4. INFRASTRUCTURE AND LEARNING RESOURCES

The department is having adequate infrastructural facilities including four lecture halls with smart class room, one seminar hall with overhead LCD projector with adequate furniture and amenities, six faculty chambers facilitated with computers and broad band and Wi-Fi internet connectivity. There is one Computer Lab with computers and printers. There is five laboratories with updated technical instruments and specimens i.e. cytogenetics and serology lab, dermatoglyphics lab, audio and visual laboratory, osteometry lab, photographic lab, and undergraduate practical lab. S.C Dube library and lyceum have a number of journal, periodicals, books, thesis and so on with peaceful study area.

Infrastructures & Learning Resources

The Department is equipped with Wi-Fi Internet Facility

Spacious Lyceum used as reading room

Library with books, periodicals, and thesis

Audio-visual Laboratory

A large Museum displayed with ethnographic artifacts, prehistoric stone tools, human skeleton and skulls with primate skeletons. Smart Classroom with spacious and wellorganized seating arrangement

UG/PG/PhD Laboratories

Class Room
Large Size black board
& Green Boards

Anthropological Fieldwork and all the related equipments

Seminar Rooms with LCD & Over Head Projectors

4.1. Building and Built-up Area of the Department

Department of Anthropology has its independent two story building with parking and enchanting premises. The ground floor has museum, office, faculty chambers, seminar hall, undergraduate laboratory and toilet for males.

The first floor is dedicated to PG and research program. There are laboratories, smart-class room, one faculty chamber, lyceum, lecture hall, computer lab and a toilet for females. In the first floor there is office of field station of Anthropological survey of India. The department has provided office space to this body of central government under a memorandum of understanding (MOU).

4.1.1. At present time the department has the following rooms:

S. No.	Details			Number
01.	Classrooms		04	
02.	Museum 01			
03.	Undergraduate Laboratory 01			
04.	Postgraduate/Research Laboratory		04	
	 Osteometric Laboratory 	: 01		
	 Serology/Biochemical Laboratory 	: 01		
	 Audio-Visual Laboratory 	: 01		
	 Cytogenetic/Dermatoglyphics Laboratory 	: 01		
05.	Computer Room		01	
06.	Lyceum/Library		01	
07.	Seminar Room		01	
08.	Faculty Rooms	07		
09	Photography Room 01			
10.	Department Office	01		
11.	AnSI Field Station 01			
12.	Store Room 01			
13.	Junk Room 03			
14.	Washrooms		02	
	Male: 01			
	Female: 01			

4.1.2. Pictures showing different rooms in the department



Picture 4.1.2.1. Dr. Sonia Kaushal in her Department chamber



Picture 4.1.2.2 Store Room



Picture 4.1.2.3 Smart Class Room



Picture 4.1.2.4 Undergraduate Lab



Picture 4.1.2.5 One Day Seminar on 'Swachh Bharat Abhiyan'



Picture 4.1.2.6 **Computer Lab**

4.2. Library and Lyceum

The department has its own Lyceum which includes the academic works covering physical anthropology, socio-cultural anthropology, archaeology, research methods and theory, Indian village studies, tribal anthropology, medical anthropology, human evolution, nutrition and growth. The library's collection has been steadily growing over time. The collection focuses on both historical and contemporary developments in the various fields of anthropology as well as scholarly interests of academics and students. There are numerous anthropological textbooks in the library used on UG and PG courses. It also has the collection of few journals, encyclopedia and gazetteers. The library also holds several published and unpublished field reports, dissertations and thesis submitted by students as part of the course curriculum during UG, PG and PhD. The library is also equipped with a Wi-Fi internet facility. The library is open on all working days for reference and research for faculty and students.



Picture 4.2.1 Students reading in the library cum lyceum



Picture 4.2.2 Group Discussion

4.3. Laboratories

Department have five advance laboratories with updated technical instruments and specimens i.e. cytogenetic and serology lab. dermatoglyphics lab. audio and visual laboratory, osteometry lab, photographic and lab, undergraduate practical lab it is preserved and functioned by technicians.







