PREFACE

Weapons and Implements have played an important role in the political, social and economic development of human civilization. The earliest weapons and implements of human were made of stone in Palaeolithic age. Human used their tools for attack on and in self-defense from predatory animals and enemies. The evidence suggest that around 5000 B.C. invention of metal took place. Manufacturing of weapons and implements in metal started in Pre-Harappan Phase as indicated by the finds from Mehrgarh, Amari, Kotdiji, Kalibangan and Kunal etc. It was a transformation of tool technology from stone to metal. The metallic weapons and implements were stronger and sharper than stone tools. In the earliest times, the weapons were used for fighting, hunting and to protect one from the wild animals. The implements were used for cultivation, making houses, cutting the trees, overturning of the soil and in different type of works.

During Protohistoric period, various cultures originated in different regions of India. The use of metal played a prominent role in the progress of these cultures. Protohistoric age includes Pre-Harappan, Mature Harappan, Late Harappan phase, chalcolithic cultures, Copper-Hoard and Painted Grey Ware culture. The people of these cultures made progress in agricultural production, small scale industries, trade and colonization with the use of weapons and implements. Various types of weapons and implements were made of copper, bronze, stone, terracotta and ivory in the Harappan phase. Purity in copper was the main characteristic in Copper Hoard phase. Iron weapons and implements existed in PGW culture with the existing copper, stone, terracotta and ivory. The weapons and implements throw light on different aspects of life of
protohistoric people. The culture which had better weapons and implements were more flourished and developed. This is pertinent even in the present context.

The aim of the present study is to analyze the characteristics, e.g. size, shape, types, category, usage, findings place and material of protohistoric weapons and implements with special reference to Haryana and Punjab. The study is based on data collection through explorations, excavation and taking photographs of unpublished weapons and implements from archaeological museums of Haryana, Punjab, Delhi and Uttrakhand. An effort has been made to collect the archaeological data mainly from the relevant sites of Haryana and Punjab for the present study. A comparative analysis of the finds has also been done between the protohistoric sites of India other than the sites in Haryana and Punjab.

The present study has been divided into six chapters. The first chapter deals with introduction under which geographical and climatic features, mines and smelting process review of the previous work, aims and objective of research works, research methodology and constraints are discussed.

Chapter–2 is based on weapons and Implements in Harappan phase. It is divided into three phases Pre-Harappan, Harappan and Late Harappan. The weapons and implements are divided into four categories, viz., weapons, agricultural tools, craft implements and household implements. These categories have been explained under three phases of Harappan civilization. These are also studied and discussed on the basis of raw material, usage, measurement or size, shape, and their features.

Chapter–3 is related with the study of weapons and implements of Copper-Hoard culture. The weapons and implements are discussed under weapons, agriculture
implements, craft implements and household implements categories, in a chronological order and distribution. Here origin and development of weapons and implements have also been discussed. It helps to understand the relationship of Copper Hoard culture with Late Harappan culture, OCP, Aryan and native tribes.

Chapter–4 is related to weapons and implements of Painted Grey Ware culture. They are explained in the context of different aspects like extent and distribution of PGW culture. Copper and iron weapons are discussed under the four categories like weapons, agricultural tools, crafts and household implements.

Chapter–5 is related to the technology of weapons and implements in protohistoric phase. The source of metals and metallurgical detail like smelting evidences, manufacturing—technique, metal composition and chemical analysis of metallic weapons and implements are explained in this chapter.

Chapter–6 deals with conclusion in which the present study is summarized under main topics of all chapters.

With high esteem and profound regard, I offer my sincere gratitude and indebtedness to my revered guide Dr. Sat Dev, Professor and Chairman, Department of Ancient Indian History, Culture & Archaeology, Kurukshetra University, Kurukshetra, for enabling me to attain another milestone in my academic journey. His painstaking disposition for students has always inspired me to work relentlessly and complete this piece of work. His able guidance and persistent encouragement has enabled me to complete this work satisfactorily. He has been kind enough to me throughout of my investigation for research work.

