Post Script:

Dr. Hari Gautam, Chairman of the UGC desired the draft report to be referred to Prof. Gopala Sarana, an eminent Anthropologist from Lucknow, for his review and comments. Accordingly, a discussion was held with him on August 17, 2001, at UGC, New Delhi, Prof. Gopala Sarana has made very useful suggestions and has also framed syllabi of some courses which have been given in full at Appendix I. We are grateful to Prof. Gopala Sarana for sparing his time and for his constructive suggestions at short notice.

2 October, 2001 R K Mutatkar

Preface

Anthropology as an academic discipline has a culture of its own. This culture of the discipline has to be transmitted to the students to increase the number of anthropologists who would spread the knowledge of human evolution, human creations, human variability and spirit of tolerance and coexistence to the humanity.

Curriculum has to reflect the resolve of the departments about the combination of knowledge and skills in order to integrate the holistic approach with practical applications, for addressing to the peoples' concerns. Curriculum has to accommodate the universalities of a discipline leaving enough space for regional specialisations according to regional history and aspirations, and space for scholars to develop the body of knowledge according to their own choice and expertise.

Every University and every Department of Anthropology has been established or has evolved in a particular frame of reference, taking into account the needs and aspirations of the region. Some departments are placed with the natural sciences, others with the social sciences. There have been British and American influences in using the terms like Social and Cultural Anthropology which connote a different relationship with cognate disciplines. Similar is the situation with the use of terms, Physical or Biological Anthropology and Prehistoric Archaeology, Paleoanthropology or Archaeological Anthropology. Linguistic Anthropology has developed into Linguistics, which encompasses much more than of immediate interest in Semantics or Sociolinguistics. Since language is the vehicle of culture, Anthropology curriculum cannot do without Linguistics.

The University Grants Commission had established Curriculum Development Centres (CDC) for developing curricula in different disciplines. Accordingly such a Centre for Anthropology and Sociology was established at the Department of Anthropology, Ranchi University towards the end of 1985. In about two years time, the report of the Centre was prepared giving the details of the courses at undergraduate and postgraduate levels in Anthropology and Sociology. The same was discussed at a Seminar held at NCERT Campus, New Delhi on 11 September 1989. The report

was first published in February 1990 and reprinted in January 1992 as a UGC publication. The report acknowledged the variability in the syllabi at undergraduate and postgraduate at all India level.

A recommendation was also made to permit flexibility by allowing the students to opt courses from the Electives, irrespective of the branches of specialisation in Anthropology. Thus, a model curriculum was presented to serve as a guideline to the departments while designing their syllabi. It however, appears from our interactions with the faculty throughout the country that the CDC report was not properly disseminated and did not reach the faculty and students across the country.

The Department of Anthropology, Andhra University, Visakhapatnam, hosted a meeting of the UGC Panel on Anthropology whereby the curriculum developed by the faculty members of the Department was discussed. Other departments also undertook such rigorous exercises which however were not shared.

A Panel on Anthropology was reconstituted at the UGC in February 1998. At the first meeting of the Panel at UGC office, New Delhi, on 24-25 March 1998 it was suggested by the then UGC Chairperson, Dr. Ms. Armaity Desai, that the Panel could have a personal interaction with the Chairpersons of the Boards of Studies (BOS) in Anthropology towards curriculum development by convening regional meetings. The Panel decided to discuss the issue of teaching, research and other relevant issues like teacher-student ratio, unit costs of the department, curriculum at the UPSC etc with the Chairpersons of the BOS in Anthropology and/or Heads of Anthropology Departments. Accordingly, three regional meetings were convened, at Pune during 5-7 October 1998, at Patiala during 15-16 December 1998 and at Shantiniketan during 19-20 March 1999 covering all 34 departments of Anthropology in India. Anthropology curriculum was the main topic at discussions. A subcommittee of four members of the Panel scanned through the recommendations generated at three regional meetings and at its meeting at Pune during 17-22 May 1999 finalised the recommendations. A draft report on the curriculum was made for further consideration of the Panel to be discussed later at the national workshop, as with the previous CDC.

At the Science Congress in January, 2000 at Pune University, the matter of curriculum development was discussed in the Anthropology section of the Congress, which helped in the preparation of the report.

The following points emerged at the regional workshops and at Science Congress:

- There appears to be some despondency among the younger faculty members and students about the identity of Anthropology. This basically stems from the confusion of understanding Anthropology as an academic discipline and as is pursued in the Universities not fully projecting the holistic, interdisciplinary character of Anthropology.
- A large number of candidates offered Anthropology at Civil Services examination signifying that it was a soft discipline. Now the syllabus has been revised.
- 3. The international and national NGO's sought the services of the Anthropologists, for training and research, in view of the experience of anthropologists of living with the people during the research process. A large number of NGO personnel obtain short duration training in anthropological data collection methods and thereby profess as practicing anthropologists. However, they lack capacity to conceptualize research results in the absence of knowledge of theory.
- 4. Anthropology is being rediscovered in the area of health, rural and tribal development and voluntary activities. Medical Anthropology is one of the fastest growing branch of anthropology, others being ecological, educational, communication, forensic, nutrition and visual anthropology.
- There is resurgence of interest in qualitative research methods and process documentation of ethnography of change
- 6. There is lack of computer training in Anthropology. Anthropology curriculum is weak in quantitative research methods.
- 7. Linguistic anthropology need to be introduced in anthropology curriculum.
- 8. Area studies and regional studies need to be promoted.

Need for more rigorous training in research methodology was stressed by those who
practised anthropology outside the University system.

Dr. K.S. Singh, erstwhile Director General, Anthropological Survey of India and a renowned history scholar observed that humanism and profound concern for the people were strong points of anthropology. The concept of holism, field work and understanding of the interrelatedness of subjects were other strong points of Anthropology. He said, anthropology was trying to meet the challenge of globalisation which was trying to obliterate the cultural diversities of humanity. As a result, the countervailing forces were developing by way of indigenous movements to establish self identity and demand autonomy and self rule. The taxonomic classifications like scheduled caste and scheduled tribe were concealing the heterogenieties and identities. Anthropology teaches respect for all cultures and autonomous identities. He thought that the 21st century would see anthropology studying heterogeneity and diversity, including biological and linguistic diversity. The genome project was therefore important. One of the crucial concepts about communities was, how they looked at themselves.

It was also brought out that Anthropology had been studying the tribals, who were the poorest downtrodden people and this experience could contribute in development related research, training and interventions.

There has been unanimity about reinforcing the holistic image of Anthropology in the curriculum. For career prospects, some courses of applied nature have to be incorporated depending upon the needs of the region and available expertise in the departments. For example, Orissa departments could be interested in disaster management while Kerala might give priority to migration and gender studies, in view of its success about health indicators. Maharashtra might bring out contributions of Saint poets in synthesising culture. On the other hand, the impact of megapolis on destroying the tribal cultures and dehumanising them due to migration, need to be studied. Various development projects including river dams leading to displacement of tribals is of significance. Chandigarh may be interested in fossil studies while forensic anthropology may be opted by some departments. Tirupati is the proper place for anthropology of religion and, art and music at Vishwabharati. There

are several issues like pseudo tribals grabbing the benefits of Scheduled Tribes. HIV / AIDS has given spurt to studies in sexuality and sexual behaviour, particularly of adolescents. Poverty and nutrition linked with growth are of perennial importance. These are stray examples. The departments will have to decide for themselves as to the areas in which they would excel. Anthropology of gender, DNA analysis, reproductive health including reproductive biology, medical genetics are some of the new areas with applicability and future prospects. Heritage of India and Indian diaspora are equally important issues for study.

Care is to be taken to project the two integrated holistic entities in the curriculum.1) Anthropology itself as a holistic discipline 2) Indian civilization encompassing all branches of Anthropology. In the days of super specialization, a discipline like Anthropology has an important place which studies man as a single piece in his body, mind senses, spirit and intellect. Mankind has to be understood in relation to other species of flora and fauna, and to own the responsibility of protecting the environment by not destroying the equilibrium of nature.

Curriculum development is a continuous process since it has to respond to the needs and aspirations of the people, which are dynamic in nature. No attempt has been made to universalize the curriculum, although the basic framework and training has to be uniform. Enough space is available to develop the frontiers of knowledge and its applicability in different Universities. The identity of Anthropology lies in holistic unity incorporating variations and space for creativity and responsiveness.

Preparing a list of reading material for the courses is quite a stupendous task to be accomplished by few scholars in meetings lasting couple of days. The reading list has been provided which is far from satisfactory. Besides, availability of books and journals to faculty and students would depend upon the budgetary provisions for the libraries. The internet facilities may help the students in this respect. Several books in vernacular languages followed particularly at the undergraduate level are not listed due to constraint of time and space.

What the Panel has been able to crystallise through the discussions with all Departments of Anthropology in the country is the keenness to project and promote the holistic nature of Anthropology. Anthropology as is practised by professionally trained anthropologists outside the university system in the government and voluntary sectors of development, research laboratories,

including the Anthropological Survey of India have provided clues to reorient the curriculum to the needs of the Society.

The UGC nominated eight member Curriculum Development Committee in Anthropology on 25 September 2000 with the convener of the subject panel continuing as convener of the CDC. The CDC in Anthropology met in three meetings, during 14-15 November, 13-14 December 2000 and during 23-25 January 2001 at the UGC office New Delhi, whereby the curriculum for anthropology and syllabi for the courses were finalised.

The CDC has made certain welcome departures from the earlier efforts in this regard. Each course has been provided with an approach which spells out the objectives of the course. The expectations from the learners at the end of the teaching of the course have been given for focussed teaching. Every course has been conceptually organised for 100 hours of teaching, and the units have been given the weightage accordingly, which would be useful in teaching and assessment. The departments could use the guidelines provided by weightage while designing the respective courses according to the patterns in semester, yearly or credit systems. In due consideration of the scenario of higher education aspiring to become self supporting, job oriented or skill oriented postgraduate diploma courses have been provided. The presentation of diploma courses is illustrative in nature. The respective departments could develop more courses as per the requirements and facilities available.

The requirements of civil services competitive examinations and NET examination of the UGC which provides uniformity at national level, have been duly met in the syllabi of the undergraduate and postgraduate courses and the diploma courses.

The diversities in the pattern of higher education, particularly at the undergraduate level has compelled CDC to provide for the core courses and specialised courses, as guidelines for designing the courses in respective universities. An attempt has also been made to spell out the requirements of M.Phil. courses particularly to meet the needs of scholars from other disciplines joining the Ph.D. programme in Anthropology. Obviously, such an exercise could not have been completed in just three meetings. Interpersonal communication among the members contributed a great deal, as also the discussions on the details of syllabi among the sub-groups within the CDC. It is not unlikely that some mistakes and omissions may have crept in the curriculum which could be rectified by the respective departments, while designing the syllabi.

In short, the curriculum presented in this report has been based on the study of following documents, and exercises:

- 1. Report of Curriculum Development Centre in Anthropology, 1988, Ranchi
- 2. Meeting of the UGC panel on anthropology at Andhra University, Visakhapatnam
- Regional meetings convened by the UGC Subject Panel on Anthropology held during
 1998-99 at Pune, Patiala and Shantiniketan
- Meetings of Curriculum Development Committee during November 2000 January 2001 at UGC office, New Delhi

The departments of Anthropology are advised to reflect on the curriculum being presented in this report and make sincere efforts to implement the courses in order to sustain and strengthen the holistic nature of the discipline of Anthropology. The skills gained in Anthropology have to be put to use in the spirit of humanism, which would also provide professional work to the students, teachers and researchers in Anthropology.

Acknowledgements

We express our profound gratitude to Dr. Hari Gautam, Chairman, University Grants Commission, for taking personal interest in constituting a Curriculum Development Committee (CDC) in Anthropology which has helped to complete the task of providing a curriculum at the national level. Dr. O.P. Gupta, Library and Information Officer at the UGC and secretary of the CDC not only helped the committee on behalf of UGC administration but as a scholar in his own right made useful academic suggestions in our deliberations. Their support has brought this report to its final conclusion.

Academics have a stereotypical image of not agreeing with each other and getting involved in endless arguments. Our experience has belied this image. It is surprising how much unanimity of views and commitment for the promotion of discipline has been displayed in the meetings of the CDC. All the members of the CDC worked on the syllabi in their departments and at their residence with a commitment to the discipline. They attended all the meetings, braving the winter in Delhi and inconvenience in accommodation. It has been a pleasant experience to work together in a very congenial atmosphere. The brainstorming discussions have been a learning experience for everybody.

The CDC in Anthropology pursued the work done by the Subject Panel in Anthropology which was nominated by Dr. Ms. Armaity Desai, the earlier UGC Chairperson. We are grateful to her for encouraging us for interpersonal dialogue amongst all the 34 departments of Anthropology in India in three regional workshops.

The Universities and Departments at Pune, Patiala and Shantiniketan hosted the workshops at short notice and provided wonderful hospitality and intellectual atmosphere for meaningful discussions. We are grateful to these University authorities and our colleagues at these departments.

We are grateful to the members of the Subject Panel on Anthropology, namely Dr. P.N. Sahu, Prof. K. Thimma Reddy, Prof. I.J.S. Bansal, Prof. Raghuvir Singh, Prof. D.V. Raghav Rao, Dr. T. Ramchandraih, Dr. Mrs. Shalina Mehta, Late Prof. Makhan Jha who made significant contributions

in the deliberations. We were fortunate in having the benefit of senior scholars like Dr. K.S. Singh, Dr. Mrs. Leela Dube and Dr. B.C. Agrawal who gave us a sense of direction as members of the Panel. Renomination of some Panel members such as Prof. K. Thimma Reddy, Prof. I.J.S. Bansal, Prof. D.V. Raghav Rao and Dr. Mrs. Shalina Mehta as members of the CDC and induction of the new members such as Dr. B.V. Bhanu, Dr. B.R.K. Shukla and Dr. C.G. Hussain Khan helped to widen the base of CDC and ensured continuity. Their experience, commitment, sense of responsibility and concern for the discipline as is practised in the universities has gone into the making of the curriculum. All the members promptly sent the revised syllabi by mail, soon after the meetings, making the task of completion of the report smooth.

I am personally grateful to my colleagues, Dr. K.S. Nair, Dr. Ram Gambhir, Dr. V.S. Kulkarni, Dr. Shaunak Kulkarni, Mr. Sumedh Gurjar at the Department of Anthropology, University of Pune, and Ms. Aarti Kaulagekar and Dr. Mrs. Apoorvaa Pandit at the School of Health Sciences, Pune University, for help in completing this manuscript. Dr. B.V. Bhanu deserves special gratitude for sharing responsibility every day at Pune. Ms. Swati Salunke at the School of Health Sciences completed DTP with laudable efficiency and understanding, tolerating the frequent changes made by us in the content and style of the report. We held brainstorming meetings at the Department of Anthropology, University of Pune, which helped to clarify our thoughts and ideas.

We are aware about the shortfalls in this report. As anthropologists, we are more satisfied with the participatory process of curriculum development than the output, which will keep on changing with the changing times. We would ever remain grateful to the departments of anthropology in India for striving to project the holistic and humanistic strengths of the discipline of Anthropology in the true spirit of Science.

R.K. Mutatkar

Nodal person

Curriculum Development Committee
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University Grants Commission

New Delhi

Anthropology Vision for Curriculum Development

Anthropology as a holistic science of Man aims to study human origins, human variation, human nature and human creations as evolved historically, blending the biological and cultural facts and perspectives. Anthropology thus shares frontiers with the natural sciences, social sciences and humanities, or to be precise, it synthesises the knowledge in order to understand Man as a species and his dynamic world. It strives to create what is known as anthropological knowledge.

In a way, anthropology tries to seek answers to the philosophical questions about mankind. Who am I? From where do I come? What is my relationship with other living beings and with Nature? Where and in what direction do I go? Why and how? These pursuits when translated as an academic discipline within the precincts of academic teaching and research institutions, pose issues in curriculum development towards a unified Science of Man.

Similar questions are asked in sciences dealing with humans and other living beings, both biological and cultural. The quest for searching the origins and evolutionary process of biological and cultural phenomena, and for understanding the similarities and variations in human groups in all aspects has developed Anthropology as an autonomous interdisciplinary subject.

Newer methods and techniques developed in Anthropology and in other disciplines, are used to unravel the mysteries of origins, evolution and variation. Contemporary Man is tried to be understood by studying the communities and their cultures, by studying the fossils and tools, and by studying the tribal groups who appear to be in time freeze for a relatively longer duration. The blood groups, the bones and now the DNA technology are used for understanding the biological Man and his origin, migration, variation and similarities. Study of languages and remains found in excavations tell us about the roots and evolution of the civilizations and cultures.

Although studies pertaining to Anthropology have been undertaken by scholars and thinkers since ancient times, Anthropology as a professional discipline is barely 125 year old. It developed as a

result of travelogues in the 18th and 19th century and more scientifically in the wake of Darwinism. The pioneers in Anthropology were gifted amateurs - physicists, natural historians, lawyers, physicians for whom anthropology and study of preliterate people, and their 'exotic' customs, morphology and languages was a hobby.

Uniqueness of Anthropology

Anthropology developed as a unique discipline, as a holistic science of man. On the one hand it has links with natural and life sciences, with earth sciences, while on the other it shares common frontiers with social sciences and humanities. The traditional branches of anthropology have also developed as distinct academic disciplines, such as Archaeology and Linguistics. In the process of other science disciplines turning to consideration of man, newer branches develop such as ethnobotany, enthnopharmacology, ethnobiology, ethnophysiology grouped together as ethnoscience. The development of knowledge in various fields in relation to mankind raises the debate about distinct identity of Anthropology.

A debate about the identity of anthropology is a very favoured subject on forums where anthropologists come to interact with one another. This has a fall out on other scientists trying to merge anthropology either with behavioural or life sciences in some forums. As a result, a sense of despondency or depression swoops on younger anthropologists. There is also a pressure about career prospects for anthropology graduates which put up craving bells for more applied anthropology as the question of social relevance is repeated frequently.

There is in fact a confusion between understanding of **Anthropology as a discipline which is a unified study of Man and Anthropology as it is taught in the university system** which forces compromises due to historically derived regional university structures in terms of water tight faculties, and narrow specialties in the vertical departments. The historical influences of colonialism and neocolonialism also sway on the minds of scholars who were brought up in the shadows of the West, and some of those who continue to look to West for leads. Anthropology having been identified with the preoccupation of evolutionary studies and origin of culture and homo sapiens, and having specialized in the studies of preliterate people, has an overbearing model of studies of

isolate unconnected to any other. As a result, historical approach was ignored which hampered the development of appropriate theory and methodology for studies in ancient Indian civilization.

Indian civilization has evolved and developed as a complex whole while providing and protecting the regional identities of the respective cultures. Plural religions and divisive caste system function as Indian entity, without crossing the limits which would encourage disintegration of Indian civilization. Threats of external aggression unites the nation and all divisive forces close the ranks.

Anthropology as a discipline functioned in real interdisciplinary fashion to understand the historical development of Indian civilization by integrating the knowledge from biological, cultural, archaeological and linguistic sub-disciplines. Now, the same integration has to take into its fold the knowledge from other human sciences, biological and cultural, to understand the contemporary issues of humankind in India.

Traditional anthropology has created a vast storehouse of knowledge about the peoples and cultures of the world. Anthropology, has an ability to compare peoples and cultures, without implying inferiority or superiority, Anthropology has a capacity to understand the processes of change which are created by science and technology, and by emerging democratic aspirations of the common people, to design their own destinies according to their own genius. Pro-people Anthropology understands the struggles of the people in this regard. The holistic perspectives of mankind at all periods of time is the heritage of anthropology, which the University systems have to inculcate among the students and through them to the humanity.

Methodology

Anthropology is a field science. Anthropology without fieldwork is inconceivable. The material of biological and cultural significance is essentially drawn from the field and studied in respective laboratories, if necessary. The laboratory methods have evolved by the use of tools and techniques developed in natural sciences, life sciences and earth sciences. Methods of field research have developed out of the studies of preliterate people, of the finds in excavations and of the comparisons made of cultures, ethnic groups and their dialects and languages. "It is the practice of field

research, of collecting data and testing concepts in the context of real behaviour, that makes the holistic ideal a heuristic guide". (David Mandelbaum)

Anthropology has earned methodological recognition due to mirco studies of tribal communities and single village communities following the conceptual model of studying primitive societies. On the other hand there are national character studies, and studies of civilizations whereby archaeological and linguistic anthropology have substantially contributed. There are studies pertaining to biological composition of the people of India and of the world. In recent times, urban anthropology has developed as a result of ethnicity studies. Anthropology has contributed to growth studies, nutritional studies, reproductive biology and demography, and forensic science which have applications in addressing concerns of the people, and of the policy planners and administrators.

Anthropology developed its body of knowledge and theories by studying other, preliterate, isolated people by developing appropriate tools and techniques of research. Now anthropology has to study not only alien cultures but familiar people and their culture, not merely as objects of study but as fellow citizens, whose aspirations of development and concerns for their own problems of poverty, health and education have to be met. This requires more objective tools and techniques of research methodology. The qualitative methods developed in Anthropology provide analytical answers to the "why" in preference to "how much" which is generally sought by policy planners and implementers. The methods of rapid appraisals now developed, and participatory research tools and techniques are the direct result and have evolved from traditional anthropological methods of investigation. A proper mix of these micro level methods with the analysis of macro situations which are rooted in history, and the new macro policy formulation which arise from science and technology on one hand, and global pressures on other, is necessary to comprehend the holistic process at work.

Anthropology tried to bridge the gap between "We' and "They" by following the research techniques of "Going Native" by one year of participatory research among the people. For a native anthropologist "We" have to be studied by "Us" and not by "Them".

The voluntary sector dominated by NGO's, continue to work and undertake research amongst "them". The language of providers and beneficiaries continue, providers seeking the help of anthropologists. Unless NGOs give way to Community Based Organizations (CBO), democracy will continue to function "for the people" and not "by the people" and "of the people" sustaining the dichotomy of "We" and "They". Anthropology as a discipline understands all these nuances having studied the people cross-culturally. Cultural Relativism and plural socio-cultural systems continue to be the sheet anchor of anthropology which provides a spirit of tolerance and coexistence to the humanity although science, technology and globalization project a scenario of universalisation of human life, with models of clones and robots.

Anthropological methods of participatory study have been transformed into rapid appraisal methods. On the other hand, quantitative analysis of qualitative data is being attempted. There are demands on anthropology for intervention research. The dynamics of micro and macro interactive processes also need to be analysed. This calls for innovative tools and techniques of research. However, empiricism and focussed ethnography continue to be the key methodological instruments in anthropological research.

Subject Matter of Anthropology

Anthropology as a discipline emerged from the studies of preliterate people and island communities. The ethnography of the cultures of these communities developed the theory and method in anthropology. The biological studies were directed towards the quest for origin of man and his variability. Kinship and Religion dominated the interpretation of culture, besides economic aspect, including material culture. This scenario was evident as a result of imperial model, the western anthropologists studying the third world preliterate or 'native' communities. As the countries gained independence from colonial rule, and people aspired for development and progress, the target groups and themes underwent change in anthropology.

Anthropology is no more the study of isolated communities. Under the ambit of anthropology, complex societies, urban, ethnic communities, caste and village communities are studied. Similarly,

issues of concern at national and global levels such as those of gender, education, health and disease, disabilities, rehabilitation, impact of science and technology are also studied. In undertaking such studies, the holistic approach is followed which gives a distinctive anthropological perspective to any issue. Genetic aspects are assuming great significance in understanding origin of man and variability as also in analysing health, disease and behaviour. Genome has opened several gates of knowledge which might throw light on the concept of 'Prakriti' in Ayurved with applications for designing medicine for each individual.

Briefly, modern anthropology with the use of holistic perspective, empirical field work and use of laboratory has widened its scope to study all mankind. The study of preliterate or isolated communities has been of significance only from methodological angle and to understand the process of cultural and biological evolution. But no more anthropology is the study of fossils, blood groups and preliterate communities alone. The anthropological interpretation of Mahabharat by Irawati Karve in her literary book 'Yugant' and her analysis of kinship organisation of the mainstream Indian Society bears enough testimony to the wide scope of subject matter of Anthropology.

The global issues of health and disease, of agricultural technology and its impact on local communities, of communication media, of consumption of new items reaching tribal and rural homes, of sports, games and recreation, have become relevant for anthropological analysis.

This has given rise to new kind of governance and regulations at the global and national levels having subtle effect on local situations. Wars, epidemics, earthquakes, issues about environment are no more managed at national levels. These are global concerns, at times, manoeuvred by global power interests. Even health care is a global commercial exercise, multinational pharmaceutical industry playing a major role. Anthropologists have to understand these issues and forces which affect local communities.

The curriculum in anthropology has to reflect the global-national-local interaction to develop the new anthropological knowledge.

Changing Scenario

Does Anthropology contribute to the precept that knowledge is an end in itself, or does it have any applications to understand and solve the problems of human societies?

The colonial period and missionary activities used anthropological knowledge for indirect rule and proselytization. Anthropology was a mandatory subject at the Indian Civil Service during British regime. Descriptive monographs and gazetteers were written by the Civil servants which are found useful even today as benchmark information, though its scientific validity is questionable in some cases. Issues of apartheid raised several debates, and researches regarding origin of man and variability in ethnic groups are discussed even today in the context of DNA studies. Similarly origin and spread of HIV/AIDS have got linked with apartheid and severely resented. Human Genetics has found wide applications in the diagnosis and treatment of several disease conditions. Studies and programmes about human health and growth have been helped by anthropology. Data generated by prehistoric archaeology, linguistics, biological and cultural anthropology have thrown significant insights in the biological and cultural distance among ethnic groups.

Post Second World War independent Nation States voted for the development of Welfare States based on Socialist principles in order to develop an egalitarian order i.e., economic development with social justice. Apart from the development projects by way of exploitation of natural resources like construction of dams, defence projects, industries, airports and even hill resorts, investments in the social sector of health and education and infrastructure development of dams, roads, transport, communication and electricity led to several human problems of rehabilitation on one hand and economic prosperity on the other. Constitutional provisions about reservations to bring about equity have led to severe competition to get listed as backward communities in the statutes. Anthropology as a discipline has shown its capacity to deal with all such issues and make pro-people recommendations. Newer technologies in agriculture adopted by non-literate and pre-literate people to obtain self-sufficiency in food production and industrialization leading to fast urbanization as a result of rural-urban migration have led to social and health problems.

Recently, drawing from the anthropological concept of culture, life style concepts have developed

to understand the problems of communicable and non-communicable diseases. Biological anthropology has much to contribute in finding solutions to these problems in cooperation with medical science specialities and with social anthropologists to advise meaningful interventions.

Professional anthropologists are in demand in international and national programmes of development at the governmental and voluntary, non-governmental sector to put to use their theories, methods, tools and techniques for the analysis, and also advance solutions to the issues about development and its consequences.

To put it briefly, "Anthropology is ... an overlapping study with bridges into the physical, biological, and social sciences and into the humanities". "Anthropology holds up a great mirror to man and lets him look at himself in his infinite variety". (Clyde Kluckhohn)

With about 10% population of scheduled tribes in India in addition to that of schedule castes and other backward classes, and the gender issues and religious minorities awakened in the democratic process, Anthropology is called upon to analyze and resolve the issues of ethnicity, ethnic conflicts, and development based on social justice. Measurement and identification of the socio-economic and nutritional determinants of poverty is still unresolved.

The State treading on the thoughts of saint-poet reformers and other social reformers has been trying to bring about social justice as per the principle of equity while harnessing science and technology for eradicating poverty. The voluntary effort has not been lagging behind, having directly inherited the legacy of social and political reformers. The social sector of health and education symbolize the integrated efforts of governments and voluntary sector in bringing about modernism. There is awareness about blending ancient and indigenous knowledge and wisdom, with laboratory based modern knowledge. Anthropology as is practised has to prove and provide leadership to these processes of development. Applied anthropology is no doubt the need of the hour. But, anthropology cannot be turned into social service alone. It is the holistic knowledge created by anthropologists which provides expertise to understand and resolve the issues which plague human efforts in development, be it cultural, social or biological having health or gender dimensions.

What are the future prospects for Anthropology?

Democracy as a form of representative government has been adopted by various States in the World, although there are few States where military dictatorships persist. Democracy as a value in itself, as a basis of social interaction is being universally accepted. The regulatory 'socialist models' have given way to free economy and individual freedom while accepting the values of social justice and equity. There is a clamour for participatory democratic governance at the micro levels legislating more powers to Gram Sabha. However, macro level policy planning, decision making and financial authority make impact at micro levels in a relativity short time. Effects of globalization with the 'remote control' of North on the South, on poor people in the South, has yet to be assessed.

The advancement of technologies in areas of economic development, disease control, information, reproduction, communication and the global spread and adoption of such technologies in short duration has led to rapid change among communities in some geographic regions. However, the hangovers of historically evolved and entrenched cultural survivals such as caste and gender inequalities, slow response to population control, lower age at marriage, low female literacy, dismal utilization of public health care delivery systems, project a pessimistic picture to development lobby. The package of economic development with poverty, displacement and resultant morbidity seem to 'work well' in the wake of wishful pronouncements about social justice. Advances in molecular biology augur well for developing appropriate health care technologies. On the other hand, local affluence also leads to pilgrimage tourism, and use of communication technology in spreading religious messages and values through mythological serials on television.

All these therefore augur well for developing the new research agenda in the holistic science of Anthropology. It also offers challenges in developing new research methods or orienting the old trusted methods like ethnography in the solution of new problems. With Anthropology joining other emerging disciplines in research, the training in Anthropology in the formal educational setting calls for flexible curricula, without losing sight of the fundamental principle of field based holistic study of Man.

The end of colonial rule, emergence of democratic states with an urge for rapid development in all fields, fast development and spread of scientific technologies have provided new challenges and

opportunities to the discipline of Anthropology which has to be reflected in the curricula and research agenda.

There has to be a distinct emergence of Anthropology in India as Indian Anthropology, which will vary from the Western model in as much as the Western scholars continue to undertake their training and research in non-western cultures, while Indian scholars have to do it within the country. However, field training in India is usually undertaken in a relatively unfamiliar culture within the region or the country, more particularly among the tribal communities. Now the students from these unfamiliar cultures and from tribal communities join anthropology departments as students, whose interest go beyond kinship and religion in their own communities. They are impatient about catching up with others in development race. This entails a distinct Indian perspective in theory and methodology. Indian Anthropologists have to be sensitive to the call for participating in national endeavours by way of directly addressing themselves to the understanding, and recommending solutions to the problems. In this exercise, they have to interact closely with the governmental and non-governmental sectors. The training therefore has to equip the students to take up these tasks in terms of knowledge and skills. Similarly, they have to interact closely with cognate disciplines when it comes to applying knowledge to address a concrete issue needing solutions. Anthropology as an interdisciplinary subject is suited for such close interaction, not having developed the intellectual interest in verticality and having constantly faced the cross cultural perspectives brought out in all branches of Anthropology.

India is a country of plural cultures with an underlying thread of universality. There are preliterate people, caste groups, religious groups and caste system which has defied reformation; village communities, some of which are getting sucked into the mega cities, and ethnic groups and communities. There are varying mating patterns across the country which may have genetic implications and varying intra-familial behavioural relationships. Indians and Indian culture have migrated to other nations since historical times and continue to do so. This phenomena has created what is commonly known as Indian Diaspora. The infrastructure and economic development processes continue within the structure of political democracy. On the other hand, pilgrimage tourism has increased with cash economy and increased modes of transport and communication. All these processes have to be captured by Indian anthropology to build up concepts and theory for analysing the dynamics of Indian culture and society.

Vision

The vision for curriculum development focuses on the following points:

- 1. Anthropology provides the empirical, holistic understanding of Mankind
- 2. Anthropologist has a role of a mediator between people, state and administration with an understanding of micro-macro interaction
- 3. Anthropology has a role to play in promoting communal harmony, tolerance, co-existence and world peace by using the instrument of culture and concept of cultural relativism
- 4. Anthropology has to unravel the heritage of cultures and that of humanity, to seek our identity
- 5. Anthropology helps to understand the biological basis of primate and human behaviour and its variability
- 6. Anthropology is a discipline for the future since it draws linkages between past, present and future, and has predictive ability
- 7. Anthropology understands the changing scenario in the wake of information technology leading to explosion of knowledge, and the shrinking world, and forces of globalisation threatening diversities and identities.

"Anthropology is a most humanist of all sciences and most scientific of all humanities." (Eric R. Wolf)

Anthropology has a potential to develop its identity as Queen of all Sciences since it is sitting on the gold mine of rich data, created and being created by dynamic human endeavour.

Additional Courses B.A./B.Sc. Anthropology

Special Courses B.A./B.Sc. Anthropology

Core Courses B.A./B.Sc. Anthropology

UNDERGRADUATE CURRICULUM B.A./B.Sc.

B.A./B.Sc. Anthropology

Approach

For undergraduate courses in Anthropology, it has been realised that there is a very wide variation with regard to B.A./B.Sc. courses across the country. Varying terms like major and minor, general and special, and honors course, are used with different course structures. Actually, for one discipline there should be no variation whether the course is offered both at B.A. or B.Sc. In order to sort out this complex issue, the proposed curriculum has taken into account the basic knowledge which a learner should know at the undergraduate level in all branches of Anthropology irrespective of whether anthropology is offered in Science or Social Science faculty or both. As a result, B.A./B.Sc. syllabus has not been given into details for each course. Only the salient issues to be discussed have been listed as guidelines. It is left to the genius of the departments to fill in the details as per text books and in the light of different structures at B.A./B.Sc., including the semester and credit systems wherever applicable. What is important is the approach given for each course and the expectations from students at the end of each course.

Several universities follow books written in vernacular languages or vernacular translations of books in English language. The reading lists are not provided for undergraduate courses. The departments may select their readings depending upon the availability of books. Introductory books mentioned in the postgraduate curriculum may be adopted. Each course is conceptually designed for 100 hours and the weightage given to units accordingly which could be used in teaching and assessment. Depending upon the semester, yearly or credit system, modifications could be made in weightage.

This is an introductory curriculum about the foundation of Anthropology and will cover all the four branches of Anthropology. A separate course is about the Indian Anthropology which will include information about the people of India and their life from the standpoint of all the branches.

Core Courses

Paper 1: Foundations of Anthropology.

This will cover the basic concepts in Social, Cultural, Physical, Biological, Archaeological and Linguistic Anthropology.

Paper 2: Biological/Physical and Archaeological Anthropology.

Paper 3: Social-Cultural Anthropology.

Paper 4: Indian Anthropology

Special Courses

Paper 5: Fundamentals of Human Genetics and Human Growth

Paper 6: Archaeological Anthropology

Paper 7: Theories in Social/Cultural Anthropology

Paper 8: Field Report/Research Methodology

Depending upon the facilities available and the structure of General and Special (Honours) courses in respective universities, **four** papers need to be added.

Additional Courses

- 1. Practicals in Biological Anthropology and Archaeological Anthropology
- 2. Anthropology of Culture Region
- 3. Research Methodology
- 4. Applications of Anthropology
- 5. Tribal Cultures of India

B.A./B.Sc. Anthropology Core Courses

B.A./B.Sc. Anthropology

Core Courses

Paper 1: Foundations of Anthropology

Approach

The subject matter of anthropology goes much beyond its simple definition. No other disciplines

encourage to study mankind tracing its origin, development and the present day variations across

the globe, taking into consideration all the aspects of biology and culture. Although various areas

of specialisation have emerged within all the four branches of anthropology it has always maintained

its holistic, integrative approaches and identity. Simultaneously it has also maintained very close

relationship with other disciplines viz., Life Sciences, Earth Sciences, Medical Sciences, etc.

However, the anthropological perspectives, approaches, methodology and intensive field work

tradition have been kept intact maintaining its own identity.

The course aims to help the students to understand the holistic perspectives and integrative

approaches of anthropology, not only amongst its four branches but also across a wide variety of

other disciplines.

At the end of the course the students should be in a position to:

a. trace the meaning, scope and history of anthropology

b. identify the relationship between and amongst its four branches

c. appreciate the interdisciplinary and transdisciplinary nature of anthropology

d. examine and comprehend the basic concepts contained in:

Biological Anthropology

Social-Cultural Anthropology

Archaeological Anthropology

Linguistic Anthropology

c. Chronology

Paper 1: Foundations of Anthropology

Syllab	ous	Hrs
1.1	Meaning and scope of Anthropology, History of Anthropology Branches of Anthropo	logy
	a) Social-Cultural Anthropology b) Physical-Biological Anthropology c) Archaeolog	gical
	Anthropology d) Linguistic Anthropology	18
1.2	Relationship with other disciplines: Life Sciences, Earth Sciences, Medical Sciences,	ocial
	Sciences, Humanities, Environment Sciences	12
1.3	Fundamentals in Biological Anthropology: a) Human Evolution b) Human Varia	ıtion
	c) Human Genetics d) Human Growth and Development	20
1.4	Fundamentals in Social-Cultural Anthropology	
	a. Culture, Society, Community, Group, Institution	
	b. Human Institutions: Family, Marriage, Kinship, Religion	
	c. Development and Change	
	d. Research Methods: Tools and Techniques	20
1.5	Fundamentals in Archaeological Anthropology	
	a. Tool typology & technology	
	b. Cultural Evolution: Broad outlines of prehistoric cultures	

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- 1.6 Fundamentals in Linguistic Anthropology:
 - a. Written and Unwritten language
 - b. Speech, language and dialect
 - c. Semantics and Lexicon
 - d. Phonetics and Phonemics
 - e. Morphemics and Syntax

f. Sociolinguistics 14

Paper 2: Biological/Physical and Archaeological Anthropology

Approach

The first part of this course aims to help the students to reconstruct the past of the mankind surveying the available theories on the processes of human evolution with the help of accumulated material evidences. Highlighting the anatomical pecularities of the present day man, this course would further compare the anatomical details with the non-human primates. The course would follow mankind through the stages of evolution by analysing fossil materials as well as other associated type technologies, linking to various aspects and organisation of culture.