Picture 4.3.2 Osteometry Lab

4.4. Museum

This department have its own well-organized preserved documented tangible and intangible material culture of human existence from past to present. It was collected during extensive field work in different time period by students, scholars and faculties. The Anthropology Museum represents a unique Museum which exhibits the essence of Anthropology and the rare cultural treasure of well known and unknown communities all in one place. The collection in this Museum represents the cultural artifacts from all across India.

In this Anthropological Museum the display is done categorically in four different sections viz., Ethnographic Collection, Biological Collection and Prehistoric Archaeological Collection and also few other random collections. The ethnographic objects are culturally categorized and also according to their usage. They are arranged into Hunting and Gathering Object, Fishing implements, Agricultural Implements, different types of Habitations, Baskets and earthen potteries of different types, Dress and Ornaments, Musical Instruments and different forms of land and water transports.



Picture 4.4.1 Museum, Department of Anthropology

4.5. Audio-visual Lab



Picture 4.5.1 Audio-Visual Lab

The department has an audio-visual lab with an aim to preserve and document the life ways of studied communities. It has rich collection of images gathered during the fieldwork conducted in remote and urban, tribal and non-tribal areas of India as part of post-graduation programme. The Audio-visual lab of the department holds a sizeable collection of visual materials in the various fields of anthropology in the form of raw videos, DVDs, images, etc. The collection of images and videos primarily intends to support the teaching and research purpose within the department especially Visual Anthropology. The collection contains both classical and contemporary ethnographic data which is used as visual encyclopedia of the human behavior and culture. In addition to this, the lab has few videos on the how to conduct ethnographic fieldwork which has proven helpful to the UG and PG students. The lab also features projectors, cameras, audio recorders, and televisions to aid in the teaching-learning process and fieldwork.

4.6. Major Equipments used for research

4.6.1. Anthropometric Rod



Anthropometric Rods are made of Brass and used for vertical measurement of human body and long bones. It is a two meters long rod made of nickeled steel. It consists of four segments of equal parts to form a straight rigid rod. One side of this rod is a fixed sleeve on the top and the rod is graduated in a descending scale towards the bottom. There is another movable sleeve, which can be moved up and down on the rod. Total 29 Spreading Caliper is present in the department lab.

4.6.2. Sliding Caliper

Sliding caliper is a 25cm long straight bar having flattened steel plate graduated in millimeter on its two sides. It has two long arms (12.5cm) of which one is fixed at the top and other one is movable. The arms are projected to an equal distance on both the sides of the scale having sharp points at one side and blunt ends on the opposite side. The sharp end is used in measuring the skeletons and the blunt end meant for the measurement on the living body. The



scale at the bottom of the bar is useful for depth measurements. Total 25 Spreading Caliper is present in the department lab.

4.6.3. Spreading Caliper



Spreading caliper is an instrument which mainly used for taking measurements on the living, especially on the head and skeleton, available in two sizes, one is of 25cm and 60cm. The instrument is composed of two outwardly curved long arms but bounded at one end. Open arm-ends of some instruments are pointed and some are specially designed with blunt ends to facilitate the measurements on living body. A straight scale graduated in millimeters is found to be fixed at one of the arms and the meter scale passes through a

flexible socket on the other arm of right-hand side. Total 30 Spreading Caliper is present in the department lab out of which 15 are pointed and 15 are blunt ended.

4.6.4. Skinfold Caliper

A skin fold caliper is used to assess the skinfold thickness, so that a prediction of the total amount of body fat can be made. This is used to estimate the total amount of body fat, four skinfolds are measured: Biceps skinfold (front side middle upper-arm), Triceps skinfold (back side middle upper arm), Subscapular skinfold (under the lowest point of the shoulder blade), Suprailiac skinfold (above the upper bone of the hip). In the department lab there are 11 Skinfold Caliper.



