOTTA SUN-BAKED CLAY TOY FIGURINE OF AN ELEPHANT WITH ITS UPRAISED FOLDED TRUNK, PIN HOLE EYES, CARRYING CONCH SHAPED WHISTLE on the back which is still in working condition. Period-IV

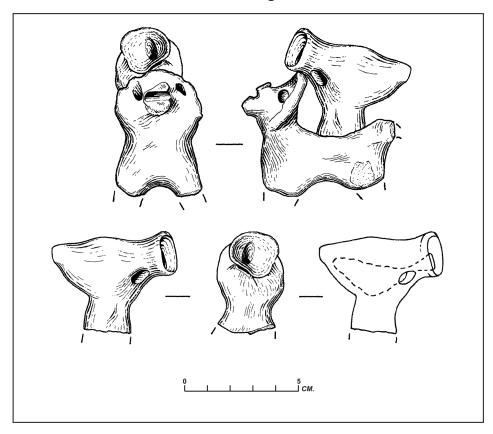


FIG.-46 & PLATE- XLII: T.C.TOY FIGURINE



T.C. ANIMAL FIGURINES

- 1. Terracotta humped bull with prominent hump and legs with a transverse hole on the nose for festering the string. Horn damaged. Well baked and treated with red slip. Period-V
- 2. Terracotta animal figurine showing prominent hump and one leg where as other three legs are broken, well fired. Period-IV
- 3. Terracotta humped bull with transverse hole depicting nose and pin hole for tail and legs. Horns are broken, well slipped. Period-III
- 4. Terracotta animal figurine of dull orange colour, probably lion with pin hole eyes. Legs and ears are broken. Well slipped. Period-III

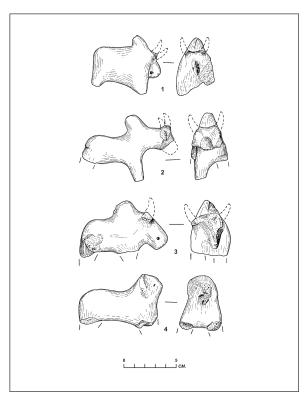


FIG. - 47 & PLATE - XLIII : T.C. ANIMAL FIGURINES.



T.C. ANIMAL FIGURINES

- 1. Terracotta animal figurine of bull with prominent hump, treated with red slip (damaged). Period-IV
- 2. Terracotta animal figurine of a bull with broken horns and ears, having a good profile, eyes and demarcating line of lips and nose, a fine example of Gupta art. Period-VI
- 3. Terracotta semi-baked clay figurine of a bull with ears and legs damaged. Period-IV
- 4. Terracotta humped bull having prominent hump with transverse hole at the nose part for festering the string. Legs and horn are damaged. Well baked clay and treated with red slip. Period-VI
- 5. Terracotta humped bull having prominent hump and legs with transverse hole at the nose part having short tail, treated with red slip. Period-V
- 6. Terracotta animal figurine of a dog with prominent ears and pin hole eyes, semi baked clay. Period-IV

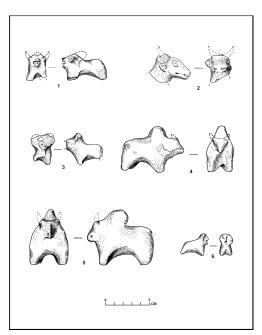


FIG. - 48 & PLATE - XLIV: T.C. ANIMAL FIGURINES.



T.C. ANIMAL FIGURINES

- 1. Terracotta humped bull grayish with transverse hole at nose part. Period-III
- 2. Terracotta humped bull with a prominent hump and legs, ill fired. Period-V
- 3. **Terracotta humped bull** with horn. Hump and legs are broken. Grayish fabric. Period-III

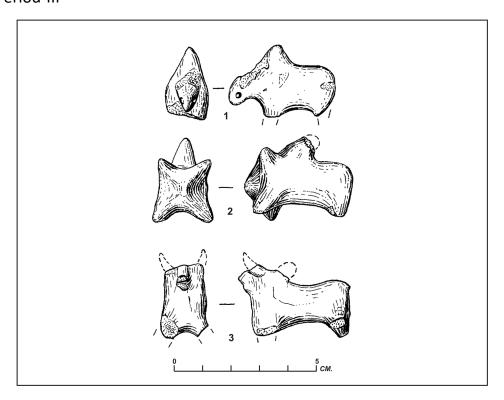


Fig. 49 & PLATE- XLV: T.C. ANIMAL FIGURINES.