I would like to express my gratitude to Dr. Bhagat Singh, Associate Professor in Department of Ancient Indian History,
Culture and Archaeology, Kurukshetra University, for his encouragement and help in various ways.

I am thankful to Dr. Sukhdev Saini, Dr. Rajpal, Dr. Surender Vashisth, and non-teaching staff Sh. Ramphal, Sh. Pramjeet, Sh. Vir Singh and Sh. Manish for help and encouragement in deferent ways.

My special thanks are due to Professor Brajesh Krishna Kathil (retd.) and Professor S.P. Shukla, (retd.), Department of Ancient Indian History, Culture & Archaeology, Kurukshetra University, Kurukshetra, and also Professor Amar Singh. (Retd), Department of History, M.D.U., Rohtak for their guidance, valuable suggestions and encouragement.

I am heartily thankful to Dr. Gautam Sengupta Director General, Archaeological Survey of India for the permission of taking photographs with measurement of protohistoric weapons and implements in the collection of Museums under A.S.I. Haryana, Punjab and Delhi. I am also thankful to Dr. B.R. Mani Joint Director of A.S.I., Dr.R.S. Bisht, Dr. V.N. Parbhakar, Deputy Superintending Archaeologist Excavation Branch II, New Delhi; Sh. Vishnu Kant, Dr. Amerendera Nath, for giving me valuable information, suggestions and encouragement.

My special thanks are due to Sh. Ranbir Singh Shastri, Deputy Director of Haryana Archaeology and Chandigarh for allowing me for photography and measuring the weapons and implements from Haryana archaeological museum's collection.

I am greatly thankful to officials of the Archaeological Museums of Ropar and Sanghol, Punjab and National Museum, New Delhi; Archaeological Museum of Gurukul Kangri University, Haridwar; Archaeological Museum, Nerela Delhi; Jayanti Archaeological Museum, Jind, Haryana; Archaeology Departmental Museum, Chandigarh; Archaeological Museum at Panipat; Archaeological Museum at Hisar; Departmental
Archaeological Museum of M.D.U. Rohtak; and Archaeological Museum Gurukul Jhajjar, for allowing me to study the relevant material for my research work.

My humble gratitude is due to the library staff of Kurukshetra University, Kurukshetra; Jawaharlal Nehru University Delhi; Central Library of Maharshi Dayanand University, Rohtak; Central Library of Punjab University, Chandigarh; Library of Archaeological Survey of India, New Delhi; Library of the Institute of Archaeology ASI Red Fort, Delhi; Library of the ICHR, New Delhi; Library of National Museum New Delhi; American Institute of Indian Studies Library, Gurgaon; for providing all the relevant pieces of literary evidence regarding my research work.

I am heartily thankful to all the scholar of Protohistoric studies, whose work helped me in forming my thesis statement. I always look back to them for inspiration and moral boosting.

I am grateful to University Grant Commission, New Delhi for awarding me a research fellowship JRF for the completion of this research work.

I also pay my deep sense of obligation and reverence to my parents Smt. Kamla Devi and Sh. Krishan Chander and other family members for their constant encouragement, blessing and moral support that helped me to tide over occasional moments of distress. My special thanks are due to my wife Poonam and her brother Mr. Parvesh along with my in-laws for their consistent support and encouragement during completion of my research work.

I owe sincere thanks to Mr. Ram Kumar, Assistant Registrar, Co-operative Society Chandigarh, Haryana, Mr. Ashok Dahiya, Assistant Professor of Mathematics in D.A.V. College, Pehowa, Raju Khatri from Ismaila, Rohtak, and the member of their family for their cooperation.
I must also express my heartily thanks to my younger brother Harish Mehra, Dr. Dharmbir, Dr. Vivek Dangi, Vinay Kumar, Kushal Parkash, Karn, Rajkumar, Ajay Sehrawat, Pradeep Nehra, Rakesh, Parveen Dhanda and many other my friends.