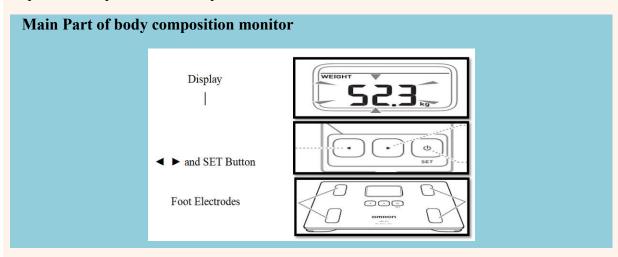
4.6.5. Weighing Machine



Weighing machine - a measuring instrument for weighing; shows amount of mass scale balance - a scale for weighing; depends on pull of gravity measuring device, measuring instrument, measuring system - instrument that shows the extent or amount or quantity or degree of something. Total 22 Weighing Machine are there in the department lab.

4.6.6. Omron Bielectrical Impidance (HBF-212-IN)

Omron bioelectrical impidance is a electrical health monument device. It gives the users a clear picture of their weight and the body fat percentage by the Bioelectrical Impedance (BI) method. Body fat is tissue that has little electric conductivity. In order for the monitor to determine body composition, it uses the electrical impedance, along with your height, weight, and age and gender information to generate results based on OMRON's data of body composition. 10 Omron Bielectrical Impidance are present in the department lab.



4.6.7. Sphygmomanometer

It is an instrument for measuring blood pressure, typically consisting of an inflatable rubber cuff which is applied to the arm and connected to a column of mercury next to a graduated scale, enabling the determination of systolic and diastolic blood pressure by increasing and gradually releasing the pressure in the cuff. It is consist of bladder, cuff, valve, bulb and monometer. In the department lab total 10 Sphygmomanometer are present.



4.6.8. Stethoscope



The Stethoscope is a medical instrument for detecting sounds produced in the body that are conveyed to the ears of the listener through rubber tubing connected with a piece placed upon the area to be examined. It is consist of earpieces, ear tube, tubing, headset, stem, chest piece, diaphragm and bell. Total 16 Stethoscope are there in the department lab.

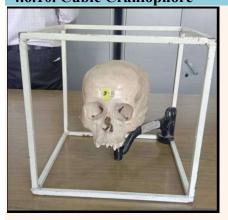
4.6.9. Spirometer

Spirometer is a medical instrument and it used for breathing test. This test measures how much air you can breathe in and out of your lungs, as well as how easily and fast you can the blow the air out of your lungs.

This instrument is using inspirometry. The spirometry is the term given to the basic lung function tests that measure the air that is expired and inspired. There are three basic related measurements: volume, time and flow. Total 10 Spirometer are present in department lab.



4.6.10. Cubic Craniophore



The Cubic Craniophore is used for drawing craniograms by mean of diagraph as well as for drawing the norms under the dioptrographs or taking their photographs. It consists of a metallic skeleton cube with dide length of 30 cm. approximately. A jaw is fixed in the centre of the cube by mean of an extended arm on one side of the height for holding the skull. Metal dish may be used in place of the jaw for fragile skulls. There are 3 Cubic Craniophore in the department lab.

4.6.11. Osteometric Board

It is used to take measurements and angles on the long bones. It consists of a rectangular board with a long and a short vertical wall. The length of the board is about 65 cm, breath is 25 cm and the height is 10 cm. A graduated graph is placed on the surface of the board which is covered by a glass sheet. A movable crosspiece is provided for determining the length and breadth measurements. An oval steel frame with threads and weights is provided for determining angles.



The steel frame can be fixed in different positions for talking different angles by placing the transparent protractor on the threads. In the department lab 1 Osteometric Board is there.

4.6.12. Spectrophotometer



A spectrophotometer is an instrument that measures the amount of light that can pass through a solution. It is apparent that less light is allowed to pass through a highly turbid or solution than through clear coloured a Spectrophotometer is the device that can quantify the amount of light transmitted through solutions. Since samples in these applications are not readily available in large quantities, they are especially suited to being analysed in this non-destructive technique. In addition, precious sample can be saved by utilizing a micro-volume platform where as little as 1uL of sample is required for complete analyses. In the department lab 1 Spectrophotometer is present.