T.C. FIGURINES OF AN ELEPHANT

Fig. -50

TERRACOTTA FIGURINE OF AN ELEPHANT with prominent eyes but main teeth, ear flaps and legs are broken. Decorated with pin hole eyes and forehead. ill-fired. Period-IV

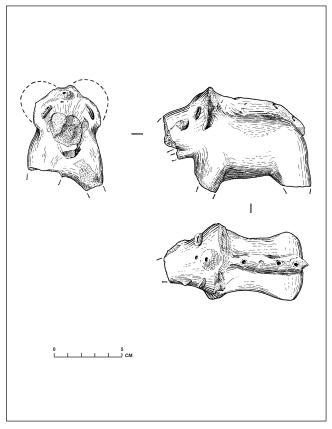


FIG. - 50 & PLATE- XLVI: TERRACOTTA FIGURINE OF AN ELEPHANT



TERRACOTTA BEAD, DISC, EAR STUDS & HOP SCOTCH

- 1. **Terracotta with black coating slip**, blunt edge, biconical, circular, with prominent cylindrical hole, decorated with incised oblique strokes at the shoulder part externally. Period-III
- 2. Terracotta plain small circular disc, treated with black slip, fine fabric. Period-III
- 3. **Terracotta ear stud** decorated with incised notches forming two concentric circle enclosing dots in the centre, treated with black slip. pin punches all around the periphery. Period-III
- 3. **Terracotta ear stud**, decorated with one side pin punches centre forming in geometrical figure of enclosed by a pin punched circle forming in geometrical figure X enclosed by a pin punches all around the periphery. Period-III
- 5. **Terracotta hop scotch disc** with a design of formation of a flower enclosed by intersecting oblique lines, treated with black slip. (Broken) Period-III

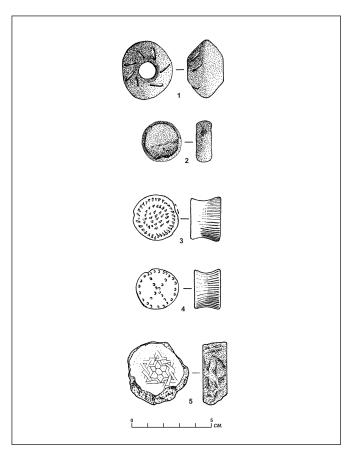


FIG. - 51 TERRACOTTA
(1) Bead (2) Disc (3 & 4) Ear Studs (5) Hop Scotch



PLATE – XLVII: TERRACOTTA
(1) Bead (2) Disc (3 & 4) Ear Studs (5) Hop Scotch

TERRACOTTA DISCS

- 1. **T.C. disk** with decorated edge by incised small oblique stroke from either side. Medium fabric treated with black slip. Period-III
- 2. **T.C. disk** with usual notches round the edge with incised line. Medium fabric. Period-IV
- 3. **T.C. disk** having usual notches round the edge with incised line on both sides having some grooves on the section. Treated with red colour. Period-IV
- 4. **T.C. disk** having usual notches round the edge with incised groove on both sides. Treated with red slip. Period-V
- 5 **T.C. disk** having usual notches round the edge with fabric and smooth surface. Partially broken. Period-V
- 6. **T.C. disk** decorated with design formed by seven intersecting concentric circle in centre point on both sides treated with red slip. Period-V
- 7. T.C. disk with incised dots on the section. Period-V

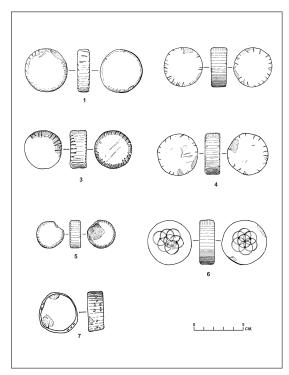




FIG.-52 & PLATE- XLVIII: TERRACOTTA DISCS

TERRACOTTA EAR STUD, GAMESMAN, DISC & BEAD

- **Terracotta ear stud** of fine fabric of dull red colour with grip, well slipped. (Period-IV)
- **Terracotta standered truncated bicone circular bead** of fine fabric of dull red colour, well fired with prominent flattened top and base. (Period-IV)
- **Terracotta dull red colour gamesman**, cylindrical in shape with flattish base, well slipped (broken). (Period-IV)
- **Terracotta pottery disc** of dull red color, irregular spherical shape, fine fabric (broken). (Period-IV)