I also express my heartfelt thanks to Sh. Jangjit Singh Principal, G.S.S.S. Matindu, Sonepat. My special thanks are due to Sh. Rambir Parashar, Lecturer, Physics; Sh. Govind, Lecturer, English; Dr. Charu, Lecturer, English and other staff members for their support and encouragement.

During the preparation of this research work many persons helped me in various ways. I record my indebtedness to all of them.

Date: (Kaptan Singh)
LIST OF ABBREVIATION

AI  :  Ancient India
ASI :  Archaeological Survey of India
BDCRI :  Bulletin of Deccan College Research Institute.
IA  :  Indian Antiquity
IAR :  Indian Archaeology – A Review
IHC :  Indian History Congress
JAS :  Journal of Asiatic Society
JBORS :  Journal of Bihar and Orissa Research Society
JBRS :  Journal of Bihar Research Society
JHS :  Journal of Haryana Studies
JISOA :  Journal of Indian Society of Oriental Art, Calcutta
KLB :  Kalibangan
LHP :  Late Harappan Phase.
MASI :  Memories of the Archaeological Survey of India
MHP :  Mature Harappan Phase
NBPW :  Northern Black Polished Ware
PA :  Pakistan Archaeology
PGW :  Painted Grey Ware
PHP :  Pre Harappan Phase
PIHC :  Proceeding of the Indian History Congress
LIST OF MAPS
Map 1.1  Map showing Haryana and Punjab the special study Area
Map 2.1  Showing Pre/Early Harappan Sites
Map 2.2  Showing Mature Harappan Sites
Map 2.3  Showing the Late Harappan Sites
Map 3.1  Showing the Distribution of Copper Hoards and Other Bronze & Copper Implements
Map 4.1  Showing the Painted Grey Ware Culture Sites
Map 5.1  Showing sources of the Harappan in India

LIST OF PLATES
EARLY-HARAPPAN PHASE
Plate 2.1.  Copper Arrowheads, From Kunal
Plate 2.2.  Copper Arrowheads From Kunal
Plate 2.3.  Copper Arrowhead from Kunal
Plate 2.4.  1. Arrowhead From Baliali  2. Arrowhead From Samlo-Kalan
Plate 2.5.  Copper Arrowhead from Kalibangan
Plate 2.6.  Copper Arrowheads From Kunal
Plate 2.7.  Copper Spearhead from Kunal
Plate 2.8.  Stone Sling Balls from Kunal
Plate 2.9.  Copper Axe From Kunal
Plate 2.10.  Copper Chisel From Kasur-2
Plate 2.11.  Chert Blades from Kunal
Plate 2.12.  Copper Blades from Kunal
Plate 2.13.  Bone Knife from Kunal
Plate 2.14.  Bone Points, From Kunal
Plate 2.15.  Bone Antler From Kunal