4.6.13. Blood Analyzer (Chemical Analyzer)

Blood analyzers can be bench top devices or placed on a cart; other systems require floor space. They are used to determine the concentration of certain metabolites, electrolytes, proteins, and/or drugs in samples of serum, plasma, urine, cerebrospinal fluid, and/or other body fluids. Samples are inserted in a slot or loaded onto a tray, and tests are programmed via a keypad or bar-code scanner. Reagents may be stored within the analyzer, and it may require a water supply to wash internal parts. Results are displayed on a screen, and typically there are ports to connect to a printer and/or computer. In the department 1 Blood analyzer is present.



4.6.14. Digital pH meter

A pH meter is a scientific instrument that measures hydrogen-ion activity in water-based solutions, indicating its acidity or alkalinity expressed as pH. pH meter measures the difference in electrical potential between a pH electrode and a reference electrode, and so the pH meter is sometimes referred a "potentiometric pH meter". The difference in electrical potential relates to the acidity or pH of the solution. The pH meter is used in many applications ranging from laboratory experimentation to quality control. 2 pH meters is present in the department.



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4.6.15. Distillation Plant

Distillation is the most commonly used method for the extraction of essential oils. There are two techniques of distillation: water and steam. The distillation apparatus, commonly called a 'still', consists of a vessel for plant material and water, a condenser to cool and condensethe vapour produced and a method of collection, or 'receiver'. Material from the appropriate part of the plant for extraction is immersed in water in the distillation vessel. This is then heated to boiling point and the steam (water vapour) carries out the volatile oils. The water



safeguards some components by preventing overheating as the temperature will not exceed 100 °C (the boiling point of water at normal pressure). However, the distillation can be a long process and the water may damage some other compounds. I distillation plant is present in the department.

4.6.16. Microscope



A microscope is an instrument that can be used to observe small objects, even cells. Microscopic means being invisible to the eye unless aided by a microscope. The image of an object is magnified through at least one lens in the microscope. This lens bends light toward the eye and makes an object appear larger than it actually is. In the department lab both compound and simple microscope are available, however, only the simple one is in working condition.

4.6.17. Haemometer

A Haemometer is a measuring device of haemoglobin blood concentration. It can operate by spectrophotometric measurement of haemoglobin concentration. Portable haemometer provide easy and convenient measurement of haematological variables.

Sahli's Method: It is a way to determine the haemoglobin content in the blood. Hydrochloric acid present in the device converts the haemoglobin into hematin acid which is then diluted so that the diluted hematin acid colour matches with the comparator. Total 5 Haemometer is present in the department.



4.6.18. Centrifuges



A centrifuge is a device that uses centrifugal force to separate various components of a fluid. This is achieved by spinning the fluid at high speed within a container, thereby separating fluids of different densities (e.g. cream from milk) or liquids from solids. It works by causing denser substances and particles to move outward in the radial direction. In a laboratory centrifuge that uses sample tubes, the radial acceleration causes denser particles to settle to the bottom of the tube, while low-density substances rise to the top. A centrifuge can be a very effective filter that separates contaminants from the main body of fluid. In the department 1 centrifuge is present.

4.6.19. Vibrator

Vibrator, A mechanical device with a vibrating table to help mix a uniform consistency into a mold and to bring the air bubbles in the mix to rise to the top. In the department 2 vibrators is present.



4.6.20. Electrophoresis

Electrophoresis instrument is used to separate nucleic acids and proteins based on their size and charge. The two basic types of gel electrophoresis instruments available are horizontal and vertical. With the horizontal gel electrophoresis instrument, sample is placed in wells on one side of the gel and moved with an electric current toward the other side. The vertical version works in a similar manner, except the samples are loaded into the top toward the bottom. Vertical move electrophoresis instruments can resolve smaller fragments of DNA and accommodate larger sample



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sizes than horizontal instruments. In the department 2 Gel Electrophoresis is present one is horizontal gel electrophoresis and other one is vertical gel electrophoresis.