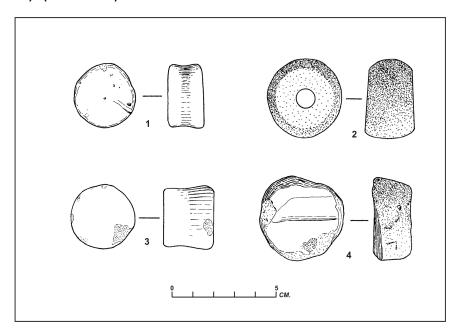


FIG. - 53 & PLATE - XLIX
TERRACOTTA (1) EAR STUD (2) BEAD (3) GAMESMAN (4) DISC



TERRACOTTA BEADS

- 1 Terracotta spherical bead, slipped, ill fired. Period-IV
- 2 Terracotta barrel shape bead slipped, ill fired. Period-IV
- 3 Terracotta areca nut shape bead decorated with pinhole shoulder part, well slipped. Period-V
- 4 Terracotta plumb-bob shape bead, handmade, of ashy ceramic with smooth surface. Period-VI
- 5 Terracotta short blunt edge, truncated circular bead, ill fired, decorated with incised dot on both sides. Period-VI
- 6 Terracotta short, bicone, truncated, dull red colour circular bead treated with only wash. From early level. Period-VI
- 7 Terracotta bowl-shape bead truncated at convex side, flattish base with brown slip. Period-V
- 8 Terracotta ill-baked clay, truncated having roughly flat base. Period-V
- 9 Terracotta short blunt edge, truncated circular bead, ill baked clay. Period-V
- 10 Terracotta short blunt edge, truncated circular bead convex side, top and base. Well fired. Period-V
- 11 Terracotta small areca nut shape bead, ill fired. Period-V
- 12 Terracotta small areca nut shape bead with convex base.
- 13 Terracotta roughly areca nut shape bead, irregular spherical, ill fired. Period-V
- 14 Terracotta roughly truncated bicone circular bead, treated with dull red slip. Period-V
- 15 Terracotta short blunt edge, truncated circular bead, convex top and base, ill fired. Period-V
- 16 Terracotta short blunt edge, truncated circular bead, convex at the base, ill fired. Period-V