The racial variation as a product of complex process of evolution and genetics would be analysed.

The second part of this course would introduce the students to the practicals in osteology, somatometry, somatoscopy, identification of ABO related antigens and the basics of dermatoglyphics.

It would further help them to study prehistoric tools as well as material artifacts including pottery and other household implements in relation to cultural development.

The paper projects man as a cultural being in historical perspective. It also deals with glimpses on origin and development of tool forms and technology. Handling of material remains such as stone, bone and wooden tools, metal objects, pottery of different shapes, function - all help the students to understand the cultural evolutions through typo-technology.

At the end of the course students would be capable to:

- a. comprehend the available theories of organic evolution
- b. locate the position of man in the animal kingdom
- c. survey the anatomical similarities and differences between man and other nonhuman primates
- d. piece together the fossil evidences to comprehend human evolution and its stages
- e. identify the racial variation in the present day man and classification
- f. advance the genetic basis for such racial variations
- g. appreciate the UNESCO statement on race
- h. undertake basic practicals in physical anthropology and archaeological anthropology
- i. introduce the student to material equipment of culture
- j. make him understand the cultural evolution through typo technologies
- k. explain the student the implication of artifacts, tools, objects, pottery, in the socioeconomic organisation of the society.

Paper 2: Biological/Physical and Archaeological Anthropology

Syllab	pus	Hrs	
2.1	Theories of Organic evolution	10	
2.2	Synthetic theory of evolution	10	
2.3	Position of Man in animal kingdom: Comparative anatomy of Man and apes	12	
2.4	Fossil evidence of human evolution	12	
2.5	Origin of tool making and their evolution	8	
2.6	Concept of Race, Genetic basis of Race, UNESCO Statement on Race — Ethnic Gro		
	Population, Racial classification of human populations	10	
2.7	Human Genetics: Mendelian Principles, Genetic markers, DNA	10	
Practi	cals		
(A) Ph	ysical Anthropology		
	a. Identification of long bones and girdles - sketching and labelling		
Somat	cometry and Somatoscopic observations, ABO system, Dermatoglyphics	15	
(B) Ar	chaeological Anthropology		
	a. Identification of prehistoric tools, pottery and other household objects b)	Tools and	
	implements used in economic activities - hunting, fishing, food gath	ering and	
	agriculture	15	

Paper 3: Social-Cultural Anthropology

Approach

This course provides an overview of fundamental human institutions as well as the basic concepts for understanding and explaining these institutions

In this course the students are exposed to a wide variety of human societies at different levels of development to bring out the uniqueness as well as commonness in these institutions. To bring home the point, the human society and culture are not static phenomena and that they constantly change at different pace and in different contexts. The students are also acquainted with the dynamics of social and cultural change.

The course aims at imparting the students with the understanding of

- the wide variety of human societies and cultures in time and space
- the fundamental institutions in human social-cultural life
- the basic definitions and concepts to interpret and explain human phenomena in a scientific manner
- the cross-cultural understanding of the uniqueness as well as commonalities between human cultures

After learning the course the student should be able to:

- a. appreciate the importance of variety and multiplicity in human socio-cultural phenomena
- b. evaluate their own prejudices and develop a cross cultural perspective
- c. shun ethnocentrism and look at others' customs and traditions on par with one's own
- d. identify the interconnections between various institutions and their impact on human action

Paper 3: Social-Cultural Anthropology

Syllabus	Hrs
3.1 Co	oncepts of Culture and Society. Aspects of culture. Enculturation, Culture and Personality,
St	tatus and Role 20
3.2 Ed	conomic Aspect: Modes of Production. Distribution and Consumption, Concept of
Va	alue 10
3.3 Sc	ocial institutions : Types of family and marriage. Nuclear, Extended, Joint, Monogamy
ar	nd Polygamy, Endogamy and Exogamy, Rules of Descent, Residence: Patterns of
au	uthority: Patriarchy, Matriarchy Definition and Nature of Kinship; Kinship terminology,
Ki	ingroups - Lineage, Clan, Phratry, Moiety 20
3.4 Re	eligion and Magic: Theories of origin of religion: Animism, Animatism, Manaism, Totemism;
Fu	unctionaries of Religion: Shamans and Priests; Types of Magic: Religion, Magic and
So	cience 20
3.5 La	aw and Political organisation 10
3.6 Cı	ultural and Social Change: Diffusion, Innovation, Acculturation, Cultural Lag, Planned
Cł	hange 20

Paper 4: Indian Anthropology

Approach

This course portrays a broad canvass of the unity and the diversity of Indian society and culture; the evolution of Indian civilization from pre-historic to post-vedic era, the village and social organisation of Indian society; the processes of socio-cultural change in modern India, the Constitutional framework promoting equity and secular trends while safeguarding the interests of

the weaker sections of society and finally the contributions of anthropologists and scholar — administrators to the understanding of the Indian society and culture.

The course is aimed at promoting a clear understanding of the varying patterns of social systems and cultures across regions and social groups and the forces binding them together leading to the appreciation of the composite nature of Indian culture and Indian nationality as well as the concepts and approaches developed to study Indian society and culture.

At the end of the course, the students should be in a position to:

- a. understand the evolution of Indian culture and civilization from pre-historic to postvedic era
- b. demonstrate knowledge of the nature and magnitude of divergence of Indian society and culture racial, ethnic, linguistic and religious as well as its unity
- c. demonstrate knowledge of the salient features of Indian social organization and culture by village, caste and tribe
- d. demonstrate knowledge of the basic concepts and approaches developed for understanding the processes of socio-cultural change occurring in modern India
- e. understand the philosophy of the Constitution and its provisions aiming to guarantee
 equity to every citizen while promoting and safeguarding the special interests of the
 weaker sections of the society
- $f. \quad demonstrate \ knowledge \ of \ the \ significant \ contributions \ of \ anthropologists \ and \ scholar$
 - administrators to the understanding of Indian society and culture.

Paper 4: Indian Anthropology

Syllab	ous	Hrs
4.1	India as a bio-socio-cultural entity	8
4.2	Geographical zones of India: glacial, subglacial, arid, coastal and hilly, forest tracks	8
4.3	Evolution of Indian culture and civilization: prehistoric, protohistoric (Indus civilization), and post-vedic era	Vedic 10
4.4	Racial, ethnic, religious and linguistic elements in Indian population	10
4.5	Indian social system: Varnashram, Purushartha, Joint family. Kinship organization	8
4.6	Caste: Definition, characteristics, origin, dominant Caste	8
4.7	Indian village as a unity and extension, Village and caste: Jajmani system, Universaliz - Parochialisation, Great tradition - Little tradition	zation 8
4.8	Tribal population in India: biogenetic variability, linguistic and socio-economic character Geographical distribution of tribal population	istics. 12
4.9	Constitution of India: Framework for modern Indian society, special provisions for SC ST. Principle of equity and secular trends	C and
4.10	Process of Social Change: Indigenous process: Sanskritisation, parochialisa universalisation, great tradition, little tradition; exogenous process: westerniza industrialization and urbanization, globalisation	
4.11	History of Anthropology in India: Pioneers in Indian Anthropology, contributions of schand administrators List is illustrative: Hutton, Basham, Haimendorf, Elwin, S.C. Roy Guha, L.A.K. Aiyar, G.S. Ghurye, D.N. Majumdar, I. Karve, M.N. Srinivas, S.C. Dube,	, B.S.
	Vidyarthi, H.D. Sankalia	12

B.A./B.Sc. Anthropology Special Courses

B.A./B.Sc. Anthropology

Special Courses

Paper 5: Fundamentals of Human Genetics and Human Growth

Approach

This paper aims to provide the basics of Human genetics and Human growth. It would detail the physical basis of heredity and enquire the processes and laws governing various modes of inheritance. Highlighting the difficulties involved in human genetic investigations, the course provides alternative methods to study human genetics.

Growth and development processes in man is controlled by numerous factors including genetics. This part of the syllabus would identify these details of variations in growth and development as well as suggest appropriate methods to investigate these growth stages and processes. The role of nutrition is also to be dealt in detail as it forms an inseparable part of growth dynamics.

At the end of the course the students are expected to:

- a. differentiate between plant cells and animal cells; mitosis and meiosis
- b. explain the chromosome structure and, the concept of DNA, RNA, etc
- c. comprehend the laws governing various modes of inheritance
- d. appreciate the difficulties and limitations in conducting human genetic investigations
- e. suggest various methods and techniques available in studying human heredity
- f. differentiate between growth and development
- g. summarise the methods adopted to probe human growth and development

 identify growth, spurt, normal and abnormal growth part 	h.	identify (arowth.	spurt.	normal	and	abnormal	arowth	patter
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- i. observe the signs of biological ageing
- j. comprehend the role of nutrition and also the nutritional requirements as per growth stages
- k. differentiate between malnutrition and undernutrition.

Fundamentals of Human Genetics and Human growth

Syllab	pus	Hrs
5.1	Human Genetics: Cell, cell division, chromosomes, genes (recessive, dominant, sex lin	ked
	normal and abnormal)	25
5.2	Concept of DNA, RNA	10
5.3	Laws of inheritance and theories of heredity, gene pool	10
5.4	Difficulties in studying human genetics, methods of investigation in human genet	tics:
	population genetics, biochemical and cytogenetics; twin methods, pedigree method, e	etc.,
	genetical and morphological characters. Formation and types of twins cloning.	25
5.5	Human growth: methods of studying human growth and development. Milestones in growth	wth;
	retarded growth, growth spurt, ageing	20
5.6	Nutritional requirement for normal growth, malnutrition, undernutrition	10

Paper 6: Archaeological Anthropology

Approach

The paper focuses on the cultural origins, evolution and their authors on the basis of interdisciplinary approach in the context of holistic nature of anthropology.

It aims at understanding human origin and development in a holistic perspective, man, culture and environment as parameters.

At the end of the course the students are expected to:

- a. be introduced to different elements, in the study of human origin and development.
 viz., environment, chronology, typo-technology, other cultural remains and associated human forms.
- b. be introduced to the palaeo environmental conditions during pleistocene period such as glacial, interglacial, pluvial and interpluvial and their impact on human cultures. This evidence is indicated by geomorphological features, sediments, and their content.
- c. list out the contributions of physical and earth sciences in chronological ordering of prehistoric cultures focussing on evolution of cultures
- d. be introduced to important culture bearing sites in the old world Africa, Asia and Europe
- e. give a picture of lower palaeolithic cultures, distribution and important features as reflected at different sites in the Old World
- f. give the evidences of middle palaeolithic/mousterian cultures, significant features, their authors in Europe and in India

g. introduce upper palaeolithic cultures and their authors homosapiens and provide glimpses of the rudimentary evidences on the beginning of social institutions and religion as reflected by archaeological data including art

- h. be introduced to the adaptive strategies on mesolithic folk in Europe and in India during early holocene period
- be informed that neolithic culture in general and Indian in particular witness the emergence of human settlements and farming brining qualitative changes in human life. This needs careful projections.

The student is introduced to a new cultural phase, i.e., megalithic cultures and their types in India.

It also provides the students the evidences of cultural evolution in India in spatial, temporal dimension from the earliest till the emergence of early farming and village communities.

Archaeological Anthropology

pus	Hrs
Pleistocene environment: glacial and interglacial, pulvial and interpluvial	10
Methods of dating: relative and absolute dating, their relevance	10
Archaeological data and cultural reconstructions	10
	iated 14
	Pleistocene environment: glacial and interglacial, pulvial and interpluvial Methods of dating: relative and absolute dating, their relevance Archaeological data and cultural reconstructions Lower Palaeolithic cultures: pebble tool industries, olduvai gorge, soan, biface industries Europe and India. abbevillian, acheulian, clactonian, madrasian, associated human for

Upper palaeolithic cultures: salient lithic features, art, beginning of social institutions and religion, associated human fossils
 Mesolithic cultures: salient features, Europe, India
 Neolithic cultures: neolithic revolution- emergence of human settlements and farming in India

Paper 7: Theories in Social-Cultural Anthropology

10

Megalithic cultures in India: salient features and types

Approach

6.9

This course is devised to provide preliminary understanding of various theoretical models evolved by Social and Cultural Anthropologists. Social Anthropology, influenced by biological evolutionism, spent its formative years in understanding evolution of human society and civilization. This course shall introduce students to renowned theoreticians like Herbet Spencer, Morgan, Radcliffe-Brown, Malinowski, Levi'strauss, etc. who have been largely responsible for defining the content of Social-Cultural Anthropology as an integrated and holistic discipline.

At the end of the course, the students should be able to:

- a. comprehend the concepts in social-cultural Anthropology
- b. understand the evolution of social-cultural theories
- understand how theories could be applied in empirical research on the basis of contributions of listed scholars
- d. critically assess the various schools of thought in anthropological theory

Theories in Social-Cultural Anthropology

Sylla	bus			Hrs
7.1	Aspects of Culture: cu	ultural universals, cultura	al relativism, cultural into	egration, dynamics of
7.2	Cultural Evolution: uni Marx and Engles	linear evolution, neo evo	lution, Morgan, Leslie V	White, Julian Steward, 10
7.3	Diffusion of Culture: E	British, German, Austriar	n and American school	s 10
7.4	Structural-Functionali	sm		10
7.5	Culture and Personal	ity approaches		10
7.6	Field work tradition in	Anthropology		13
7.7	Major Contributions o	f the following:		35
	a) E.B. Tylor,	b) Herbet Spencer	c) L.H. Morgan,	d) F. Boas,
	e) A.L. Kroeber,	f) E. Durkheim,	g) B. Malinowski,	h) Radcliffe Brown,
	i) Levi-strauss,	j) R. Redfield,	k) S.C. Roy,	I) M. N. Srinivas,
	m) D.N. Mujumdar,	n) I. Karve,	o) S.C. Dube,	p) N. Bose,
	q) L.P. Vidyarthi,	r) Verrier Elwin		

Paper 8: Field Report

It is advisable for the students to undertake field work in a tribal or rural community for one or two weeks to study the social-cultural, biological, archaeological and linguistic aspects. A field report has to be submitted to the Department.

Wherever such facilities or appropriate budgets are not available, a course on Research Methodology as under has to be introduced and the field experience to be gained in the neighbourhood communities.

Paper 8: Research Methodology

Approach

A course in Research Methodology is envisaged with the idea of providing skills in undertaking independent research programmes. The students will be introduced to various techniques commonly used by Social Anthropologists. After completion of their graduation many students opt to work for various non-governmental organisations or seek employment in short-term policy based research programmes. Students of Anthropology equipped with fundamentals in research are favourites for recruitment in such positions.

After the deliverance of teaching module, it is desired that the student has:

- a. necessary skills to apply appropriate methods to the research in hand
- b. acquire aptitude for establishing rapport in the field
- c. basic knowledge about sampling methods
- d. the ability to scan secondary sources for research
- e. familiarity with internet programmes usually availed for social science research
- f. acquire skills to analyse the quantitative and qualitative data
- g. write a scientific report

Research Methodology

Syllab	ous	Hrs
8.1	Science and Anthropology: Science and controlled experiments	6
8.2	Concepts, theory and hypothesis: Types of hypotheses, testing hypothesis	8
8.3	Field work in Anthropology: (preparation, learning the language, and rapport establishment)	6
8.4	Qualitative and quantitative approaches	10
8.5	Major tools of research: Observation, interview, key informant, case study, schedules and questionnaires, group discussions, genealogy, mapping	life history,
8.6	Rapid appraisal techniques: Focus group interviews	8
8.7	Documentation	6
8.8	Use of Library: Review of literature and other records and reports	6
8.9	Probability and sampling	8
8.10	Scaling techniques	4
8.11	Analysis of data: Use of computers. Use of statistics	12
8.12	Report Writing	6

B.A./B.Sc. Anthropology Additional Courses

B.A./B.Sc. Anthropology

Paper 1: Practicals in Biological Anthropology and Archaeological Anthropology

Approach

This practical course aims to strengthen the confidence of students to employ appropriate instruments and techniques required for various measurements and observations. Correct description and identification of osseous materials, their landmarks, and measurements would help the students while pursuing somatometry and somatoscopy. Similarly, exercises on archaeological materials would provide better confidence among them to experiment with various techniques. This course would further help them to develop a comparative and holistic approach while dealing with material artifacts from the museum, rural and tribal, and excavation sites. Laboratory procedures in blood grouping and dermatoglyphics would give further confidence in dealing with all the applied dimensions they possess.

At the end of the course the students would be in a position to:

- a. comprehend the knowledge of basic human anatomy, especially the structure and function of skeletal system
- b. define and locate the relevant landmarks on bones as well as on living beings
- c. take osteometric and somatometric measurements
- d. recognise and record the variations rendered by morphological traits
- e. collect, analyse and identify the ABO system of blood groups
- f. collect, analyse and classify dermatoglyphic data

g. provide descriptions of archaeological artifacts and make their sketches/drawings/
 photographs

h. observe and record the pecularities of river terraces and stratigraphy.

Practicals in Biological Anthropology and Archaeological Anthropology

Syllabus		Hrs.
1.	Human Osteology: Osteometry/craniometry	20
2.	Anthropometry, Somatoscopy and dermatoglyphics	15
3.	ABO blood grouping	15
4.	Identification, sketching and description of palaeoliths, microliths, neoliths and pottery	
	pieces	20
5.	Tribal and Rural Technology: Tools of production and other material artifacts	15
6.	Visit to Museums, excavation sites, river terraces, stratigraphy	15

Paper 2: Anthropology of Culture Region

Approach

This course is meant to learn about the Anthropological perspectives of a culture region in India where a particular Anthropology Department is located. The course is designed on the lines of a course on Indian Anthropology. The course encourages critical analysis of the issues in the contemporary society which have evolved historically and would encompass the biological, sociocultural and archeological evidence.

The overall aim of this course is to provide information and knowledge about the composition of the culture region which includes the knowledge about the people, history, cultural and social change and literature and arts.

At the end of the course the students should be able to:

- a. understand holistic culture system of the region
- b. understand micro situation at the tribal, rural and urban levels
- c. analyse the factors responsible for continuity of tradition and change towards modernization
- d. understand interrelationship between the micro and macro at the village, district, state and national level.

Anthropology of Culturel Region (study your own)

Syll	abus	Hrs
1.	History of the cultural region	10
2.	People: Ethnic, language groups, tribes, castes	15
3.	Study of atleast one tribal/ village monograph	10
4.	Tribal and village cultures in the region	15
5.	Contributions of historical personalities, saint poets and social reformers	10
6.	Regional, social and political movements, tribal, peasant movements	10
7.	Contemporary issues: Role of voluntary sector	10
8.	Preindustrial and postindustrial cities, their classification and their role	10
9.	Folklore : literature, art, craft and music	10

Paper 3: Applications of Anthropology

Approach

Being a transdisciplinary subject, anthropology permeates among every discipline with definite modes of applications. It is only for the sake of convenience that the subject matter is divided into branches. Anthropology has its applications at all the levels of human interaction ranging from biological, ecological, social, psychological and supernatural. Students need to be encouraged to identify newer areas where anthropology could help serve mankind for its own betterment.

The course aims to help the students to perceive the areas where anthropological theories, concepts, methods and techniques are employed to appreciate and understand human society with a view to improve human conditions.

At the end of the course the students should be able to:

- a. understand the meanings of applied anthropology, action anthropology and development anthropology
- b. identify the general and specific areas of applications of anthropology
- examine the applications of anthropology in the areas of forensic science, sports,
 medical genetics, health and nutrition
- d. understand the concepts of tribal and rural development from people's perspective
- e. recognise the bio-cultural dimensions of gender issues
- f. comprehend the plurality of Indian polity and the need for national integration
- g. discuss the role of anthropology in preserving the heritage of India

h. explore the man made ecological and environmental degradation and the associated disasters and displacements

i. reflect upon the impact of technological changes on people, culture and development

Applications of Anthropology

Sylla	abus	Hrs
1.	Meaning of applied, action and development anthropology	10
2.	Applications of biological anthropology: anthropometry, forensic anthropology, sp anthropology, medical genetics	orts 12
3.	Applications of social-cultural anthropology: public administration: health and nutri education, industry	ition 10
4.	Peoples perspective of development. Anthropology in tribal and rural development empowerment and enablement.	ent, 12
5.	Gender issues: biological and cultural	10
6.	Communication anthropology in preserving heritage of India	10
7.	Disasters and displacements, ecology and environment	10
8.	Plurality in Indian polity and national integration	10
9.	Impact of technological advancement on people, culture and health	16

Paper 4: Tribal Culture of India

Approach

The tribal population in India constitutes about 10-11% of total Indian population. The Constitution of India has made special provisions for the upliftment of the tribals by designating them as scheduled tribes. Mahatma Gandhi had a special constructive programme for the Adivasi. There is separate administrative and budgetary infrastructure for tribal development at the Central and State Governments. In Indian anthropology, maximum studies and books have been written on the ethnography of tribal communities.

At the end of the course the students are expected to:

- a. know the geographical distribution of tribal population
- comprehend the various classifications of tribal communities according to economic or linguistic and ethnic criteria
- c. clearly differentiate between tribe and caste and between ST and SC
- d. analyse the impact of change on tribal communities

Tribal Culture in India:

Syl	labus	Hrs
1.	Tribes: definitions, characteristics, geographical distribution, various classifications.	10
2.	Tribe and caste: difference between SC and ST, characteristic features.	10
3.	Tribal language families in India.	10

Anthr	opology	52
4.	Tribes, land and forest.	10
5.	Issues about tribal education and health	10
6.	Status of tribal woman	10
7.	Impact of development schemes on tribal life	10
8.	Contributions of scholar administrators, western anthropologists and Indian anthropolog	ists
	towards the study of tribes.	15
9.	Study of atleast two tribal monographs from two culture regions in India.	15

Postgraduate Curriculum M.A./M.Sc.

M.A./M.Sc. Anthropology

The curriculum in Anthropology at the postgraduate level envisages the holistic knowledge of Anthropology encompassing all the branches. Seven courses have been identified as core courses which should be considered mandatory. Specialisation in a branch would have one or two theory courses and field/community based dissertation project which are mandatory. The concerned departments could choose other two or three courses from the electives as per their requirements and available infrastructural facilities, irrespective of the branch of specialisation in which electives are offered.

In different universities in India, Anthropology is taught at the undergraduate and/or postgraduate levels only. In some States, Anthropology is also taught at higher secondary standard level. Accordingly the contents of the detailed syllabi would vary in the respective universities. However, the holistic nature of Anthropology has to be preserved. Since Anthropology is a field science, fieldwork training and field based dissertation projects are to be sanctified in Anthropology training. A good grounding in Theory and Research methods form the backbone of every academic discipline.

The variations and detailed syllabi will also depend upon the semester or non-semester pattern in different universities, and whether teaching of Anthropology starts at undergraduate or postgraduate levels. Some universities have introduced credit system which facilitates flexibility in terms of opting courses from different branches of anthropology and from cognate disciplines.

Attempts have to be made to combine the body of knowledge and skills to develop Anthropology as a professional discipline. The applied aspects pertaining to each course be preferably incorporated in the course itself as far as possible. It would be necessary to select job oriented courses as electives. It may be possible to float one year certificate or diploma courses at graduate and postgraduate level which would be field based, skill oriented and could be offered as in-service training by Government and NGO personnel. The curriculum being presented has proposed several

postgraduate diploma courses. The Diploma in Anthropology is particularly aimed at candidates appearing for competitive examinations.

The curriculum in the following pages has been presented with an approach for each subject and the expectations from a learner after studying that course. It has been found that the course content has remained unchanged for several decades. It is no doubt necessary to grasp the basic theory and methodology of a discipline. Since anthropology does not restrict itself to the study of tribals and aliens, analysis of the contemporary society and the issues therein require reinterpretation of the classical theories and methodology. It is therefore necessary that the approach for each course should be followed while designing teaching sessions and there should be clarity as to what should the student learn after going through the course. The new research areas about new issues, problems and interpretations have to be brought into orbit of anthropology, such as, problems due to socio-economic and technological development, AIDS, gender issues, RCH, genome and the like. The macro-micro interaction and its impact on people, and the institutions, traditional and modern, has to be the subject matter of anthropology.

Weightage of Units

Each course has been divided into academically appropriate units, considering the treatment of subject matter in anthropology. Conceptually, each course has been allotted a total of 100 clock hours, irrespective of whether a course has to be taught as a semester or non-semester course. Each unit has been allotted number of hours which would indicate the proportionate weightage to be given in teaching and in evaluation, internal as well as external assessment. The universities and departments could use the proportional weightage while devising the semester, non-semester or credit courses.

Assessment

Assessment systems and procedures are undergoing change under the semester and credit system. In a discipline like anthropology with courses on theory, research methods, field work, dissertation and practicals, the assessment procedures have to be followed accordingly and keep in line with assessment in NET and civil services. There has to be a combination of assessment of theoretical knowledge, skills acquired in the laboratory and in the field. The following list is provided as illustrative to develop an assessment model for each course.

1. Theoretical knowledge

- a. Term paper
- b. Review of literature/Book Reviews
- c. Short essays

2. Focussed understanding

- a. Objective test multiple choice questions
- b. Short notes
- c. Classroom presentations
- d. Viva-voce

3. Field Assessment

- a. Small projects/ mini-group projects
- b. Field logbook / Diary
- c. Journal about laboratory and class notes

4. Other assignments

- a. Internet information
- b. Knowledge channels on TV such as Discovery, National Geographic, Animal Planet
- c. Visit to local museums
- d. Statistical analysis

5. Current issues: Essay and Seminar

- a. Rehabilitation of tribals
- b. Problems of malnutrition
- c. Committee reports and their analysis
- d. Policy planning issues
- e. Genetic diseases

The faculty members could decide about the choice of test for internal assessment and as a part of year/term end examination depending upon the nature of the course.

M.A./M.Sc. Anthropology

Note: In all 12 courses (7 core courses; 3 specialisation courses and 2 elective courses) are to be offered for the M.A./M.Sc. Degree in Anthropology:

- 1. The **seven Core Courses** are mandatory
- 2. There are **3 areas of specialisation** available:
 - A. Social/Cultural Anthropology
 - B. Physical/Biological Anthropology
 - C. Archaeological Anthropology

A candidate is free to select **any one** of these three areas of specialisation. Here also, the **three** courses listed under each area of specialisation are compulsory.

 From the Elective courses listed under 4 Groups one can, however, select any two elective courses from any one or more groups irrespective of the specialisation opted.

Here, the courses/papers are organised under 3 major heads:

CO: Core Courses (All the seven core courses listed under this head are compulsory.)

SA,SB,& SC: Specialisation Courses (Select any one group: SA or SB or SC. The three courses listed under each Group are compulsory)

Group SA: Social-Cultural Anthropology

Group SB: Physical/Biological Anthropology

Group SC: Archaeological Anthropology

EA, EB, EC & ED: Elective Courses (Select any two courses from any one or more of the 4 groups)

Group EA: Social-Cultural Anthropology

Group EB: Physical/Biological Anthropology

Group EC: Archaeological Anthropology

Group ED: Integrated Courses

M.A./M.Sc. Anthropology

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Core Courses

CO.1	Social-Cultural Anthropology
CO.2	Physical/Biological Anthropology
CO.3	Archaeological Anthropology
CO.4	Indian Anthropology
CO.5	Research Methods (Three branches)
CO.6	Field Work and Field Work Report (Three branches)
CO.7	Practicals (Three branches)
	SPECIALISATION COURSES
	Group SA. Social-Cultural Anthropology
	Compulsory Courses
SA1.	Theory and Methods in Social-Cultural Anthropology
SA2.	Anthropology of Complex Society

Group SB. Physical/Biological Anthropology Compulsory Courses

SB1.	Human Genetics
SB2.	Laboratory based Practicals
SB3.	Field based Dissertation

SA3.

Community based Dissertation

Group SC. Archaelogical Anthropology Compulsory Courses

SC1. Theory and Methods in Archaeological anthropology

SC2. Practicals

SC3. Field based Dissertations

E: ELECTIVE COURSES

(Note: Select any two courses from any one or more groups (A to D) listed below:)

Group EA: Social-Cultural Anthropology

EA.1	Development Anthropology
EA.2	Anthropology of Communication
EA.3	Displacement & Disaster Management
EA.4	Anthropology of Gender
EA.5	Anthropology of Indian Diaspora
EA.6	Anthropology of Music
EA.7	Tribal Cultures of India
EA.8	Tribal Development
EA.9	Anthropology of Religion
EA.10	Applied Social-Cultural Anthropology
EA.11	Women Studies

Group EB: Physical/Biological Anthropology

EB.1	Applied Biological Anthropology
EB.2	Human Biology
EB.3	Forensic Anthropology
EB.4	Medical Genetics
EB.5	Practicals in Applied Biological Anthropology
EB.6	Human Cytogenetics
EB.7	Molecular Genetics
EB.8	Human Population Genetics
EB.9	Sports Anthropology
EB.10	Child Development
	Group C: Archaeological Anthropology
EC.1	Archaeological Anthropology of India & West Asia
EC.2	Archaeological Anthropology of South & South East Asia, including Ocenia and Far East
EC.3	Archaeological Anthropology of Africa
EC.4	Archaeological Anthropology of Europe
EC.5	Environmental Archaeology
EC.6	New World Archaeology

Group ED: Integrated Courses

ED.1	Medical Anthropology
ED.2	Visual Anthropology
ED.3	Ecological Anthropology
ED.4	Anthropological Demography and Genetics
ED.5	Growth and Nutrition
ED.6	Bio-Social Gerontology
ED.7	Bio-cultural Evolution
ED.8	Ethnomedicine
ED.9	Bio-Social Anthropology
ED.10	Heritage of India
ED.11	Anthropological Linguistics
ED.12	Research Methods in Anthropology

Core Courses

M.A./M.Sc. Anthropology Core Courses

M.A./M.Sc. Anthropology

Paper 1: Social/Cultural Anthropology

Approach

This course emphasises the strengthening of central focus and significant concepts in Anthropology,

more particularly in Social-Cultural Anthropology. The most prominent feature of Anthropology as

a holistic discipline, is to study man, culture and society. This has implications in the interrelationships

of the branches of Anthropology and other sciences and with theory, methodology and applications

of Anthropology. Even in the new areas of Anthropology the holistic perspective offers a new

approach to look at issues which are relevant to human welfare.

The central concept of culture which distinguishes human from other animal forms and differentiates

between instinctive and acquired is to be understood in all its ramifications. The most significant

contribution is concept of cultural relativism which is at the root of principle of coexistence and

tolerance in human communities.

Theories about cultural evolution in relationship with biological evolution, would offer discussion

about such issues as unilinear or multilinear evolution. Various models and theories about evolution

and diffusion and their implications for explanation of change need to be critically assessed, such

as provided in Marxist theories of evolution based on Morgan.

The illustrative material would be drawn from international and Indian sources to emphasise the

traditional Anthropological study model of primitive society and its application to study the

contemporary societies. The importance of language in Anthropological theory, methodology, and

field research can't be underestimated since language is the vehicle of culture. Qualitative research

which is a strong point of Anthropology field research is not possible without good grounding in

language.

This course therefore emphasises on the concept of culture and concept of language. Various aspects of culture and the concepts which are institutionalised have to be understood thoroughly taking primitive society as a conceptual and methodological model.

At the end of the course learner should be able to:

- a. understand the holistic and interdisciplinary nature of Anthropology as a discipline.
- b. comprehend the relationship within branches of Anthropology and with all sciences, resolve the discussion about using dual terms such as Social-Cultural Anthropology, Physical-Biological Anthropology, Archaeological and Palaeoanthropology, more particularly the difference between Sociology and Anthropology.
- c. explain the theory of culture, evolution and diffusion with their implications for understanding the process of stability and change.
- d. clearly demonstrate the knowledge of various terms and terminologies in regard to theories, pertaining to culture and its various aspects, such as, economic, social, political and religious organisation, and art and aesthetics.
- e. identify the emerging new areas by way of applications of Anthropological theories and methods to contemporary issues.
- f. explain the concepts and terms in each of the aspects of culture to cover the syllabus of NET curriculum.
- g. understand the relationship of dialect, language and culture, use of language in field research-key words and their cultural meanings, Language and Literature.

Social/Cultural Anthropology

Syllabus Hrs

Meaning and scope of Anthropology, divisions of Anthropology, scope of Social-Cultural
 Anthropology and relations with other branches of anthropology, social sciences, life
 sciences, medical sciences and humanities

1.2 Theory of culture: attributes of culture, culture trait, culture complex, culture area, integrationof culture, paradoxes of culture10

1.3 Diffusion: evolution, unilinear, multilinear and universal, acculturation and transculturation,innovation

1.4 Social organisation:

Family: typology, residence, functions

Marriage: typology, mate selection: cross-cousin, sororate etc. dowry and bride price.

Kinship: kin: consanguine, affinal

Kinroup: tribe, class, moiety, phratry

Principle and types of descent and residence.

Kinship terminology: classificatory and descriptive, terms of reference and address

Kinship behaviour: Joking and avoidance relationship

Social stratification

Status and role

Status of woman (Gender)

1.5 Economic organisation:

Property: individual and collective

Property: concept of primitive communism

Concept of value in primitive economy

Stages of economy: collection, hunting, fishing, pastoralism, cultivation: shifting and settled

Subsistence, surplus, and market economy

Systems of trade-exchange: reciprocity, redistribution, barters and markets

8

8

1.6 Political organization:

Law and social control: concept of authority and leadership

Types of political organisation: band, tribe, state

Kingship and chiefdom

Primitive law and Justice

Types of punishment

Ethnicity and nationality

1.7 Religion and magic:anthropological approaches to the study of religion- evolutionary, psychological and functional

Primitive religion: animism, animatism, bongaism, totemism

Magic: functions and types

Magico-religious functionaries: shaman, priest, medicine man, sorcerer, witch.

Anthropo	logy	69
	Symbolism in religion and rituals	
	Religion, magic and science	10
1.8	Art and aesthetics:	
	Forms of music, dance forms, musical instruments	
	Paintings: ritualistic and symbolic,	
	Artifacts: carvings, mould, masks etc	4
1.9	Culture and language	
	Origin and evolution of human language	
	Language and communication: phonology, morphology, syntax, semantics	
	Language, culture and society	
	Importance of language in Anthropological research	
	Applied linguistics	14
1.10	Applications and new areas in social-cultural Anthropology (areas of special interest):	
	Medical Anthropology	
	Ecological Anthropology	
	Communication Anthropology	
	Urban Anthropology	
	Development Anthropology	10

Recommended Readings:

- 1. Evans-Prichard, E.E. Social Anthropology
- 2. Honigman J. Handbook of Social and Cultural Anthropology
- 3. Fox, Robin. Kinship and Marriage
- 4. Sahlins & Service. Evolution and Culture, The University of Michigan Press, Ann Arbor
- 5. Mair, Lucy. An Introduction to Social Anthropology, Oxford University Press
- 6. Barth: Ethnic Group Boundaries
- 7. Barnet, H.G. Innovation. The Basis of Culture Change
- 8. Rogers, E.M. & Shoe Maker, F.F. Communication of Innovation
- 9. Rogers, E.M. Diffusion of Innovation
- 10. Radcliffe Brown, A.R. Structure and Function in Primitive Society
- 11. Harris, Marvin Cultural Anthropology
- 12. Malinowski, B.A. Scientific Theory of Culture and Other Essays
- 13. Foster, G.M. Traditional Cultures and Impact of Technological Change
- 14. Dalton, George. Tribal and Peasant Economies: Readings in Economic Anthropology
- 15. Kluckhohn, C. Mirror for Man
- 16. Herskovits, Man and His Works

Paper 2: Physical/Biological Anthropology

Approach

This course would help the students to identify the linkages of biological anthropology with the other three branches - Cultural Anthropology, Archaeology and Linguistics. It would further trace its relationship with the related disciplines from Natural sciences, Biological Sciences, Medical Sciences, Social Sciences, Arts and Humanities. Further it would prepare the students to understand the basis for studying Man as a biological being, keeping the process of organic evolution in focus. It would critically examine the theories on evolution and the available evidences with a comparative perspective, highlighting India's traditional view point on organic evolution in various theologies or mythologies.

Taking help from the principles of genetics, this course would then probe the causes of biological variation among the present day man as conceived by race, ethnicity, religion, caste, tribe, etc. The course would equip the students to understand the biological basis of human behaviour and cultural evolution.