4.6.21. Electronic Balance

Electronic balance is an instrument used in the accurate measurement of weight of materials. Electronic balance is a significant instrument for the laboratories for precise measurement of chemicals which are used in various experiments. Laboratory electronic balance provides digital result of measurement.

Some of the application areas for laboratory electronic balance are pharmaceutical research, scientific research, industrial, food research, educational research and others. On the basis of types of products electronic balance instrument can be classified into top loading balance and analytical balance. In the department 1 electronic balance is present.



4.6.22. Ishihara's Colour Blindness Chart



The Ishihara's test is a colour perception test for red-green colour deficiencies. The test consists of a number of Ishihara plates, each of which depicts a solid circle of colour dots appearing randomized in colour and size. Within the pattern are dots which form a number or shape clearly visible to those with normal colour vision, and invisible, or difficult to see, to those with a red-green colour vision defect. In the department 12 Ishihara's colour blindness chart is present.

4.6.23. Tread mill



A treadmill is a device generally used for walking, running, or climbing while staying in the same place. It enables the user to adhere to an indoor exercise regime irrespective of the weather and also used for ergometry and cardiopulmonary stress test. On the running deck the subject moves, adapting to the adjustable speed of the belt. The running deck is usually mounted on damping elements, so the running deck has shock absorbing characteristics. A lifting element raises the entire frame including the running deck, and simulating a pitch angle for uphill running. Some treadmills can also reverse the running belt to simulate downhill loads. In the department

1 tread mill is present.

4.6.24. Still Camera

It is a film-based device or digital device that takes one picture at a time. It is a type of electronic camera that takes still images and stores them as single frames of video. However, still cameras may also provide moving picture (video) capability, and video cameras may include a still camera function. In the department 1 still camera is present.



4.6.25. Video camera



Video camera is a camera used for electronic motion picture acquisition (as opposed to a movie camera, which records images on film), initially developed for the television industry but now common in other applications as well. Recorded video is used in television production, and more often surveillance and monitoring tasks in which unattended recording of a situation is required for later analysis. In the department 1 video camera is present.

4.6.26. Audio Recorder

The recording of audio data through devices such as tape recorders has been a significant development within qualitative research, replacing the researcher's handwritten notes. Digital recording and reproduction converts the analog sound signal picked up by the microphone to a digital form by the process of sampling. In the department 5 audio recorders is present.



4.7. Collection of Bones in the Department

4.7.1. HUMAN SKELETON

The human skeleton serves as a shapes framework which and supports the human body. It gives a distinct idea about the various functions of the human body. The human skeletal system comprises of 206 bones and 32 teeth. There are two articulated skeletons of male and female human available in the department to give the students a clear-cut idea about human anatomy.



4.7.2. SKULL

The skull is the skeleton of the head. 32 skulls There are in the department's lab and museum to study the various parts of the skull.



4.7.3. MANDIBLE

The mandible or the lower jawline constitutes the largest bone in the human skull. It holds the lower teeth in place and assists in mastication. There are 9 child mandibles and 34 adult mandibles for comprehensive understanding of the students.

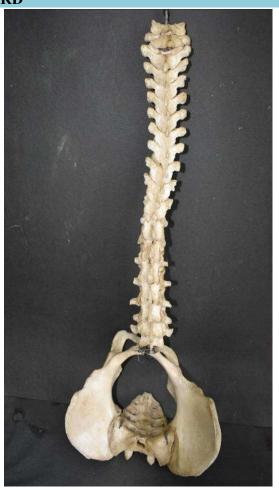


4.7.4. VERTEBRAL COLUMN OR SPINAL CORD

The vertebral column is a sequence of 33 segmented bones called vertebrae separated by intervertebral discs. The vertebral column or the spine is split into 5 regions: cervical, thoracic, lumber sacrum and coccyx. Each region is characterized by a different vertebral structure. There are 23 Atlas and 18 axis bones available in the department for the purpose of study.