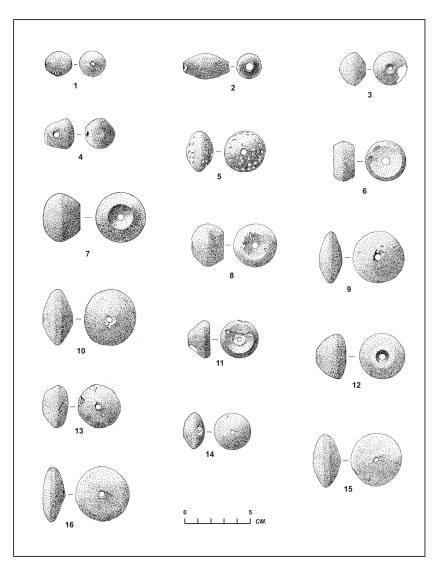


FIG.- 54 & PLATE- L: TERRACOTTA BEADS



TERRACOTTA BEADS

- 17. Terracotta arecanut shape bead slightly conical, well fired. Period-V
- 18. Terracotta roughly bowl shape rounded bead with convex base. Treated with black slip. Period-III
- 19. Terracotta arecanut shape bead with convex base. Treated with brown slip. Period-V
- 20. Terracotta arecanut conical shaped bead having one groove near the shoulder part, concave base, red slip, ill fired. Period-V
- 21. Terracotta small arecanut shaped bead groove on the shoulder part, treated with brown slip, convex base. Period-V
- 22. Terracotta arecanut shaped bead with a groove near the perforation having slightly convex base, ill fired. Period-V
- 23. Terracotta truncated pear shape bead decorated with horizontal grooving at shoulder part and triple grooving at the body, well slipped. Period-VI
- 24. Terracotta arecanut shape bead having a groove on the shoulder part, convex base, treated with slip, ill fired. Period-V
- 25. Terracotta arecanut shape bead having a groove on base part, convex base, ill fired. Period-V
- 26. Terracotta arecanut shape bead with convex base. Brown slip.
- 27. Terracotta arecanut shape bead with rounded body having grooves on the shoulder part. Period-V
- 28. Terracotta arecanut shape short circular beed having groove on the shoulder part, treated with slip Period-V
- 29. Terracotta roughly arecanut shaped circular bead, grooved on the shoulder part, treated with red slip. Period-IV
- 30. Terracotta standard ghatasaped circular bead with flaring towards round base slightly incised and incurved round collar, slipped, slightly damaged Period-II
- 31. Terracotta arecanut shape bead having one groove near the shoulder part having convex base, treated with brown slip. Period-V

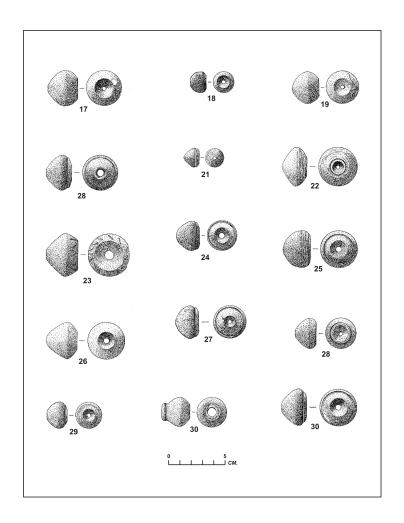


FIG.-55 & PLATE- LI: TERRACOTTA BEADS



BANGLES Fig. - 56

- 1. Shell bangle piece decorated with horizontal small grooving near shoulder. Period-V
- 2. Very thick plain shell bangle piece well finished. Period-V
- 3. Shell bangle piece decorated with a bird at the junction point. Period-V
- 4. Shell bangle with couple of horizontal groovings around the body externally. Period-IV
- 5. Shell bangle piece decorated with incised design externally in very thick section. Period-IV
- 6. Shell fragment of plain bangle round in section. Period-VI
- 7. Copper fragment of bangle piece decorated with one mould bold dot. Period-II

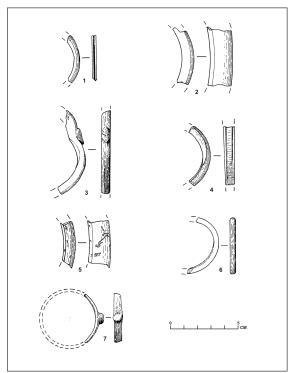


FIG. - 56 & PLATE- LII: BANGLE FRAGEMENTS



TERRACOTTA BRACELET & BANGLES

Fig. 57

- 1. Terracotta bracelet piece, rectangular in section, decorated with stamped line with dot, brown colour. Period-IV
- 2. Fragment of a bangle piece of light brown colour terracotta, triangular in section. Period-IV
- 3. Terracotta bangle piece in brown colour, round in section, with perforation, decorated with incised oblique lines. Period-IV

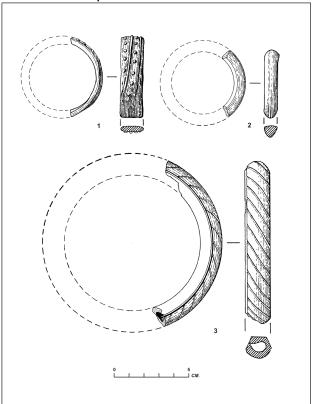


FIG.- 57 & PLATE - LIII: TERRACOTTA BRACELET & BANGLE FRAGEMENTS



IVORY & SHELL ITEMS

- 1. **Ivory pyramid-shape socket** with prominent circular marks enclosing a dot and drill hole at the base vertically probably meant for the purpose of socket cap. Period-II
- 2. **Shell pendent** having a transverse hole to pass thread and decorated with couple of grooves. Period-II
- 3. **Button made of shell** with decorated edge having small oblique strokes all around the periphery with two holes in the centre. Period-II
- 4. A **shell ring piece** decorated with curved oblique strokes externally with the concept of a screw. Period-II