MATURE HARAPPAN PHASE
Plate 2.16.  Copper Arrowhead From Nausharo
Plate 2.17.  Copper Arrowheads from Kalibangan
Plate 2.18. Copper Arrowheads from Rakhigarhi
Plate 2.19. 1-2. Copper Arrowheads from Dholavira, 3. Harappa
Plate 2.20. Copper Arrowheads from Mohenjodaro
Plate 2.21. Copper Arrowheads from Rakhigarhi
Plate 2.22. Copper Arrowheads From Bhirrana
Plate 2.23. Copper Arrowheads from Balu
Plate 2.24. Copper Arrowheads from Banawali
Plate 2.25. Copper Arrowhead from Banawali
Plate 2.26. Copper Arrowheads from Dhalewan
Plate 2.27. Copper Arrowhead from Farmana
Plate 2.28. Copper Arrowheads from Girawar (Explored By Dr. Sukhdev Saini)
Plate 2.29. Copper Arrowheads from Girawar-2
Plate 2.30. Copper anthropomorph shaped arrowheads discovered in Burial no. 28, from sanauli
Plate 2.31. Chert Arrowheads from Kalibangan
Plate 2.32. 1. Bone Arrowhead From Dhalewan, 2. Rakhigarhi
Plate 2.33. Wood Arrowhead From Kotla Nihang Khan
Plate 2.34. Arrowhead of Horn from Rakhigarhi
Plate 2.35. A Drawing Sketch of Harappan Bow and Arrow.
Plate 2.36. Copper Tablet-Hunter with Bow and Arrow from Mohenjodaro
Plate 2.37. Copper Dagger from Kalibangan
Plate 2.38. Copper Dagger from Banawali
Plate 2.39. Copper Dagger from Mohenjodaro
Plate 2.40. Copper or Bronze double Axe from Harappa
Plate 2.41. 1. Double Axe from Harappa 2. Double Axe from Chanhudaro
Plate 2.42. Copper Spearhead from Nausharo
Plate 2.43. Copper spearhead found at Burial No. 111 from sanauli
Plate 2.44. Copper Spearheads from Dholavira
Plate 2.45. 1. Copper tip of Spearhead 2. Tang of spearhead 3. Copper Spearhead from Rakhigarhi
Plate 2.46. Copper Spearheads from Banawali
Plate 2.47. Copper or Bronze Spearheads from Harappa
Plate 2.48. Copper or Bronze Spearhead from Harappa
Plate 2.49. Copper or Bronze Spearheads from Harappa
Plate 2.50. Copper or Bronze Spearheads from Mohenjodaro
Plate 2.51. Copper Spearheads from Kalibangan.
Plate 2.52. Copper Spearheads from Kalibangan
Plate 2.53. Copper Spearhead from Ropar
Plate 2.54. Copper Spearhead from Farmana.
Plate 2.55. Copper Spearheads from Farmana
Plate 2.56. Copper Spearhead from Tarkhanewala Dera
Plate 2.57. Copper Spearheads from Bhirrana
Plate 2.58. Terracotta Tablet from Harappa, depicting the Siva-Like seated figure (right) and person attempting to kill a buffalo by Spear as a sacrifice.
Plate 2.59. Stone Mace-head from Harappa
Plate 2.60. Copper or Bronze Sword from Mohenjodaro
Plate 2.61. 1 Sheath. 2 Antennae Sword From Sanauli.
Plate 2.62. Antennae Sword From Sanauli.
Plate 2.63. Terracotta Sling Balls From Kotla Nihang Khan
Plate 2.64. Terracotta Sling Balls from Ropar
Plate 2.65. Stone Sling Balls From Madahanheri-1
Plate 2.66. Terracotta Sling Balls From Dhalewan.
Plate 2.67. Faience Sling Ball From Bara
Plate 2.68. Stone Sling Balls From Bara
Plate 2.69. Copper Plate of Shield from Mohenjodaro
Plate 2.70. Copper Axes from Dholavira
Plate 2.71. Copper Axes from Dholavira
Plate 2.72. Copper Axes From Kalibangan.
Plate 2.73. Copper Axe from Mohenjodaro
Plate 2.74. 1. Copper Axe from Harappa. 2-3. Copper or Bronze Axes from Mohenjodaro
Plate 2.75. Copper or Bronze Axe from Harappa
Plate 2.76. Copper or Bronze Axe from Harappa
Plate 2.77. Copper or Bronze Axe from Harappa
Plate 2.78. Copper Axe from Harappa
Plate 2.79. 1. Copper Celt (Bhirrana) 2. Copper Axe (Dholavira) 3. Copper Axe (Dhalewan) 4. Copper Celt (Dholavira)