There is one vertebral column with sacrum and coccyx and two vertebral columns with pelvic girdle.

There are 18 typical cervical bones, 39 thoracic cervical bones, 45 lumber bones available in the lab to furnish a precise idea about the spinal cord. There are also 6 sacrum bones available in the lab.



4.7.5. STERNUM

The long flat bone located in the center of the chest. The sternum articulates with the clavicle on either sides or the cartilages of the upper seven ribs. There are 7 sternum bones, which can be clearly studied.



4.7.6. APPENDICULAR SKELETON

The shoulder girdle or pectoral girdle is the set of bones in the appendicular skeleton which connects to the arm on each side. In humans it consists of the clavicle and scapula. These bones of the appendicular skeleton facilitate the movement of human body.

UPPER LIMB

It includes Clavicle, Scapula, Humerus, Ulna, Radius and Phalanges **4.7.7. CLAVICLE**

The clavicle is an S-shaped bone located between the rib cage (sternum) and the shoulder blade (scapula). It connects the arm to the body.



4.7.8. SCAPULA

The scapula or shoulder blade is a large triangular-shaped bone in the upper back connecting the clavicle and humerus.

The number of clavicle and scapula present in the lab are 14 and 28 respectively.



4.7.9. HUMERUS

The humerus is the long bone in the upper arm extending from shoulder to the elbow. The number of humerus bone present in the lab is 26.



4.7.10. ULNA

Ulna forms the other bone of the forearm stretching from the elbow to the smallest finger. It forms the elbow joint with the humerus and also articulates with the radius both proximally and distally.



4.7.11. RADIUS

The radius is one of the two long bones of the forearm lying laterally and parallel to ulna. Radius extends from the lateral side of the elbow to the thumb side of the wrist. The number of radius bone is 15.



4.7.12. PHALANGES

These are the numbers of bone which are there in the hands. These consist of phalanges, metacarpal and carpal.



LOWER LIMB

The lower limb includes Pelvic Girdle, Femur, Tibia and Fibula which are described below

4.7.13. PELVIC GIRDLE

The pelvic girdle or bony pelvis is a ring like bony structure constituting the lower part of the trunk. It connects the axial skeleton to the lower limbs. There are sufficient numbers of pelvic girdles and 25 hip bones available in department to give a clear about human anatomic study. There are 25 Hip bones in the department.



4.7.14. FEMUR

The femur is the largest bone in the human body. It is commonly known as the thigh bone (femur is Latin for thigh) and reaches from the hip to the knee. A human male adult femur is about 19 inches long and weighs a little more than 10 ounces. The femur is extremely hard and not easy to break.



4.7.15. TIBIA

The tibia or shin bone is larger of the two bones in the lower leg on the anterior side. The top of the tibia connects to the knee joint and the bottom connects to the ankle. There are 22 Tibia bones available in the department lab.



4.7.16. FIBULA

The fibula or calf bone is the smaller of the two bones in the lower leg. It runs parallel to the tibia on the lateral side. The numbers of fibula bones are 32, which are used to give a distinct idea about the anatomical study.



4.7.17. **GORILLA**

There is one replica and articulated skeleton of Gorilla in the department which provides an understanding explicit of the anatomy of Gorilla.



4.7.18. **EVOLUTIONY STAGES OF HUMAN BRAINS**

The lab also consists of a number of replicas representing the various evolutionary stages of human brain. There are various replicas of skull for detailed study of skull anatomy Erectus Narmadenis, of Homo Homo Sapiens Sapiens, and Australopithecus.