At the end of the course, the students should be in a position to:

- a. appreciate the intra, inter and transdisciplinary linkages of biological anthropology
- understand the traditional and modern theories on human evolution, their strength and weakness
- c. compare and analyse fossil evidence and understand primate behaviour
- d. highlight the implications of this theory in socio-cultural evolution
- e. discuss the principles of human genetics and relate them to the present day human variation.
- f. examine the concept of race and race variations in the light of human genetic principles

a. (comprehend	the race	elements	and	their	distribution
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- h. differentiate between race and racism (apartheid)
- i. explore the closely linked areas of this course and their applications

Physical/Biological Anthropology

(i) Anthropology of Sports

2.1 Meaning, Scope and Relations with other branches of Anthropology and with biolog social and medical sciences	6 ninid 12
	12
2.2 Man's place in the animal kingdom. Comparative anatomy of Man and Apes. Hon Evolution: erect posture and bipedalism	
2.3 Human origin and Evolution: Theories of organic evolution. Lamarckism, Darwin Synthetic theory	ism, 12
2.4 Emergence of Man: Fossil evidence-Pongid and Hominid, Australopithecenes, He Erectus, Neanderthal, Homo sapiens	omo 14
2.5 Human Genetics: Mendelian genetics in Man, methods for studying genetic principleMan - Family studies, Twin studies, Pedigree analysis, DNA technology	es in 14
2.6 Human Growth: Stages of Growth, Nutrition and Development, Factors affecting gro Methodologies for growth studies, Theories of ageing	wth, 14
2.7 Race, Ethnicity and Populations: Concepts Classification of races, Causes of hurvariation - Morphological, serological and genetic	man 12
2.8 Applied Physical Anthropology	

- (ii) Nutritional Anthropology
- (iii) Forensic Anthropology
- (iv) Applied Human Genetics
- (v) DNA Technology and Medicine
- (vi) Defence Services

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Recommended Readings:

- 1. Ashley Montague: Concept of Race
- 2. Backer, P.T. and Weiner (Eds.) Biology of Human Adaptability
- 3. Bodmer and Cavalli Sforza. Genetics, Evolution and Man
- 4. Buettner-Janusch: Origins of Man
- 5. Cox, P. Demography
- 6. Ember and Ember: Anthropology
- 7. Emery, A.E.H. Elements of Medical Genetics
- 8. Harrison, et.al. Human Biology
- 9. Harrison, G.A. and Boyce, J. The Structure of Human Population
- 10. Mange and Mange. Basic Human Genetics
- 11. Marrell: Evolution and Genetics
- 12. S.S. Sarkar: Aboriginal races of India
- 13. Sahlins and Service: Evolution and Culture

14. Shukla, B.R.K. and Rastogi, S.: Physical anthropology and Human Genetics - An Introduction

- 15. Simpson, G.G.: The meaning of Evolution
- 16. Vogel, F. and Motulsky, A.C. Human Genetics Problems and Approaches
- 17. Weiner and Lourie. Human Biology A Guide to Field Methods
- 18. Weiss, K.M. and Ballonoff, P.A. Demographic Genetics
- 19. Williams, B.J.: Evolution and Human Origin
- 20. Wright, S. Evolution, Genetics and Population

Paper 3: Archaeological Anthropology

Approach

This course aims to highlight the anthropological perspectives of archaeological material. The origin, evolution, migration, distribution and development of mankind still remains the central theme in anthropology. The subject matter, has to interact with many other disciplines viz. Earth Sciences, Physical Sciences, and Life Sciences with a view to reconstruct man's past — the palaeo environment chronology and typo-technologies. The ethnoarchaeological aspect would help to reconstruct the spatio-temporal development of past cultures comparing them with those of the present cultures.

The course provides glimpses of the scope in understanding the origin, development and distribution of mankind. It indicates the relevance of palaeoenvironment, chronology, typo-technologies and culture - construct which also established the relationship of archaeological anthropology with Earth Sciences, Physical and Life Sciences.

The course aims at projecting the anthropological significance of archaeological data in the reconstruction of human evolution.

At the end of the course the students are expected to:

a. be conversant with the basic terminologies, branches, sub-fields of archaeological anthropology and their interrelationship, scope and historical development

- b. recall the geological time scale, environment, stratigraphy and their characteristics
- c. detail the types of available dating methods, their advantages, disadvantages and their implications to archaeological data
- d. recongnise fossil primates, their features and distribution
- e. identify hominid fossil evidences and explain their salient features
- f. describe the tool making technology, raw materials used, tool types and functions in an evolutionary perspective
- g. survey the cultural chronology of Palaeolithic, Mesolithic and Neolithic periods and their special features
- h. recognize the early food producers and their varied activities
- i. identify the salient features of Indus valley period, its people and activities.

Archaeological Anthropology

Syllabus Hrs

- Definition, aim, genesis of the subfield: Relationship to other branches of anthropology, earth sciences, physical sciences, life sciences and social sciences, scope and objectives
 environmental archaeology, ethnoarchaeology.
- 3.2 A brief outline on the origin of earth and life and geological time scale. Pleistocene epoch chronology, environmental episodes as seen in geomorphological features, classic sediments, distribution, markers fauna, flora, and hominids involvement etc. Pleistocene Holocene interphase changes, vestiges, emergence of identities. Environment industrial components, typology and technology, adaptive mechanisms and variations.

3.3	Dating methods: absolute and relative dating: stratigraphy, river terraces, raised sea	beaches
	dunes. Astronomical dating, collagen analysis, obsidian hydration, dendrochr	onology,
	thermoluminescence dating, pollen dating, varve analysis, uranium dating, potassic	ım-argon
	method, fluorine dating, C-14 dating, amino acid racemization.	16

- 3.4 Fossil primates: Types, with genus and species, special characters, distribution and chronology with reference to fossils.
- 3.5 Hominid fossil evidence: Overview of skeletal evidence, Homo fossil in Indian subcontinent,special features phylo-taxonomy, salient features and environment.8
- 3.6 Tools and Technology: raw material and sources, temporal dimension of tool making techniques and tool types, function of tool types.
- 3.7 Cultural chronology Palaeolithic, Mesolithic and Neolithic, special salient features of environment, sites and areas, typo-technology, distribution, artificers and their physical forms.
- 3.8 Neolithic revolution emergence of agriculture and domestication of animal, village communities, tool types, pottery, wheel, and plough. Diffusion of agriculture in S.E. Asia and West Asia
- 3.9 Protohistoric period with special reference to Sindhu/Indus valley civilization. Copper and Iron age, features and distribution.

Recommended Readings:

- 1. Agrawal, D.P. The Archaeology of India, Curzon Press
- 2. Allchin, B and Allchin, F.R. The Rise of Civilization of India and Pakistan, Cambridge University Press
- 3. Ashley Montague. Physical Anthropology and Archaeology
- Barmown Victor. Physical Anthropology and Archaeology, The Dorse Press Home Wood,
 Illinois
- 5. Banerjee. Iron Age in India, Munshiram Manoharlal
- 6. Bordes, F. Old Stone Age, Weidenfeld and Nicolson
- 7. Brothwell.D & Higgs, E. (Ed), Science in Archaeology, Thames & Hudson
- 8. Budtzer, K.W. Environment and Archaeology
- 9. Clark, D.L. Analytical Archaeology, Methuen & Co. Ltd
- 10. Coles, J.M. & Higgs, E.S. The Archaeology of Early Man, Faber & Faber
- 11. Das, B.M. Outlines of Physical Anthropology, Kitab Mahal
- 12. James, J. Hester, Introduction to Archaeology, Holt, Rinehart and Winston
- 13. Michel, J.W. Dating Methods in Archaeology, Seminar Press
- Sakalia, H.D. New Archaeology Its Scope and Application to India, Ethnographic and Folk
 Culture Society
- 15. Sankalia, H.D. Stone Age Tools, Families and Techniques, Deccan College, Pune
- 16. Sankalia, H.D. Pre and Protohistory of India and Pakistan, Deccan College, Pune
- 17. Zeuner, F.E. Pleistocene Period, Hutchinson

Paper 4: Indian Anthropology

Approach

This course focusses on a critical examination of various approaches to the study of Indian society and culture as well as the latter's emergence and growth from the pre-historic times. It also analyses the philosophy of traditional social system and its major pillars. viz., joint family, caste system and the village; an analysis of tribal studies and tribal situations; the diversity and composite nature of Indian society and the issues of national integration; constitutional provisions and the agenda and programmes - of government/voluntary organisations/reforms leaders - for the welfare and development of Indian society, especially the weaker sections. Finally, it examines the contributions of anthropologists and scholar-administrators in the analysis and understanding of Indian society, culture and civilization and the processes of socio-cultural change occurring in India.

At the end of the course, the student should be in a position to:

- a. demonstrate a critical understanding of the various approaches to the study of Indian society, culture and civilization.
- b. show a clear knowledge of the emergence, and the nature of growth of Indian culture from the prehistoric to the later Vedic period.
- c. make critical evaluation of different explanations to the immigrations into India.
- d. evaluate the diversities and the composite nature of Indian society and civilisation and the issue of national imtegration
- e. provide an understanding of traditional value system and the impact of non-Hindu faiths on Indian culture
- f. comprehend a clear knowledge of the continuity and change of traditional social structure and its institutions as well as a critical appraisal of concepts and approaches for understanding this phenomenon

g. demonstrate a clear understanding of the main features of tribal studies, tribal situation. Tribe-caste continuum and the issue of their integration in the mainstream

- h. provide a clear understanding of the constitutional framework, policy and programmes for the welfare and development of SCs/STs, their shortfalls, contributions of National Commissions and Committees on welfare and developments of STs
- i. asses knowledge of the role of social and religious reformers, voluntary agencies and national leaders in eradicating/reforming social evils and promoting development.
- j. make a critical evaluation of the role of the government and NGOs in community development and understand the relevance of development anthropology.
- k. appreciate knowledge of the contributions of anthropologists and scholaradministrators to the analysis of India society and culture and the processes of soci-cultural change occurring in India.

Indian Anthropology

Syllabus Hrs

- 4.1 Approaches to the study of Indian society, culture and civilisation: Indological, Anthropological, historical, etc.
- 4.2 Ancient culture: prehistoric (Paleolithic, Mesolithic and Neolithic), protohistoric (Indus civilization), Vedic and later vedic age, Harappa and Mohenjo Daro 8
- Indian people: racial, ethnic, linguistic and religious elements (composition) and distribution of people. Autochthons, peopling of India: migration, hypergamy, hypogamy, DNA explanations.
- 4.4 Unity and diversity in Indian society and culture: linguistic, political, ethnic, communal andreligious tensions and conflicts; national integration.

4.5 Basis of traditional Indian social structure and life cycle: varnashram dharma, purushartha,impact of Buddhism, Jainism, Islam and Christianity.6

- 4.6 Social Structure: caste system -definition and criteria of caste system, varna and caste, caste among non-Hindus, caste outside India; dominant caste, caste-mobility-fusion, lack of fusion and fission. Backward castes and scheduled castes: statutory provisions, caste and tribe, caste in democracy.
- 4.7 Family, marriage and kinship: joint and extended family, kinship groups and kinship patterns.
- Indian village: a myth or reality; village: a part society: Jajmani system: impact of new technology and urbanisation changing agrarian social structure; peasant movements,
 Panchayati Raj. Importance of village studies.
- 4.9 Tribal societies: definition and identification of tribe/scheduled tribe; classification and distribution of tribes based on economic, cultural, linguistic and biogenetic criteria. Tribal areas and crafts (tribal heritage); tribe-caste continuum— tribal identity issues; tribal absorption/assimilation/integration; tribal situation in India.
- 4.10 Constitution and SCs/STs: constitutional provisions for scheduled castes/scheduled tribes: tribal policy and governance in British India. Constitution and scheduled tribes; pseudo tribes. Evolution of tribal development policy and programmes. Tribal movements. National Commissions and Committees on development and welfare of scheduled areas/tribal areas and scheduled tribes.
- 4.11 Voluntary initiatives/development and welfare movements in 19th and 20th century: anticaste, antiuntouchability, women's emancipation, education and health. Role of social reform leaders. Mahatma Gandhi's constructive programmes. Contributions of religious and spiritual leaders/reformers.

4.12 Community development programme: Government programmes and their impact; emergence of NGOs and their agenda and impact on tribal, rural, urban — health and education, marginalised sectors of people and women groups, role of action anthropology in voluntary and government sectors Panchayati Raj and 73rd constitutional amendment.
Role of development anthropology in voluntary and government sectors.

- 4.13 Growth of anthropology in India: contributions of the following anthropologists, scholar administrators in 19th and 20th century in the understanding of tribal, caste and village communities and Indian social structure and civilisation. List is illustrative: Hutton, Mortimer Wheeler, Grierson, A.L. Basham, Haimendorf, V. Elwin, Milton Singer, S.C. Roy, B.S. Guha, G.S. Ghurye, L.A.K. Aiyar, N.K. Bose, D.N. Majumdar, I. Karve, M.N. Srinivas, S.C. Dube, L.P. Vidyarthi, H.D. Sankalia.
- 4.14 Socio-cultural change, indigenous processes sanskritisation, parochialisation universalisation, great-little traditions; sacred complex: nature-man-spirit complex Exogenous processes: westernisation, industrialisation, urbanisation and globalization. 6

Recommended Readings:

1. Agrawal, D.P. The Archaeology of India. Curzon Press, London

2. Allchin, B & Allchin, R. The Rise of Civilization in India and Pakistan.

Cambridge University Press

3. Sankalia, H.D. Pre and Proto History of India and Pakistan. Deccan College,

Pune

4. Karve, Irawati. Kinship Organisation in India

5. Karve, Irawati. Hindu Society - an interpretation

6. Mandelbaum, D. Society in India

7.	Marriot, M.	Village India: Studies in the Little Community.
8.	Singh, K.	People of India: An Introduction. Anthropological survey of India, Calcutta
9.	Vidyarthi, L.P.	Sacred complex of Kashi. A microcosm of Indian Civilization, Concept Publication, New Delhi
10.	Leach, E.R.	Aspects of Caste in South India, Ceylon and North-West Pakistan
11.	Singer, M.	When a Great Tradition Modernizes
12.	Srinivas, M.N.	Social Change in Modern India
13.	Haimendorf, C.	Tribes of India, the struggle for survival.
14.	Singh, K.S.	Tribal Society in India
15.	Dube S.C.	India's Changing Villages

Paper 5: Research Methods

Approach

This course will focus on ethnographic tradition in anthropology to strengthen the holistic perspective.

The empirical and inductive model of research has to be understood to generate scientific data about human communities. The research process, research methods and research designs, tools and techniques of data collection, statistical analysis including computer applications have to be grasped for all the branches individually and collectively.

Exploration techniques both conventional and scientific nature, to locate an archaeological site, data collection from surface, excavation techniques. Artifacts associated material, soil sample, documentation of the site situation, classification of artifacts and other material remain from surface and sub-surface collection, report writing.

At the end of the course, the learner should be able to:

- **a.** appreciate the holistic research perspective in anthropology
- b. differentiate between the terms, methodology, methods, tools and techniques
- c. comprehend and correlate the techniques and tools for collecting specific data based on the research design/research questions
- d. clearly understand the types of research design and show capability to prepare a research design
- e. demonstrate capability to use statistical methods and computer applications and defend the choice of methods
- f. demonstrate the ability to produce a scientific report by combining the review of literature, data analysis and use of theory in putting forward generalisations

Research Methods

Syllab	us Hrs
5.1	Field work tradition in anthropology: covering all branches of anthropology to gain holistic perspective
5.2	Approaches: emic-etic, macro-micro Methods: ethnography, comparative method
	participant observation, genelogical method, case study, survey
5.3	Research design: review of literature, aims, objectives, hypotheses, research questions
	conceptual model, types of research design, evaluation research
5.4	Techniques of data collection: (a) Primary sources: observation, interview, key informant
	schedules and questionnairs, life history, focussed group interview, scaling techniques
	RRA, PRA, RAP, audio-visual recording (b) Secondary sources: census, national sample
	survey, documents and records, maps, national and international reports (UNDP, World
	Bank, UNICEF, etc.)
5.5	Statistical methods: sampling, classification and tabulation of data, variables, univariate
	bivariate and multivariate analysis
5.6	Report writing: Dissertation and scientific papers
5.7	Theory building in anthropology: generalization and conceptualisation to be attempted as
	per conceptual model. Biological anthropology: Family and Pedigree methods, Twin study
	methods, Population genetics method, Population comparison. Archaeologica
	Anthropology: Exploration techniques, Excavation methods and techniques Surface
	collections, Classification and field documentation
Note 1	: Specific methods and techniques for biological and archaeological anthropology would
	be covered in teaching.

Note 2: Appropriate examples from all the branches of anthropology would be given while teaching

this course, particularly from Indian researchers.

Note 3: This course could be taught in a participatory workshop style.

Biological Anthropology:

Family and Pedigree methods

Twin study methods

Population genetics method

Population comparison

Archaeological Anthropology:

Exploration techniques

Excavation methods and techniques

Surface collections

Classification and field documentation

Recommended Readings

1	Danda, Ajit.	Research Methodology in Anthropology. Inter-India New Delhi
	Dariaa, 7 qrt.	1 tooodion woulddology in 7 thin opology. Intol maid 140W Bollin

2. Fernandes & Tandon Participatory Research

3. Fischer, Michael Applications in Computing for Social Anthropologists. Routledge,

London

4. Goode & Hatt Methods in Social Research

5. H. Russel, Bernard Handbook of Methods in Cultural Anthropology, Altamira Press

6. Haster J., Introduction to Archaeology, Holt, Rinehart & Winston

7. Kaplan, Abraham The Conduct of Enquiry: Methodology for Behavioral Sciences

- 8. Kassam & Mustafa Participatory Research
- 9. Madrigal, Lorena Statistics for Anthropology
- 10. Mukherjee, Neela Participatory Rural Appraisal and Questionnaire Survey
- 11. Pelto P.S. & Pelto G.H. Anthropological Research: the structure of inquiry, Cambridge University Press, London
- 12. Renfrew C. (Ed), The Explanation of Culture Change: Models in Prehistory, Duckworth
- 13. Sankalia H.D. Stone Age Tools, Families and Techniques, Deccan College, Pune
- 14. Trigger B.G., Beyond History the Methods of Prehistory, Holt, Rinehard & Winston
- 15. Wheeler R.B.M., Archaeology from the Earth, Penguin Books
- 16. Young, Pauline Scientific Social Surveys and Research

CO.6: Field Work and Field Work Report (Three branches)

Approach

Anthropology has a tradition of ethnographic field work in the holistic perspective covering all branches. Continuing the objective and scientific training by undertaking field work in an unfamiliar community, field work training for about 3 to 4 weeks has to be conducted in tribal and /or rural setting. Field work training has to be imparted under the guidance of atleast one teacher to all the students as one or two teams.

Prior to the actual field work, students may be trained in methods of data collection in the neighbourhood community. But this training should not be construed in lieu of field work in tribal/rural setting.

The data have to be collected in social, physical, linguistic and archaeological anthropology. If necessary, the students may be exposed to separate field conditions for familiarity in the field of archaeological anthropology.

Separate topics may be assigned to each student or to a group of students. But care has to be taken for training in all branches of anthropology during field work. The students are expected to write the log book and diary everyday and discuss the collected data, in a group, every evening.

Every student shall submit the field work report which would comprise of the sections in all branches.

The students as a group should present field data to the community at the end of field work. The individual reports should be presented in the form of a seminar in the department.

The students should be encouraged to collect material artifacts from the tribal/rural field area to build up a museum for the department.

The student may be exposed to separate field condition for familiarity in the field of archaeological anthropology. Field work to be conducted in the form of exploration to locate an archaeological site essentially in river valley/ stream valley, foot hills etc., excavation both horizontal and vertical for the data in the environmental, ethno-archaeological, ethno historical context.

At the end of the field work, the students should be able to:

- a. know the mechanism to establish rapport with the community
- b. demonstrate holistic knowledge about the community and people, their culture, dialect and language, biological variables, geographical and environmental peculiarities
- c. learn the methods of data collection in all branches, both qualitative and quantitative variables.
- d. learn the methods of analysis of primary and secondary data
- e. produce a field work report highlighting the human face of the community

Field Work and Field Work Report (Three branches)

Syllabus

- 1. Field work tradition in anthropology
- 2. Preparation for field work: physical, psychological and academic
- 3. Rapport building initial contact
- 4. Review of data collection methods (as per research methods)

No societies are static. Increasingly they are exposed to forces of change, through education, technology, market forces and political processes in which they participate. The economic and political decisions at macro level affect the micro situations affecting lives of the people. Hence the ethnographic data should not be misconstructed or limited to aspects as reflected in monographs of island communities or primitive communities. The data should also be collected about the current issues and problems regarding change processes initiated by planned programmes of government and voluntary organisations. The following list is illustrative and additive to traditional ethnographic data collected in anthropological field work following 'Notes and Queries on Anthropology' or 'Outline of Cultural Materials'.

6.1 Social-Cultural:

80

- a. Census and demographic profile
- b. Diet survey
- c. Morbidity survey
- d. Health practitioners: allopathy, homeopathy, ayurved, unani
- e. Local healers and ethnomedicine
- f. Anganwadis

- g. Prevalence of common/rare diseases
- h. Environmental sanitation, drinking water sources
- i. Health care delivery in the public and private sector
- j. Indebtedness extent and causes
- k. Land alienation extent and causes
- I. Reproductive survey
- m. Disability survey
- n. Obstretic history of women
- o. Educational dropouts
- p. Political awareness and political organisation
- q. Functioning of government institutions
- r. Functioning of local Panchayats
- s. Impact of government programmes
- t. Problems of rehabilitation
- u. Gender issues
- v. Women's participation in development programmes
- w. Harijan and Adivasi problems
- x. Mass communication
- y. Infrastructure in the village:

road, electricity, water, transportation facilities, PHC, etc.

z. Caste-tribe interaction

Anthropology	90
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6.2	Physic	cal/Biological:	60
	a.	Somatometry	
	b.	Somatoscopy	
	C.	ABO, MN, Rh systems	
	d.	Colourblindness; P.T.C. tasting	
	e.	Growth standards for children	
	f.	Nutritional status: children, adults	
	g.	Haemoglobin count	
	h.	Genetic/congenital anomalies	
	i.	Pregnancy wastage	
	j.	Dermatoglyphic data	
6.3	Archa	eological:	40
	a.	River terraces and stratigraphy; sediments	
	b.	Antiquity of the village: stories, temples	
	C.	Raw material for stone tools: quarts/chert etc.	
	d.	Exploration and surface collection of tools if any	
	e.	Excavation sites, artifacts	
6.4	Lingui	istics:	20
	a.	Dialects: caste, tribe peculiarities	

b. Semantic changes in kinship structure, terms and kinship behaviour

- c. Borrowed words
- d. Proverbs and key words

e. Nicknames

Recommended Readings

11. Murdock

1.	Binford L.R.	An Archaeological Perspective, Seminar press
2.	Davidson D.A. and Shackley M.L.	Geoarchaeology Earth Sciences and Past, Duckworth, London
3.	Evans J.G.	Environment Archaeology, Paul Elek
4.	Wheeler R.B.M.	Archaeology from the Earth, Penguin Books
5.	Royal Anthropological Institute Notes and Queries on Anthrop	e of Great Britain and Ireland pology. Routledge and Kegan Paul Ltd. London
6.	Allison & Hockey & Dawson, Andrew	After Writing Culture. Routledge
7.	Maanen, John Van.	Tales of the Field: On Writing Ethnography. The University of Chicago Press, Chicago.
8.	Pelto P.S. & Pelto G.H.	Anthropological Research, Cambridge University Press, London
9.	Young, Pauline	Scientific Social Surveys and Research
10.	Wiener, J.S. and J.A. Lourie	Human Biology: A Guide to Field Methods

Outline of Cultural Materials

Paper 7: Practicals (all three branches)

Approach

This practical course offering training in all branchs is aimed at acquiring skills to understand the interrelatedness and holistic perspective which is the strong focus in anthropology. The training would instil confidence among the learners to collect data in all branches during field work and in further research exercises.

It is these practicals and field work which would distinguish anthropology from other cognate disciplines and bring out the unique identity of anthropology as a holistic study of man.

Social anthropology practicals would orient the students to study museum to understand culture and to look at artifacts in the communities accordingly. It would equip the students to design the tools of data collection, offer training in data analysis and analyse national and international reports meaningfully.

Physical Anthropology practical section would equip the students to appreciate the importance of human anatomy in comprehending the essence of biological anthropology and palaeoanthropology. Its increasing applications in Forensic science and other areas will be discussed with examples. The morphological, physiological and the osteological aspects are to be taught with a comparative perspective. While discussing and demonstrating anthropometry, the ethnomethods of measurements as practised in India especially the *angulipraman*, could be highlighted with examples.

Archaeological anthropology practicals would equip the students to understand the meaning and use of stone tools, pottery and fossil material which would be relevant both in cultural and physical anthropology. Training in reconstruction of tools, bones, pottery and other artifacts to be given.

At the end of the course the students should be able to:

- a. prepare guides for observation and interviews
- b. analyse the data in such reports as census, NSS and international reports
- c. describe the structure and functions of human skeletal system
- d. recall the traditional method of body measurement system practised in India (Angulipraman)
- e. gain confidence in taking various osteometric and somatometric measurements and to assess their interrelationship through indices.
- f. obtain physiological samples viz., blood, sera, etc. and analyse them to identify specific trait variations
- g. record and analyse morphological traits viz. dermatoglyphics and other relevant traits (somatoscopy)
- h. derive various indices and explain their relevance
- identify specific measurements useful for specific purposes, viz., growth, malnutrition, forensic science, etc.
- j. identify the stone tools and other man-made artifacts
- k. analyse the use and functions of artifacts
- I. acquire skills to reconstruct bones and skeleton

Practicals (Three branches)

Syllabus Hrs

A. Social Anthropology

20

- 7.1 Analysis of material artifacts in museum
- 7.2 Preparation for observation and interview guides and collection of data in the city or nearby villages about socio-cultural, religious events, festivals or markets connected to rural areas, social issues and social problems
- 7.3 Data processing of the available/collected data; computer programming for qualitative and quantitative data.
- 7.4 Analysis of Census reports and such reports viz. NSS, World Development and Gender reports (particularly the tables)
- 7.5 Genealogy preparations

B. Physical Anthropology

60

- 7.6 Human skeletal system: its importance in biological anthropology, palaeoanthroplogy, Anthropology and forensic sciences, study of museum material
- 7.8 Osteology and osteometry Importance of studying human skeletal system in anthropology Structure-function, classification Axes and planes Skull and mandible (description) Long bones (description and side identification) Vertebral column and girdles Age and sex differences Selected measurements and indices
- 7.8 Somatometry and Somatoscopy Importance of body measurements in anthropology; applications; in growth, forensic, clothing, sports, etc. Selected measurements on head; indices Selected measurements for height, breadth, and circumference; indices Selected traits on somatoscopy

7.8 Blood groups, PTC and colourblindness Anthropological importance, application, ABO,MN, Rh systems, PTC and colourblindness

7.10 Dermatoglyphics Relevance in anthropology; applications Techniques of printing, pattern identification Basic classification

C. Archaeological Anthropology

20

- 7.11 Drawing and identification of stone tools of different phases and pottery
- 7.12 Drawing and labelling of human fragmentary bones, teeth
- 7.13 Reconstruction of bones and skeleton
- 7.14 Treatment and preservation of bones
- 7.15 Study of fossils and tools in the museum

Recommended Readings

- 1. Binford L.R., Ancient Man and Modern Myths, Academic Press
- 2. Cronwall I.W., Bones for the Archaeologists, Phoenix
- 3. Ghoshmaulik S.K., Rath Basanti and Mishra S.K., Practical Anthropology, Society for Anthropological and Archaeological Studies, Orissa
- 4. Oakley K.P., Man The tool Maker, British Museum
- 5. Paddar S.R. and Bhagat A, Hand Book of Osteology
- 6. Sankalia H.D. Stone Age Tools, and Techniques, Deccan College, Pune
- 7. Singh I.P. and Bhasin M.K. Anthropometry

M.A./M.Sc. Anthropology
Specialisation Courses

Specialisation Courses

Social-Cultural Anthropology

SA1. Theory and Methods in Social-Cultural Anthropology

Approach

Anthropology has remained preoccupied with evolution, diffusion and structural functional approach.

New theoretical constructs and methods such as Marxian Anthropology, psycho-analytical approach,

Dialogical Anthropology, interpretative Anthropology, cognitive Anthropology, post-modernist

approaches and concepts like ethnicity are now being discussed in contemporary anthropology.

In Anthropology there is discussion about methods, paradigms and models in addition to formulation and empirical verification of hypothesis to be field tested. The central focus of anthropology of holistic perspective, and empirical studies has ever continued. In this course, concepts and theories are to be understood in terms of contributions of authors and scholars.

At the end of the course, students are expected to:

- a. critically assess theoretical contributions of Anthropologists
- understand various concepts and theories and their interpretations in traditional areas of Anthropology and contemporary issues
- c. develop a critical vision about future of Anthropology as integrative and interdisciplinary science of Man
- d. evaluate the role of Anthropologists as scientists, as humanist, and as citizens of a nation
- e. understand the interaction of micro and macro paradigms of development

Theory and Method in Social-Cultural Anthropology

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1.8

1.1	History of Anthropological Thought: classical schools	20
	Pioneers in Anthropology	
	Evolutionism: Spencer, Morgan, Tylor	
	Diffusionism: Elliot Smith, Graebner	
	Historical Particularism: Boas, Wissler, Kroebar	
	Functionalism: Malinowski, Merton	
	Structural-functionlism: Rad-Cliffe Brown, Evans Pritchard, Fortes, Raymond Firth, N	adel
	Neo-evolutionlism: Leslie White, Julian Steward, Sahlin	
	Structuralism: Levistrauss, Leach	
1.2	Psychological Anthropology	12
	Culture and personality studies: Kardiner, Linton, Benedict, Cora-du-Bois, Margaret M Spiro, Mary Douglas, A Kleinman, AFC Wallace, Stephen Taylor	ead
1.3	Philosophical anthropology: Concept of Value, Cultural Relativism, Value and human rig Herskovits	hts: 2
1.4	Cognitive Anthropology	
1.5	Historical and Dialectical Materialism: Hegel, Marx and Engels	6
1.6	Symbolic and Interpretative Anthropology: Turner, Schneider, Geertz	6
1.7	Post Modernism: Marcus, Fischer	8

Anthropological theory and method for policy planning and applications:

16

1.8.1 Concept of 'Primitive' and 'Native' in Anthropology. Dilemma of 'We' and 'They' in research. 'Primitive' as a conceptual model in anthropological research. Ethnographic method for policy planning and intervention

- 1.8.2 Efficacy of qualitative method and its application as an additive tool to quantification
- 1.8.3 Synthesizing micro and macro paradigms of development
- 1.8.4 Using anthropological sensitivity for designing development/disaster management projects
- 1.8.5 Policy Planning Issues: education, health, gender, ethnicity-identity, marginal people, rehabilitation, environment, human rights, world peace.
- 1.9 Autonomous nature of Anthropology: Integration of scientific and humanistic approachesAnthropologist as scientist, citizen and humanist4
- 1.10 Contributions to Indian Studies: S.C. Roy, N.. Bose, D.N. Majumdar, V. Elwin, Robert Redfield, Milton Singer, Mckim Marriott, L.P. Vidyarthi, Haimendorf, Irawati Karve, Dumont, M.N. Srinivas, S.C. Dube, Leela Dube

Recommended Readings

Evans-Prichard,

1.

	,	, , , , , ,
2.	Harris, Marvin	Rise of Anthropological Theory. Routlege & Kegan Paul, London
3.	Bidney, David.	Theoretical Anthropology. Colombia University Press, New York
4.	Erickson, Paul.	Anthropological Lives: Biographies of Eminent Anthropologists.
		Reliance, New Delhi

A History of Anthropological Thought

- 5. Sahilns & Service Evolution and Culture
- 6. Schneider et al. Symbolic Anthropology: A Reader in the Study of Symbols and Meanings

7.	Turner, Roy	Ethnomethodology
8.	Douglas, Marry	Cultural Bias
9.	Gerrtz, Clifford	The Interpretation of Culture
10.	Ingham, John	Psychological Anthropology Reconsidered
11.	Manganaro, Marc	Modernist Anthropology: From Fieldwork to Text
12.	Nadel, S.F.	The Foundations of Social Anthropology
13.	Manners, R.A. & David Kaplan (Eds.)	Theory in Anthropology
14.	Levi-Strauss,	Structural Anthropology
15.	Malinowski,	Scientific Theory of Culture and Other Essays
16.	Redfield R.	Human Nature and the Study of Society
17.	Tyler, Stephen (Ed.)	Cognitive Anthropology
18.	Redfield, Robert	Peasant Society and Culture
19.	Steward, Julian H.	Contemporary Change in Traditional Societies
20.	Moore,	The Future of Anthropological Knowledge
21.	Hastrup,	A Passage to Anthropology

SA.2: Anthropology of Complex Society

Approach

Anthropology has been known for studying simple and isolated communities and for looking at microcosm. However, there have been national character studies, civilisational studies and urban studies. Such studies have given rise to new theories and methods emphasising the interaction of micro and macro situations.

In India, anthropology as a discipline undertakes studies in caste/peasant villages and in cities. There is mobility and dynamics which change it peasant folk communities. Mythologies are woven around complex phenomena across wide geographical areas. Anthropology therefore does not limit itself to study of simple tribal communities. Conributions of Robert Redfiled, or Irawati Karve and her studies on Kinship and Caste are good examples of the studies of complex issues, groups and institutions.

At the end of the course, a student is expected to:

- a. appreciate the emerging scope of anthropological theories and methods to the study of complex society
- b. analyse the contributions of Robert Redfield
- c. understand issues on ethnicity and pluralism
- d. critically assess the rise of urban anthropology
- e. understand anthropological methods for urban studies
- f. analyse the use of anthropological theory and methods in urban planning

Anthropology of Complex Society

Syllabus:

1.	Anthropological approaches to the study of complex societies, British anthropologists' m	odel
	and American anthropological approaches.	7

- Concept of peasant society and peasant culture: Indian village as a peasant society. Studies
 of rural and peasant societies.
- Folk-urban continuum; idea of rural analysis; great tradition and little tradition; sacred complex,;
 textual and contextual approaches
- 4 Studies on institutions in complex societies. Family, kinship and political institutions. Social network analysis
- Anthropological approaches to the civilizational studies, levels of socio-cultural integration; study of irrigational civilizations; study of cultural wholes and civilizational wholes.
- Study of culture at a distance and national character studies; nation building process in developing nations and national integration.
- Study of cities in historical perspective and in transtion, pre-industrial and post-industrialcities; cultural role of cities, study of Indian cities.
- 8 Community: group and industry in western culture, concept of culture of poverty and anthropological approaches to the study of culture and poverty.

 10
- 9 Emergence of urban anthropology. Contribution of urban sociology to urban ethnography; concept of scale in urbanization; extended case study method and Manchester school of urban anthropology. Anthropological approaches to urban planning. Role of participatory communication to urban planning. Advocacy and pluralism in urban planning. Social, economic, political and urban environmental dimensions of planning process.

Recommended Reading

1.	B.C. Agrawal, (Ed)	Anthropological Approaches to the Study of Civilizations
2.	M. Baxton, (Ed)	Social Anthropology of Complex Societies
3.	F. Baret,	Ethnic Group and Boundries, George Allen and Unwin, London
4.	B.S. Cohn,	India: Social Anthropology of a Civilization
5.	Fox, R.,	Urban Anthropology Prentice Hall Inc. New Jersey
6.	Creetz C., (Ed)	Urban Research Methods, D. Van Nostrand Co. Inc and Affiliated Press
7.	Erikson, T.H.,	Ethnicity and Nationalism, Pluto Press, London
8.	Jain, R.K.,	Text and Context: The Social Anthropology of Tradition
9.	Glodberg, T.D.,	Multiculturalism: A Critical Reader, Blackwell, Oxford
10.	Marriot, M., (Ed)	Village India - Studies in Little Community
11.	Singer, M (Ed),	Traditional India: Structure and Change
12.	Singer, M (Ed),	When a Great Tradition modernizes
13.	Redfield, Robert:	Peasant Society and Culture
14.	Redfield, Robert:	Human nature and the study of Society
15.	Fox, Richard:	Urban Anthropology
16.	Hack, Gibbs (Ed.)	Urban Research Methods
17.	Erikson, T.H.	Ethnicity and Nationalism
18.	Cherry, Gordon (Ed.)	Urban Planning Problems
19.	Paul, Brass	Ethnicity and Nationalism

SA.3: Community Based Dissertation

Approach

The primary data for M.A./M.Sc. dissertation need to come invariably from community studies. It needs to be supplemented by secondary data and library as such. Unlike field work training, the data has to be collected by single student. The dissertation has to be in the format of such design which will include hypothesis and/or research questions and a conceptual model.