Plate 2.80. Copper Axe from Rakhigarhi
Plate 2.81. Copper Celt found from Ropar
Plate 2.82. Stone Celt from Harappa
Plate 2.83. Terracotta Plough from Banawali
Plate 2.84. Copper Seed Drill from Mohenjodaro
Plate 2.85. Copper adze from Mohenjodaro
Plate 2.86. Copper Chisel from Dholavira
Plate 2.87. Copper Chisels from Chanhudaro
Plate 2.88. Copper Chisel from Harappa
Plate 2.89. Copper Chisels from Nal
Plate 2.90. Copper Chisels from Rakhigarhi
Plate 2.91. Copper Chisels from Balu
Plate 2.92. Copper Chisels from Banawali
Plate 2.93. Copper Chisels from Kalibangan
Plate 2.94. Copper Chisels from Ropar
Plate 2.95. Copper Chisels from Farmana
Plate 2.96. Chisel of Horn from Rakhigarhi
Plate 2.97. Copper Saw from Kalibangan
Plate 2.98. Ivory Awl from Dhalewan
Plate 2.99. Ernestite Drill Bits from Dholavira
Plate 2.100. Copper Borers from Balu
Plate 2.101. Copper Chopper from Kalibangan
Plate 2.102. Harappan Plumb-bob
Plate 2.103. Copper Knives from Kalibangan
Plate 2.104. Copper Knives from Mohenjodaro
Plate 2.105. Copper knife from Nal
Plate 2.106. Bone Knives from Banawali
Plate 2.107. 1. Bone Knife 2. Ivory Knife from Dhalewan
Plate 2.108. Bone knife from Balu
Plate 2.109. Ivory Knives from Dhalewan
Plate 2.110. Bone Needles From Mehrgarh
Plate 2.111. Horn Needle from Rakhigarhi
Plate 2.112. Copper Fish Hook from Kalibangan
Plate 2.113. Copper Fish Hook from Dholavira
Plate 2.114. Copper Fish Hook from Harappa
Plate 2.115. Copper Fish from Rakhigarhi
Plate 2.116. Copper Fish Hook from Banawali
Plate 2.117. Copper Razors from Ropar
Plate 2.118. Copper Razors from Harappa
Plate 2.119. Chert Blade from Dholavira
Plate 2.120. Chert Blades from Kalibangan
Plate 2.121. Chert Blades. 1 Dhani. 2 Kheri Meham. 3,5 Farmana – 1. 4 Dhangana-1. 6 Talwara. 7 Rakhigarhi. 8 Kharar Alipur.
Plate 2.122. Chert Blades from Tarkhanewala Dera
Plate 2.123. Chert Blades From Rakhigarhi
Plate 2.124. Chert Blades from Balu
Plate 2.125. Chert Blades from Banawali
Plate 2.126. 1,3 Chert Blades. 2,4-6 Chalcedony Blades from Kunal
Plate 2.127. Chert Blades From Dhalewan.
Plate 2.128. Chert Blades From Ropar
Plate 2.129. 1-10 Chert Blades. 11 Core From Bhirrana.
Plate 2.130. Copper Blade From Baliali –2
Plate 2.131. Copper Hook from Kalibangan
Plate 2.132. Copper Hook from Balu
Plate 2.133. Bone points from Rakhigarhi
Plate 2.134. Bone Points from Balu
Plate 2.135. Bone Points from Banawali
Plate 2.136. Bone Points from Dhalewan
Plate 2.137. Bone Points from Ropar
Plate 2.138. Bone Points from Kotla Nihang Khan
Plate 2.139. Bone Points from Rakhigarhi
Plate 2.140. 1 Chalcedony Point, 2 Core, 3 Chalcedony Borer, 4 Chert Core, 5-8 Chert Blades, 9 Core of Quartzite (Explored by Dr. Sukhdev Saini From Harappan Sites in Haryana)
LATE HARAPPAN PHASE
Plate 2.141. Bone Arrowhead from Bhagwanpura
Plate 2.142. Copper Spearheads from Mirzapur
Plate 2.143. Ivory dagger from Daultpur
Plate 2.144. Copper Parasu from Mitathal
Plate 2.145. Copper Harpoon from Mitathal
Plate 2.146. 1 Stone Ball from Surmi. 2. Stone Ball from Seonser. 3. Stone ball from Kheri Meham
Plate 2.147. Copper Celt from Mitathal
Plate 2.148. Copper Awl from Bhagwanpura
Plate 2.149. Bone Knife from Bhagwanpura
Plate 2.150. Copper Fish Hook from Daulatpur
Plate 2.151. Copper Razor from Mirzapur
Plate 2.152. Bone Points from Daultpur
Plate 2.154. Bone Points from Bhagwanpura
Plate 2.155. Copper Pin from Bhagwanpura