Picture 4.7.1 Human brains, skulls, stone tools and bust of different ethnic



Picture 4.7.2 Skeleton of Buffalo



Picture 4.7.3 Skeleton of Cow





Picture 4.7.4 Skeleton of Rabbit

Picture 4.7.5 Skeleton of Dog

There is one articulated and one disarticulated skeleton of rat, one articulated and one disarticulated skeleton of dog, one articulated and one disarticulated skeleton of cat, one articulated and one disarticulated skeleton of cow, one articulated skeleton of buffalo, one articulated and one disarticulated skeleton of pig, one articulated and one disarticulated skeleton of rabbit and one disarticulated skeleton of horse available in the department for the purpose of anatomical study. The lab also consists of a number of replicas representing the various evolutionary stages of human brain.

4.8. Collection of Stone tools

The department has a huge collection of stone tools starting from the Lower Paleolithic culture to Neolithic culture. Few of the tools are displayed in the Museum for the benefits of the students and common people who visit the Museum. However, majority of the tools are carefully kept in the laboratory for the purpose of teaching and learning. Undergraduate and Post-graduate students of this department use these tools during their archaeology practical to understand the prehistoric cultures and how it had evolved through time and space.

Evol Stag	lutionary se	Description of the Tools	Stone Tool
Paleolithic Period	Lower Paleolithic Period	Name of the major tools which are found during this time are Chopper, chopping tools, V-shaped Cleaver, U-shaped Cleaver and different types of Handaxes. The tradition of the tools is mostly Core and the cultures of tools ranges from Oldowan, Abbevillian to Early Acheulian, Middle Acheulian and Late Acheulian cultures. The most common techniques used for making tools during this period are Stone Hammer Technique, Direct percussion or anvil technique and cylinder hammer technique. These tools are mostly used for Cutting, digging, chopping.	
•	Middle Paleolithic Period	Majority of the tools found during this period are Side Scrapers, End Scrapers, Double Side Scrapers, Concave Scrapers, and Convex Scrapers, convergent scrapers, borer and burin, Mousterian Points, round scrapers etc. Both Core and Flake tool traditions are	

found during this period, however, flake tool tradition is more common. Cultures of the tools vary from Clactonian, Levalloisian and Mousterian. Clactonian Techniques of making tools are mostly Levalloisian Technique and Mousterian technique and the heavier tools which retained original surface are made with Clactonian technique. These tools are used for cutting, scrapping and boring.





Upper Paleolithic Period

Different types of blade tools, Chatelperrionian points, Aurignacian or Gravettian points, Laurel leaf points, Willow leaf points, bone tools like harpoons and baton-de-commandment. Blade Tool tradition are found during this time. Most of the cultures found during this time are Perigordian, Aurignacian, Solutrean, and Magdalenian cultures. Pressure flaking technique is the most common form of tool making technique used during this period. Tools are used for cutting, boring, piercing and scrapping. A model of Venus of Willendorf, also called Woman of Willendorf or Nude Woman is also carefully preserved and displayed in the department Museum. It is an Upper Paleolithic female figurine found in 1908 at Willendorf, Austria, that is perhaps the most familiar of some 40 small portable human figures (mostly female) that had been found intact or nearly so by the early 21st century.





Mesolithic Period

The tools found during this time are very small and the maximum size is below 5 cm. Tools are divided into two types namely Geometric tools- triangles, trapezoid, rhomboids; Non-geometric tools- microscrapers, lunates, micro-borer, micro- burin. The tradition of the tools during this stage is Microliths. The cultures of the tools are Azilian Culture, Tardenoisian Culture, Maglemosian Culture and Kitchen Midden. Fluting Technique is used for make these microliths. These tools are used for making Arrow head, spear head and for cutting and piercing.



Neolithic Period

Common tools found during this stage are Axe, Adze and Chisel, grinding stone, ring stone, mortar and pestle. These tools are also called as Celts. The cultures of the tools are divided into Ceramic which is mostly made of clay and Aceramic which are not made of clay like stone tools and bone tools. Majority of the tools are made by Grinding and Polishing. The tools of this age are used for digging, tilling of soil, carpentry and for cutting or chopping.