The completed dissertation should provide proof of students' understanding of:

- a. research design as applicable to a specific topic
- b. issues concerning sampling, quantitative and qualitative analysis of data
- c. linkage of theory and data in regard to certain specific issues such as gender, rehabilitation, development and backwardness

Recommended Readings

- 1. Pelto P.S. & Pelto Anthropological Research, Cambridge University Press, London
- 2. Goode & Hatt Methods in Social Research
- 3. Young, Pauline Scientific Social Surveys and Research
- 4. H. Russel, Bernard. Hand book of Methods in Cultural Anthropology

Specialisation Courses

Physical/Biological Anthropology

Paper SB.1: Human Genetics

Approach

This course aims to develop knowledge about the basics of human genetics as a fast developing

area. It focuses on the fact that socio-cultural and demographic behaviour of a population decides

the genetic structure and vice versa.

This course would initially examine the difficulties in subjecting human beings in genetic

investigations. Alternatively it would focus on the available methods, their advantages and

disadvantages. In the second section, the course would highlight the traditional view points on

genetics available with the Indian tradition especially as part of Ayurveda and compare them with

the modern concepts. Explaining the population genetic principles this course would then identify

the concept of gene pool, its constants as well as those forces and processes viz. natural selection,

mutation, genetic drift etc. which would alter the genetic equilibrium. This course would further

explain the nature and types of inheritance of normal traits citing examples. Explaining the Kryotyping

techniques and the normal chromosomal complements this course would assess the numerical

and structural abnormalities involved as well as explore the nature of inborn errors of metabolism,

mutations and their causes. The last section of the course would encourage the students to probe

the structure and dynamics of DNA, RNA complex and the recombinant technology leading to

genetic engineering, the genome project its prospects in medicine and the associated ethical and

socio-cultural implications.

At the end of the course the students should be able to:

a) appreciate the limitations in subjecting human beings in genetic studies

b) critically examine the available methods in human genetic investigations

c) probe the concept of inheritance contained in Ayurvedic and other traditional sciences

- d) relate the gene behaviour with the social and demographic structure and behaviour of populations (consanguinity, inbreeding)
- e) discuss the types and nature of inheritance of physical and physiological traits
- f) examine the karyotypes normal and abnormal
- g) explain the mutations, their causes and types
- h) understand the structure and functions of DNA and RNA with their expressions
- asses the advantages and other socio-cultural implications of genetic engineering and of the genome project.

Human Genetics

Syllabus Hrs

- Difficulties in subjecting man for genetic investigations, methods of studying heredity: pedigree method, twin method, population, family, linkage studies, karyotyping, cytogenetic and biochemical, DNA techniques, concept of genetics in Ayurveda, Homeopathy, Unani, etc. 16
- Concept of gene pool and gene frequencies, Hardy-Weinberg equillibrium, inbreeding and genetic polymorphism. Multiple alleles and blood groups. Compatible and incompatible matings. Multifactorial inheritance.
- 3 Human chromosomal techniques, normal complements. Numerical and structural chromosomal abnormalities; somatic allergens, genetic counselling.
- Inborn errors of metabolism, protein, carbohydrate, lipid metabolisms, gene- enzyme hypothesis. Mutations and genetic hazards of radiation. HLA systems.
- Structure and functions of DNA, RNA and proteins. Genetic code, concept of gene and its expression. Replication, transcription, translation. Methods of creating recombinant DNA molecules. Genetic engineering, genome project.

6. Autosomal and sex-linked inheritance theories with examples.

7. Population genetics in the Indian context, endogamous population as unit of study. Castes and caste cluster, fission and lack of fusion models. Isolates - causes.

8. Demogenetics; relationship between social structure and genetic structure.

Recommended Readings

1. Bhamrah and Chaturvedi. A Text Book of Genetics

2. Mange and Mange. Basic Human Genetics

3. Rothwell, N.V. Human Genetics

4. Harrison *et.al.* Human Biology

5. Curt Stern. Principles of Human Genetics

6. Winchester. Genetics

7. Ashley Montagu. Concept of Race

8. Shukla, B.R.K. and Physical Anthropology and Human Genetics

Rastogi, S.

9. Dalela and Verma. A Text Book of Genetics

10. Bodmer and Genetics, Evolution and Man

Cavalli Sforza.

11. King and Stansfield. A Dictionary of Genetics

12. Brudette, W.J. Methodology in Human Genetics

13. Yunis, J.J. (Ed) Biochemical Methods in Red Cell Genetics

14. Harris, H. Human Biochemical Genetics

Paper SB.2 Laboratory Based Practicals

Approach

The main aim of this course is to help the learners in the appropriate laboratory techniques of measurement and observations so that the analysis and interpretation of the skeletal material will be taken up easily. Additional information on serology and detmatoglyphics will be useful for comparing the contemporary subjects.

Palaeoanthropological studies, medical and forensic science require sufficient knowledge in osteology. This course is framed to equip the students to master the techniques of measurements with various instruments for both direct and indirect measurements, the landmarks involved, possible errors and the ways of rectifying them and to interpret the data from phylogenetic point of view. The technique involved will be useful for both the metrical aspect and the observational — seopic — aspect of the skeleton. Serological and dermatoglyphic studies will be additional aspects on the living being.

At the end of the course the learners should be able to:

- a. handle the instruments effectively and accurately for linear, breadthwise, volumetric and angular measurements.
- b. effectively collect, analyse and classify blood samples and finger and palmar prints
- c. draw the contour lines for indirect measurements for a sophisticated way of skeletal reconstruction, superimposition etc.
- d. verify and understand the interrelationship of these measurements to probe further the intricacies involved in shape, size, volume, etc. vis-à-vis the measurements and indices

e. improve and master the observation technique on skeletal parts as well as on the living.

f. maintain a laboratory journal incorporating the details done in the practicals

Laboratory based Practicals

Syllabus

- 1. Introduction: Historical development of physical anthropology. Relevance of craniometry, cranioscopy and osteometry in physical anthropology. Normal and abnormal variations.
- 2, Basic instruments especially used for craniometry and osteometry
 - Craniometric measurements: About <u>30</u> measurements taken directly covering linear, transverse, arcs, chords and circumference measurements on crania
- 3. Drawing of at least three craniogramms covering both the sexes
- 4. Measuring directly and indirectly at least 5 angles on crania
- 5. Calculation of at least two cranial indices
- 6. Mandibulometry: At least 8 direct measurements on mandibles, teeth
- 7. Observations of a few scopic traits on crania: supra orbital ridges, pterion, nuchal lines
- 8. Osteometry: covering clavicle, scapula, humerus, radius, ulna, tibia and fibula. The measurements be taken directly and indirectly.
- 9. Drawing of these bones with the help of diaptrograph, for indirect measurements.
- 10. Journal writing; practicing.

Advanced practicals in serology and dermatoglyphics: ABO, MN, Rh systems, PTC and colourblindness, Galton and Henry systems, Main Line Formulae, Palmar Pattern, Toes and Soles

Recommended Readings

- **1.** Frazer. Human Anatomy
- 2. Singh, I.P. and Bhasin, M.K. Anthropometry
- 3. Weiner and Lourie. Human Biology A guide to field methods
- 4. Steward, T.D. Hrdlicka's Practical Anthropometry
- 5. Cummins, H and Midlo, C. Dermatogplyphics An introduction to fingerprints, palms and soles

Specialisation Courses

Archaeological Anthropology

SC.1: Theory and Method in Archaeological Anthropology

Approach

The course gives an outline on the methods and techniques in the data collection by locating an archaeological site and excavation of the site, conceptualization of site and nature of data. It also deals with classification, documentation of the data, cultural reconstruction using ethnographic data and finally gives a picture of social evolution of the society.

It aims at conceptualisation of methods and building models and theories.

At the end of the course the students are expected to:

- a. learn various scientific techniques and tools in the identification of an archaeological site using survey and other conventional methods
- conduct excavation, surface collection, sampling, documentation and transferring
 the same to the laboratory
- c. undertake classification of the data pertaining to culture i.e., artifacts, pottery and other objects
- d. reconstruct environment and chronology based on stratigraphy, geomorphology,
 typo-technology and soil analysis
- e. organise ethnographic data for parallels, survivals, analogies and interpret archaeological artifacts objects etc., and reconstruct culture
- f. comprehend theories and models in the reconstruction of cultures and project an evolutionary picture of culture

Theory and Method in Archaeological Anthropology

Sylla	abus	Hrs
1.	Basic units: sites, locality, area, region, culture, focus, diffusion, artefact, type, assembla tradition, time pattern-regularities, phase pattern regularities, system pattern regularities. making raw materials - their properties, forms, fracture pattern.	
2.	Exploration: location and identification of archaeological sites, toposheets, aerial photographic remote sensing, earth resistivity survey system. Types of Excavations: vertical and horizon setting of computer collections and documentation. Classification of the data: paradigmataxonomic and conventional classification	ntal,
3.	Dating methods: radio carbon dating, potassium-argon dating, dendro - chronolo thermoluminiscence dating and archaemagnetic dating	ogy, 14
4.	River Systems: stratigraphy, elastic sediments, lithology and terraces	10
5.	Ethno-Archaeology: parallels, survivals, analogies	10
6.	Reconstruction of cultural processes	10
7.	Settlement archaeology, post processual archaeology, new archaeology	10
8.	Subsistence and land use pattern - resource trade and economy	10
9.	Social evolution: with reference to Childe, Phillip and Phillip, Malik, La.Whilde, Julian Steward	12

Recommended Readings

- 1. Binford, L.R. An Achaeological Perspective, Seminar Press
- 2. Butzer, K.W. Environment and Archaeology, methuen & Co. Ltd

Anum	Antimopology				
3.	Childe,V.G.	Social Evolution, Watts & Co.			
4.	Clark, D.L.	Analytical Archaeology, Methuen & Co. Ltd			
5.	Cornwall, I.W.	Soils for the Archaeologist. Phoenix			
6.	Dunnel, R.C.	Systematics in Prehistory. The Free Press			
7.	Evans, J.G.	Environmental Archaeology. Paul Elek			
8.	Gabel, C.	Analysis of Prehistoric Economic Patterns			
9.	Malik, S.C.	Indian Civilization: The Formative Period			
10.	Renfrew, C. (Ed.) Duckworth	The Explanation of Culture Change: Models in Prehistory.			
11.	Rouse, I.	Introduction to Prehistory. Yale University Press			
12.	Sankalia, H.D.	New Archaeology: Its Scope and Applications to India. Ethnographic and Folk Culture Society			
13.	Shackley, M.L.	Archaeological Sediments: A Survey of Analytical Methods. Butter Worths			
14.	Trigger, B.G.	Beyond History: The Methods of Prehistory.			
15.	Willey, G.R. & Philip Phillips.	Methods and Theory in American Archaeology. Phoenix			

SC.2: Practicals

Approach

The course is aimed to familiarize the students with basic archaeological data on prehistoric societies such as stone artifacts climatic conditions fossilized in soils reflected in physical and chemical properties and the anatomical features of human skeleton. The course aims at understanding the typo-technological features of artifacts against the environmental parameters.

At the end of the course the students are expected to:

- a. handle stone artifacts, characterizing Lower, Middle, Upper Paleolithic, Mesolithic and Neolithic periods and pottery and other objects particularly on Neolithic and or Chalcolithic periods
- demonstrate the techniques of manufacture, function and social implication of artifacts
- c. comprehend physical and chemical properties of soils/sediments
- d. handle different human bones in order to understand the location, salient feature and their functions.

Practicals

Syllabus

- Drawings and indices calculations of tool families belonging to Palaeolithic, Mesolithic and Neolithic cultural periods
- Pottery drawings, measurements and reconstruction of pot shapes and types based on potshreds
- 3. Soil physical analysis: Properties as colour, texture, sand, silt and clay rations.
- 4. Soil chemical analysis: Percentage of calcium carbonate, chlorides, phosphates, organic carbon etc
- 5. Osteology: Drawing, description and identification of human bones

Recommended Readings

- 1. Das, B.M. & Ranjan Deka. Physical Anthropology Practical. Kitab Mahal, Allahabad
- 2. Jackson, M.L. Physical and Chemical Analysis of Soil. Prentice-Hall
- 3. Oakley, K.P. Man the Tool Maker. British Museum
- 4. Sankalia, H.D. Stone Age Tools and Techniques. Deccan College, Pune
- 5. Shackley, M.L. Archaeological Sediments: A Survey of Analytical Methods. Butter Worths

SC.3: Field Dissertation

Approach

The course is designed to make the student carry out independent research in the planning of the projects proposal, data collection, data analysis and report writing, using conventional and scientific methods at various stages of the field disseration. The course aims at capacity building of the student in taking up independent research programmes.

At the end of the course the students would be in a position to:

- a. locate archaeological site through conventional and scientific methods viz., place names, topo sheets, aerial photographs, remote sensing and other techniques.
- b. collect data pertaining to culture, faunal, floral, remains and climatic markers from the identified archaeological site; surface collection, excavation
- c. adopt a holistic approach in interpreting data: geomorphological/sedimentlogical, ethnographic nature along with archaeological data
- d. compile the analysed data and present in the form of a report

M.A./M.Sc. Anthropology Elective Courses

Elective Courses

M.A./M.Sc. Anthropology

EA.1: Development Anthropology

Approach

This course is aimed at creating awareness among students of anthropology about the concept

and scope of development anthropology and the perspective role anthropologists could play in

development planning with adequate exposure to the relevant economic models of development.

It also envisages to provide a broad view of the policies and development programmes initiated for

the development of the rural poor and the Scheduled Castes and Scheduled Tribes and their

impact on the target groups.

At the end of the course students are expected to:

a. analyse the concept of development in the light of anthropological theories

b. understand perspectives of people and programmes and their interaction

c. evaluate the process of development and measurement of the output

d. discuss various development models followed in independent India such as welfare

model, charity, social activist, Gandhian model

e. analyse the roles of Govt., NGOs and community based organisations in

development.

Development Anthropology

Syllabus

 Development: Meaning and evolution of the concept: Indices and measurements of development. Development theories and Models.

- Applied, Action and Development Anthropology: Meaning, scope and the emerging trends, Contributions of anthropology to development studies, Development studies' contribution to anthropological thought and method. Moral/Ethical issues and limitations of development Anthropology.
- Policy and Planning: Concept of planning, formulation of policy and plan strategy phases, targets, regions, resources and people; Participatory Approach in development, Anthropological perspectives and data in development planning. Conflict in people centred and programme centred paradigms.
- 4. Agencies for development: Governmental and non-governmental, approaches, models, administration, training man power, peoples participation
- 5. Evaluation and Impact: Indices and measures; anthropological approaches assessment of social impact, evaluation of development programmes. Gender issues in development.
- 6. Role of values and institutions in develoopment: Caste, religion and culture Weber, Bailey, Epstein, Milton Singer and Madan
- 7. Rural Development in India: Historical background; special programmes and poverty alleviation programmes. Land reforms; Panchayati Raj; community based organisations
- 8. Development of Scheduled Castes, Scheduled Tribes: Special component plans.
 - Development of Scheduled Tribes: Constitutional provisions and safeguards, protective legislation; structure of tribal development administration; evolution of tribal sub plans; problems and prospects of tribal development

9. Sustainable development: Environment, natural resources, people' concerns and needs.

 Case Studies in Development: e.g. Ralegaon Siddhi in Maharashtra, NGO case studies in different regions. Success stories in cooperative management.

Recommended Readings

- 1. Zamara, D. Mario Perspectives on Cultural Change and Development
- 2. Vorhies et al. The Politics of Hunger
- 3. Rogers Everll Communication and Development: Critical Perspectives
- 4. Chambers Robert Rural Development
- 5. Kapoor & Singh Rural Development through NGOs
- 6. Cochrne Development Anthropology
- 7. Dalton, George (Ed.) Economic Development and Social Change
- 8. Foster, G.M. Traditional Cultures and Impact of Technological Change
- 9. Chansarkar, B.A. Models for Planning in India
- 10. Krishnamachari, V.T. Community Development in India
- 11. Tax, Sol Action Anthropology
- 12. Vidyarthi, L.P. (Ed.) Applied Anthropology in India

EA.2: Anthropology of Communication

Approach

Culture is a communicative process. Language is the vehicle of communication. This paper is aimed at understanding traditional methods of communication in the stability of culture and its transformation. The role of oral communication and folk performing arts has to be understood. With the advancement of communication technology, mass media of communication has developed in printed form and in audio-visual presentation. All these forms of communication are being used to inform and educate the mass and to influence their opinions and behaviour. In India, the phenomenal rise of television, films, and its impact has to be analysed. Distinct educational and religious channels have been floated on the TV. On one hand there is fear of indigenous culture, while on the other hand, cultural values are tried to be strengthened through mythological and family serials. The course aims at taking a historical review of the development and transformation in communication media and its impact on the people and culture.

At the end of the course the students are expected to develop capacity to:

- a. analyse the strength and weaknesses of various media
- b. analyse the use of different media in influencing people's behaviours and practices
- c. assess educational role of various media
- d. assess role of media in planned development.

Anthropology of Communication

Syllabus

 Meaning and definition of communication. The nature, role and functions of communication; human communication, approaches to study of communication - Anthropological, Sociological and Psychological perspectives of communication. Theories and models of communication.

 Channels of communication: Inter personal and oral communication, mass communication. transport communication, electronic media, satellite communication. The process of information dissemination

- 3. Folk Media: Folk dance, drama, songs, tales, puppet show, story telling, music, theatre and their communication potentiality.
 - Integrated use of folk media and mass media, art and visual communication. dormitories.
- Mass Media: The elements of mass communication theories, new communication technologies and communication revolution, role of television - films, musicals, family serials and mythologies.
- 5. Culture and Communication: Culture, history and technology.
 - Socialization as cultural communication
- 6. Language and communication: Verbal and non-verbal communication. Art in Anthropological perspectives, photographs and pictures, kinetics (gestural communication)
- 7. Development communication: Relationship between communication and development, communication and urbanization, modernization process. The effects of mass media on youth, children, women; disadvantaged group. The role of communication in education, agriculture, health and family welfare and national development Communication and the dynamics of social and cultural change.
- 8. TV and educational media: UGC, IGNOU, National Geographic, Discovery, etc.

Recommended Readings

1. Rogers, E.M. Communication of Innovation

2. Nair, S. & White, S. Perspective on Development Communication

3. Rogers, Everall. Communication and Development: Critical Perspectives

4. Fisher, Audrey B. Perspective on Human Communication

5. Kincaid, Lowrence D. Communication Theories: Eastern and Western Perspective

EA.3 Displacement & Disaster Management

Approach

There have been migrations in historical times on account of epidemics, famines, floods and earth-quacks. In contemporary times, people get displaced due to man made contingencies such as wars, development projects, and chemical or nuclear holocaust. Anthropologists are called upon to advise the policy planners and administrators in regard to rehabilitation of the displaced people. Selected case studies would illustrate the issues of the development and rehabilitation.

At the end of the course, the students should learn:

- a. natural and man made causes of displacement
- b. human right issues in displacement
- c. culture shock and psychological trauma
- d. process of rehabilitation

Displacement & Disaster Management

Syllabus

- Displacement situation: Natural and manmade, floods, epidemics, famines, earthquakes, fire, chemical and nuclear leaks, wars, ethnic conflicts and migrations
- 2. Development and displacement:
 - Construction of dams and roads, development of cities absorbing villages in city, defence projects, hill resorts
- 3. Rehabilitation policies and programmes in natural and created disasters: strategies, agencies and organizational structure

- 4. Human factors in rehabilitation: anthropological perspectives
- Case studies: Bhopal gas tragedy, Latur and Gujrat earthquakes, Orissa floods, Narmada
 Dam (examples to be added which may be region specific, national or international)

Recommended Readings

1.	Bose, B.P.C.	Disaster Policies and Administration: A Study of Three Andhra Disasters
2.	Cohen, Stephen P. and C.V. Raghavulu	The Andhra Cyclone of 1977. Individual and Instituional Responses to Mass Death
3.	Fernandes, Walter and Enakshi Ganduli Thakrai (Eds.)	Development, Displacement and Rehabilitation
4.	Gangopadhyay, T and K.A. Mankodi	Rehabilitation: The Ecological and Economic Costs
5.	Goldsmith and Hildyad, N.	The Social and Environmental Effects of Large Dams
6.	Keller, Stephen L.	Uprooting and Social Change
7.	Saklani, Girija	The Uprooted Tibetans
8.	Schdder, T.	The Human Ecology and Big Projects: River Basin Development and Resettlement. In Annual Review of Anthropology

EA.4: Anthropology and Gender

Appraoch

This course provides a broader setting to understand cross-cultural view of the concept of gender, role of cultural and religious frameworks in shaping this concept. It also explores linkages between sex, gender and health, both physical and mental, by paying attention to the critical issues that have a bearing on health across life span. It provides insight in to the gender development models and their implementation in gender sensitive manner. The course discusses the issues related to gender and violence, gender and economy and gender relations in the context of Indian society.

The aims of the course are:

- To understand concept of gender, relationship between sex, gender and other cultural variables
- To understand various models of gender development on the specific themes such as welfare, empowerment etc.
- To study relationship between gender, culture and health (physical and mental)
- To understand gender based violence and roots of violence

At the end of the course, students will be able to:

- a. discuss the evolution of concept of gender in the frame of different social structures
- b. identify and discuss cultural values influencing gender
- c. demonstrate knowledge of alternatives for gender development and show gender sensitive approach towards implementation
- d. critically evaluate the policies developed for gender equality
- e. understand pattern of gendered violence and its linkages to the culture

Anthropology and Gender

Syllabus

 Concept of Gender: evolution of concept of gender, social and biological theories of gender, social construction of gender, gender and socialization, cross cultural concept of gender, approaches to gender studies.

- 2. Gender Role and Social Structure: gender role, gender differences in social role, social, psychological and cultural factors determining gender relationship, role of social structure (kinship, caste, family) in determining gender relation. Theoretical framework for gender role analysis, gender role analysis with specific reference to patriarchal and matriarchal societies.
- Gender and socio-cultural change: comparative status of men and women in society, impact
 of changing cultural values on the role, status and gender relationship, sources of change
 and its differential impact across cultures.
- 4. Gender and development: concept of development, need to consider development from gender perspective. Theories, models, and strategies, for gender development. Definitions of terms like gender sensitive, gender equity and gender discrimination. Gender Development Index.
 - National and international policies of development and their impact on the gender. Discuss gender and community development with reference to various gender sensitive projects.
- 5. Gender and Economy: impact of globalization on gender, participation of gender in national and local economy, gender and employment, discussion on participation of women in economic activity with reference to some facts and figures from World development report.
- 6. Gender and Health: concepts and their assessment in Gender framework: fertility, sexuality, reproductive health needs. Issues in gender, health and development. Gender construct and mental health, gender and abuse, violence and its link to the social structure and culture. Gender and violence: definition and dilemmas, cultural difference in the expression of gender violence.

 Gender in the context of Indian Society: explain concept of gender with reference to tribal, rural and urban context. Compare and contrast status of women and gender role across various regions in India.

Recommended Readings

(Eds) 1990

1.	Monica Dasgupta, Lincoln C. Chen, T.N. Krishnan (Eds.)	1995 Women's health in India Risk and Vulnerability, Oxford University Press
2.	Ardener, Shirley 1985	The social anthropology of women and feminist anthropology, Anthropology Today, 1, 5, 24
3.	Atkinson, Jane M and Shelly Errington, (Eds) 1990	Power and Difference: Gender in island southeast Asia, Stanford: Stanford University Press
4.	Chanana, Karuna (ed) 1988	Socialisation, education and women: Explorations in Gender identity, Nehru Memorial Museum and Library and Orient Longman
5.	Srinivas, M.N. (Ed) 1996	Caste: Its 20th century avatar, New Delhi, Viking Penguin, India
6.	Dube, Leela Women and Kinship:	Comparative perspectives on gender in South and Southeast Asia, Tokyo: United University Press, New Delhi: Vistaar 1997
7.	Dube, Leela. Leacock, E. and Ardener S. (Eds) 1986, 1989	Visibility and Power: Essays on women in society and development, Delhi: Oxford University Press
8.	Dube, Leela and Rajni Palriwala	Structures and Strategies: Women, work and family, New Delhi, Sage

9.	Moore, Hennrietta 1988	Feminism and Anthropology, Minneapolis: University of
		Minnesota Press
10.	Palawala, R. 1994	Changing Kinship, family and gender relations in South Asia:
		Processes, trends, issues Women and Autonomy Centre,
		University Leiden, Leiden
11.	Sargent, C and	1996 Gender and Health: an International Perspective, Upper
	Brettell, C	Saddle River, NJ: Prentice Hall
12.	World Bank Report	Gender and Poverty in India
	1991	
13.	Shireen Jejeebhoy, 1995	Women's education, Autonomy and reproductive health, Oxford
		University Press, New York

EA.5: Anthropology of Indian Diaspora

Approach

The Indian communities migrated to other countries have to become the citizen of those nations. They continue their contact with India and simulate Indian culture in the respective places, also follow their cultural practices and rituals. Some of them have become economically prosperous and politically dominant.

This course is aimed at capturing the ethnography of overseas Indian. It aims to study their relationship with India and anxieties about their identities. The process of integration has to be understood.

At the end of the course, the students are expected to:

- a. get complete information about the overseas Indian in different regions
- b. understand their process of integration with the inhabitants of the respective countries
- c. analyse their involvement in the economic and political process in the respective countries
- d. study the implications for the foreign policy and security.

Anthropology of Indian Diaspora

Syllabus

- The methodological relevance of an anthropological approach to international relations (General)
- 2. Migration and culture-contact: acculturation and interculturation, with particular reference to overseas Indian communities

- 3. Overseas Indian communities: five zones:
 - a. Indian Ocean zone: South and East Africa, Mauritius, Sri Lanka, Malaysia
 - b. Pacific zone: Fiji, New Zealand, Australia, Indonesia
 - c. Caribbean zone: Guyana, Trinidad Tobago, Surinam
 - d. North America, U.K. and Europe (with special reference to the Gypsies)
 - e. West Asia
- 4. The view of countries of the Indian Diaspora as "settlement societies" in contrast to civilizations.
- 5. Relevance and applied value of the course.
 - a. Lateral rather than vertical study of international migration and Socio-cultural adaptation of Indian communities abroad.
 - b. Refurbishing and taking a dynamic view of Indian civilization itself in the era of globalization
 - c. Problems and issues of NRI investments in India and their role in economic development of Indian and the respective Nation States
 - d. Role of NRIs in the political processes of the Nation States
 - e. What kind of Indian cultural input is needed in areas of overseas Indian settlement?
 - f. Issues of multi-ethnicity in the context of national and international trends development/regional alliances and security concerns.
- 6. Indian cultural frameworks in South-East Asia: Thailand, Indonesia-Bali islands

Recommended Readings

1. Imtiaz Ahmad: The Constructionof Diaspora: South Asian Living in Japan

2. Vinay Lal: Reflections on the Indian Diaspora, In the Caribbean & Elsewhere

3. Leela Prasad (Ed.): Live Like the Banyan Tree: Images of the Indian American

Experience

4. Benedict Burton: Indians in a Plural Society: A report on Mauritius

5. Carter Marina: Voices from indenture: Experinces of Indian Migrants in the British

empire

6. Calpin G.H.: Indians in South Africa

7. Schwartz, B.M.: The Dissolution of Caste in Trinidad

8. Clarke, Peach et.al.: South Asians Overseas: Migration & Ethnicity

EA.6 Anthropology of Music

Approach

Music is one of the important aspects of human behaviour. Its study offers a special advantage in cultural studies because its units in terms of notes and beats may precisely be identified and measured and by its nature it expresses the deeper creative aspirations and capabilities of people. Music also provides special scope for an understanding of the process of transmission of knowledge and the pattern of pursuit of excellence in a culture. Its study may give a special access to the core of a culture and a civilization.

This course is aimed at encouraging studies on folk music, more particularly music among the tribal communities

Theory and Method

- 1. Basic concepts, approaches and methods
- 2. Music, society and culture: structure and dynamics
- 3. Semiotics and semantics of Music
- 4. Ethnophilosophy of music
- 5. Recent trends in anthropology of music

Musical Traditions in India

- 1. Cultural type and Musical styles: tribal, caste, regional and classical
- 2. Social Organization of different musical traditions
- 3. Musical Forms and Musical Instruments: Oral and textual history of their origin, development and migration.

Recommended Readings

1	Merriam, Alan P.	Anthropology of Music
	Michalli, Alairi,	

- 2. Lomax, Alan Folk Song Style and Culture
- 3. Nettl, Bruno Music in Primitive Culture
- 4. Sanyal, Amiyanath Ragas and Raginis
- 5. Bhattacharya, Ethnomusicology and India

Sudhibhushan

6. Sinha, Purnima An Approach to the Study of Indian Music

EA.7: Tribal Cultures of India

Approach

Comprising about eleven percent of India's population the tribes are attracting considerable attention from scholars, administrators, politicians and NGOs. Anthropological interest on tribals is not only academic but also applied and development oriented. Considering the ongoing fast changes within, and globalisation process invading India, it is pertinent to examine these traditional and comparatively simple societies for a comparative and diachronic assessment of socio-cultural changes.

At the end of the course the students are expected to:

- a. learn various definitions of tribe as well as the specific and general characteristics
- b. comprehend the distribution of tribes in India
- c. highlight the antiquity, racial elements and anthropological importance of studying tribes in India
- d. differentiate between tribes and castes on the socio-cultural parameters
- e. describe the pattern of distribution and classification
- f. identify the problems of nomenclature, tribal dialects and language peculiarities
- g. critically assess the problems of tribal identity and difficulties involved
- h. differentiate between scheduled tribes, tribes, nomadic, vjnt/denotified etc.
- i. observe the trends of pseudo tribalism and its consequences on scheduled tribes

Tribal Cultures of India

Syllabus

Tribe: definitions; critical assessment of conflicting definitions. General and specific
characteristics. Tribes of the world-glimpses. Tribes in India: antiquity, historical, academic,
administrative and anthropological importance. Historical perspectives in the study of tribes
in India by travellers, administrators, scholars and by anthropologists. geographical distribution,
various classifications.

- 2. Tribe and caste: Compared and contrasted in their physical and socio-cultural peculiarities. Tribe-caste and rural-urban continuum: myths and realities. Distribution of tribes in India: zonewise, statewise. Tribes across state boundaries. Tribewise population strength. Classification of tribes based on their economy, occupation and religion. Racial elements among the tribes.
- Tribes: Nomenclature emic and etic differences; problems created by translation, transliteration as well as through scripts. Tribal language families in India; languages and dialects; bilingual and multilingual tribal groups and areas.
- 4. Problems of tribal identity. Who is a tribe? Why people opt to be in the list of scheduled tribe? political, economic, educational and developmental dimensions. Pressure groups, demands, and the bureaucracy. Pseudo-tribalism.
- 5. Scheduled and non-scheduled categories of tribes. Who are scheduled tribes? Why not other groups? Critical appraisal on inclusion and exclusion parameters. Status change by migration to other states. Role of tribe/caste verification authorities. Court cases and judgements on misrepresentations.
- Tribal development programmes and welfare schemes. Who benefits? Awareness about govt. schemes. Ground realities of implementation of welfare programmes. Problems of tribal development.

7. Tribes and environment: Tribes and forest; tribes and occupation; tribal economy; dependency on forest; Forest policies and tribes; migration and occupational shift. Traditional farming and change.

- 8. Tribal monographs: by scholar administrators in British times, western anthropologists and Indian anthropologists.
- 9. Study of atleast two tribal ethnographic monographs from two culture regions.

Recommended Readings

1. Majumdar, D.N. Races and Cultures of India

2. Fuchs, Stephen. The Aboriginal Tribes of India

3. Bose, N.K. Tribal Life in India

4. Ghurye, G.S. The Scheduled Tribes of India

5. Tribal monographs by scholar administrators, foreign and Indian anthropologists such as by Elwin, Haimendorf, Mills, Fuchs, Roy and others.

EA.8 Tribal Development

Approach

The basic issue is regarding the identification of major tribal groups in the constitutional category of 'Scheduled Tribe'. The constitutional safeguards and facilities in regard to political representation, socio-economic development and applying the principle of equity to enable them for equality of opportunity is a process which has to be properly analysed. Issues of tribal autonomy, tribal development and tribal unrest needs anthropological interpretation.

At the end of the course the students are expected to:

- a. learn about the cultural and legal issues about tribe and Scheduled Tribe
- know about constitutional provisions about Scheduled Tribe, scheduled area and the powers of the President and Governors
- c. analyse the economic and social issues more particularly about land and forest relationship
- d. assess the planning process and schemes about tribal development
- e. evaluate role of NGOs in tribal development

Tribal Development

Syllabus

- Definition of tribe and Scheduled Tribe. Distribution of Scheduled Tribes. Demographic trends.
 Classification and characteristics of tribal regions. Racial and linguistic classification of Scheduled Tribes. Social structure. Tribal economy (stages of economy). Tribal religions.
- 2. Tribal Policy: Tribal Policy, regulatory and development measures during British India. Indian Constitution safeguards and provisions for Scheduled Tribes: socio-cultural, economic, educational, political, services, etc. History of regulatory and developmental measures in pre-Independence period. Administration of Scheduled Areas (Fifth Schedule to the Constitution), Tribal Areas (Sixth Schedule to the Constitution) and tribal majority States. Important Regulations promulgated by Governors in Scheduled Areas.
- 3. Tribal Economy: Forests shifting cultivation Forest department its policy, Acts and regulations; Joint forest management; tribal agriculture land holdings land rights land tenures and land reforms adoption of modern agricultural technology; allied economics fishing and hunting; pastoralism; village and cottage industries; distribution: consumption, savings and investments; tribal markets.

- 4. International and National funding for tribal schemes.
- Land alienation, Indebtedness, Bonded labour and forms of tribal exploitation: Role of cooperation, cooperatives and other financial institutions; Tribal and non-tribal interaction patterns. Impact of Acts and Regulations against land alienation and debt redemption measures.
- 6. Tribal Education: Literacy and educational levels; educational programmes: formal, non-formal and vocational; problems in the promotion of tribal education and of female education.
- House and Health: housing conditions and housing programmes; health, sickness and disease
 drinking water, ethno-medicine and modern medical systems; roads and communications status and issues.
- 8. Impact of industrialisation and urbanisation. Displacement of tribals as a result of land acquisition for projects and their rehabilitation
- 9. Tribal unrest and revolts; Religious movements; Political movements.
- Basic issues in transition: Loss of languages and traditions, identity crisis and problems of integration
- 11. Planning and development: Scheduled Tribes in Five Year Plans; Tribal development through SMPT Blocks, TD Blocks and Tribal Sub-Plans; Voluntary efforts and role of tribal leadership. Resource-rich regions and resource-depleted regions. Poverty alleviation programmes. Dispersed tribals. Primitive groups. Oceanic communities
- 12. Tribal research, evaluation and training
- 13. Case studies of tribal development programmes: NGO sector.

Recommended Readings

1. Bhanage, N.P. Tribal Commissions and Committees in India

2. Bhudhury, Tribal Development in India

Bhudadeb (Ed.)

3. Elwin, V. A Philosophy for NEFA

4. Govt of India. Report of the Scheduled Areas and Scheduled Tribes

Commission, 1960

5. Haimendorf. The Tribes of India: The Struggle for Survival

6. Sharma, B.D. Basic Issues in Tribal Development

7. Singh, K.S. Tribal Movements in India, Vols I & II

8. Singh, K.S.(Ed.) Tribal Situation in India

EA.9 Anthropology of Religion

Approach

Religion continues to be a sheet anchor of culture. It is hard core of culture and involves emotional response sometimes leading to fundamentalism. The course aims at understanding the principles of religion, the importance of mythologies, symbolism and sacred geography. Mass media technology on one hand threatens the roots of religiosity. On the other hand, the same technology is also used for propagating religious values.

At the end of the course, the students should:

- a. appreciate the basic principles in comparative religions
- b. know the ethnography of religion in different communities
- c. use the cultural relativistic theory for the analysis of religion
- d. analyse the impact of technology on religion.

Anthropology of Religion

Syllabus

- 1. Origin and theories of religion: Prehistoric, Protohistoric
- 2. Sacred Texts: Oral and written tradition, mythologies and cultural transmission
- 3. Symbolism in religion and cultural expression, as in performing and graphic art. concepts of totem, pure, impure, pollution
- 4. Sacred Geography: Sacred complex
- 5. Places of pilgrimage: local, regional, national levels.
 - Pilgrimage tourism: new dimensions due to development of transport and communication. Impact of pilgrimage on behaviour, individual, family and community levels.
- 6. Impact of technology on spread of religiosity: mass media like TV, audio tapes, specialized magazines and other literature; films.
- 7. Religion with binding functions and divisive tendencies in a National State
- 8. Studies in sacred complex: e.g. Varanasi, Gaya, Tirupati, Jaganath Puri, Vaishnodevi, Amritsar- Golden Temple, Mahakumbh

Recommended Readings

	Lowie, R	Primitive	

- 2. Henry H. Presler Primitive Religions in India
- 3. Stephen Fuchs. Origin of Religion
- 4. De Waal Malefijt, Religion and Culture: An Introduction to Anthropology of Religion Annemarie.
- 5. Evans-Pritchard, E.E. Theories of Primitive Religion

EA.10 Applied Social-cultural Anthropology

Approach

Knowledge of theory and methods of a discipline has to be put to practical use for the welfare of humanity and to offer solutions to the problems. This course provides some illustrations of such applications. The holistic perspective and the micro level research methods in anthropology are found useful in planning and implementation.