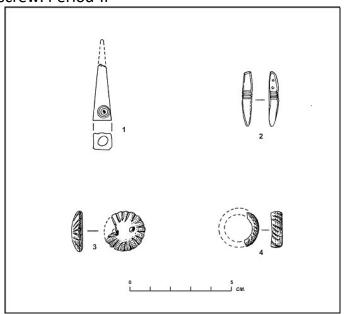


FIG.- 58 & PLATE - LIV: IVORY & SHELL ITEMS



TERRACOTTA WHEELS

- 1. **Terracotta double hubbed wheel** of medium fabric with radius of 3.3 cm., well baked, treated with red coloured water slip, decorated with pin punches in three lines on either side of the wheel. Period-V
- 2. **Terracotta double hubbed wheel** with the radius of 2.5 cm., of medium fabric, treated with red slip, ill fired. Period-IV
- 3. Terracotta double hubbed wheel, ill baked. Radius 3 cm. Period-IV
- 4. **Terracotta double hubbed wheel** of fine fabric, well backed and finished with red water slip. It has a radius of 2.5 cm. Period-IV
- 5. **Terracotta cart wheel** with radius of 2.3 cm. having convex section, over baked. Period-V
- 6. **Terracotta dull red slip wheel** of medium fabric having prominent hub with 4 cm radius, ill fired slightly damaged Period-V

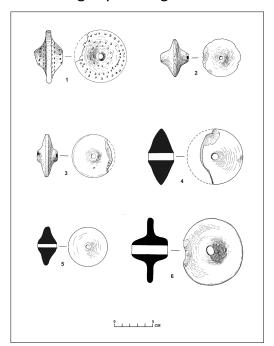


FIG. - 59 & PLATE - LV: TERRACOTTA WHEEL



TERRACOTTA MISC. ITEMS

- **Terracotta reel with a perforation** in the middle and incised concentric circle at both the ends make out of the nice mould, treated with red slip. Period-IV
- 2 Terracotta short areca nut shaped bead, well slipped, dull red color. Period-IV
- **Terracotta ritualistic pot**, crudely modeled, incurved featureless rim and rounded body, flat base, thick section, of medium fabric, ill fired (crucible). Period-IV
- **Red sand-ball** having prominently incised with four lines, smooth surface, treated with slip in pink colour. Period-IV
- **Net sinker** with perforation and having one groove at the mid part horizontally looking like seed of wheat. Period-IV
- **Terracotta dice**, rectangular in shape, well fired with incised circuler numbering 1-4 in series. Period-V
- **Terracotta plumb bob**, well slipped, with transfer hole for tying the thread and another decorating hole at the carinated part of junction of biconical side to denote the level. Period-IV

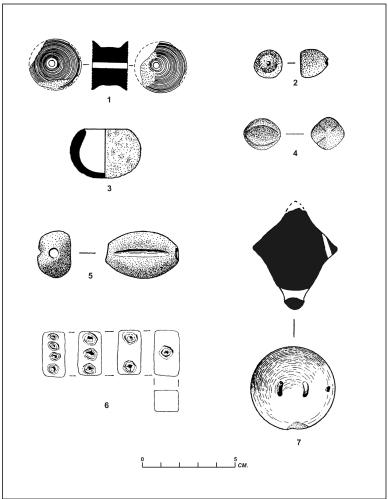


Fig. - 60

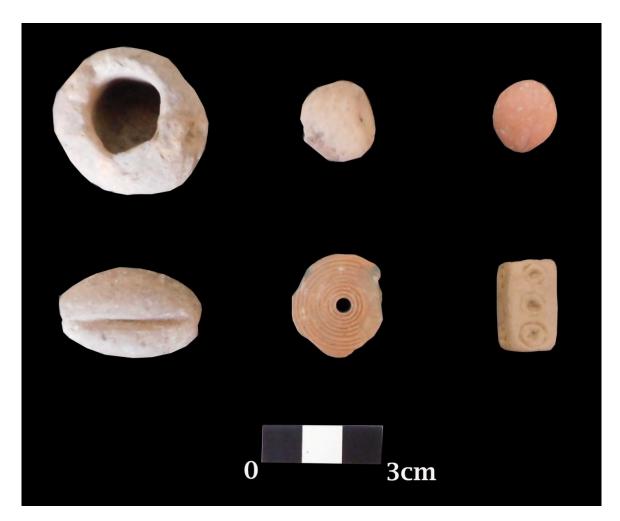


PLATE - LVI: TERRACOTTA MISC. ITEMS



METAL OBJECTS Fig.- 61

- ANTIMONY ROD of round section thickened at the end made of copper. (1)
- (2) COPPER NEEDLE.
- (3) COPPER RING.
- **HOOKED PIN** of round section made of copper. (4)
- ARROW HEAD. All are from Period-I (5)