COPPER HOARD PHASE
Plate 3.1 Antennae Sword from Mehsana (Gujarat)
Plate 3.2 Antennae Sword from Mehsana (Modhera)
Plate 3.3 Copper antennae Sword from Mehsana (Modhera)
Plate 3.4 Antennae Sword from Hansi (Haryana)
Plate 3.5 Antennae Sword from Rewari
Plate 3.6 1. Antennae sword (kankasa) 2. Antennae Sword (Kerala) 3. Sword Blade (Shahabad)
Plate 3.7 Hooked Sword from Nasirpur
Plate 3.8 Hooked Sword from Narnaund
Plate 3.9 Simple Sword from Rewari
Plate 3.10 Copper Spearhead from Sarthauli
Plate 3.11 Copper Spearhead from Narnaund
Plate 3.12 Copper Spearhead from Nasirpur
Plate 3.13 Rhinoceros Hunts. Ghormangur Cave, Mirzapur (U.P.) Perhaps the barbed harpoons were hafted in wooden poles and used as spears.
Plate 3.14  Copper Harpoon from Nasirpur
Plate 3.15  Misc. Harpoon (Bendarkala)
Plate 3.16  Copper Harpoon from Ganga Yamuna doab
Plate 3.17  Copper Harpoon from Ganga Yamuna doab
Plate 3.18  Harpoon type-I (Mainpuri)
Plate 3.19  Harpoon Type-II (Saipai)
Plate 3.20  1. Copper Harpoon. From Panipat (?)  2. Harpoon type-III from Narnaund in Hissar District (Haryana)
Plate 3.21  Copper Harpoon From Narnaund.
Plate 3.22  Copper Harpoon from Hansi
Plate 3.23  Harpoon Type-III (Hansi)
Plate 3.24  Copper Hoard. 1,3,4,5,7 Harpoons From Pro. Unknown. 2. Harpoon from Shahabad. 6. Harpoon from Rewari.
Plate 3.25  Copper Parasu from Nasirpur
Plate 3.26  Double Axe from Parhati
Plate 3.27  Copper Hand Weapon from Rewari
Plate 3.28  Copper Flat Axes from Uttar Pradesh
Plate 3.29  Copper Flat Axes from Nasirpur
Plate 3.30  Flate Axe from Bithur
Plate 3.31  Souldered Axe (Nakrihiya)
Plate 3.32  Flat and Rectangular Axe from Panipat (?)
Plate 3.33  Copper Hoard Flat and Rectangular Axes From Bhiwani (Courtesy Gurukul Jhajjar Museum)
Plate 3.34  Copper Hoard Flat and Rectangular Axes From Bhiwani (Courtesy Gurukul Jhajjar Museum)
Plate 3.35.  1-3. Copper Hoard Flat and Rectangular Axes. 4. Copper Short Axe.  5. Copper Cylindrical Axe from Narnaund.
Plate 3.36.  1. Short Axe from Rewari. 2. Flat Axe from Rewari.
Plate 3.37.  1. Flat and Rectangular Axe from Bhiwani 2. Splayed Axe from Hansi. 3. Short Axe from Rewari.
Plate 3.38  1. Shouldered Axe from U.P. 2. Shouldered Axe from Shahabad (Hardoi)
Plate 3.39  Shouldered Axe from P.S. Basia
Plate 3.40  Lugged and Shouldered Axe from Rewari (Courtesy: Gurukul Jhajjar Museum)
Plate 3.41. 1. Bar Axe (Narnaund) 2. Bar Axe (Rewari) 3. Bar Celt (Narnaund)
Plate 3.42  Plough Share from Nasirpur
Plate 3.43  Copper Chisel from Hansi
Plate 3.44  Copper Chisel from Ganga-Yamuna Doab
Plate 3.45  Copper Hoard. 1-19 Anthropomorph from Madarpur
Plate 3.46. 1. Anthropomorph (Bisauli) 2. Anthropomorph (Saipai)
Plate 3.47  Copper Hoard Rings from Haryana
Plate 3.48  Copper Knife (Naurangabad)