At the end of the course the students are expected to understand:

- a. applications of theory to issues like health, education, technology, communication and development
- the issues arising out of displacements and disasters due to construction of dams,
 floods, earthquake, war, epidemic, etc.

Applied Social-cultural Anthropology

Syllabus

- Meaning and scope of applied social-cultural anthropology: Development of the concept of action anthropology. Applied anthropology in administration. Applied anthropology in industry.
 Applied anthropology in education. Applied anthropology in communication
- Applied anthropology and social and cultural change: Concepts and theories of social and cultural change, diffusion, evolution, acculturation, assimilation, modernization, westernization, industrialization, innovation, discovery, contra-acculturation, transculturation, nativistic movements. Cultural context of technological change
- 3. Applied anthropology and development: Emergence of development anthropology. Meaning and perspectives of development theories.

4. Gandhian approach to development. New approaches to development, particularly comprehensive need based development. Appropriate technology, indigenous technology

- 5. Maximisation of local resource rural development in India. Concept of planning for development
- 6. Formulation of policy and plan startegy. Micro and macro level planning. Participatory approach in development. Anthropological perspective and data in development planning
- 7. Agencies of development: Governmental and non-governmental. Indices and measures of development planning: human development report and human development index (UNO)
- Displacement and disaster management. Discplacement situation: voluntary, involuntary, natural and manmade. Socio-cultural, economic, psychological and ecological consequences of displacement. Relocation and rehabilitation; strategies, agencies and organisational structure. Rehabilitation policies and management

Recommended Readings

1. Bose N.K. Tribal Life in India, New Delhi: NBT

2. Elwin, V. A New Deal for Tribal India (Ministry of Home Affairs

3. Elwin, V. A Philosophy of NEFA

4. Vidyarthi, L.P. Social-Cultural Implications of Industrialization in India

5. Vidyarthi L.P and Roy. Tribal Culture of India, New Delhi: Concept

6. Majumdar, D.N. A tribe in transition. New Delhi: Cosmos

7. Sachindananda. Culture Change in Tribal. Bihar: Munda and Oraon

8. Sharma, B.D. Basic Issues in Tribal Development

9. Ministry of Information The Adivasis

and Broadcasting.

10.	Thakkar, A.V.	Tribes in India (2 volumes)
11.	Planning Commission 1959	Report of the Study Team on Social Welfare and Welfare of Backward Classes
12.	Commission for SC and ST's	Six Reports 1983-94
13.	Commissioner for SC and STs	Twenty Seven Reports (upto 1981)
14.	Planning Commission 1972	Report of the Study Team on Tribal Research
15.	Bose BPC	Disaster: A Study of Three Andhra Disasters Policies and Administration:
16.	Fernandes et al (Ed)	Development, Displacement and Rehabilitation. Delhi: Indian Social Institute
17.	Gangopadya T and Mankodi, K.A. 1983	Rehabilitation: Ecological and Economic Costs. Centre for Social Studies, Surat
18.	Goldsmith and Hildyad, N.	The social and Environmental Effect of Large Dams. Waole Bridge Ecological Centre
19.	Keller, Stephen L.	Uprooting and Social Change. New Delhi: Manohar Book Service
20.	Mair, Lucy	Studies in Applied Anthropology, London University Press, London
21.	Foster, G.M.	Traditional Cultures and Technological Change
22.	Mead M	Technological Change
23.	Cobrane G	Development Anthropology

SA.11: Women Studies

For a long time social science literature missed the focus on women who comprise half the mankind. During the last few decades the literature on women has grown in volume. This course opens up new vistas of study and research in the area of women's studies. It lays stress on the developmental perspective, more specially on the efforts made towards their march to equality with the other sex.

- 1. Being a woman: bio-pycho-social meaning of sex differences
- 2. Status of women in India through the ages from ancient to pre-Independence period
- Women in the family: devision of work based on sex. Inter-personal relations. Decision making.
 Social value of motherhood. Role in the socialization process.
- 4. Economic contribution of women:
 - a. Invisible
 - b. Women in the job-market. Motivations for work. Conditions of work. problems
 - c. Trends of employment of women in organised and unorganised sectors
- 5. Political role of women: Women in the freedom struggle and in public life. electoral behaviour of women
- Women and law with special reference to Hinduism, Islam and Christianity and other religions.
 Position in customary law. Conflict between customary law and statutory law. Rights of women,
 their awareness and obstacles in the exercise of their rights
- 7. Women's literacy and education: Primary, secondary, university, technical and research.

 Reasons for slow progress and recent trends
- 8. Women and health: demography. Access to health services. Socio-cultural constraints. Female infanticide and female feoticide

- 9. Status and role of women in tribal societies
- 10. Exploitation of women and crimes against them

11. Quest for equality: meaning and achievement

Recommended Readings

Altekar, A.S.

1.

2.	Kidwai and M.H. Sheikh	Woman under Different Social and Religious Laws: Buddhism.

Status of Woman in Ancient India

Judaism, Christianity and Islam

3. Omved, Gail We will Smash this Prison: Indian Woman in Struggle

4. Roy, Shibani Status of Muslim Woman in North India

5. Sachchidananda and Women's Rights: Myth and Reality

R.P. Sinha

Elective Courses

Physical/Biological Anthropology

EB.1: Applied Biological Anthropology

Approach

Physical and physiological responses to environmental changes have been well studied among the animals. Those theories are equally applicable in Man also, especially when it comes to high altitude, very cold and hot climatic conditions are probed. The gene-environment interaction and the homeostasis in man could regulate his responses for better adaptation. This course aims to provide a background relating to man's physiological and structure-function adjustment with his immediate environment. Human genetic variability alongwith his body constitution, age, sex, etc. are to be probed to get a clear picture. This is achieved with the help of various biochemical cytogenetic and molecular genetic investigations.

At the end of the course the students are expected to:

- a. comprehend the importance of biological anthropology in probing the physical and physiological adjustment of man-environment dynamics
- b. understand the role of heredity and environment in physical types and body proportions
- c. describe the physical and physiological variations due to age, sex and exercises
- d. summarise the techniques employed to probe the biochemical, cytogenetic and molecular genetic investigations as applied in understanding human variability

Applied Biological Anthropology

Syllabus Hrs

Meaning and scope of physiological anthropology. Structure, function and physiological changes of various vital body parts according to age. Testing of pulmonary, circulatory and muscular changes during rest and exercise according to age, sex and occupation.

- Heredity and environment in body dimensions Relationship of different types of sports
 efficiency and different body proportions. Ecological, ethnic and genetic variation of body
 shape and size in relation to sports efficiency. Physiological variation in relation to sports
 activities.
- Scope and development of biochemical anthropology. Techniques in biochemical anthropology, electrophoresis, immunoelectrophoresis, isoelectric focussing, chromatography.
 Hemoglobinopathies, enzyme deficiencies - clinical problems - management and treatment.
 20
- Cytogenetic techniques: banding techniques in the identification of structural abnormalities.
 Prenatal diagnosis amniocentesis, chorianic villi sampling (CVS), fetoscopy,
 ultrasonography.
- DNA, RNA, protein studies. Southern blotting, Nothern blotting, Western blotting, polymerase
 chain reaction (PCR) method, DNA finger printing.

Recommended Readings

Weiner (Eds)

- 1. Backer, P.T. and The Biology of Human Adaptability
- 2. Beal, Virginia. Nutrition and the life span

3.	Beutler, E.	Redcell Metabolism: A Manual of Biochemical Methods
4.	Brock and Mayo	The Biochemical Genetics of Man
5.	Craig.	Human Development
6.	Burdette, W.J.	Methodology in Human Genetics
7.	Emery, A.E.H.	Elements of Medical Genetics
8.	Eveleth, P.B. and Tanner, J.	Worldwide variations in Human Growth
9.	Forbes, G.B.	Human Body Composition
10.	Haris and Hopkinson	A Handbook of Electrophoresis
11.	Singh, I.P. and Bhasin, M.K.	Anthropometry
12.	Singh, S.P., Sidhu, L.S. and Singh, J.	Skeletal Maturity
13.	Sodhi, H.S.	Sports Anthropometry
14.	Sol Tax.	Action Anthropology
15.	Weiner, J.S. and Laurie J.A.	Human Biology - A guide to Field Methods
16.	Willigt, J.V.	Applied Anthropology - An Introduction

EB.2: Human Biology

Approach

Human biology deals with the origin of man, his evolutionary history; human heredity, and the nature of inborn differences between individuals; human ecology, physiology; the growth of human populations and their demographic structure. Students will be made familiar with the International Biological Programme (IBP) being carried out in India and abroad.

The adaptation of human populations to extreme climatic conditions such as heat, cold and high altitude areas and biochemical, physiological and behavioural responses will be discussed in the first part of the course. It also aims at elucidating various stages of growth viz. the prenatal, postnatal, adolescent, post-adolescent, hormonal, genetic and environmental factors which control the growth and development of an individual.

There are great differences in bodily forms amongst different human populations and various methods of analysis of physique are useful in their classification. Differences in the average body size and work require, as determined by cultures and climates, result in significant differences in a population's energy requirement. Also the energy requirements from infancy to old age and nutritional status i.e., undernutrition, obesity and malnutrition are important. Age chages in physiological variables, blood pressure and body composition in both males and females will be discussed.

Haemoglobin, one of the best known blood protein, occurs in normal and variant types in man. The study of variant haemoglobin types and their association with conditions such as malaria is an example of molecular adaptation will also form the part of teaching of this paper.

Study of demography is assuming increasing significance primarily because of ever-growing population in developing and underdeveloped countries in particular is straining social, economic and even political systems of various nations, which is very important to be known by the students.

Students will be given knowledge about the evolutionary processes viz. mutation, selection and genetic drift and the combined effect of which are attributed to the present day genetic diversity. There is a further factor affecting genetic evolution which man himself has enhanced, namely population structure.

At the end of the course students are expected to:

- a. describe the anthropological significance of human biology
- comprehend the human physiological and behavioural responses to extreme climatic conditions
- c. identify the growth pattern and stages with reference to genetic and environmental factors
- d. explain the energy requirement by population, occupation and age, sex categories
- e. perceive the body composition and classify them to examine the hemoglobin variations in populations, their responses and association with diseases like malaria etc.
- f. explain the population growth and the theories
- g. comprehend the evolutionary processes and their effect on human populations.

Human Biology

Syllabus Hrs

- Meaning, scope and development of human biology, major problems in human population biology and the IBP approach.
- Human growth and development: growth from conception to maturity senescence differences
 in physique. factors controlling growth and development in populations.

 Nutritional and diet survey method; nutritional requirements for normal growth from infancy to old age. The energy value of foods; undernutrition, and malnutrition. nutritional adaptation in Man. Human adaptation - physiological adaptation to heat, cold and high altitude.

- Blood pressure: age and sex variation. Human body composition: body density, lean body mass and body fat, muscular strength, work capacity. Human hemoglobin synthesis, normal and abnormal Hb types Thalassaemia association.
- 5. Genetic implication of demography: population structure: naturing patterns of population;population structure, subdivision size and composition
- 6. Heredity-environment interaction different approaches 10

Recommended Readings

1.	Baker, P.T. and	The Biology of Human Adaptability	
	Weiner (Eds.)		
2.	Beal, Virginia.	Nutrition and the Life Span	

3. Beutler, E. Red Cell Metabolism: A Manual of Biochemical Methods

4. Bogue, D. Principles of Demography

5. Brock and Mayo. The Biochemical Genetics of Man

6. Burdette, W.J. Methodology in Human Genetics

7. Craig. Human Development

8. Dixit, M. Human Nutrition Principles and Applications in India

9. Emery A.E.H. Elements of Medical Genetics

10. Eveleth, P.B. and Worldwide variations in Human Growth

Tanner, J.M.

11.	Forbes, G.B.	Human Body Composition
12.	Gopaldas and Sheshadri.	Nutrition Monitoring and Assessment
13.	Harris and Hopkinson.	A Handbook of Electrophoresis
14.	Harrison et.al.	Human Biology: An Introduction to Human Evolution, Variation, Growth and Adaptation
15.	Harrison G.A. and Boyce, J.	The Structure of Human Population
16.	Harrison, G.A.	Human Biology
17.	Lohman, T.G.	Advances in Body Composition Assessment
18.	Sheldon, W.H. et.al.	Varieties of Human Physique
19.	Singh, I.P. and Bhasin, M.K.	Anthropometry
20.	Singh, S.P. Sidhu, L.S. and Singh, J.	Skeletal Maturity
21.	Sodhi, H.S.	Sports Anthropometry
22.	Sol Tax.	Action Anthropology
23.	Tanner, J.M.	Fetus into Man
24.	Weiner, J.S. and Laurie, J.A.	Human Biology - A guide to field methods
25.	Weiss, K.M. and Demogr Ballonoff P.A.	raphic Genetics

Essentials of Nutrition and Diet Therapy

26. Williams, S.R.

27. Willigt, J.V. Applied Anthropology - An Introduction

28. Wright, S. Evolution, Genetics and Population

29. Yunis, J.J. (Ed) Biochemical Methods in Red Cell Genetics

EB.3. Forensic Anthropology

Approach

The course aims to provide both theoretical and practical aspects of forensic science from an anthropological perspective mainly to orient those principles and techniques in a dynamic and heterogeneous Indian context. In the process of estimation of age, sex and time of death of a person, anthropometry and scopy would play crucial roles. Socio-cultural, ethnic, caste, tribe specific markers would also share their importance in personal identification, besides the analysis of body fluids, DNA techniques and dermal patterns.

At the end of the course the students should be able to:

- a. perceive and explain the theories on personal identification
- assess the difficulties and relevance of personal identification in a multicultural and biologically heterogeneous context as in India.
- c. follow correctly the procedures of personal identification through anthropological methods and techniques
- d. estimate correctly the age, sex and time of death of person(s) involved
- e. predict the identity of an individual to his/her socio-cultural, ethnic, caste, tribal group, based on various cultural and biological markers
- f. gain confidence in employing anthropological concepts and techniques in establishing identities through skeletal remains.

Forensic Anthropology

Syllabı	us		Hrs
1.	a.	Definition, aims and scope of forensic Anthropology	20
	b.	Definition of crime, its theories and treatment	
	C.	Crime scene investigation - its location, evaluation, protection of evider photography, sketching and search	nce,
	d.	Assessment of time and cause of death	
	e.	Establishment of complete or partial identity from decomposed or mutilated bo	dies
	f.	Study of fragmentary or burnt bones for establishing identity	
	g.	Anthropological perspective	
2.	Establ	ishment of identity through skeletal remains:	20
	a.	Study of human skeleton	
	b.	Comparison between human and non-human skeletal remains	
	C.	Age changes and their relation to sex and ethnic group	
	d.	Microscopic and gross anatomy of human bones	
	e.	Determination of time of death through studies of bone, density method	
	f.	Human skull — determination of age, sex and ethnic group. Skull suture pattern individualization based on suture patterns. Fusion of sutures and determination age	
	g.	Electronic Superimposition identification device (ESID)	
	h.	Attribution of sex and reconstruction of stature from skeletal remains	

i. Human dentition: determination of age, sex and ethnic groups - Importance of dental

records in forensic odontology

20

- a. Latent finger prints tracing, lifting and developing (techniques)
- b. Filing and searching of finger prints
- Classifications for filing the finger prints (Henry's four-fold and extended classifications)
- d. Classifications for searching finger prints (Single finger print classifications; e.g.,
 Battley and Bertilon)
- e. Palm prints and sole prints, including foot marks
- f. Details of ridge and crease characters: analysis

4. Personal identification

20

- a. Identification through somatometric and somatoscopic observations
- b. Identification through mannerism, deformities, scars, occupational marks and handwriting, age, sex and ethnic association
- c. Identification through hair. Differentiation of animal and hair. Structural polymorphism of human hair.
- d. Body fluids in personal identification:
 - I. Blood-location, collection, evaluation -

Specific problems: (i) Blood indebris

- (ii) Age of blood stains
- (iii) Disputed paternity
- II. Semen, saliva, urine and sweat

5. Identification of parentage. Disputed paternity and different approaches to solve it - morphological, serological, biochemical, cytogenetic, immunological and DNA.

Recent trends in personal identification:

20

a. Reconstruction of facial physiognomy

DNA finger printing, VNTR, Single loans, multiloans, Mini Satellite

b. Computer applications

Recommended Readings

1.	Boorman and Dodd:	Blood Group Serology

2. Bridges: Practical Finger Printing

3. Brothwell, D.R. (Ed): Dental Anthropology

4. Chatterjee, J.B.: Haematological Techniques

5. Chatterjee: Finger, Palm and Sole Prints

6. Cherril, F.R.: Fingerprint systems at Scotland

7. Gilbert, H.R.: Genetic markers in Human Blood

8. Kind, Stuuart and Science Against Crime

Michael:

9. Kirk, P.L.: Crime Investigation

10. Lundguist, F and Methods in Forensic Sciences

A.S. Curry:

11. Ment: Modern Trends in Forensic Medicine

12. Nicoles: Methods in Forensic Science

13. Steward, T.D.: Forensic Anthropology

14. Symans, J.: Crime and Detection

15. Turner: Forensic Science and Laboratory Techniques

16. Yunis, J.J. (Ed): Biochemical methods in Red cell Genetics

EB.4: Medical Genetics

Approach

This course would introduce the students to the basics of inherited diseases and their epidemiological dimensions. It would deal with the ecological demographic and socio-cultural beliefs and practices (consanguinity, inbreeding) their positive and negative implications in the causation of genetic as well as congenital defects. The students would be further oriented to traditional view points on the inheritance of normal and abnormal traits. Various methods to track down and identify the mode of inheritance of genetic diseases would be discussed. Subsequently, the students are provided with the methods of genetic counselling perspectives.

At the end of the course the students are expected to:

- a. recongnise the socio-cultural dimensions of medical genetics
- b. identify the effect of consanguinity and inbreeding on inherited diseases
- c. explain the basic principles of human genetics and of inherited diseases
- d. differentiate between genetic diseases and congenital defects
- e. identify the causes leading to congenital and birth defects
- f. assess the incidence of genetic anomalies among populations in India
- g. employ methods to track down genetic disease in families and populations

h. predict their occurrence/incidence in populations with or without inbreeding practices

i. provide basic genetic counselling to individuals/families/populations

Medical Genetics

Syllabus

This course centres around the anthropological components of medical genetics, as opposed to the treatment orientation advocated by medical scientists. While the course would introduce the preliminaries of those diseases and their patterns of inheritance and their varying manifestations in different population/racial groups, it would also prepare the students to probe the cause and work out the relative occurance/incidence of such genetic diseases among different populations. Importance of pedigree method, twin method and population genetics methods would be highlighted to get a better perspective of these diseases. The ecological demographic and socio-cultural implications in the causation of perpetuation of various genetic diseases would be discussed besides training the students in the basics of genetics counselling with reference to various genetic diseases.

Hrs

- Medical genetics vis-à-vis Medical sciences and genetics. Anthropology and genetics,
 Anthropology and medicine (diseases) overlapping areas and their relevance.
- 2. Formal genetics and Medical genetics: to be distinguished and their boundaries identified. 8
- Timing and possible causation of genetic diseases/syndrome defects/disorders/and the congenital deformities having adverse bearing on community level
- Methods in identification of genetic diseases: Pedigree method, twin method, cytogenetic,
 biochemical and molecular gene, prenatal diagnosis
- Genetic classification (autosomal, sex-linked etc) of the disease and their variations with reference to syndrome; racial/population variations - epidemiology.

 Demographic, Socio-cultural and ecological dimensions of genetic diseases, perception knowledge and attitude towards such diseases. Ethno-medical aspects of diagnosis: control and treatment.

7. Society and genetic diseases: KAP and curing practices 8

8. Genetic counselling approaches.

Recommended Readings

1. Connor, J.M.: Essential Medical Genetics

2. Emery, A.E.H.: Elements of Medical Genetics

3. Thompson, J.S. and Genetics in Medicine

Thompson, M.W.:

4. British Medical Human Genetics: Choices and Responsibility

Association:

5. Harper, P.S.: Practical Genetic Counselling

6. Kourilsky: Genetics: The Thread of Life

7. Morton, N.E.: Outline of Genetic Epidemiology

8. Verma, I.C.: Medical Gentics in India, Vol 1 & 2

9. McKusick, V: Human Genetics

10. Landy, D.: Culture, Disease and Healing

11. Foster, G.M. et.al.: Medical Anthropology

EB.5 Practicals in Applied Biological Anthropology

Appraoch

This course aims to equip the students to master the laboratory techniques in serology, cytogenetics and forensic anthropology, besides training them in biostatistics for population genetic analysis and for population comparisons. The course would provide the students sufficient confidence to employ these methods and techniques to collect and analyse data from the field. The foundation laid in all the components in practicals would help the students to opt for further specialisation in any one or more applied areas.

At the end of the course the students are able to:

- a. gain expertise in serological techniques including blood grouping
- b. prepare PTC stock solution and attempt serial dilution; also administer colourblindness test using Ishihara's chart
- c. analyse blood samples for sickel cell disease, G6PD; carry out electrophoresis, chromatography tests using blood, serum, etc.
- d. prepare cell culture for chromosome spread and do Karyotyping along with banding techniques as well as isolate DNA material
- e. obtain clear dermal prints, attempt classification and filing procedures; develop chance prints/latent prints
- f. examine osseous materials and identify age and sex; derive other measurements and reconstruct facial features using eraniometric and scopic techniques
- g. organise tests for genetic markers from body fluids, stain, sweat, hair etc
- h. derive gene frequencies and compare between populations; estimate genetic load, selection intensity indices, inbreeding coefficient and other derivations useful for population genetic studies

Practicals in Applied Biological Anthropology

Syllabus

 Collection of blood, separation of plasma/serum, preparation of RBC suspension, haemolysates and storage.

Blood grouping: A1, A2, B0, Rh CDE, MNS ABH secretion

Tests for colour blindness, PTC taste sensitivity

 Tests for Sickle cell disease: Na2S2O5 slide and sodiumdithionate, turbidity test, Tests for G6PD deficiency.

Electrophoresis blood enzymes and proteins;, G6PD, Acp, ESD, PGM, Hp, TF, CP, ALB, etc.

- 3. Detection of Inborn errors of metabolism: Paper and thin layer chromatography.
- Cytogenetics: Cell cultures from blood, leukocyte, culture after separation of erythrocyte, preparation of metaphase chromosomes, karyotyping, banding techniques. Isolation of DNA material
- 5. Forensic Anthropology: finger printing: classification, filing and search for development of latent prints
- 6. Bones and teeth for determination of sex, age and stature. Reconstruction of facial features using metry and scopy
- 7. Body fluid and stain examination: Blood, saliva, semen and sweat testing for genetic markers from stain, examination of hair.
- 8. Elementary Biostatistics: basic statistical measures, gene/allele frequency estimation/testing Hard-Weinberg equilibrium, estimation of inbreeding coefficient, genetic load, selection intensity indices

Recommended Readings

1. Frazer. Human Anatomy

2. Singh, I.P. and Anthropometry

Bhasin, M.K.

3. Weiner and Lourie. Human Biology - A guide to field methods

4. Steward, T.D. Hrdlicka's Practical Anthropometry

5. Cummins, H and Dermatogplyphics - An introduction to fingerprints, palms and

Midlo, C. soles

EB.6: Human Cytogenetics

Approach

This course aims to provide the basics involved in chromosome mapping and banding techniques. Comparing and contrasting with the normal Karyotype, the course would highlight the abnormalities or aberrations observed in the number and structure of human chromosomes citing various syndromes as examples. Describing the latest methods and techniques in studying human chromosome, the course would further identify the importance of sex chromosomes, theories on sex determination as well as sex-linked inheritance with suitable examples. The role of cytogenetic investigation is then highlighted with reference to prenatal diagnosis in screening various abnormal and disease conditions. Lastly the human genome organisation in the light of chromosome mapping and banding techniques are to be discussed.

At the end of the course students are expected to:

- a. examine cytogenetics in relation to human genetics and its relevance in anthropology
- explain various methods employed for human chromosome analysis mapping banding techniques and types

c. differentiate between normal karyotype and locate the chromosome aberrations with reference to their number and structure

- d. identify, various syndromes associated with such aberrations
- e. comprehend the importance of sex-chromosomes and the theories associated with sex determination
- f. survey the types of sex linked inheritance with examples
- g. describe the role of cytogenetic investigations in prenatal screening for diagnosis of abnormalities
- h. understand the relevance of cytogenetic investigations in various human disease as well as abnormal conditions
- i. appreciate the relevance of cytogenetic methods in the light of genome organisation.

Human Cytogenetics

Syllabus Hrs

- Cytogenetics in relation to human genetics; anthropological significance. scope and development, various banding techniques, their significance and applications
- 2. Sister chromatid exchange (SCE), insitu fluorescent level, high resolution banding 10
- Chromosome nomenclature, chromosome mapping. mosiac and chimeras; structural and numerical chromosomal aberrations and causes
- Chromosomal syndromes: Down's syndrome, Patau's syndrome, Edwards syndrome, Cridu-chat syndrome, Fragile X syndrome, Klineflter's syndrome and Turner's syndrome. True and Pseudo hermophrodites.
- Methods of studying Human chromosomes from peripheral leucocytes, sex chromatin from buccal mucosa.

 Lyon's hypothesis; X-chromosome inactivation and reactivation; sex-linkage, sex-limited and sex-influenced traits; recent concepts in human sex determination.

- Prenatal detection of chromosome abnormalities. Cytogenetics of human pregnancy wastage, repeated abortion and in primary and secondary amenorrhea. cancer cytogenetics.
 Chromosome polymorphism.
- The Human genome organisation: morphology of chromosomes and classification, movable elements in the human genome. Genome organisation in the light of chromosome banding techniques. Current status of human cytogentics.

Recommended Readings

11. Yunis, J.J.

1.	Buettner-Janusch, J.	Origins of Man
2.	Spuhler, J.N.	Genetic Diversity and Human Behaviour
3.	Burdettee, W.J.	Methodology in Human Genetics
4.	Giblett, E.R.	Genetic Markers in Human Blood
5.	Harris, H.	Human Biochemical Genetics
6.	Harris and Hopkinson	A Handbook of Electrophoresis
7.	Yunis, J.J (Ed)	Biochemical Methods in Red Cell Genetics
8.	Beutler, E.	Red Cell Metabolism: A Manual of Biochemical Methods
9.	Livingstone, F.B.	Abnormal Hemoglobins in Human Populations
10.	Arakaki, D.T. and Sparkes R.S.	Microtechniques for Culturing Leucocytes from Whole Blood

Human Chromosome Methodology

EB.7: Molecular Genetics

Approach

This course aims to orient the students to the most recent theoretical advances and techniques in molecular genetics. Although this paper deals with fundamentals and techniques has varied implications and applications. Anthropological perspectives for comparative studies among populations and its utility in forensic sciences need to be highlighted.

At the end of the course the students are expected to:

- a. identify the structure of DNA, RNA and other molecular variants
- recognise the process of DNA replication, modification and repair system as well as RNA transcription and translation systems
- c. comprehend the general and specific features of genetic code and their signficance in anthropology
- d. discuss the details involved in molecular techniques of DNA,RNA isolation
- e. discuss the ethical socio-cultural implications of cloning.

Molecular Genetics

Syllabus Hrs

An overview of molecules involved in the flow of genetic information; Double helical structure
of DNA alternate forms of DNA, double helix, denaturation and renaturation of DNA, variations
in the shape of DNA and standards, types and structure of RNA, RNA-DNA hybrid, helices,
structure of proteins.

DNA replication: The replication concept, primosomes and replisomes, The DNA modification systems, DNA repair systems.

- Transcription machinery: The promoter transcription factors and RNA polymerases. Operon concept with reference to lac operno, arabinose operon and tryptophan operon, general eukaryotic transcription, post transcriptional processing of RNA.
- Genetic Code: General features of the genetic code. Degeneracy and universality of the genetic code. Anthropological significance and applications.
- Translation machinery: RNA, prokaryotic and eukaryotic ribosomes, activation of amino acids, initiation elongation and termination of polypeptide chains, inhibitors of protein synthesis, post-translation modifications, general eukaryotic translation.
- Tools of molecular genetics; Enzymes, nucleases, restriction endonucleases, DNA ligase,
 DNA polymers L, Reverse transcriptase, terminal transferase.
- Basic molecular techniques: Isolation of DNA and RNA, restriction endonculease digestion
 of DNA, Southern blotting, Nothern blotting, isotopic labelling of DNA probes, polymerase
 chain reaction. Current status on molecular genetics; its applications and socio-cultural
 implications.

EB.8 Human Population Genetics

Approach

Studying contemporary populations for their socio-cultural and biological variations has been a focal interest in anthropology. Starting with identification, description and classification of race elements, today population genetics as a sub-discipline has evolved to a position to analyse and discuss the population dynamics in an evolutionary context. This shift in approach has brought many other areas of inquiry under the gamut of population genetics.

This course aims to provide the basics of population genetics differentiating it from other areas of human genetics. Analysing the basic elements involved in genetic structure and population structure, this course would identify the inherent relationship between these two aspects. Later, the course would discuss the unique characteristics of Indian populations identifiable as endogamous caste groups within a caste cluster, through space and time; and theories on their origin. The role of population in genetic investigations and the nature of genetic investigations carried out as well as approaches to assess population distance measures will be discussed in this course.

At the end of the course students are expected to:

- understand the basics of population genetics its relation with other sub-disciplines
 of anthropology
- comprehend the nature and types of mating systems their genetic implications and the approaches to study them
- c. explain the significance of reproductive isolates in human genetics and the models available to study them
- d. discuss the genetic structure of human populations in relation to Hardy-Weinberg law and investigate the causes for changes in genetic equillibrium
- e. examine the nature of genetic polymorphism with examples
- f. explore the biological consequences of consanguineous mating system and compute inbreeding coefficients
- g. critically examine the Indian population structure and the theories of origin of caste groups in India, and focus on the unit of study in population genetic surveys/ researches
- h. highlight the ingredients necessary for genetic study of population
- i. explain the role of population in human genetics
- j. examine the measures employed in assessing the population distances

Human Population Genetics

Syllabus Hrs

Definition and scope of population genetics, its relevance in anthropology; its relationship and differences with other branches of human genetics, viz., formal genetics, developmental genetics, cytogenetics and molecular genetics.

- Mating system: Random mating/panmixis; selective mating/ preferential mating; mate choice/ sex selection; assortative mating. Mendelian population with reference to animals and Man; other concepts and definitions - statistical, geographical, demographic, ecological.
- Reproductive isolates and the concept of gene pool: genetic isolates; geographic isolates; models to study gene flow 'island' model, 'diffusion' model; 'isolation by distance model', role of social divisions and heirarchy in genetic isolation.
- Genetic structure of human populations: approaches to study social, geographic, demographic and genetic. Principles of genetic equillibrium; Hardy-Weinberg law, causes for changes in gene frequencies: mutation, hybridisation, genetic drift and selection. Genetic polymorphisms balanced, transient and neutral.
- Biological consequences of mating systems: consanguinity; inbreeding and outbreeding.
 Inbreeding coefficient (F ratios) inbreeding depression: heterozygosis; homozygosis; genetic load.
- Population structure and genetic structure relationship: Population structure in India: religious groups; caste groups; other isolates. Origin of caste theories: fission (Ghurye) lack of fusion (I. Karve). Endogamous group as the ultimate unit of study in population genetics. Genetic distance: concepts and approaches to study.
- Genetic study of populations: Natural and social boundaries; mobility; growth, age, sex composition; fertility, mortality and morbidity. Marriage and Kinship; age at marriage; type of marriage: consanguineous, nonconsanguineous comparison: ethnic, ecological, geneological, generational, social, epidemiological.

8. Role of population in human genetics: Natural history and racial history; variation; inheritance: direct - family and pedigree correlation; recessive ratios; indirect: population frequencies; inbreeding, genetic traits. Association: environment: mutation expression, evolution.

9. Population distance measures.

8

Recommended Readings

1.	Cavalli-Sforza, L.L and	The genetics of human populations
	Bodmer, W.F.	

Crow, J.F. and An introduction to population genetic theory
 Kimura, M.

3. Stern, C. Principles of Human Gentics

4. Winchester, A.M. Human Genetics

5. Giblett, E.R. Genetic Markers in Human Blood

6. Bhende and Kanitkar Principles of Population Studies

7. Cox. Peter. Demography

8. Houser and Duncan. The study of population

9. Shryock and Shryock. Methods and Materials of Demography

 Shukla, B.R.K. and Physical Anthropology and Human Genetics - An Introduction Rastogi, S.

11. McKusick, V.A. Human Genetics

12. Li, C.C. Human Genetics

13. Malhotra, K.C. Statistical Methods in Human Population Genetics, IBRAD, ISI& ISHG, Calcutta

- 14. Wright, S. Evolution and Genetics of Population
- 15. Harrison, G.A. and Structure of Human PopulationA.J. Boyce.
- 16. Stanfield, W.D. Theory and Problems of Genetics
- 17. Bhamrah, H.S. and A Textbook of Genetics Chaturvedi, C.M.
- Rieger, R. et.al. Glossary of Genetics Classical and Molecular
- 19. Mange, J.E. and Mange, A.P. Basic Human Genetics
- 20. Rothwell, N.V. Human Genetics

EB.9 Sports Anthropology

Approach

Sports, games as well as recreation have played pivotal roles in the successful survival and evolution of all species. They also provide the much needed adaptive advantages in terms of biological, psychological and social parameters, not only among the humans but also among other animal forms. India provides a plethora of sports and games along the length and breadth of the country.

Today, competitions at the local to the international levels in many areas of sports call for intensive screening and selection of the "most appropriate" candidates for the best results. Identification of the ideal body composition most suited for a particular sports/games, right at the young ages require a series of tests and body measurements, besides monitoring them for changes due to age and exercises.

This course tries to equip the students to various aspects of Kinanthropology as well as provide training to identify the traditional sports and games in India with a view to encourage and promote them.

At the end of the course the students are expected to:

- a. comprehend the varieties of traditional sports, games and modes of recreation among the Indian communities
- b. assess the biological measures in body maturity and their role in sports performance
- c. evaluate body composition and classify separately as per age and sex
- d. understand the physical and physiological changes brought about due to exercise
- e. appreciate the group variations expressed through sports performance and endurance
- f. identify the most suitable body composition for specific sports and suggest the types of exercises they should perform to achieve excellence

Sports Anthropology

Syllabus

- Sports: Its relation to anthropology. History and development of sports anthropology. Its relevance to Indian context. Traditional sports and games in India
- 2. Energy and sports activity: introduction, concept, interaction of energy systems
- 3. Fuel for sports: introduction, different food stuffs and their involvement during exercise, effect of intensity and duration of exercise on fuel consumption.
- 4. Cardio-vascular fitness, physical work capacity and sports performance.
- 5. Introduction to Kinanathropometry, body proportionality and the age changes. Body proportionality in relation to sports.

Human physique and body composition and its role in sports participation and excellence.
 Different methods for studying human physique and assessment of body composition for both sexes.

- 7. Biological measures of maturity (skeletal, dental and sexual) and its role in sports performance.

 Racial variations in physical structure and participation in sports. Race and sports performance
- 8. Sports talent selection in young children on the basis of structural, functional and endurance characteristics
- 9. Ethnicity, race, sports and political policies interference
- 10. Genetic constitution, physical fitness and sports performance. Drug uses in sports.
- 11. Habitual physical activity, tribal subsistence activities related to game
- 12. Sports and games for handicapped children and adults
- 13. Gender specific sports and games

Recommended Readings

1.	Boyd W.C., 1950	Genetics and the Races of Man. Little Brown, Boston
2.	Das B.M., 1980	Outlines of Physical Anthropology. Kitab Mahal, Allahabad
3.	Garn S.M., 1971	Human Races. Thomas, Springfield, Illionis
4.	Hooton e.A., 1965	Up From the Ape. Motilal Banarasidas, Delhi
5.	Eveleth P.B. and Tanner J.M., 1990	Worldwide Variations in Human Growth. Cambridge University Press, Cambridge
6.	Forbes G.B., 1987,	Human Body Composition, Springer-Verlag, New York

7. Sheldon W.H., Stevens S.S., Varieties of Human Physique. Harper Grow, New York Tucker, W.B. 1940

- Lohman T.G., 1992 Advances in Body Composition Assessment, Human Kinetics,
 Champaign
- 9. Montagu A., 1960. An Introduction to Physical Anthropology.
- Singh I.P. and Anthropometry, Kamal-Raj Publishers, Delhi
 M.K. Bhasin, 1968,
- Singh S.P., Sidhu L.S. Skeletal Maturity, HBPS, Patiala
 and J. Singh, 1992
- 12. Sodhi H.S., 1991 Sports Anthropometry, Anova Publishers, Mohali
- 13. Tanner J.M., et al., 1983 Assessment of Skeletal Maturity and Prediction of Adult Height (TW2 method)
- 14. Weiner J.S. and Human Biology A guide to Field MethodsLaurie J.A., 1969

EB.10 Child Development

Approach

The course is designed to provide basic insight into the issues related to the development of the child. All topics related to child development including physical, motor, emotional, social, moral and personality aspects have been included along with a milieu of factors influencing the birth weight. It includes the use and creation of growth standards in judging the small-for-date and growth retardation cases. Infant feeding by bottle, breast and weaning issues have also been incorporated.