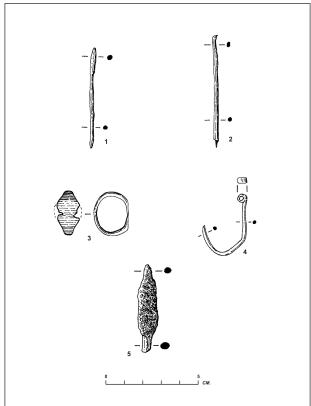
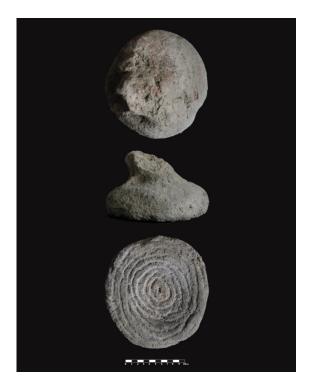


FIG. -61 & PLATE -LVII: METAL OBJECTS



POTTER'S STAMP Fig.- 62

POTTER'S STAMP by holding fingers in the grew with a comfortable grip, Kushan Period



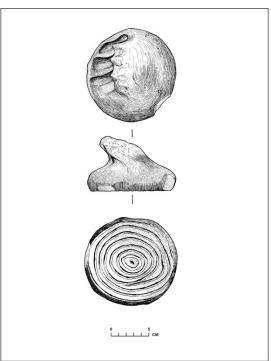


FIG.- 62 & PLATE- LVIII: POTTER'S STAMP/DABBER



TERRACOTTA SEALING

TERRACOTTA SEALING IN LATE BRAHMI CHARCTERS OF GUPTA PERIOD VI

LINE 1 DECIPHERED AS "SRI RUDRANAMASA"

LINE 2 DECIPHERED AS "SRI RUDRAGUTTASYA"



PLATE – LIX

GUPTA PERIOD

INSCRIBED RIM FRAGMENT OF VASE

Fig. - 63

INSCRIBED RIM FRAGMENT OF VASE with drooping undercut rim and short concave neck with incised BRAHMI words with numerical read as "SE II VUKHA" Period VI.

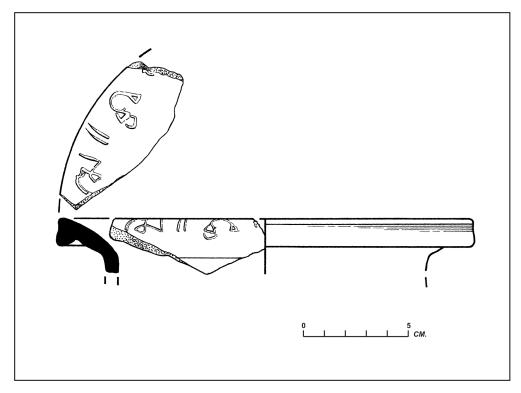


Fig.- 63 & PLATE - LX



ANTIQUITIES FROM DIFFERENT PERIODS



PLATE - LXI
(1) TC CAKE and (2) PART OF A HEARTH, all are of Period- I

2

ANTIQUITIES FROM DIFFERENT PERIODS



1



3

2

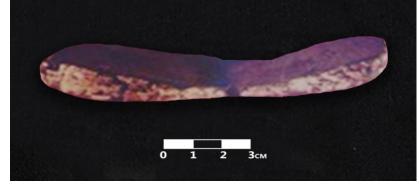


PLATE -LXII

1. IRON IMPLEMENTS; 2. CRUCIBLE; 3. WHETSTONE; all are of Period V

KUSHAN AND KOTA COINS



PLATE - LXIII

KUSHAN AND KOTA COINS

(ONE COIN BELONGS TO VASUDEVA OF KUSHAN DYNASTY)

CHAPTER - IX

CIVILIZATION AS INFERRED FROM THE CULTURAL REMAINS AT MANDOLI

It appears that the society consisted of agriculturists, potters, craftsmen, masons and traders. People in the early stages lived in huts and then in mud-walled houses and finally in brick-built houses. When we notice the habitational activity at the site, various structures were found at different levels. People used to live in different types of structures as per the evidences shown in different trenches like i) Post-holes, ii)Mud walls and iii)Brick houses.