PAINTED GREY WARE PHASE

Plate 4.1  Iron Arrowheads from Atranjikhera
Plate 4.2  Iron Arrowheads from Ropar
Plate 4.3  Iron socketed Arrowhead from Hatt in Jind District
Plate 4.4  Iron socketed Arrowhead from Hatt in Jind District
Plate 4.5  Iron Arrowheads from Alamgirpur
Plate 4.6.  Pointed and Tanged Bone Arrowheads from Allahapur
Plate 4.7.  Iron Spearhead from Alamgirpur
Plate 4.8.  Iron Spearhead from Atranjikhera
Plate 4.9.  Iron Spearhead Explored by Dr. Sukhdev Saini from PGW site (?) in Haryana.
Plate 4.10. Iron Spearhead from Hatt in Jind District
Plate 4.11. Iron Spearhead from Hatt in Jind District
Plate 4.12. Iron shaft from Atranjikhera
Plate 4.13. Iron Hilt from Ropar
Plate 4.15. Iron Sling Ball from Ropar
Plate 4.16. Iron Axe from Atranjikhera
Plate 4.17. Copper Axe from Atranjikhera
Plate 4.18. Iron Sickle from Hatt in Jind District
Plate 4.19. Iron Chisels from Atranjikhera
Plate 4.20. Iron Chisels from Ropar
Plate 4.21. Iron Borers from Atranjikhera
Plate 4.22. Iron Needle from Atranjikhera
Plate 4.23. Iron Clamps from Atranjikhera
Plate 4.24. Iron clamp from Ropar
Plate 4.25. Copper Clamp from Atranjikhera
Plate. 4.26. A pair of Iron Tong from Atranjikhera Period-III
Plate 4.27. Iron Knives from Atranjikhera
Plate 4.28. Iron Knife from Ropar
Plate 4.29. Copper Antimony Rod from Atranjikhera
Plate 4.30. 1. Copper Antimony Rod From Kasithal. 2. Copper Antimony Rod from Jognakhera. 3. Copper Antimony Rod from Agond
Plate 4.31. Copper Antimony Rod-Cum-Nail-Parer from Atranjikhera
Plate 4.32. Iron Nails from Atranjikhera
Plate 4.33. Copper Nail Parer from Atranjikhera
Plate 4.34. Iron rod from Atranjikhera
Plate 4.35. Copper Fish Hook from Atranjikhera
Plate 4.36. Iron simple Hook from Atranjikhera
Plate 4.37. Iron Hook from Ropar
Plate 4.38. 1-3 Socketed Bone Points. 4,7,10 One Sided Pointed Bone Points. 5,6,8,9 Double Pointed Bone Points from Ropar.
Plate 4.39. Copper pin from Atranjikhera
Plate 4.40. Iron Pin from Alamgirpur
Plate 5.1. Terracotta Mould from Balu (Mature Harappan Phase)