At the end of the course students are expected to:

- a. Understand what is meant by birth weight and which factors influence it
- b. assess the newborn whether he is a normal or a retarded child
- c. describe different types of feeding practices of the infant and their importance
- d. comprehend all aspects of child development (physical, moral, emotional, psychological)

Child Development

Sylla	abus	Hrs
1.	Introduction to the field of child development and principles of development.	8
2.	The creation and use of growth references for evaluating growth	8
3.	Assessment of growth retardation of children born on term or pre-term	8
4.	Extra-uterine growth of pre-term and small for gestational age children	8
5.	Factors influencing birthweight: maternal anthropology, nutrition and socio-economic status	8
6.	Infant feeding and growth: breast-feeding, bottle feeding, weaning foods	4
7.	Physical growth and development, adolescence and changes during puberty	8
8.	Motor skills: milestones, functions and sequences of the motor skill development	8
9.	Patterns of emotional development, social development and social adjustments	6
10.	Moral and personality development	6
11	Endocrinological regulation of post-natal growth	8

Archaeological Anthropology

EC.1: Archaeological Anthropology of India and West Asia

Appraoch

This course deals with Pre and Protohistoric background of India and West Asia. It presents the personality of India, i.e., origin and development of palaeolithic cultures, process and emergence of farming and village communities culminating in the establishment of urban centers or civilization indicating natural process of cultural evolution. It identifies West Asian cultures from proto-neolithic stage to the emergence and spread of West Asian civilisation and examines the features to understand their relationship between different centres during protohistoric period.

It aims at showing indigenous origin and development of cultures in India and later their relationship during the period of civilization with west Asian societies and Vice-Versa.

At the end of the course the students would be in a position to:

- a. recall the cultural origins and development in India.
- b. highlight the evidence to the cultural processes from stage to stage including emergence of civilisation
- c. project the culture contacts between India and West Asia during the period of urban civilization

Archaeologica Anthropology of India and West Asia

Syllabus Hrs

- Prehistory of India: Regional distribution lower palaeolithic, middle palaeolithic, upper palaeolithic, mesolithic
- Neolithic: Nothern zone, north-east zone, central zone, southern zone, problems of ash mounds

Anthropology 174			
3.	Harappan Civilisation: Pre-Harappan, Harappan and Post Harappan. 12		
4.	Chaleolithic: Chaleolithic of	cultures of India	12
5.	West Asia: Proto-Neolithic	c Cultures in the Near East, Ecological background of the fo	od
	producing economies		14
6.	Neolithic and Civilisation: F	Pre-pottery, Neolithic Phase, Jeriche, Jarmo. The Ceramic Neolith	nic
	Period - Labonon, Palastin	ne, Hasuna, Hasilar, Cetal Huyuk, Halaf, Giya, Sialk and Enan.	20
7.	Urban Revolution in Meso	potamia	10
Red	commended Readings		
1.	Allchin, B. & Allichin, R.	Rise of Civilization in India and Pakistan.	
2.	Braidwood, R.J.	Foundation of the Civilizations in the Near East.	
3.	Childe, V.G.	New Light on the Most Ancient East.	
4.	Dani, A.H.	Pre and Protohistory of Eastern India.	
5.	Gordon, D.H.	The Pre-historic background of Indian Cultures.	
6.	Mellart, I.	The Earliest Civilization of the Near East.	
7.	Mellowan, M.E.L.	Early Mesopotamia and Iran	
8.	Sankalia, H.D.	Pre and Protohistory of India and Pakistan.	

EC.2: Archaeological Anthropology of South and South East-Asia including Oceania and Far East

Approach

Cultural similarities and variations during Pre and Protohistoric periods in Asia and different Islands in Asia and Oceania are dealt in this course. Pre and protohistoric evidences in India, China, Korea, Thialand, Indonesia, Japan, Australia and other Islands are presented. It projects similiarities and variations if any, the region as a broad culture zone which helps in regional identity and cooperation.

The course aims at projecting the evolution of cultures from the times of Homoerectus and gradual development and spacial expansion into different islands.

At the end of the course the students would be in a position to:

- a. explain the origins of cultures in India, China, Indonesia etc.
- b. present the cultural development and expansion to neighbouring islands in Asia and Oceania
- c. comprehend the regional variations and similarities of Prehistoric cultures in South and South East Asia and other islands in the area
- d. describe the information on geographical features of the area
- e. relate the people and cultures against the geographical background of South and South East Asia
- f. evaluate the Pleistocene and Holocene cultures in general and Ganga valley in particular in India and provide the evidence on human settlements, expansion of their economy temporal dimension etc.

g. discuss the Paleolithic, Epic paleolithic cultures in China, Korea, Japan, Indonesia, Thailand, Burma, etc.

- h. identify the colonisations of human populitions in Australia and other Islands in Oceania
- i. appreciate the adaptive strategies, socio-economic features of these Island cultures
- j. understand the economic features of Holocene cultures in Australia and other islands
- k. examine the emergence of civilisation in China, Japan, Thailand and Indonesia
- understand the human efforts in the development and spacial expansion of past cultures similarities, variations, culture contacts between the cultures of South and South East Asia.

Archaeological Anthropology of South and South East-Asia including Oceania and Far East

Syllabus Hrs

Major geographical regions of India and their bearing on the course of cultural evolution.
 Environmental changes during the quaternary.

Pleistocene cultures in India: distribution, development, regional variation, environment, technology and chronology

Holocene cultures: distribution, expansion of human settlements in the Ganga valley, economy, regional variation, chronology.

2. Geography - People - culture of South East Asia

24

Palaeolithic cultures in South East Asia - Patijithanian, Ahyathian, Finguoian, Cabalvanian, Tampanian. Elp-Palaeolithic cultures in South East Asia - Hoabinhian, Taolian, Banchiang

Anthropology 177 3. Prehistoric cultures in Japan: Jamon, Yayoi, Nara-Hian 14 Prehistoric culture in China Korea: Choukoutian, Tingus-tan, Chengokui Arrival of man in Australia. Expansion of Human colonisation in Australia and Oceania. 4. Microlithic cultures and subsistence in Australia 14 5. Early civilizations: China, Japan, Thailand and Indonesia 20 **Recommended Readings** 1. Aljan, Jetal (Ed.) Sunda and Sahul. Man's Conquest of the Pacific. 2. Bellwood, P.S. Prehistory of Indo-Malaysian Archipelago. Bellwood, P.S. 3. Chang, K.C. 4. The Archaeology of Ancient China. 5. Clark, Graham. World Prehistory: In New Perspective. 6. Heakeren, H.R. Van. The Stone Age of Indonesia. 7. Prehistory of Australia. Mulvany, D.J. 8. Asian Perspectives (Journal) Vol. 12, 1972 9. American Anthropologist, Vol. 62. No. 5, 1960

World Archaeology, Vol. 2, 1970

10.

EC.3: Archaeological Anthropology of Africa

Approach

The course deals with the human origins in the tropical environment and contributions of Africa to the bio-cultural evolution of mankind. It presents the evidences at Olduvai Gorge, Vaal river valley, Omo valley, Moracco etc. in the form of fossil remains, cultural remains and the environmental conditions. The course aims at presenting Africa as the cradle of human origin.

Therefore the student is introduced to pluvial and inter pluvial environment in Africa. Case studies of Olduvai gorge and Vaal and Omo river valleys, Moracco coast are discussed. The course would evaluate the hominid fossil evidences in temporal and spacial dimension in Africa, in different geographical situations as presented in the case studies, besides presenting culture remains in chronological order at different sites. The case studies present the correlation of fossil men with cultures and environmental conditions.

At the end of the course the students are expected to:

- a. understand the cultures and processes of cultural development in chronological order at each of the site
- b. comprehend the similarities and variations of cultures during pleistocene period.

Archaeological Anthropology of Africa

Syllabus Hrs

- Introduction to Human fossil finds in Africa-Pleistocene pluvials and Inter pluvial climatic conditions
- 2. Olduvoi gorge: Human fossils, and archaeological findings 20
- 3. Vaal River: Stratigraphy, palaeolithic cultures of South Africa 20

Anthropology		179
4.	Omo River Valley: Human fossils and archaeological findings	20
5.	Morocca: The coastal sediments and archaeological findings	20
Rec	commended Readings:	

- 1. Alimen, H. The Prehistory of Africa. Hutchinson
- 2. Clark, J.D. The Prehistoric Cultures of the Horn of Africa.
- 3. Clark, J.D. The Prehistory of Southern Africa.
- 4. Cole, S. The Prehistory of East Africa.
- 5. Coles, J.M. and Higgs, S.S. The Archaeology of Early Man.
- 6. Howells, W. Mankind in the Making.
- 7. Howell, F.C. African Ecology and Human Evolution.
- 8. Mc Burney, C.B.M. The Stone Age of Nothern Africa.
- 9. Pfeiffer, J. The Emergence of Man.
- 10. Washburn, S.L. Social Life of Early Man.

EC.4 Archaeological Anthropology of Europe

Approach

The course deals with glacial, periglacial and interglacial environments during the Pleistocene period, human fossil finds and cultural remains from Acheulian times to Megalithic period. Archaeological evidence in different ecozones during quaternary period project adaptive strategies through typetechnologies revealing spacial expansion of prehistoric cultures in Europe. The course aims at providing bio-cultural evidences in spaito-temporal dimensions and their adaptive strategies

in glacial zones. It focuses on the origin and biocultural developments in glacial, periglacial zones in Europe, hence the student is introduced to the environmental conditions during the Pleistocene and Holocene periods. A survey of human fossil evidences in Europe is made and the student is informed of the evidence of Homoerectus, pre Neanderthal, Neanderthal and finally Homo sapiens in order to understand the temporal and spacial distribution of early human populations in glacial and interglacial conditions.

At the end of the course the students are expected to:

- explain the associated cultures and development particularly abbivillian, achulian,
 clactonian, levallosion, technologies and typologies
- explain the distribution of Mousterian cultures including the habitat, economy burrial practices, etc. in different ecozones
- c. recognise the origin of Upper Palaeolithic culture in Europe based on typotechnology, rudimentary evidences of family, clan, religion, habitat, economy, etc.
- d. reflect the colonization of different ecozones during Holocene period, technotypologies, regional various of Mesolithic cultures in Europe
- e. comprehend the development of early agricultural economy of Neolithic period in Loessic zones of Europe. Development of Neolithic into bronz age cultures and evidence of stone hinjes.

Archaeological Anthropology of Europe

Syllabus Hrs

 Pleistocene epoch in Europe: glacial and interglacial climatic episodes. Bio-cultural evolution of Man.

12

2. Human fossil finds - Swanscombe, Tautavel, Vertezollos, Neanderthal, Cro-Magnon

Anthropology

3. Abbevelian and Achulean cultures: typo-technological development, chronological aspects,

associated material 12

- 4. Clactonian and Levallosian technologies Mousterian cultures 12
- Upper palaeolithic cultures in Europe: Perigardian, Auregnasian, Solutrean and Magdalenianprehistoric Art.
- Mesolithic cultures in Europe: Azilean, Tardenoisean, Austerian, Maglemasean, Kitchen
 Midden and Campegnian
- 7. Neolithic cultures in Europe 10
- 8. Stone Hinge: Archaeological and astronomic aspects Bronze Age Civilization 10

Recommended Readings

1. Bordes, F. The Old Stone Age.

2. Butzer, K.W. Environment and Archaeology.

3. Coles, J.M. and The Archaeology of Early Man.

Higgs, E.S.

- 4. Graziozi, P. Palaeolithic Art. (English Edition)
- 5. Howell, W. Mankind in the Making.
- 6. Pfeiffer, J. The Emergence of Man.
- 7. Powell, T.G.E. Prehistoric Art.
- 8. Shackley, M.I. Neanderthal Man.
- 9. Washburn, S.L. (Ed.) Social Life of Early Man.

EC.5 Environmental Archaeology

Sylla	abus	Hrs
1.	Environment: physical environment, biological environmentl, palaeo environment	10
2.	Weathering and soil formation: physical, chemical and biochemical weathering of rocks	. 8
3.	Pleistocene Epoch: Glaciated area - Peri-glacial Area - Tundra - Steppes - Mediterrane Tropical and sub-tropical Arid and Semi-arid Zones and geomorphological features	an - 12
4.	Glacial Geomorphology: Moraines, solifluction	8
5.	Krast Geomorphology: Cave sediments/deposits	6
6.	River Geomorphology: Terraces, alluvial plains, deltas	8
7.	Coastal Geomorphology: Ancient beach ridges, rock-cut-caves, rock-cut-beaches	8
8.	Wind Geomorphology: Aeolian deposits, loess deposits	8
9.	Soil: physical and chemical properties - sands, silts and clays and depositional environment and areas and associated cultural traits	nent 10
10.	Impact on archaeological sites	6
11.	Glacial and inter-glacial: History in Alpine, Scandinavian, Himalayan	8
12.	Pluvial and inter-pluvial: tropical and sub-tropical Africa and associated cultural traits	8

Recommended Readings

- 1. Butzer, K.W. Environment and Archaeology.
- 2. Charlesworth, J.K. Quaternary Era

3.	Davidson, D.A. &	Geo-Archaeology, Earth Sciences and Past.
	Shackley, M.L.	
4.	Evans J.G.	Environmental Archaeology.
5.	GSI Memior 32.	Quaternary Environments and Geoarchaeology of India
6.	Pettijohn,f.J.	Sedimentary Rocks.
7.	Shackley, M.L.	Environmental Archaeology, George Allen and Unwin
8.	Shackley, M.L.	Archaeological Sediments: A Survey of Analytical Methods.
9.	Seuner. FE.	Pleistocene Period.

EC.6: New World Archaeology

Sylla	abus	Hrs
Majc	or geographical sectors in America/Int America.	
1.	Land and people before the advent of Europeans.	16
2.	Historical development of American archaeology	16
3.	Divisions of prehistoric past in Americas	14
4.	Lithic Cultures: typology, technology and other associated traits, spirituals and cult elimination	tural 20
5.	Archaic culture, their features and distribution	16
6.	Classic period with special reference to Mexican & Peru regions	10
7.	Post-classic period with special reference to Tula of Tottecs	8

Recommended Readings

1. Bennett, W. and Bird, J. Andean Culture History.

2. Harold Driver. Indians of North America.

3. Kroeber, A.L. Cultural and Natural Areas of Native North America.

4. Lanning, E. Peru before the Incas

5. Leonard, J.N. Ancient America.

6. Morley, S.G. The Ancient Maya

7. Patterson, T.C. A New World Archaeology.

Americas past:

8. Willey, R.G. An Introduction to American Archaeology.

9. Willey, G.R. & Method and Theory in American Archaeology.

Philip Phillips.

10. William, A. Haviland. The Ancient Maya and the Evolution of Urban Society.

Integrated Courses

ED.1: Medical Anthropology

Approach

This course is meant to facilitate communication between anthropology and medical sciences.

Cultural relativism in anthropology puts all indigenous and modern systems of medicine such as

Ayurved, Unani, Chinese etc. equidistant. Anthropological theory advocates the terminology of

medical pluralism in preference to alternative or complementary medicine. The dialogue with medical

faculty is expected to be more interactive and creative with epidemiologists, public health experts

and policy planners, psychiatrists and nutrition experts.

The overall aim of this course is to absorb the knowledge about health and disease in traditional

and modern medical systems (except the treatment) and analyse the same from the cultural

perspective. The principles and practice of health and plural medical systems would be learnt by

the students.

The central focus of the course is to develop anthropological perspective concerning health, disease

and programmes. The systems as practised are based on the paradigm of infection model and

treatment model, contrast with a different paradigm taking into account people's concern and

perspective. The Government programmes fail because of logistic or technological shortfall or

because it doesn't address to the people's concern about leprosy, TB, HIV/AIDS, etc. People are

concerned about the functioning as effective members of family and other social groups. The

indigenous knowledge based on traditional systems which are a part of culture has to be analysed

in detail.

At the end of the course the students should be able to:

a. demonstrate the knowledge about biomedical and socio-cultural perspective of health

and disease

b. acquire knowledge from modern scientific perspectives and ethnomedical

perspectives and from the perspectives of traditional systems such as Ayurved,

Sidha etc.

c. know about the operational aspects of health care delivery from village to international level, with a critique from people's perspectives

- d. acquire knowledge about the scientific aspects of health and disease due to advances
 in physical and biological sciences
- e. develop capacity to analyse the functioning of Govt and NGO programmes at the national and international levels. Assess the measure of success and failure.
- f. examine national health policy as evolved historically and the efficacy of plural systems of medicine and critically assess paradigms from peoples perspective vs. techno-managerial programmes
- g. understand the international health organisations and interaction with national health setup at the governmental and non-governmental levels.

Medical Anthropology

Syllabus

- Meaning and scope: changing concepts of health and disease, concepts of culture and lifestyle
 in relation to health and disease
- 2. Enthomedicine, magico-religious practices, indigenous medical systems and medical practitioner. Ethnobotany, ethnobiology, ethnopharmacology
 - Ethnography of tribal and folk medical system in India with case studies
- Plural systems of medicine: traditional systems as part of culture and life style. Ayurved, Siddha, Unani, Naturopathy, Tibetan, Chinese: basic principles. Resurgence of traditional medical systems in the West and in India.
- Epidemiology: basic principles, epidemiology of common communicable and noncommunicable diseases — Malaria, TB, Leprosy, STD, AIDS, Diabetics, Cancer and Cardiovascular diseases, mental health.

National disease control programmes. (Perspectives of host and environment in preference to that of agent.)

- 5. Medical statistics: measurement of morbidity and mortality rates, incidence and prevalence rates, adjustment of rates and other vital statistics.
- 6. Health promotion and health programmes: nutrition, RCH, family welfare, health education, ageing. (People's perspectives to be focussed.)
- 7. Health and environment: Water pollution, air pollution, noise pollution
- 8. National health policy: historical review. Health care delivery in India: rural and urban. Response of the people.
- 9. Voluntary efforts in community health and development some case studies of community participation.
- 10. International health: WHO, UNICEF, Ford Foundation etc.

Primary health care approach and Alma-Ata declaration: People centred vs. techno-managerial approaches for documentation.

11. Anthropological approach to health systems research: uses of anthropological research methods and evaluation. Judicious mix of qualitative and quantitative research methods.

Recommended Readings

1. Caudill, W. Applied Anthropology in Medicine

2. Foster, G.M. and Medical Anthropology

B.G. Anderson

3. Banerjee B.G. and Folk Illness and Ethnomedicine

R. Jalota

4. Rivers, W.H.R. Medicine, Magic and Religion

5.	Hasan, K.	The Cultural Frontiers of Health
6.	Bannermann et. Al. (Eds.)	Trditional Medicine and Health Care Coverage (WHO)
7.	Kakar, D.N.	Folk and Modern Medicine
8.	Leslie, C. (Ed.)	Asian Medical System
9.	Loudon, J.B.	Social Anthropology and Medicine
10.	Madan, T.N.	Doctors and Society
11.	Antia, A.H. & Bhatia	People's Health in People's Hand
12.	Jejeebhoy, S.	Women's Autonomy, Education and Reproductive Health
13.	Ministry of Health & Family Welfare:	National Health Policy
14.	W.H.O.	World Health Reports
15.	Freeman, H.E. et. al.	Handbook of Medical Anthropology
16.	Landy, D.,	Culture, Disease and Healing
17.	National Institute of Health & Family Welfare	Maternal & Child Health
18.	Paul, B.D.	Health, Culture and Community
19.	Mead, M.	Cultural Patterns and Technological Change
20.	Read, M.	Culture, Health and Disease

ED.2: Visual Anthropology

Approach

The Indian society is moving away very fast from its oral tradition and folk art medium to modern mass media. Similarly, the tribal, rural and urban societies are also under the grip of fast changes. There is an urgent need to record all these changes not only for posterity but also for a diachronic evaluation of those forces of change. With highly technical advancements emerging in the field of visual communication, a student of anthropology should be in a position to play a better role in comprehending and projecting anthropological dimensions and dynamics of people of India.

This course aims to prepare the students to understand the historical and theoretical background of visual communication. It would also provide them the required technical/practical knowledge in visual anthropology.

The objective of the course is to provide insights into communication processes so that students acquire a better understanding of society and culture both in continuity and change. The understanding of role and function of communication in socialisation, cultural change and development process is essential in anthropological studies in communities of varying complexities: tribal, rural and urban.

Visual anthropology, besides making anthropological teaching and research more realistic and meaningful, will also help in documenting the richness of cultural heritage for analysis and study. The practicals in the course will expose the student to various modes of communication, their scope and operations and also handling of audio-visual equipments.

At the end of the course the students should be able to:

a. recall the rich heritage of indian folklore and folk art tradition among various communities

- b. appreciate and understand the dimensions of mass media communication
- c. comprehend the theoretical background of visual communication
- d. differentiate between visual anthropological films and other films (commercial, documentary)
- e. employ visual anthropological techniques to record, preserve, analyse and interpret films
- f. evaluate the problems and potentials in the field of visual anthropology in India

Visual Anthropology

Syllabus

- 1. Visual communication through folk arts and modern mass media
- 2. Visual anthropology: concepts, scope, uses and problems
- 3. Visual anthropology as a discipline for study and as a mode of recording and documenting human societies and their cultures
- 4. History and development of visual anthropology. Approaches to anthropological films. Visual anthropology and analysis of cultural style.
- 5. Visual anthropology and films: commercial, realistic, new wave and documentary films.
- 6. Visual Anthropology as a mode to preserve culture and as an input to cultural enrichment.
- 7. Visual anthropology as an aid to visual literacy and cultural development

8. Television and visual anthropology. Video-tape. New techniques of observation and analysis in anthropology

- 9. Film review, appreciation and criticism. Film as an art. The film language. Necessary conditions for film making
- 10. Development of visual anthropology and ethnographic films in India
- 11. Scope of visual anthropology in India. Its uses, urgent problems and future possibilities.

Practical

- 1. Screening of visual anthropological films and their critical review
- Production of anthropological films, script writing, shooting, editing, sound mixing, commentary, etc. All this will depend upon the facilities available. Put with the advancement of film technologies not it is possible to make video films with ease.

Recommended Readings

1.	Arnheim, R. 1969	Visual Thinking, University of California Press
2.	Asch, T. 1971	Ethnographic Film Production, Film Comment 7(1):40-53
3.	Asch, T. 1972	Making Ethnographic film for Teaching and Research, PIEF Newsleter, 3(2):6-10
4.	Asch, T. et al. 1973	Ethnographic film: Structure and function, Ann. Reviews of Anthropology, 2:179-187
5.	Barndt, D. 1974	Toward a Visual study of Society, Michigan State University, College of Social Sciences
6.	Barnouw, E. 1974	Documentary: A History of Non-fiction film, Oxford University

Press, New York

7.	Becker, 1981	Exploring society photographically, University of Chicago Press
8.	Bogaart, N.C.R. and H.W.E.R. Ketelaar (Ed) 1983	Methodology in Anthropological film making, Herodot, Gottingen
9.	Breen, R. (Ed) 1977	Ethnographic Film, Cambridge University Press
10.	Hockings, P. (Ed) 1975	Principles of Visual Anthropology, Mouton, The Hague
11.	Collier, J. and Collier, M. 1986	Visual Anthropology: Photography as a Research Method, University of New Mexico Press
12.	Taureg, M. and Ruby, J. 1987	Visual Explorations of the World, Herodot, Aachen
13.	Thorn, R. 1987	Visual anthropology as Teaching Method, CVA Newsletter, Jan 29-32
14.	Mead, M. and Metraux, R. (Eds)	1982 The study of culture at a distance, Chicago University Press
15.	Jeffrey, I. 1981 Photography:	A concise History, Oxford University Press, New York

ED.3 Ecological Anthropology

Approach

The course aims at providing the student with a new conceptual framework for analyzing human situations, problems and issues, which has certain advantages over the classical framework of 'Concept of Culture'. The new framework of Ecological Anthropology is essentially based on 'Systems' approach, and is capable of giving an equal and just treatment to the man-centered culture as well as ecosystem-centered environment, as equal actors in a dynamic reciprocal relationship between communities and their eco-niches, and thereby, ultimately the humanity and

its global environment. In this sense, Ecological Anthropology inherently combines the theoretical as well as applied orientations to the problem of a sustainable man-nature relationship, which forms the center of a growing concern for the future of humanity. Therefore, the central emphasis in conducting this course should be on exposing the student to both these orientations in an equal and balanced manner.

At the end of the course the student should be able to:

- a. critically analyze a given sociocultural phenomenon/situation with reference to its ecological context (combining both natural and social environments), and wherever necessary, be able to fill up the lacunae in understanding of ecological relations between society/culture and environment,
- develop insights into the ecological issues underlying a given sociocultural situation, and wherever necessary, be able to point out the need for giving adequate attention/ treatment to these issues,
- c. understand the larger ecological/environmental issues at the national/global level, and be able to play a definite role as anthropologists at the level of policy planning or field implementation.

Ecological Anthropology

Syllabus

- Ecological Anthropology: definition and approach; aims and objectives; key terms and concepts
 used (only a brief mention); relation with, or position among, other disciplines within and
 outside anthropology; the distinctive interdisciplinary nature of ecological anthropology.
- 2. Historical background and development:
 - a. Ecological approach as a reaction to the Deterministic explanations: a critique of Cultural Determinism and Environmental Determinism; a gradual shift from Determinism to Possibilism; Possibilistic versions of Boas, Kroeber and Steward;

 Ecological approach as a reaction to the theory of unilinear evolution, and as a proponent of the school of multilinear evolution;

- c. Ecological approach as a reaction to the concept of culture as an abstract 'Superorganic' level : revival of cultural materialism and emergence of 'Systems' approach.
- Ecology and ecosystem: ecology as a natural science: definition of ecology; concepts of
 ecosystem, eco-niche, ecological community, energy pyramid, ecological hierarchy,
 competition for resources, territorialism, adaptation and adaptive specialization, feedback
 and carrying capacity.
- 4. Cultural ecology: inadequacy of original definitions of ecology and ecosystem when applied to human society and culture, anthropological reinterpretation of ecology, ecosystem and other related concepts; man-nature and culture-nature relationship reviewed from the viewpoint of cultural ecology; ecological transition; concept of culture-core and its relation with environment as well as 'other' aspects of culture; ecological ethnography: study of hunter-gatherers, nomads and pastorals, island communities, etc.
- 5. Major branches of ecological anthropology: growth of ecological anthropology beyond cultural ecology, other branches: population ecology, systems ecology, ethnoecology, socio-biology, archaeological ecology, human energetics.
- 6. Human ecology and environmental problems: human activities and their impact on ecosystems, ecological balance and environmental quality; environmental problems and issues : degradation of land, water, air, forests and biodiversity resources; global warming, disturbances in ozone layer and other global environmental issues, relation between development and environmental problems; concept of ecologically/environmentally sustainable development, ecological considerations in development planning.
- Ecological anthropology and environmentalism: environmentalism: environmental protests, movements and activism; international environmental conventions; anthropological issues involved in environmentalism; role of ecological anthropologists in the debate of environmentalism.

Recommended Readings

18. Ucke & Dimbleby.

1.	A. Roberto Frisancho:	Human Adaptation
2.	Barth, F. 1956	'Ecological Relations of Ethnic Groups in Swat, Pakistan', American Anthropologist.
3.	Bennet, John 1979	'The Ecological Transition : Cultural Anthropology and Human Adaption', Pergamon Press Inc., Great Britan.
4.	Chapple, Elliot 1980	'Biological Foundations of Individuality and Culture', Robert E. Krieger Publication, New York.
5.	Changnon & Irons	'Evolutionary Biology and Human Social Behavior'
6.	Cohen, M., Nathan	'The Food Crisis in Pre-history : Over Population and the Origins of Agriculture'
7.	Eidt, R.C.	'Man, Culture and Settlement'
8.	Gadgil & Guha 1997	This Fissured Land : An Ecological History of India. OUP
9.	Hardesty. Donald 1997	'Ecological Anthropology', John Wiley and Sons. India Oxford University Press, New Delhi.
10.	Moran, E.F.	Human Adaptability: An Introduction to Ecological Anthropology
11.	Netting, R.M.	The Ecological Approach in Cultural Study
12.	Odum, H.T.	Environment, Power and Society
13.	Odum, Eugene	Fundamentals of Ecology
14.	Reddy, G.P.	Scarcity and Survival
15.	Steward, Julian.	Theory of Culture Change
16.	Tax, S. & Freeman, L.	Horizons of Anthropology
17.	Tiwari & Sharma.	Tribal Eco-system and Malnutrition in India

The Domestication and Exploitation of Plants and Animals

ED.4: Anthropological Demography and Genetics

Approach

This course aims to focus on the dynamic and cause effect relationship between demography and genetics; also maintained and modified through ecology environment and functional adaptation.

The fact that demography and genetics are the natural partners in an evolutionary framework is the core of this course. Imparting the basic demographic variables, this course would superimpose them with population theories probing the cause effect relation between them. It would further probe the role of environment, ecology and functional adaptation in regulating demographic structure of populations. Later the course would demonstrate that the genetic structure of a population is closely related to the social structure and social behaviour as expressed through demographic variables. The role of Kinship and marriage practices viz., consanguinity, inbreeding, marriage distance etc. need to be investigated in relation to population structure and genetic distances with the help of available models.

At the end of this course the students would be in a position to:

- a. recognise the basic concepts and terminologies used in demography
- b. understand the available theories on population size, structure and growth
- c. examine the facets of demography and human adaptation
- d. understand the role of population structure, social structure and social behaviour (kinship, marriage type etc.) in studying genetic structure of populations
- e. appreciate the role of genetic structure in understanding demographic and epidemiological variables
- f. assess the available models in comprehending demogenetic principles and genetic distances.

Anthropological Demography and Genetics

Syllabus Hrs

 Definition and concept of anthropological demography and human genetics. Basic demographic variables - age, sex, marriage, sex ratio, fertility, migration, mortality, morbidity and population growth. Factors affecting demographic variables - physical, environmental, biological, socio-cultural.

- Population growth: theories: factors regulating population growth fertility rate: birth rate, age-specific fertility rates, net reproductive rate, mortality rate, prenatal and post-natal life table, migration rates, intrinsic rate of natural increase, effective population size, selection intensity and genetic load
- Demography and human adaptation: concept of environment, ecology and functional adaptation of human populations, epidemiology
- Demographic consequences of family planning and family welfare: genetic distance, trees cladograms and dendrograms maps figures, principal component analysis.
- Population structure genotype and phenotype frequencies. Isonomy and kinship model;
 coefficient of inbreeding, F-statistics isolation models. Computer simulation of genetic
 and demographic processes macro and micro models

Recommended Readings

1. Barclay, Techniques of Population analysis

2. Bhende and Kanitkar Principles of Population Studies

3. Bodmer and The genetics of human populations

Cavalli Sforza.

4. Bogue, D.I. Principles of Demography

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5.	Burdette, W.J.	Methodology in Human Genetics
6.	Cox, P.	Demography
7.	Crow, F.G. and Kimnra, M.	An Introduction to Population Genetics Theory
8.	Crow, J.F.	Genetics Notes — An introduction to Genetics
9.	Harrison G.A. and Boyca, J.	The Structure of Human Populations
10.	Hauser G.A. and Duncan, O.D.	The Study of Populations
11.	Khanna, V.K.	Genetics — Numerical Problems
12.	Li, V.V.	Human Genetics
13.	Malhotra, K.C.	Statistical methods in Human Population Genetics.
14.	Mamoria, C.B.	Tribal Demography in India
15.	Mamoria, C.B.	Tribal Demography in India
16.	Mange and Mange.	Basic Human Genetics
17.	Nag, Moni.	Cultural Patterns in Fertility
18.	Pathak and Ram.	Techniques of Demographic Analysis
19.	Spidgelman, M.	Introduction to Demography
20.	Vogel, F. and Motulsky, A.G.	Human Genetics - Problems and Approaches
21.	Weiss, K.M. and Paul A. Ballonoff,	Demographic Genetics
22.	Wright, S.	Evolution and Genetics of Population

ED. 5: Growth and Nutrition

Approach

Very much relevant to the present day situation, the knowledge of child growth and development from all possible directions, becomes important. Broadly speaking this bio-socio-cultural part involves three broad sub-fields of knowledge viz. growth - largely the biological aspect; nutrition - the socio-cultural part and epidemiological aspect - largely covering health, hygiene and a combination of couple of other aspects. The knowledge gained through this course would strengthen the students to perfect the approaches, methods and techniques in the area of growth and nutrition assessment.

At the end of the course the students should be in a position to:

- a. define and differentiate between growth and development, as well as explain other associated key concepts and the history of growth studies
- b. identify various methods employed in studying growth and development
- c. examine the roles of heredity and environment in growth spurt, the trends of growth pattern and the causes
- d. appreciate the socio-cultural attributes of food as perceived by the community, and classification of food
- e. recongnise specific problems related to growth and nutrition among infants, pregnant mothers etc. and the methods of assessment
- f. examine the Govt. programmes on food and nutrition
- g. understand the epidemiological aspects of health, disease, morbidity, malnutrition and their causes

Growth and Nutrition

Syllabus Hrs

Human growth and development: pre-natal and post-natal - definition; history of growth studies; patterns of growth: Infancy, childhood Juvenile, adolescence, adulthood, senility - human growth curves; - basic methods of growth studies - cross sectional; longitudinal, mixed longitudinal

- Factors for and/or against growth genetics of growth; heredity and environment, concept of age chronological, skeletal, dental, morphological and based on body size; changing human growth patterns i.e. secular trend; effects of agricultural intensification, industrialization, modernization; migration; urbanisation.
- 3. Nutrition: Basic terms and concepts: Socio-cultural attributes of foods, hot, cold, preferences and avoidences, nutrition, nutrients; malnutrition, under nutrition, overnutition, obesity etc. Types, functions and uses of nutrients: broad view, special problems related to growth and nutrition groups at risk: infants, pregnant and lactating mothers, old age problems; birthweight variations; abnormal growth, growth failure (screening); surveillance during famine and war, determinants of nutritional levels: anthropometric; clinical signs, bio-chemical health; diet and nutrition; socio-economic-assessment, evaluation, monitoring and surveillance; concept of standard and/or reference values of growth and nutritional status.
- Govt. programmes: ANP, ICDS, SNP, mid-day meal programme; vitamin 'A' prophylaxis programme; nutritional anaemia prophylaxis programme; goitre control programme, nicotinic acid deficiency Vit. C, Vit. D, deficiency.
- 5. Health and epidemiological aspect. Epidemiology: definition, scope approach and uses analytical epidemiology case control study and cohort study screening for disease general concepts immunization; malnutrition, morbidity and mortality perinatal, neonatal causes; IMP role of maternal education; Injections: diarrhoea, dysentry, dehydration, amoebiosis, respiratory infection, pneumonia, whooping cough, measles, chicken pox, worm infestation, skin infection, fevers, TB, AIDS; Health and nutrition education at home and for community

6. Recent trends and future prospects - HIV and growth among infants and children. Sociocultural and biological dimensions of old age.

Recommended Readings

1. Harrison et.al. (Ed): Human Biology: An introduction to Human Evolution, Variation,

Growth and Adaptation

2. Garn and Shamir: Methods of Research in Human Growth

3. Tanner, J.M.: Growth in Adolescence

4. Tanner, J.M.: From Fetus into Man

5. Watsonand Lowery: Growth and Development of Children

6. Jelliff, D.B.: Community Nutritional Assessment with special reference to Less

technically developed countries

7. Dixit: Human Nutrition: Principles and Applications in India

8. Shanti, G.: Nutrition and Child Care - A Practical Guide

9. Winer and Lourie: Human Biology - A guide to Field Methods, IBP Handbook No. 9

ED.6: Bio-Social Gerontology

Approach

Rapidly expanding number of older persons around the world represent a social phenomenon without historical precedent. To date, population ageing has been a prominent issue largely in the industrialized nations of Europe, Asia and North America. In at least 50 such countries, 15 percent or more of the entire population is age 60 or over, and these nations have experienced intense public debate over issues that are directly linked to the changing age structure of their populations.

What is not as widely appreciated is the fact that population ageing is occurring in less developed countries like India as well, and that older populations in most less developed countries are growing much more rapidly than those in more developed nations. Over 60 million numbers is expected to almost treble in next 25 years.

Keeping in mind the changing times and changing needs, this course on Bio-social Gerontology has been introduced to expose the students to the basics of gerontology - the demographic, biological as well as social-cultural dimensions of ageing and their long term implications. The course ends with a note on quality ageing.