The earliest structural activity consists of huts. In the first stage it may be noticed that rammed earth floor with post holes in circular and arc fashion traced in couple of trenches give an idea of the residential pattern of the earliest inhabitants of Mandoli, the late Harappan people. It is interesting to note that a burnt terracotta object, coarse in fabric along with traces of ash was also found on this mud floor in situ perhaps the remains of a hearth.

In this connection it may also be observed that the late Harappa culture represents a transformed stage which could be easily identified as continuity with the mature phase of Harappa which was broken at this point of time. No doubt, it had witnessed a general decline in the civic standards of the mature Harappa like planned houses which were replaced by inferior structures. The material such as pottery and antiquities were also of inferior quality.

The people of the Painted Grey Ware culture which succeeded late Harappa culture at Mandoli also followed the same pattern of the late Harappans who lived in the huts of rammed mud floor and post holes. No large scale horizontal excavations have yet been carried out at any PGW site. Thus one cannot get a detailed picture of the every day life of the people. It appears that these proto-historic cultures were essentially a village culture of agricultural-cum-pastoral base. There are no signs of urbanization found in these cultures such as town planning, large scale trade and commerce, coinage, writing etc.

The people used to wear ornaments of terracotta and bangles of copper, shell, faience and glass. Ghata shaped beads and beads of semi-precious stones were also used. Women bedecked with necklaces of beads of agate, carnelian and jasper etc. They also used ear studs. But most notable is the usage of glass bangles. Skin rubbers were used for cleaning the body. The availability of hopscotch and terracotta balls point out to popular games of the children. The occurrence of the dice in the excavations indicates the interest of the folklore in this game. It appears that these people played the game of Chausar indicated by the discovery of typical gamesmen used in this game.

Among important antiquities discovered were terracotta animal figurines, ghata-shaped beads, discs decorated with designs at the edges, pyramid-shaped hollow ivory piece, ivory button, beads of banded agate including etched carnelian bead, antimony rod and nail parier made of copper.

Bowls, dishes with straight or convex sides and having designs like dots, dashes, loops, concentric circles, wavy lines, strokes etc. have been found painted usually with black pigment alongwith fine thin greyware and red ware. The pottery was wheel thrown and well lavigated, thin to medium section. As per the evidence available from the material remains it seems that the life was simple, based on advanced pastoral economy. PGW was a matured phase here as in the case of other important PGW sites like Hastinapur, Mathura, Kausambi, Ahichchattra.

Black Slip Ware using people succeeded immediately after PGW as evidenced in trench XA-2. The material culture associated with Black Slip ware suggests that it had acquired some knowledge of superior technology. Some of the antiquities like terracotta animal figurines, gamesmen, shell objects, ear studs, fishing net and weights were recovered from this level.

Systematic house building activities were noticed during the early historic phase. A house complex with mud lumps of Sunga period was noticed in trench no. XA-1 Qdt.-1. However, during Kushan phase at Mandoli, it was indicated by well constructed houses of burnt bricks measuring various sizes viz. 33x22x6, 31x22x5 and 32x21x6 cm. Two successive floors of mud and lime were noticed associated with an oven in one of the rooms in trench no. XA-1.

It is also interesting to note that mud bricks were seen underneath the burnt brick structure in this trench. During this period the houses were constructed by mud bricks and also with burnt bricks. The people realized the importance of perennial river Yamuna exploited the advantage of the river and the deposit of alluvial soil on either side of the bank which had given them the idea of farming agriculture and domestication of cattle. Moreover, usage of available material to build houses, extraction of ores, manufacture of ornaments which may be clearly seen on the terracottas of that age, weapons and tools of utilitarian value.