Bio-social Gerontology

Syllabus Hrs

- Ageing in Twentieth Century: Global perspective; situation in India; demography of ageing;
 demographic changes in 21st century and longevity
- The process of ageing: Biological ageing; psychological changes; social-cultural dimensions of ageing
- Theories of biological ageing: Programmed theory, wear and tear theory, somatic mutation theory, toxic accumulation, auto-immune theory; free radical theory, cell membrane theory, telomere theory; evolution and ageing
- 4. Ageing in cultural context: The diverse meanings of age and ageing; sex and gender in ageing society; elderly females in India; ageing and widowhood

 10
- Aged in the family: Changing status and role; family support: ageing in urban India; ageing in a rural (and tribal) society; institutionalized ageism and intergeneration relation/ Family care vs. senior citizen's homes

6. Ageing and Health: Organic and psychosomatic symptoms of menopause; chronic diseases of old age; minor ailments; healthy ageing; life-style and ageing; ageing and nutrition 10

7. Welfare of the aged: Rights and responsibilities of the aged; charter of rights of the aged 8

Practical: (40 hours)

Measuring Biological age-changes:

Linear body changes, Transverse changes,

Body Fat Changes, Body Mass Index, Estimating Total Body Fat

Percent Body Fat, Fat Mass, Fat Mass Index, Muscle Mass

Assessment of Physical Health Status of Elderly:

Measuring Blood pressure, Pulse, Muscle strength, Lung capacity etc.

Psychological Measurements of Ageing:

Evaluating Mental Health (Cognitive tests, Memory Tests, etc.)

Recommended Readings

Bond, Jam; Peter 'Ageing in Society - An Introduction to Social Gerontology'
 Coleman, Shiela Peace Sage Publication, New Delhi
 (1996)

2. Dandekar K (1996) 'The Elderly in India' Sage Publications, India Pvt. Ltd.

Gurbrium, Jaber F.; 'Qualitative Methods in Ageing Research', Sage Publication,
 Sankar, Andrea; (1994) New Delhi

4. Ulijaszwk Stanley 'The Cambridge Encyclopaedia of Human Growth and Development', Cambridge University Press J; Johnston, Francis E.; Preece, Micheal A.; (1998) 5. Rao, Venkoba A. (1987) 'National Task Force on Problems of the Aged Seeking Psychiatric Help', Indian Council of Medical Research, New Delhi 6. Weiner, J.S. and 'Human Bilogy: A Guide to Field Methods', IBP Hand Book, Oxford: Blackwell Scientific Publications Lourie, J.A. (1969) 7. World Health 'Physical Status: The use and Interpretation of Anthropology', Organization (1995) WHO Technical Report Series 854 Geneva 8. Bhatia, H.S. Ageing and Society 9. Jamuna, D. Ageing Women in India 10. Multagi, P.K. Ageing Issues and Old Age Care Aged in India 11. Pati and Jena,

ED.7: Biocultural Evolution

Approach

The course presents the phenomenon of human evolution from both biological and cultural point of view. It deals with the evidences of physical remains of man in the form of fossils; fauna, flora, climate and cultural remains. Adaptation of Australopithecines, Neanderthals, Homosapiens to specific environment and moulding their culture as a process would be discussed. It helps in understaning biocultural evolution in spacio-temporal dimension.

At the end of the course the students are expected to:

a. give an idea of bio-cultural, environmental parameters and adaptive strategies of man; glimpses of socio-economic organisation of prehistoric human groups.

- b. provide the information on Pre-Pleistocene and Pleistocene environment in glacial and pluvial zones in terms of climate, fauna and flora
- c. understand the archaeological evidence of human fossils in general and Austrolopethecus and particularly in Africa and Olduvai Gorge as a case study for hominid adaptation.
- d. examine the spacial distribution of Neanderthal particularly in glacial zones of Europe and their adaptation.
- e. Explain the emergence of Homo sapiens and their capabilities in forming rudimentary social, religious, economic organization
- f. Understand the development of faculty of speech, behaviour and social institutions like family, clan, religion in an evolutionary perspective.

Bio-cultural Evolution

Sylla	abus	Hrs
1.	Pleistocene pluvial environmental and human fossil finds in Africa	12
2.	Bio-cultural adaptations of early hominids in Olduvoigorge	12
3.	Origin of Homo Neanderthalensis: Their biocultural adaptions in glacial environments, distribution and extinction	their 16
4.	Emergence of Homo sapiens, their biocultural capabilities and distribution	12

Anthr	Anthropology 206		
5.	Hominization process: Ma	n's capacity for culture and socialization processes 12	
6.	Bio-cultural evolution of Ho	omo sapien. 12	
7.	Aesthetic point of culture a	as revealed from art 10	
8.	Prehistoric societies: socia	l organisation, economic organisation and cultural perpectives 14	
Red	commended Readings		
1.	Borders F.	Old Stone Age, McGraw Hill	
2.	Buettner-Janusch J,	Origins of Man: Physical Anthropology, Jon Wiley and Sons	
3.	Clark Le Gross,	Fossil Evidences for Human Evolution, University of Chicago Press	
4.	Coles J.M. and Higgs E.S.,	Archaeology of Early Man, Penguin Books	
5.	Kennedy G.E.	Palaeoanthropology, McGraw Hill	
6.	Lull R.S.,	Origins Evolution, MacMillian	
7.	Pfeiffer J E,	The Emergence of Man, Harper and Row	
8.	Stirton R.A.,	Time, Life and Man, Wiley	
9.	Washburn S.L.,	Social Life and Early man, Matheun	
10.	Williams B.J.,	Evolution of Human Origins: An introduction to Physical Anthropology, Harper and Row	
11.	Wolpoff M.H.,	Palaeoanthropoloy, Alfred A. Knopff	

ED.8: Ethnomedicine

Approach

Studies in enthnomedicine are gaining importance world over, both from theoretical and practical perspectives. Theoretical interest of Anthropologists in ethnomedicine stems from the fact that health and disease though biological in nature are defined culturally, as they are related to people's social belief system. A comprehensive understanding of people's ethnomedical beliefs and practices as viewed by them from an emic perspective, helps policy makers to plan and implement culturally appropriate and acceptable health care and health education programmes.

Ethnobiologists on the other hand are interested in identifying, classifying and analysing natural medical resources prevalent in rural and tribal societies. Besides this, some scientists - turned - activists study ethnomedicine in order to contest issues connected with patents. Thus, ethnomedicine as a branch of medical anthropology is gaining multi-disciplinary significance as well, besides its practical relevance.

At the end of the course the students would be in a position to:

- comprehend how important is the role of socio-cultural symbols, which includes objects, songs, prayers, chants, actions, gestures in ritual healing in achieving positive health
- explain people's knowledge of origin and cause of illness, their categorization of disease and etiological classification
- c. describe the nature and role of ethnomedical therapies, mother and child health care beliefs and practices
- d. comprehend peoples perceptions of body image, various therapeutic techniques employed to cure patients
- e. provide suggestions to policy makers to plan, implement and follow-up culturally appropriate and acceptable health care and education programmes

Ethnomedicine

Syllabus

Definition and concept of ethnomedicine: Definitions of disease, illness, health and sickness.
 Disease classification concepts.

- 2. Natural and supernatural pathogenic agents. Illness or etiological ideology.
- 3. People's perception of ethnophysiology and ethnoanatomy
- 4. Ethno-nutritional concepts in relation to preventive, promotive and curative health and morbidity
- 5. Perception of body image, including body constitution, composition, elements that contribute to the survival of body and soul. Human body as a natural, social, cosmological, political and spiritual symbol in the context of ritual healing.
- 6. Mother and child health care beliefs and practices.
- 7. Nature and role of traditional medical practitioners

Different types of ethnomedical specialists, their stats and medical functions

Apprenticeship pattern

Medical knowledge of practitioners

Medicinal plants administered for various diseases

Animal derivatives administered for various diseases

Medicines extracted from minerals

Other therapies employed

8. Healing rituals: rituals of inviting healing forces for diagnosis and treatment, collecting, preparing and administrating medicines.

Therapeutic rituals:

Rituals of appeasing spirits,

Rituals of compromise,

Rituals of warding off pathogenic agents/evil effect,

Rituals of killing pathogenic agents,

Rituals of purification,

Rituals of prevention,

Thanks giving rituals

9. Ethnomedical pathway- the processes or stages through which a patient passes to get himself cured.

Cultural factors that influence decision to choose and change a therapy

Ethnomedical Practicals and Field Work

- 1. A trip to a tribal area, a nomadic camp, or a caste village to study people's ethnomedical beliefs and practices.
- 2. Preparing herbarium sheets of medicinal plants used by people and prescribed by ethnomedical specialists.
- 3. Preparing five illness episodes
- 4. Preparing five case histories of medical practitioners
- 5. Body mapping session with the target community in order to understand their concept of anatomy, physiology and body image.
- 6. Visit the PHC, private medical practitioner or sub-centre to understand the diseases prevalent in the area/target community.

Recommend Reading

1.	Caulie William (1955),	Applied Anthropology in Medicine, edited by Kroeber A.R., Anthropology Today
2.	Foster George (1983),	An Introduction to Ethnomedicine edited by Bannerman and others, Traditional Medicine and Health Coverage, WHO, Geneva
3.	Hughes Charles (1968),	Ethnomedicine, Encyclopaedia of Social Sciences, Vol X, USA
4.	Kurian J.C. and Bhanu B.V. (1980),	Ethnomedicine: A Study of Nomadic Vaidus of Maharashtra, Eastern Anthropologist, Vol 33, No.1, pp 71-78, Lucknow
5.	Kurian .C. and Tribhuwan Robin (1990),	Traditional Medical Practitioners of the Sahyadri, Eastern Anthropologist, Vol 43 No. 3, pp 251-258, Lucknow
6.	Turner Victor (1967),	The Forest of Symbols, Cornell University Press, USA
7.	Tribhuwan Robin (1998),	Medical World of Tribals (An Exploration in Illness Ideology, Body Symbolism and Ritual Healing), Discovery Publishers, New Delhi
8.	Tribhuwan Robin and Gambhir R.D. (1995),	Ethnomedical Pathway: A Conceptual Model, edited by Jain N.S. and Tribhuwan Robin, An Overview of Tribal Research Studies, TR&TI, Pune
9.	Jose Baban K (1998),	Tribal Ethnomedicine (Continuity and Change), A.P.H., Publishing Corporation, New Delhi
10.	Lieban Richard (1973),	Medical Anthropology, Handbook of Social and Cultural Anthropology, edited by John Honigman, R and McNally College Publishing Co, Chicago
11.	Hasan K.A. (1967),	The Cultural Frontiers of Health in Village India, Manaktala and Sons, Bombay
12.	Kakar D.N. (1977),	Folk and Modern Medicine, New Asian Publishers, New Delhi
13.	Young Allan (1982),	The Anthropology of Illness and Sickness, Annual Review of Anthropology, No. 11, pp. 257-285

ED.9 Bio-Social Anthropology

Approach

This course falls in the borderline between Biological Science and Social Science, which explores how the social factors influence biological constitution and performance, and how biological factors influence socio-cultural behaviour in Man. The interrelationships between biology and culture are studied in terms of population structure and characteristics, reproductive health of mankind, sex related diseases (STD, HIV and AIDS) and their problems and prevention; diet and nutrition, health and disease; ageing and longevity. The students are introduced to the above mentioned aspects of the study of population, and the burning national problems of population control, malnutrition and diseases, reproductive health situation, pollution and health hazards.

Syllabus:

- 1. Culture and biological heritage: Basic concepts culture, biology and bio-social science. Human characteristics in biological perspective characteristics men share with other animals at different levels. Distinctiveness of cultural behaviour physical structure and development of behaviours in animals other than man, essential criteria in building human culture.
- Interrelationships between biology and culture: the relation between biological-psychological (constitutional) characteristics and cultural behaviour. Bodily variation and differences in cultural behaviour.
- Social structure and mating systems: marriage regulations, mating patterns, incest taboo, exogamy and endogamy, descent groups. inbreeding - patterns of consanguinity, levels of inbreeding and biological consequences of inbreeding.
 - Population studies, biology and health

- 3. Population structure and characteristics:
 - (a) meaning and development of population studies; relevance of anthropology to population studies; historical demography. Basic characteristics of population - age and sex composition, sex-ratio, dependency ratio, age at menarche and menopause, age at marriage, marital status and their bio-social implications.
 - (b) Conceptualisation of fertility, mortality, morbidity and migration, nuptiality and fertility, value of children, women and reproductive health. Problems of population growth, and strategies for population control in India.
- 4. Reproductive health of mankind: meaning and definition, the reproductive health situation in India, need for an integrated reproductive health services programme; bio-social implications in sex related diseases like STD, HIV and AIDS - Problems and prevention. Culture and Dietary Patterns, Health and Disease
- Nutrition, Diet and Disease: diet and nutrition balanced diet, malnutrition, undernutrition.
 Nutritional status and susceptibility to infectious diseases. Bio-social implications of malnutrition in India. Nutritional dificiency diseases Kwashiorkar, Iodine deficiency disorders, Anemia, Marasmus, etc.
- Culture, dietary patterns and disease: dietary patterns and diseases in traditional and developing societies; morbidity, nutritional deficiencies and child development in developing countries
- 7. Ecology, biology and disease: Malaria and Sickle-Cell Haemoglobin (Hb S), and G-6-PD deficiency; Thalassemia and Haemoglobin disorder. Ecology and disease; pollution and health hazards. Sanitation, personal hygiene and health care.
 - Biology and culture in ageing and longevity

- 8. Ageing and longevity:
 - (a) Meaning, process of ageing, factors affecting ageing, socio-cultural problems of aged-people in India; factors influencing longetivity genetic, socio-cultural, psychological, health status of the aged people nutrition and illness in the aged.
 - (b) National policy for the welfare of the aged in India
- 9. Integrated approach to food, nutrition, population and economic growth for the welfare of humanity.

Recommend Readings

7.

Mahadeven, K.,

et.al. 1999

1.	Agarwal, S.N. 1972	India's Population Problems (3rd Edition). Revised by U.P. Sinha (1989) New Dlhi: Tata McGraw-Hill Publishing Co.
2.	Behnde Asha, A. and Tara Kanitkar 1985	Principles of Population Studies (3rd Edition) Bombay: Himalaya Publishing House
3.	Fox, Robin 1975	Bio-social Anthropology. London: Malaby Presy
4.	Harrison, G.A. 1990	Diet and Disease in Traditional and Developing Societies. Cambridge University Press
5.	Jerome Norge, W., Rande F. Kandel and Gretel H. Pelto 1980	Nutritional Anthropology. Contemporary approach to diet and culture (Ed.) New York: Redgrave Publishing Co.
6.	Johnston, Francis E. (Ed.) 1987	Nutritional Anthropology. New Yotk: Alan R. Liss., Inc.

B.R. Publications

Reproductive Health of Human Kind in Asia and Africa. Delhi:

ED10: Heritage of India

Appraoch

The heritage of Indian culture with its value systems as expressed through tolerance, co-existence,

plurality and integration goes back to 5,000 years. India is a land of plural ethnic groups, religious,

faiths, languages, castes and tribes. People who came to India for conquest settled down and

developed a new integrated culture. The Muslim rule and the British rule brought in further changes

to arrive at new equillibrium and identity of plural Indian culture. The contemporary cultural entity

of India continues to have its distinct identity in the international scenario.

India's contributions in the areas of Mathematics, Astronomy, Architecture, Medicine and Philosophy

have been phenomenal. Impact of Indian culture having roots in Hindu and Buddhist philosophy is

clearly discernible in South-East Asia. The Indian national dress, classical music, performing arts,

culinary varieties are symbols of an integrated culture. The richness and variety of the unity and

diversity of Indian culture has to be the basic theme of this course which could have a link with a

course on Anthropology of Tourism. This course could also have links with courses on Culture

Region, Indian Anthropology, Anthropology of Music, Anthropology of Religion and other courses.

The course will be a combination of philosophy, ancient indian culture and archaeology, history

and geography. The Vedas, Upanishads, Maurya and Gupta dynasties, rise of Buddhism and

Jainism, Muslim impact on secular trend in music, dance, Sufi sects, Akbar's ideas of integration

of religion and impact of British on social reform movements etc. will have to be covered.

ED.11 Anthropological Linguistics

Approach

Although the period of origin of language is still being debated, there exists complete unanimity that the language is learned through the process of enculturation. This elective course aims to equip the students to understand the cognitive and semantic anthropology, besides providing various dimension of origin, acquisition and development of language as well as writing. The course would further analyse the structure and functions of human communication - verbal and non-verbal. The inseparable relation between language and culture, contexts of language use as well as the direction of language change are focussed.

At the end of the course students are expected to:

- a. recognise the relationship between anthropology, language and linguistics
- b. explore their relation with other disciplines
- c. perceive the origin and evolution of language and the associated theories
- d. comprehend the acquisition of language and various stages of writing
- e. identify the forms and structure of human communication and their linguistic nature
- f. relate the language and social structure
- g. explain the nature of relationship between culture and language
- h. discuss the language use in various social contexts
- i. identify the directions and principles of language change

Anthropological Linguistics

Syllabus

 Anthropology, linguistics and other sciences. Nature of human language, division of linguistics; relations between linguistics and anthropology, sociology, psychology, philosophy, neurophysiology, etc.

- 2. Origin and evolution of language: early theories of origin of languages; language and biological evolution
- 3. Acquisition of language and development of writing: stages of child language acquisition; acquisition of second language; chronology of development of writing
- Structure of human communication: (a) Non-verbal communication paralinguistics, kinesics, proxemics, chronemics, and sign languages. (b) Verbal communication - principles of phonology, morphology, syntax and semantics
- 5. Language and social structure: linguistics in the 19th century and before; origin of structural study of language; structural analysis in linguistics and anthropology
- 6. Language and culture: the American descriptivism; the Sapir-Whorf hypothesis; cognitive anthropology; enthnography of communication.
- 7. Social context and language use: speech variation with regard to age, sex, class, occupation etc.; multilingualism and diglossia; lingua franca, pidgin and creole
- 8. Directions of language change: phonological, morphological, lexical and semantic changes of language

Recommended Readings

1.	Akmajian, A. et.al.	Linguistics (3rd Edition)
2.	Bell, R.T.	Sociolinguistics: Goal, Approaches and Problems
3.	Bemstein, B.	Class, Codes and control
4.	Bloomfield, L.	Language
5.	Bolinger, D.	Aspects of Language (2nd Edition)
6.	Brigh, W. (Ed.)	Sciolinguistics
7.	Fasold, R.	Sociolinguistics of Society
8.	Formkin, V. and R. Rodman	An Introduction of Language (5th Edition)
9.	Giglioli, P.P. (Ed.)	Language and Social Context
10.	Gumperz, J.J. and D. Hymes (Eds.)	Directions in Sociolinguistics: The Ethnography of Communication
11.	Hickerson, N.P.	Linguistic Anthropology
12.	Hockett, C.F.	An Introduction to Modern Linguistics
13.	Hymes, Dell (Ed.)	Language in Culture and Society
14.	Misra, K.K.	A Text Book of Anthropological Linguistics
15.	Pride, J.B.	Sociolinguistics
16.	Saville-Trolke, M.	Ethnography of Communication
17.	Trudgill, P.	Sociolinguistics,

ED12: Research Methods in Anthropology

Approach

The course is designed to accomplish two things: (a) examine theories of research methods in anthropology, past and present; and (b) practice these methods through supervised field research assignments. The first part will be done through lectures, assigned readings, class discussions, and individual consultation. The second part requires each student to carry out an approved and supervised field research project during the semester.

The course will begin with the pertinent philosophical assumptions that relate to the underlying epistemology which guides the research. Students will not only learn various techniques for collecting and analyzing information but also its appropriate use and limitations. Each student will design and carry out fieldwork in the community. Discussions will analyze the theories that emerge from this anthropological enterprise.

The second section provides a hands-on approach for learning how to undertake systematic anthropological research. Over viewing the variety of research methods, special attention is given to qualitative analyses of large data sets. A variety of tools are addressed. The course goals emphasize writing and rewriting, learning how to formulate and test research hypotheses, and understanding how to present results in an accurate and effective manner.

It also includes problems of access, rapport and ethics in conducting research; data gathering through interviewing, participant observation, personal documents, photos, tapes; data collection and retrieval; computer applications; and analysis and interpretation in the context of theory, problem formulation and research design.

Section A deals mostly with theory and methodology of research. Section B outlines the practical aspect of research and could be dealt in workshop style.

Section A: Research Theory in Socio-cultural Anthropology

 Philosophy of science: contemporary perspective; logical empiricism in positivism, Popper's falsification, Hermeneutics, critical theory, Post-structuralism, Socio-biology, Problems in the philosophy of social sciences; perspectives, value judgments, ideology, etc.

- 2. Elements of research: deductive and inductive logic, theory, law, construct, hypothesis, concepts, variables, facts
- 3. Types of research; exploratory, explanatory, experimental, diagnostic
- 4. Research Design: Scientific and practical consideration in research planning, characteristics of a good research design, characteristics of hypothesis, dos and don'ts in research design
- 5. Review of literature: use of secondary sources, Role of history and historical records, how to get access to literature on the net, library use, other sources of secondary data
- Sampling techniques: concept and significance of sampling, advantages of sampling, concepts: population, sample, sampling unit, finite and infinite sampling, sampling frame, sampling designs,
- Research methods: Quantitative and Qualitative data collection, need to have different tools
 and techniques for each type, discussion on interview, observation, life history, survey
 methods, case study etc.
 - a. Tools and techniques: Relationship between hypothesis, research questions and questions included in tools (Questionnaire, interview schedules) Dos and Don'ts while constructing tools, structured, semi structured schedules, open and close ended questions (use of these concepts in practical section)
 - b. Interview guide: formulating interview guides for life history, case study, case history method

c. Standardized tests and scales: Brief overview, values, attitude, interest scales, motivation test and scales, Importance of using scales, Attitude: nominal, ordinal and interval scales, Thurstone scale, Likert scale, Guttman scale, Reliability and validity of scale, Procedure attitude scaling

- 8. Evaluation research: process documentation, process evaluation,
- 9. Quantitative and Qualitative data analysis:
 - a. Basic principles of use of various methods, computer software for data analysis, highlight importance of contextual analysis, frame of reference for data interpretation,
 - Relevance of statistical techniques in research, measure of central tendency,
 measure of variation, use of tests to see significance of results
 - c. Qualitative data analysis methods: appropriate use of methods, hermeneutics, semiotics, narrative and metaphor analysis, content analysis,
- 10. Ethical considerations in research
- 11. Report writing: requirements of scientific report, problems in report writing, linking ideas, linking paragraphs, etc.

Section B: Research methods and practice in Anthropology

- Research process: identify research area and specific problem, listing research variables, conceptual mapping, formulate research questions, hypothesis formulation
- 2. Review of literature: construct conceptual flow chart
- 3. Sampling technique: designing sample, estimation of sample size depending upon research problem at hand: probability and non-probability sampling, principles of probability and normality curve, randomization and random sampling, stratified random sampling. sample size estimation, hypothesis testing

 Constructing Data collection tools and techniques: Questionnaire, interview schedules, interview guide: critically evaluate the questions, arrangement, order, construct, pre-testing, modification, finalization.

- 5. Conducting interview, structured and unstructured interviews,
- Constructing different types of scales based on various techniques, modify the scales
 depending upon topic and administer after deciding number of respondents, analysis of data
 gathered

7. Data Analysis:

- a. Quantitative: use of computer and software for following, coding of data, data entry and data cleaning, ,primary data analysis, frequency distribution, cross tabulation, graphs and histograms, use of basic statistics (mean, median, mode, Std. deviation, test of significance, association). Use of SPSS, SAS, bi-variate, multivariate, regression analysis, factor analysis., etc.
- b. Qualitative : use of software in qualitative data analysis

The Ethnograph (v 4.0), ATLAS/ti, WordStat, TextAnalyst, Anthropac etc.

8. Scientific writing: report writing, scientific paper writing: writing a paper on dissertation topic

Recommended Readings

1. Bernard: Research methods in cultural anthropology

2. Pelto and Pelto Anthropological research: The structural enquiry, qualitative data analysis:

POSTGRADUATE DIPLOMA Courses In Anthropology

Postgraduate Diploma Courses in Anthropology

Considering the steadily increasing job opportunities and demand for trained anthropologists in various service sectors, it would be advantageous to introduce Certificate and Diploma courses of one year duration. A couple of Anthropology Departments (Lucknow, Delhi and Chandigarh) are already conducting such courses viz. Forensic anthropology, Visual anthropology etc. Such university approved courses could be organised by the Anthropology departments, also involving subject experts from other departments and organisations. These courses could be conducted in addition to the ongoing undergraduate/post-graduate programmes in anthropology. Considering the existing financial constraints prevailing in many universities, the Departments have to conduct these Certificate and Diploma courses as "self supporting" courses where the fee structure could be different.

These ventures if followed properly, would help the Department:

- to generate additional income for the Departments to develop further infrastructural facilities
 viz. library, laboratory, teaching aids etc.
- 2. to establish closer interaction with other Departments, organisations and specialists
- 3. to propagate anthropology and its applications to a larger section of the society
- 4. to help students to develop practical skills and take up better and suitable jobs of their liking
- 5. to develop super specialisations based on the regional and departmental needs
- 6. to impart the knowledge of anthropology to persons involved in professional work connected with the subject matter of anthropology such as tribal development, community health, etc.

Note: In the following pages, only some diploma courses have been listed. The certificate courses and other diploma courses need to be designed by the respective departments.

Suggestions:

- 1. These Diploma courses may be opened for graduate students from any stream
- 2. 15-20 students would be ideal for each course, since practicals and dissertations are involved.
- 3. Students with Anthropology background may be given preference for admission.
- 4. Each Diploma course shall have 5 papers of 100 marks each, out of which 3 theory, 1 practical and 1 dissertation could be the norm.
- 5. 10-12 credit hrs of orientation lectures on Anthropology be given to all the Diploma course students before starting with the actual course.

Through the following pages the course structure and the detailed syllabus of a few Diploma courses have been presented. However, a few courses have been only listed and for a few others the course structure provided. The departments desirous of conducting any of the courses may prepare the detailed syllabus following the models given here. The other related courses and the units given in this curriculum would help them to prepare the necessary details. Alternatively, help could also be sought from other anthropology departments where such Diploma courses are conducted.

- (i) Diploma in Anthropology
- (ii) Diploma in Anthropological Methodology
- (iii) Diploma in Anthropology of Management & Human Resource Development
- (iv) Diploma in Tribal Development
- (v) Diploma in Medical Anthropology
- (vi) Diploma in Medical Laboratory Techniques

(vii)	Diploma	in	Genetic	Counselling
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- (viii) Diploma in Visual Anthropology
- (ix) Diploma in Forensic Anthropology
- (x) Diploma in Disaster Management and Rehabilitation
- (xi) Diploma in Ecological Management
- (xii) Diploma in Heritage of India and Tourism (listed only)
- (xiii) Diploma in Gerontology and Ageing (listed only)
- (xiv) Diploma in Museology (listed only)
- (xv) Diploma in Applied Anthropology (listed only)
- (xvi) Diploma in Research Methodology (listed only)

Diploma in Anthropology

Approach

This course is designed keeping in view the requirements of civil services at the Central and State level. The departments could modify the syllabi appropriately in view of examination pattern in vogue.

The course structure is as follows:

Paper 1: Social-Cultural Anthropology

Paper 2: Physical/Biological Anthropology - Theory and Practicals

Paper 3: Archaeological Anthropology - Theory and Practicals

Paper 4: Indian Anthropology

Paper 5: Research Methods and Field Dissertation

Paper 1: Social-Cultural Anthropology

- Meaning and scope of Anthropology; divisions of anthropology; scope of social anthropology and its relations with other branches of anthropology, social sciences, life sciences, medical sciences and humanities
- Society and culture: concepts: society simple and complex; society culture-civilisation, community, group, institution, association; culture: attributes of culture, culture-trait, culture complex, culture-area, integration of culture, paradoxes of culture

3. Social Organisation:

 Family: Definition - debate on universality; family typology; family-householddomestic group: basic structure and functioning; residential rules; impact of urbanisation, industrialisation, education and feminist movements on family

- b. Marriage: Definition and debate on universality; marriage regulations and incest; mate selection, forms of marriage; preferential marriages; sororate and levirate; marriage payments/presetations Bride price- dowry; marriage instability and divorce.
- V. Kinship: Meaning and importance; consaguineal and affinal kin; classificatory and descriptive kinship terminologies; terms of address and - reference; criteria for analysis of kinship terminology; kinship usage - joking, avoidance, tecknonymy and couvade
- d. Descent: Meaning and importance; descent-filiation and complementary filiation.
 Descent rules; descent groups lineage, clan, phratry and moiety, kindred, descent and alliance theory
- e. Social structure and social organisation; social stratification; principles and form: status, class, power; gender issues; status and role
- 4. Economic organisation: Concept of property; individual and collective property, primitive communism, concept of value in primitive economies; systems of production food gathering hunting fishing, pastoral, shifting and settled cultivation; systems of exchnage: reciprocity redistribution, trade-exchange, barter and markets; substantivist and formalist debate
- Political organisation of stateless societies, band tribe, chiefdom and of state: kingship and government; forms of authority and leadership; mechanisms of social control, law and justice; types of punishment

6. Religion: Definitions and functions: anthropological approaches to the study of reglion — evolutionary, psychological and functional primitive religions; animism, bongaism, fetishism, totemism, taboo. Magic: meaning, function and forms; witchcraft and sorcety; religious functionries: shaman, priest and medicineman; symbolism in religion and ritual. Myth and rituals: definitions and approaches to their study. Religion, magic and science - compared/distinguished.

- 7. Culture and language: Origin and evolution of human languae; language and communication: phonology, morphology, syntax, semanties; language, culture and society; applied linguistics
- 8. Demography: demographic theories biological, social and cultural; population structures and population dynamics; demographic rates and ratios; life table structure and utility.
- 9. Approaches to the study of culture: Evolutionism: unilinear, multilinear and universal diffusionism; historical particularism, acculturation, innovation, cultural ecology, functionalism, structural functionalism, neo-evolutionism, culture-personality, transactionalism, symbolism, cognitive approach and new ethnography, post-structuralism and post modernism
- Social-cultural change: meaning of concepts; theories of social-cultural change; process of social-cultural change in India
- 11. Applications in social-cultural anthropology (new areas), medical anthropology, ecological anthropology, communication anthropology, urban anthropology, development anthropology.

Paper 2: Physical/Biological Anthropology

Approach

This course would help the students to identify the linkages of biological anthropology with the other three branches - Cultural Anthropology, Archaeology and Linguistics. It would further trace its relationship with the related disciplines from Natural sciences, Biological Sciences, Medical

Sciences, Social Sciences, Arts and Humanities. Further it would prepare the students to understand the basis for studying Man as a biological being, keeping the process of organic evolution in focus. It would critically examine the theories on evolution and the available evidences with a comparative perspective, highlighting India's traditional view point on organic evolution in various theologies or mythologies.

Taking help from the principles of genetics, this course would then probe the causes of biological variation among the present day man as conceived by race, ethnicity, religion, caste, tribe, etc. The course would equip the students to understand the biological basis of human behaviour and cultural evolution.

At the end of the course, the students should be in a position to:

- a. appreciate the intra, inter and transdisciplinary linkages of biological anthropology
- b. understand the traditional and modern theories on human evolution, their strength and weakness
- c. compare and analyse fossil evidence and understand primate behaviour
- d. highlight the implications of this theory in socio-cultural evolution
- e. discuss the principles of human genetics and relate them to the present day human variation.
- f. examine the concept of race and race variations in the light of human genetic principles
- g. comprehend the race elements and their distribution
- h. differentiate between race and racism (apartheid)
- i. explore the closely linked areas of this course and their applications

Physical/Biological Anthropology

Syllabus

 Meaning, Scope and Relations with other branches of Anthropology and with biological, social and medical sciences

- 2. Man's place in the animal kingdom. Comparative anatomy of Man and Apes. Hominid evolution: erect posture and bipedalism
- 3. Human origin and evolution: Theories of organic evolution. Lamarcksm, Darwinism, synthetic theory
- Emergence of Man: Fossil evidence-Pongid and Hominid, Australopithecenes, Homo Erectus,
 Neonderthal, Homo sapiens
- 5. Human Genetics: Mendelian genetics in man, methods for study of genetic principles in manfamily studies, twin studies, pedigree analysis, DNA technology
- 6 Human Growth: stages of growth, nutrition and development, factors affecting growth, methodologies for growth studies, theories of ageing
- Race, ethnicity and populations: concepts Classification of races, causes of human variationmorphological, serological and genetic
- 8. Applied Physical Anthropology
 - (i) Anthropology of Sports
 - (ii) Nutritional Anthropology
 - (iii) Forensic Anthropology
 - (iv) Applied Human Genetics
 - (v) DNA Technology and Medicine
 - (vi) Defence Services

Recommended Readings

1. Sahlins and Service: Evolution and Culture

2. Ember and Ember: Anthropology

3. Simpson, G.G.: The meaning of Evolution

4. Williams, B.J.: Evolution and Human Origin

5. Shukla, B.R.K. and Rastogi, S.: Physical anthropology and Human Genetics - An Introduction

6. Marrell: Evolution and Genetics

7. Ashley Montague: Concept of Race

8. Buettner-Janusch: Origins of Man

9. R.M. Sarkar

10. B.M. Das

11. S.S. Sarkar: Aboriginal races of India

Paper 3: Archaeological Anthropology

Approach

This course aims to highlight the anthropological perspectives of archaeological material. The origin, evolution, migration, distribution and development of mankind still remain the central theme in anthropology. The subject matter, has to interact with many other disciplines viz. Earth Sciences, Physical Sciences, and Life Sciences with a view to reconstruct man's past — the palaeo environment chronology and typo-technologies. The ethnoarchaeological aspect would help to reconstruct the spatio-temporal development of past cultures comparing them with those of the present cultures.

The course provides glimpses of the scope in understanding the origin, development and distribution of mankind. It indicates the relevance of palaeoenvironment, chronology, typo-technologies and culture - construct which also established the relationship of archaeological anthropology with Earth Sciences, Physical and Life Sciences.

The course aims at projecting the anthropological significance of archaeological data in the reconstruction of human evolution.

At the end of the course the students are expected to:

- a. be conversant with the basic terminologies, branches, sub-fields of archaeological anthropology and their interrelationship, scope and historical development
- b. recall the geological time scale, environment, stratigraphy and their characteristics
- detail the types of available dating methods, their advantages, disadvantages and their implications to archaeological data
- d. recongnise fossil primates, their features and distribution
- e. identify hominid fossil evidences and explain their salient features
- f. describe the tool making technology, raw materials used, tool types and functions in an evolutionary perspective
- g. survey the cultural chronology of Palaeolithic, Mesolithic and Neolithic periods and their special features
- h. recognize the early food producers and their varied activities
- i. identify the salient features of Indus valley period, its people and activities.

Archaeological Anthropology

Syllabus

 Definition, aim, genesis of the subfield: Relationship to other branches of anthropology, earth sciences, physical sciences, life sciences and social sciences, scope and objectives environmental archaeology, ethnoarchaeology.

- 2. A brief outline on the origin of earth and life and geological time scale. Pleistocene epoch chronology, environmental episodes as seen in geomorphological features, classic sediments, distribution, markers fauna, flora, and hominids involvement etc. Pleistocene Holocene interphase changes, vestiges, emergence of identities. Environment industrial components, typology and technology, adaptive mechanisms and variations.
- Dating methods: absolute and relative dating: stratigraphy, river terraces, raised sea beaches
 dunes, astronomical dating, collagen analysis, obsidian hydration, dendrochronology,
 thermoluminescence dating, pollen dating, varve analysis, uranium dating, potassium-argon
 method, fluorine dating, C-14 dating, amino acid racemization.
- 4. Fossil primates: Types, with genus and species, special characters, distribution and chronology with reference to fossils.
- 5. Hominid fossil evidence: Overview of skeletal evidence, Homo fossil in Indian subcontinent, special features phylo-taxonomy, salient features and environment.
- 6. Tools and Technology: Raw material and sources, temporal dimension of tool making techniques and tool types, function of tool types.
- 7. Cultural chronology Palaeolithic, Mesolithic and Neolithic, special salient features of environment, sites and areas typo-technology, distribution, artificers and their physical forms.

8. Neolithic revolution emergence of agriculture and domestication of animal, village communities, tool types, pottery, wheel, and plough diffusion of agricultural in S.E. Asia and West Asia

9. Protohistoric period with special reference to Sindhu/Indus valley civilization. Copper and Iron age, features and distribution.