There was division of society in accordance with the professional skills they had acquired. Society was possibly better organized. It appears that there were separate class of people in the society as evidenced by the occurrence of various items like plumb bob, crucible, net sinker, ivory socket, pendent, button, bangles etc. Constant study of nature and understanding of the environs had provided opportunities to improve for themselves and gathering of more knowledge.

The excavation brought to light a good number of antiquities. Notable among them include artistically executed voluptuous female figurines, a rim portion of vase inscribed in Kushana Brahami characters. Besides terracotta human and animal figurines, other antiquities found include beads of some-precious stones, shell objects, terracotta plumb bob, dabbers, copper rings, iron objects like arrow-head, sickle, spear and a copper coin belonging to Vasudeva II. The ceramics include carinated handis, spouted vessels, spouts and miniature vessels. Mandoli appears to have been a prosperous town during this period.

Period VI at Mandoli yielded mud floor in one of the trenches. A brick wall was also found on the eastern side of the trench. The note worthy finding of this period is a terracotta well baked sealing with few lines in Gupta Brahmi characters decorated with a conch at the top of the inscription. The seal was possibly to tie an item for its authenticity as there are thread marks appeared at the back of the seal. Some of the pottery items were typical of Gupta period having red polish.

Thus, the above inference gathered from the material remains unearthed from Mandoli of different periods give us an idea of the people, their way of life and living conditions of particular period to which they belonged.

CHAPTER - X

GLIMPSE OF PROTO-HISTORIC CULTURES IN DELHI

The excavations at Purana Qila revealed continuous occupation from Mauryan times to the Early Mughal period though the excavations at this place from 1969 to 1973 did not provide any proto-historic vestiges. However, it was reported the occurrence of a PGW shred from trail excavation in 1954-55 at the same place.

A few sites in Delhi also revealed PGW phase. Khera Kalan was reported by Shri K.N. Dikshit of the A.S.I in 1968-69. Again the site was visited by a team of Archaeologist headed by Dr.B.R. Mani of the A.S.I in the year 1994 collected pottery from the surface which included PGW. The mound at Gordon Highlanders Column near Badli-ki-Sarai yielded Painted Grey Ware. A small mound towards north of Badli-ki-Sarai was noticed by Shri Rameswar Dayal in 1957-58 having Painted Grey Ware. Bankner was visited by the above team headed by Dr.B.R. Mani did not find PGW at that time but it was reported about PGW during earlier visit to the site. The said team also visited Jhatikara in the year 1991. Out of three mounds at Jhatikara, the largest mound yielded PGW. At Loni, 4 km north of Mandoli, outskirts of Delhi, Shri C.L. Suri of ASI during 1991 found PGW in thick deposit at the site. Shri B.M. Pande of ASI discovered a site near Wazirabad barrage at Timarpur in 1971-72 yielded PGW.

The above sites yielded only PGW where as some other sites in Delhi also provided even earlier culture. At Dhansa, Prof. Suraj Bhan of Kurukshetra University discovered late Harappan and PGW sherds at Kharkhari Nahar, Dr.Mani collected late Harappan pottery with close affinity to late and degenerate Siswal Ware and Bara element in addition to PGW in the year 1990-91.

Bhorgarh was explored by the A.S.I. in 1973-75 by Ms. Madhu Bala. In 1991-92 a joint team led by Shri C.L. Suri and Dr.B.R. Mani collected PGW sherds. Dr.B.S. Rajendra Babu, the present author from the Department of Archaeology, Govt of NCT of Delhi excavated the site in two successive seasons during 1992-93 and 1993-94. The importance of the site is the discovery of two parallel extended burials of late Harappan period in the lowest level. One of the Burials had a small bowl and two globular vases placed behind the head.

Mandoli was explored earlier by Dr.D.V. Sharma of ASI during 1980 discovered late Harappan sherds from the site. Dr. B.S. Rajendra Babu, the present author during his subsequent exploration in 1987 confirmed the sequence of the site and excavated the site from 1987-88 & 1988-89 and discovered late Harappan and Painted Grey Ware cultures.

The excavations at Mandoli and Bhorgarh gave complete picture of these two sites to study the settlement pattern. These sites have yielded vestiges of late Harappan and Painted Grey Ware cultures from the stratified layers for the first time in Delhi is note worthy.