Recommended Readings

1.	Agrawal, D.P.	The Archaeology of India, Curzon Press
2.	Allchin, B and Allchin, F.R.	The Rise of Civilization of India and Pakistan, Cambridge University Press
3.	Ashley Montague.	Physical Anthropology and Archaeology
4.	Barmown Victor.	Physical Anthropology and Archaeology, The Dorse Press Home Wood, Illinois
5.	Banerjee.	Iron Age in India, Munshiram Manoharlal
6.	Bordes, F.	Old Stone Age, Weidenfeld and Nicolson
7.	Brothwell.D & Higgs, E. (Ed),	Science in Archaeology, Thames & Hudson
8.	Budtzer, K.W.	Environment and Archaeology
9.	Clark, D.L.	Analytical Archaeology, Methuen & Co. Ltd
10.	Coles, J.M. & Higgs, E.S.	The Archaeology of Early Man, Faber & Faber
11.	Das, B.M.	Outlines of Physical Anthropology, Kitab Mahal
12.	James, J. Hester,	Introduction to Archaeology, Holt, Rinehart and Winston
13.	Michel, J.W.	Dating Methods in Archaeology, Seminar Pers

Sakalia, H.D. New Archaeology - Its Scope and Application to India, Ethnographic and Folk Culture Society
 Sankalia, H.D. Stone Age Tools, Families and Techniques, Deccan College, Pune
 Sankalia, H.D. Pre and Protohistory of India and Pakistan, Deccan College, Pune

Pleistocene Period, Hutchinson

Paper 4: Indian Anthropology

17. Zeuner, F.E.

- Approaches to the study of Indian society, culture and civilisation, indological, anthropological, historical etc.
- 2. Ancient culture: Prehistoric (Paleolithic, Mesolithic and Neolithic), protohistoric (indus civilisation), vedia and later vedic age
- Indian People: racial, ethnic, linguistic and religious elements (composition) and distribution of people, peopling of India: Autochthons, migration, hypergamy, hypogamy and DNA explanations
- 4. Unity and diversity in Indian society and culture: linguistic, political, ethnic, communal and religious tensions and conflicts; national integration
- 5. Basis of traditional Indian social structure and life cycle: varnashram, dharma, purushartha, karma, rina and rebirth, impact of Buddisim, Jainism, Islam and Christianity on Indian society.
- 6. Social structure: caste system- definition and criteria of caste system, varna and caste, theories on the origin of caste system, caste among non-Hindus, caste outside India; dominant caste, caste-mobility-fussion and fission. Backward castes and scheduled castes: statutory provisions; component plans for scheduled castes; atrocities on scheduled caste, caste in democracy.

7. Family, marriage and kinship: joint and extended family, kinship groups and kinship patterns

- 8. Indian village: a myth or reality; village: a part society Jajmani system: impact of new technology and urbanisation changing agrarian social structure; peasant movements, Panchayati Raj. Importance of village studies.
- 9. Tribal societies: definition and identification of Tribe/ Scheduled tribe; classification and distribution of tribes based on economic, cultural, linguistic and biogenetic criteria.
- 10. Development of forest policy and tribals; tribal situation in India: Land alienation, indebtedness, poverty, illiteracy, displacement, tribal arts and crafts
- 11. Tribal policy and governance in British-India. Constitution and scheduled tribes: Provisions and safeguards; pseudo-tribes; evolution of tribal development policy and programmes; SMT blocks, T.D. Blocks and tribal sub-plans; tribals and Panchayati Raj; social and cultural change among scheduled tribes; impact of Hinduism, Christianity, Islam and other religions on tribal societies. Tribe-caste continuum; emergence of ethnicity and tribal movements and identity; tribal absorption/ assimilation/ integration.
- 12. Voluntary initiatives/ development and welfare movements in 19th and 20th century; anticaste, antiuntouchability, women's emancipation, education and health. Role of social reform leaders. Mahatma Gandhi's constructive programmes. Contributions of religious and spiritual leaders/reformers
- 13. Community development programme: Government programmes and their impact; emergence of NGOs and their agenda and impact on tribal, rural, urban health and education, marginalised sectors of people and women groups. Panchayati Raj and 73rd constitutional amendment. Role of anthropology in voluntary and government sectors and in rural and tribal development.
- 14. Growth of anthropology in India: contributions of anthropologists, scholar administrators in 19th and 20th century in the understanding of tribal, caste and village communities and Indian social structure and civilisation.
 - [List is illustrative: Hutton, Mortimer Wheeler, Grierson, A.L. Basham, Haimendorf, V. Elwin, Milton Singer, S.C. Roy, B.S. Guha, G.S. Ghurye, L.A.K. Aiyar, N.K. Bose, D.N. Majumdar, I. Karve, M.N. Srinivas, S.C. Dube, L.P. Vidyarthi, H.D. Sankalia]

 Socio-cultural change: indigenous processes - sanskritisation, parochialisation universalisation, great-little traditions; sacred complex, exogenous processes - westernisation, industrialisation, urbanisation and globalisation

 Contributions of anthropology to the understanding of regionalism, communalism and ethnic and political movements

Paper 5: Research Methods and Field Dissertation

Section A (Research Methods)

- 1. Science and scientific method -methods of natural and social sciences. Positivist and non-positivist approaches.
- 2. Field work tradition in anthropology salient features; field work preparation, hazards, tensions and strategies; social survey and anthropological field work relative merits
- Research Methodology Method and Technique distinguished; research design; formulation
 of hypothesis; comparative method: Nature, purpose and methods of comparison in social
 and cultural anthropology
- 4. Data collection through genealogies, observation, case study, extended case study, key informants, schedule-questionnaire, interview, focussed group discussion, projective techniques
- 5. Review of literature and secondary sources of data
- 6. Sampling and sampling types; elementary statistics classification, tabulation, measures of central tendencies and variation
- 7. Rapid rural appraisal and participatory rural appraisal; methods of evaluation and assessment of social impact

Section B (Field Disseration)

Field based dissertation on problem - planning - development oriented topic.

Diploma in Anthropological Methodology

Papers

- 1. Fundamentals of Anthropology
- 2. Ethnographic Field Investigation and Research Techniques
- 3. Conceptual and Methodological aspects of Anthropological Research
- 4. Approaches to the Study of Indian Society and Indian Ethnography

Paper 1: Fundamentals of Anthropology

- Anthropology: Meaning and Scope Major branches of anthropology and their relations to one-another and other Sciences
- Fundamentals of Biological Anthropology Human evolution; human variation; human genetics;
 human growth and development
- Fundamentals of Social-Cultural Anthropology Concepts; culture; society; group; community; institution; status and role; norms and values; cultural relativism; cultural universals; acculturation; assimilation; transculturation; contra-acculturation; innovation Human institutions: Family; marriage; kinship; law; politics; economy and religion
- Fundamentals of Archaeological Anthropology History of human culture and its evolution;
 broad outlines of pre-historic cultures, tool types and technology, chronology
 20
- Fundamentals of linguistic Anthropology Linguistic and anthropology, human and non-human communication, language and dialect, phonetics; phonemics; morphemics and syntax; language and culture; ethnography of communication

Recommended Readings:

1.	Beals, A and H. Hoijer	Introduction to Anthropology
2.	Beattie, J. 1976	Other Cultures, London, Routledge & Kegan Paul
3.	Bohannan, P. 1963	Social Anthropology, New York, Holt, Reinhart & Wonston
4.	Childe, V.G. 1956	Man makes Himself - Piecing Together the Past, London: Watts
5.	Das, B.M.	Outlines of Physical Anthropology
6.	Ember and Ember 1977,	Anthropology
7.	Evans Pritchard, E.E. 1954	Social Anthropology, London, Cohen & West
8.	Fried, J. 1976	Human Portrait, New Jersey, Prentice-Hall Inc
9.	Hammond, P.B. (Ed)	Physical Anthropology and Archaeology, New York, Mac Milan
10.	Hoebel, A.	Man in the Primitive World
11.	Hoebel, A and Frost,	Cultural Anthropology, Englewood, Cliffs, New Jersey, Prentice Hall
12.	Kluckhohn, C.	Mirror for Man
13.	Majumdar, D.N. and Madan, T.N.	An introduction to Social Anthropology, Asia, Bombay
14.	Miller and Weits 1979	Anthropology, Englewood Cliffs, New Jersey, Prentice-Hall
15.	Misra, V.N. et.al. (Ed)	Indian Prehistory, Poona
16.	Stein and Rowe 1978	The New Physical Anthropology, New York, McGraw Hill
17.	Sankalia, H.D. 1964	Stone Age Tools Their Techniques, Names and Function, Poona, Deccan College, Post-Graduate and Research Institute

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Pap	er 2: Ethnographic Field Investigation and Research Techniques	
1.	Getting ready for anthropological research	4
2.	Definition and delimitation of the research problem	3
3.	Review of literature and preparation of conceptual chart	4
4.	Hypothesis: the place of hypothesis in anthropological research	2
5.	Concept of research design: types of research design	3
6.	Main features of ethnographic field investigation:	
7.	Getting acquainted with the field	3
8.	Establishing rapport and learning the native language	5
9.	Importance of diary	2
10.	User of informants: key informants	3
11.	Techniques of data collection:	
12.	Interview: types of interview; focussed group interview	5
13.	Observation: participation and non-participation observation	4
14.	Schedules and questionnaires	3
15.	Case study and extended case study methods	5
16.	Genealogical methods	2
17.	Use of historical, personal and official documents	5
18.	Participatory learning and assessment	2

Anthropology		241
19.	Participatory rapid appraisal	2
20.	Processing of data and report writing	5
21.	Classification and tabulation	5
22.	Measurement of central tendencies: mean, median and mode	3
23.	Dispersion and measures of dispersion	3
24.	Standard Deviation	2
25.	Sampling: probability sampling and non-probability sampling	3
26.	Correlation	2
27.	Chi-square test	2
Doo	ammandad Daadinga	

Recommended Readings

1.	Sellitz, C. Jahoda, S.C. (et.al.)1976	Research Methods in Social Relations, New York, HRW
2.	Epstein, A.L. 1978	The craft of Anthropology, New Delhi, HPC
3.	Goode, W.J. and Hatt, P.K. 1952	Methods in Social Research, Mc Graw Hill, Tokyo
4.	Hammersley M and Atkinson P,	Ethnography: Principles and Practice
5.	Blalock and Blalock 1968	Methodology in Social Research, Mc Graw Hill, New York
6.	Langness, L.L. 1965	Life History in Athropological Sciences, Prentice Hall, New York
7.	Russell, B.H. 1994	Research methods in cultural anthropology, Altamira: New York

8. Young, P.V. 1956 Scientific social Survey and Research, Prentice Hall, New York 9. Pelto P.S. and Anthropological Research, Cambridge University Press, Pelto G.H. 1978 Cambridge 10. Wellar S.C. Systematic Data Foundations of Behavioural Research 11. Kelkniger F.W. 12. Royal Anthropological Institute of Great Britain and Ireland, 1954, Notes and gueries on Anthropology, Routledge and Kegan Poul Ltd. London 13. Elman R. Service, World Ethnography 14. Murdock G.P. 1949 Our primitive contemporaries, Mac Millan, New York 15. Fuchs S 1973 The Aboriginal Tribes of India, Mac Millan, Delhi Cooperation and Competition among Primitive People, Mc Graw 16. Mead, M (Ed) 1973 Hill, New York 17. Evans Pritchard E.F. Social Anthropology Encyclopaedia of Social Sciences 18. Sills. D.L. (Ed) 19. Some books on elementary statistics

Paper 3: Conceptual and Methodological Aspects of Anthropological Research

Techniques, method and Methodology distinguished

1.

2.	Evolutionism: Unilinear, universal; multilinear and Julian Huxley on Biological and Cultur	al
	Evolution	10

4

6

3. Diffusionism: British School; German-Austrian School; and American Distributionists

4. Comparisons in Anthropology:

20

'The comparative Method' and its critique of Franz Boas

Radcliffe-Brown on 'The Comparative Method'

The Method of controlled comparison

Cross-cultural comparison

Oscar Lewis on comparisons in Anthropology

- 5. Structural Functionalism: Malinowski and Radcliffe-Brown and Micro-level Studies 10
- 6. Structuralist Methods and Levi-Strauss: study of myth and alliance
- 7. Ethnoscience and new ethnography
- 8. Plea for unity of method: scientific and humanistic approaches to be distinguished nature of anthropological method and notion of its autonomy
- 9. Explanation: Science and Anthropology
- 10. Restudy and reinterpretation in anthropology
- 11. Postmodernism and ethnography

6

Recommended Readings

1. Harris M. 1962. The Rise of Anthropological Theory. London: routledge & Kengan

Paul

2. Evans Pritchard, Social Anthropology and other Essays, Glencoe: Free Press

E.D. 1963.

3. Firth, R. (Ed) 1960. Man and culture (Selected Essays) London: Routhledg

4. Hampel, Carl G. 1963. Aspects of Scientific Explanation. New York: Free Press

5. Kroeber, A.L. 1968. The Nature of Culture. Chicago: Chicago University Press

6.	Leach, E.R. 1964.	Political Systems of Highland Burma. London: Bell
7.	Manners, R. and Kaplan, D. 1964.	Theory in Anthropology. London: Routledge
8.	Merton, R.F. 1962.	Social Theory and Social Structure, Glencoe: Free Press
9.	Nagel, E. 1968.	The Structure of Science. London: Routledge
10.	Radcliffe-Brown, A.R. 1976.	The Structure and Function in Primitive Society. London: R&K Paul
11.	Redfield, R. 1962.	Human Nature and Human Society. Chicago: Chicago University Press
12.	Sarana G. 1975.	The Methodology of Anthropological Theory. Tucson: University of Arizona
13.	Turner V.W. 1981.	Forest of Symbols. Ithaca: Cornell University Press
14.	Schneider, D.M.	Culture and Kinship
15.	Greetz, C.	Interpretation of Cultures
16.	Marcus and Fisher:	Writing Cultures
17.	Honigmann, J.J. 1973	Handbook of Cultural and Social Anthropology. Chicago: Rand Mc Nally & Co.
18.	Levi-Strauss C. 1968.	Structural Anthropology. London: Cohn and West
19.	Spencer, R.F. (Ed) 1954	Method and Perspective in Anthropology. Minneapolis: Minnesota University Press
20.	Tylor, S. (Ed) 1969	Cognitive Anthropology, New York: McGraw Hill
21.	White, L.A. 1959	Evolution of Culture. New York:McGraw Hill
22.	Herskovits. M.J. 1960	Man and His Works. New York: Knopf

Symbolic Anthropology

23. Schnader et al., 1960

Paper 4: Approaches to the Study of Indian Society and Indian Ethnography

1.	India as cultural region	10
2.	Racial Linguistic and Social Characteristics of Indian Population - tribal and non-tribal at their distribution.	and 10
3.	Tribal life in India: Socio-economic, political, religious and ecological aspects	20
4.	Traditional Indian social structure, varna, ashrama, purushartha, karma, rina and rebirth	5
5.	Caste system and structural basis of inequality in Indian society	5
6.	Approaches and concepts: Sanskritization; dominant caste; modernization; westernization	on;
	Jajmani system; great tradition and little tradition; parochialization and universalization; trib	be-
	caste continuum; nature-man-spirit complex and urbanization	15
7.	History of tribal administration in India; tribal welfare- policies and approaches	5
8.	Constitutional provisions for scheduled caste and scheduled tribes: implementation a	and
	evaluation. Plans and programmes for tribal development: the five year plans; spec	cial
	component plan; tribal sub-plans; integrated tribal development impacts; role of no	on-
	governmental organisations. Role of anthropology in tribal and rural development	
9.	Projects, programmes and welfare measure on rural, tribal and weaker sections	6
10.	Tribal problems: Land alienation; poverty; indebtedness; illiteracy; unemployment a	and
	underemployment; bonded labour; health; disease and nutrition; tribal movements; ethnic	city
	and quest for identity; forest policy and tribal problems; impact of industrialisation a	and
	urbanization on rural and tribal populations. Panchayat Raj and rural developme	nt,
	displacement and rehabilitation in rural and tribal areas.	20
11.	Mandatory review of two monographs pertaining to India: one on a tribe and the other of	n a
	village/caste.	9

Recommended Readings

1.	Cohen, B.	India: Social Anthropology of Indian Civilization
2.	Mendelbaum D.G. 1989.	Society in India. Bombay: Population Prakashan
3.	Krober A.L. 1963.	An Anthropologist look at History. Berkeley: University of California Press
4.	Cohen and Singer (Eds.) 1970.	Structure and change in Indian Society.
5.	Basham A.L. 1982.	The wonder that was India. London: Sidwick and Jackson
6.	Dumount, L. 1970.	Homo-Hierarchicus. Delhi: Vikas
7.	Prabhu, P.N. 1958.	Hindu social Organisation. Bombay: Popular
8.	Karve I. 1961.	Hindu Society, Poona, Deccan College
9.	Coomarswamy, A.K.	Hinduism and Buddhism
10.	Marriott, M. (d.) 1961	Village India. Bomaby: Asia
11.	Srinivas M.N. 1962.	Caste in Modern India. Bombay: Asia
12.	Redfield R. 1967.	Little Community. Chicago: Chicago University Press
13.	Redfield R. 1958.	Peasant Society and Culture. Chicago University Press
14.	Dube S.C. 1958.	India's Changing Villages, London: Routledge
15.	Bhattacharya S.N. 1959.	Villages on the March. Delhi: Metropolitan
16.	Lewis, O. 1958.	Village Life in Nothern India. University of Illinois Perss
17.	Yogendra Singh. 1994.	Modernization of Indian Tradition

18.	Epstein, T.S. 1962.	Economic Development and Social Change in South India
		(Selected Chapters). Bombay:OUP
19.	Majumdar D.N. 1958.	Races and Cultures of India. Bombay: Asia
20.	Mehta, V.L. 1964.	Decentralized Economic Development. Bombay: Khadi and
		village industries commission
21.	Verma, R.C. 1997	Indian Tribes Through the Ages. New Delhi: NBT
22.	Vidyarthi, L.P and	Tribal culture of India. New Delhi: Concept
	Roy 1985.	
23.	Ross, M.G. 1955.	Community Organisation. New York: Harper

Diploma in Anthropology of Management & Human Resource Development

The course structure is as follows:

- 1. Theories in Management Anthropology
- 2. Human Behaviour
- 3. Human Resource Management
- 4. Research Methodology for Management Studies
- Field based dissertation

Approach

Anthropological skills in understanding cultural diversity and human behaviour are well established. This diploma course is planned to transfer that knowledge base to students, who want to make a career in the field of modern management. This course shall address the requirements of employees of multinationals, management aspirants, company PRO's and all others who want to comprehend human behavioural nuances for professional excellence.

Anthropology is the study of interpersonal relations. The discipline sensitizes future managers to understand individuals in their respective cultural contexts. It empowers individuals to become better managers.

Paper 1: Theories in Management Anthropology

- Theories of organizational behaviour: Causation of human behaviour, personality, perception, attitudes, motivation, morale, power, authority and transactional analysis, relevance of culture for organizational behaviour.
- Organizational Dynamics: organisational communication, organisational change, conflict management, organizational health development and its effectiveness in cross-cultural perspective.

3. Schools of Management Thought: School of scientific management, school of cultural management, the social system school, decision theory school

- 4. Theories of Socio-cultural Management of Business in India: The critical elements of socio-cultural environment, social institutions and system, social values and attitudes, social groups, middle class; share holder movement. Dualism in Indian society and problems of uneven income distribution in India. Emerging rural sector in India and Indian business. Social responsibility of business. Ethics in business. Impact of legal, political and economic regulations on management of business in India.
- Technology and management: Energy theory of Leslie A. White. The technological environment in India. Policy for Research and Development. appropriate technology and problems of technology transfer.

Paper 2: Human Behaviour

Human behaviour is both intense and complex. For every successful managerial venture, human resource is the key component. All management schools acknowledge that it is most dynamic and hence most difficult to manage. This course is devised to orient students to comprehend complexities of this fundamental resource for managerial skills.

Dynamics of Organizational Behaviour:

Understanding individuals part of social complexes. Determinants of human behaviour, personality theories, institutional variations, socialisation processes.

Interpersonal communication:

Interpretative and dialogical methods of social analysis. Developing interpersonal skills, art of listening, feedback counselling and transactional analysis.

Intergroup behaviour:

Herman's theory of group. Group processes, team management, leadership (nature, style and approaches), motivation and morale, issues of power and authority, notions of political field. Difference between status and office. Dualism in Indian society, problems of caste, class and clinic affinities.

Labour policies in India: Labour policy and growth of legislative framework in India, Government as employer, new economic policy and labour, social closure and WTO. Impact of Indian social system on recruitment, selection, commitment and motivation; industry's impact on caste, family, education and society's expectations from industry.

Recommended Readings

1. K.K. Ahuja Industrial Relations - Theory and Practice

2. Blain Pane International encyclopedia of Industrial Relations

3. Mciver and Page Society

4. John Martinu Transactional Corporations in a developing country

5. Johannes Negotiating development - Labour relations in Southern Asia

6. Stephan P. Robbins: Organizational Behaviour

7. Keith Davis Human Behaviour of Work

8. Gregory Moor and Organizational Behaviour, Managing People and Organizations

Lead, Ricky W. Griffin

9. M.G. Rao, Gagpro Organizational Behaviour - Text and Cases

and R.S. Narayana.

Paper 3: Human Resource Management

Nature, scope and significance of Anthropology of HRM, objectives and functions of Human Resource Management. Relevance of Human Resource Management policies and principles, human resource planning in specific cultural contexts.

Developing Human Resource:

Introduction and organisational socialization, training policies, programmes and techniques, management development programmes and evaluating their effectiveness, human resource information system, auditing human resource, human resource accounting, emerging HRM, concepts and systems in the new millenium.

Industrial relations as a personnel function:

Concept and significance of approaches to industrial relations. Grievance handling- concept, procedure and guidelines for effective grievance. Handling, managing discipline - concept, approaches and principles of discipline. Employee counselling and empowerment, quality of work life, job evaluation: concept, techniques, problems of job evaluation

Human Resource Management in India:

Cultural dimensions of human resource management in India.

Genesis, growth of HRM in India. Human Resource Management in public enterprises in India. Human resource management in small undertaking. Human Resource Management in rural enterprenuership.

Recommended Readings

1. Gay Desslen: Human Resource Management

2. R.S. Diwedi: Managing Human Resource - Personnel Management in Indian

Enterprises

3. Date Yoden: Personnel and Industrial Relations

Paper 4: Research Methodology for Management & HRD

 Quantitative Methods: Frequency distribution. Measures of central tendency (mean, median, mode, qualities, etc.). Measure of dispersion (range, variance, standard deviation). Probability: introductory ideas (probability rules), statistical independence, statistical dependence, probability, marginal probability. Notion of random variables; expectation. Discrete distribution (binerial). Continuous distribution(normal, exponential, uniform, joint distribution)

2. Qualitative methods: Case study, in-depth interviews, focus group discussion,s data generation through schedules

- 3. Sample survey for market Research: Sampling Design: Sampling and non-sampling error, random sampling, systematic sampling, sampling with probability, proportions of size, startified sampling, cluster sampling, clutter sampling and multistage sampling. Estimation: Point estimation and internal estimation. Hypothesis testing: one sample test, two sample test, z test, 1 test, yz test.
- 4. Project management: Phases of project management, work breakdown, structure, (WBS), network arrow diagram, measure of activity, forward and backward compulatic, probability of meeting scheduled dates. A critical path for CPM, negative fall, negative slack, crashing the network
- 5. Linear Programming: Formulation of LPP, graphical method, simple method, duality, transportation model, least time assignment model
- 6. Computer data processing: Role of computers in managerical decisionmaking. Office automation, flow charts and data flow diagrams, word processing, mail merging, transfer, editing, spreadsheet design, graphics, macros, data base management concepts. File systems, netware menus, electronic mail, fundamentals of web design client, server technology, interactive computer graphics, computer viruses.

Recommended Readings

1. C.R. Kothari: Research Methodology

2. Goode and Hatt: Methods in Social Research

3. K.V. Rao: Research Methodology in Commerce and Management

4. Raja Rawan: Fundamentals of Computers

5. MS Office 2000 Training Manual

Diploma in Tribal Development

The course structure is as follows:

Paper 1: Anthropology and Tribal Ethnography

Paper 2: Interdisciplinary Research Methods

Paper 3: Planning, Development and Change

Paper 4: Tribal Development

Paper 5: Field Work and Dissertation on Problem-Planning and Development oriented Topic

Paper 1: Anthropology and Tribal Ethnography

- Anthropology: Meaning and scope; major branches and their relations to one another and sister disciplines
- 2. Basic concepts: culture, civilisation, society, group, community, structure, organisation, institution, status and role, social norms, values; culture biology relationship
- Indian society: approaches to the study of Indian society, culture and civilisation; racial, ethnic, linguistic and religious composition of Indian society. Unity and diversity and the issue of National Integration
- 4. Village and caste: rural and tribal villages their characteristics; significance of village studies; caste system definition and criteria of caste, varna and caste, dominant caste and scheduled castes, caste and democracy, Jajmani system; impact of modernisation and industrialisation on agrarian social structure
- 5. Social institutions: concepts, structure and organisation of marriage, family and kinship; voluntary organisations and youth dormitories
- Economic organisations: tribal and peasant economics; concept of property and forms of owership; approaches to the study of economic institutions and organisations; systems of production and distribution; markets and trade

7. Political organisation: forms of leadership and systems of social control, authority systems, law and justice; dispute resolution, Panchayati Raj and empowerment of the poor and women

- 8. Religious organisation: magic, religion and science distinction; belief, ritual and myth; animism, animatism, mana, shamanism, totemism, religious functionaries; rites-de-passage, nature-man-spirit complex
- Culture and language: evolution of human language; language-culture-society; language and communication; applied linguistics; classification and comparison of languages; language drift and language change
- 10. Culture and society approaches to the study of: evolutionism, diffusionism, functionalism, structural functionalism, culture patterns and configurations; culture and personality
- 11. Socio-cultural change, process of: social change caste mobility: fusion, fission, associations and movements; tribe-caste interactions; cultural change: indigenous processes: sanskritisation, parochialisation universalisation; great-little traditions; exogenous processes; westernisation, industrialisation, urbanisation and globalisation
- 12. Tribe: definition; scheduled tribes; biological, racial, linguistic classification; types of social and economic systems; religious systems; scheduled tribes their spatial distribution, settlement patterns, socio-economic and demographic trends in India
- 13. Detailed study of one or two monographs each on the following categories of Indian Tribes:
 - (a) Matrilineal tribes
 - (b) Polyandrous tribes
 - (c) Settled agriculture
 - (d) Shifting and terrace cultivation
 - (e) Pastoral tribes
 - (f) Food gathering hunting tribes
 - (g) Artisans
 - (h) Accultured tribes/tribes in transition

Paper 2: Research methods

- 1. Science and scientific method method of natural and social sciences
- 2. Field work tradition in anthropology main features, preparation for field work, hazards, tensions and strategies; social survey and anthropological field work comparison
- 3. Research design, formulation of hypothesis
- 4. Research methodology, method and technique distinguished
- 5. Basic techniques of data collection: genealogies, observation, case studies, key-informants, schedule questionnaires, interviews, focused group discussions, projective techniques
- 6. Review of literature and secondary sources of data
- 7. Sampling and its relevance; types of sampling
- 8. Scaling techniques: objectivity, reliability, validity, rating scale, ranking scale, Thurstone scale, Bogardus scale and sociometric scale
- 9. Elementary statistics: classification, tabulation and measures of central tendency, measure of variability, significance tests
- 10. Emic and etic approaches
- 11. Rapid rural appraisal and participatory rural appraisal
- 12. Methods of evaluation and impact of programmes: indices and measures; anthropological approaches to assessment of social impact.

Paper 3: Planning, Development and Change

- 1. Policy; concept; policy formulation-processes
- 2. Planning: meaning, principles and methods of planning planning strategy phases, targets, regions, resources, people and sectors

3. Development: meaning and goals - economic and anthropological perspectives, development theories and strategies

- 4. Development planning in India five year plans; NES, community, development, IRDP, green revolution, land reforms, institutional finance and cooperation, infrastructure and industrial development
- 5. Development anthropology applied, action and development anthropology meaning scope and emerging trends; ethnical issues and limitations
- 6. Role of values and institutions in development: caste, religion and culture views of Weber, Singer, Epstein and Madan
- 7. Poverty: concept of measurement of poverty, anthropological approach to poverty the poverty/deprivation trap (Robert Chambers), culture of poverty, poverty alleviation programmes, minimum/basic needs
- 8. Contributions of anthropology to development studies rural poverty and rural development, green revolution, Panchayati Raj and empowering the poor. gender issues in development
- Planning and development agencies government, voluntary and NGO-Models. NABARD,
 CAPART, International, bilateral, and NGO funding agencies.
- 10. Development administration: rural bureaucracy; culture of bureaucracy; personnel
- Sustainable development: concept and policy perspectives, environment natural resources,
 peoples concerns, and participation
- 12. Social-cultural change: meaning; theories of social change; factors of social change; direction and rate of social change. Barriers and stimulants to change
- 13. Diffusion of innovations acceptance/rejection of innovations role of advocates, advocate assets, novelty characteristics, acceptors and rejecters

Paper 4: Tribal Development

 Tribal policy: tribal policy, regulation and development measures during British-India, the Indian Constitution and tribal policy: safeguards and provisions for S.T.s - economic, sociocultural, political, educational, service sectors, etc.; administration of scheduled areas (V Schedule) and tribal areas (VI Schedule). Promulgations by State Governors for Scheduled areas and their impact

- 2. Administrative structure for tribal welfare: structure and functioning both at the central and state levels down to the grassroots
- 3. Planning and development: approaches to tribal development; isolation, assimilation and integration of tribal communities; tribal policy and programmes in five year plans
- 4. Special instruments for development: structure, functioning and impact of SMPT blocks, TD Blocks; review of reports of National committies and commissions; tribal subplans: concept and objectives; planning procedures and fiscal allocations (ITDA/ITDP, MADA, clusters, etc./ structure and functioning of projects/programmes for PTGs)
- Tribals' participation in development; Panchayati Raj; Priorities of development. Development
 personnel and their attitude towards tribal development. Role of voluntary organisations and
 NGOs in tribal development
- 6. Forests and tribal development: forest villages and development; forests in tribal life and economy, impact of forest policy, acts, regulations and programmes on shifting cultivation and tribal economy and society; joint forest management; minor forest produce mining and labour coops.
- Agricultural development: land holdings and tenures; land reforms and land rights; land improvement, introduction of modern agricultural technology; allied sectors - fishing, hunting, pastoralism; village and cottage industries; distribution: consumption, savings and investments; tribal markets

8. Finance and development: credit needs: consumption and production credit; indebtedness, land alienation bonded labour and other form of exploitation; role of coops and other financial institutions; impact of acts and regulations against land alienation and debt redemption measures

- 9. Development of infrastructure
- 10. Tribal education: literacy and educational levels, educational programmes; formal, nonformal and vocational; problems in the promotion of tribal education and of female education medium of instruction, curriculum, and attitudes of teachers and parents, infrastructural facilities.
- 11. Housing and health: housing conditions and housing programmes; drinking water, health sickness and disease ethno-medicine and modern medical systems; roads and communications
- 12. Impact of industrialisation and urbanisation; displacement and rehabilitation of tribes; tribal and non-tribal interaction
- 13. Tribal unrest and revolts, loss of tribal languages and traditions, identity crisis, religious movements; political movements
- 14. Case studies of tribal development programmes: Government and Voluntary sector

Diploma in Medical Anthropology

The course structure is as follows:

Paper 1: Medical Anthropology

Paper 2: Ethno-medicine and Medical Pluralism

Paper 3: Research methods in Health

Paper 4: Health and Human Development

Paper 5: Medical Genetics

Paper 6: Dissertation

Approach

The course introduces students to the field of critical issues in medical anthropology. The body is seen to be both genetically inherited and culturally and historically constructed. The broad objective is to discuss the interactive relationship between culture, health and development. The course focuses on social and cultural etiology to understand entire spectrum of health and sickness and the peoples perspectives on that. Medical anthropology applies anthropological insight and practice to the study of health, illness, (practices, norms, behaviour) and pattern of healing. Emphasis on the use of Anthropological approaches, theories and methodology ('going native', 'ethnography', and participatory research) to investigate the inner worlds of people of different cultures is necessary. The central focus is to develop anthropological perspective to analyze the various paradigms of health; from the infection, treatment models to peoples concerns. The course is wide ranging: ethnographic examples of health, illness, and healing will be drawn from number of societies within and outside India. Taking a comparative historical approach, this course examines how an individual's interactions with sociocultural and physical environments influence the experiences of

health and illness. Topics include a cultural system of healing, disease and international situations, and the global political economy of health.

The present course caters to the needs of the students of anthropology, medicine, medical social work, public health and other disciplines, who aspire to have career in the field of health as well as those who are already in service. Hence, intention of the course is to create and develop skills and knowledge for use in the field of peoples' health.

Paper 1: Medical Anthropology

The first section of the course introduces basic anthropological theory which provides the context for understanding of medical anthropology. The second section exerts the critical issues in medical anthropology. It incorporates concept of primary health care, health promotion, determinants and measurements of health and critical health issues on national and international arena, discussion on which help in gaining holistic understanding of the gamut of health. In this section current concerns are briefly touched, like the issues of poverty, gender discrimination, inequalities around the world and policy planning and implementation in health and disease.

Section A: Introduction to Anthropology

- Meaning and scope of Anthropology; divisions of anthropology; scope of all branches of anthropology.
- Society and culture: concepts: society simple and complex; community, group, institution, association; Culture: attributes of culture, culture-trait, culture complex, culture-area, integration of culture, culture change. Health as an aspect of culture.
- 3. Basic Social Organization:
 - a. Family: Definition, family typology, family of orientation and procreation, rules of residence.

b. Marriage: Definition, Rules-endogamy, exogamy, Parallel and cross cousin marriage

- c. Kinship: Meaning and importance; consanguine and affinal kin, terms of address and reference
- 4. Social structure: Class, caste, gender, status, and role, Varnashram system, purushartha, backward classes: statutory provisions
- 5. Indian village: a part society, impact of new technology and Urbanization changing agrarian social structure, Panchayati Raj
- 6. Social-cultural change: Planned and unplanned change, Sanskritisation, great-little traditions; sacred complex, modernization, industrialization, urbanization and globalization

Section B: Medical Anthropology

- 1. Meaning and scope: Culture, health and disease
- 2. Concept of health and disease: socio-cultural and biomedical approaches
- 3. Determinants of health: socio-cultural, life style, economic, nutrition, environment, genetic and health care delivery system.
- 4. Indicators of health: quality of life, mortality and morbidity indicators, discussion on international indicators; Disability Adjusted life years, Disability free life years,
- WHO Concept of Primary Health care, Alma-Ata Declaration, Concept of health promotion,
 Otawa Charter
- 6. National Health Policy: Pre-British era, Bhore Committee and other committee recommendations, evaluations of earlier recommendations, Formulation of present health policy, Revised National Health Policy.
- 7. Health care delivery in India: rural and urban; utilization of services, training of Health Personnel (village health guide, ANM, etc.)

8. Health behaviour: definitions, socio-psycho and cultural, and bio-medical models, health seeking behaviour models, health education models.

- 9. Health of vulnerable groups: discussion on social, cultural, medical, economic and political dimensions of health of women, children, elderly, tribal communities, etc.
- Nutrition: Macro and micro nutrients their classification, function, sources, daily requirement, and deficiency.
- Concept of Poverty: social, economic and political dimensions of poverty, discussion on
 Prof. Sukhatme's hypothesis about interaction between Nutrition and Poverty
- 12. International health: Role of international agencies in health sector; WHO, UN CEF, Ford Foundation etc
- 13. Workshop on Reports: World Health Report, India Development Report, Human Development Report, World Development Report, National Family Health Survey (1 and 2) above mentioned reports will be discussed to highlight the important indictors of health and general health and development scenario in the country and world.

Paper 2: Ethnomedicine and Medical Pluralism

The first section of the course deals with Ethno-medicine. It has always remained a part of ethnographical research as a system followed by natives and analysis is done from emic point of view. The cultural position of ethno medicine and its practitioners will be revealed using various case studies. Documentation developed by course students will help in understanding its importance and extent of practice in day to day life.

However, current trends (intellectual property right, GATT, patenting, etc.) in international market has changed the entire outlook. This section addresses a range of issues (drug research,

standardization of ethno-medicine) associated with ethno-medicine and its value in global market. The implications of such trends will be discussed in the Indian context and from the National economy point of view.

A section followed by this is on the principles of various systems of medicine and the interplay of these systems and peoples culture. Cultural relativism in Anthropology puts all systems of medicine equidistant. The teaching of these systems of medicine will not only include basic principles but also analysis of concepts from anthropological standpoint. The little traditions are enshrined in Ayurvedic text as great traditions which goes back to communities after reinterpretation to suit their requirements of operational logistics. Use of such examples can be made to reveal congruity of these systems in the human psyche reflected through health behaviour and practice.

Issues of plural therapies (practice of multiple systems) and cross therapies (e.g. Ayurvedic practitioner prescribing allopathic drug) are discussed to recognize the position of these systems of medicine in contemporary society. The update on current research on these systems to comprehend the larger approach and trend is necessary.

It is equally important to bring out peoples perceptions, preferences, extent of use of plural system of medicine, views about efficacy to abet holistic understanding of the subject.

Section A: Ethno-medicine

- Entho-medicine: Difference between Traditional and Ethnomedicine, importance and scope of the subject.
- Practices of Ethno-medicine: magico-religious practices, indigenous medico systems and medical practitioners.
- 3. Concept of Ethno-botany, Ethno-biology, its verification and use in present context
- 4. Ethnography of tribal and folk medical system in India with case studies to understand the role of Ethnomedicine in the community

 Ethnopharmacology: historical approach to drug research, botanical sources of medicine, standardization of Ethno-medicine, methods of standardization, importance of Ethno-medicine in future drug discovery

6. Documentation of ethno medicine, discussion on issues like Patent, GATT, Intellectual Property Right etc.

Section B: Plural Systems of Medicine

- Introduction to Medical Pluralism: Definition of concept of medical pluralism. Overview of different medical systems in India
- 2. Ayurveda: Basic principles of the system, Concept of dosha, dhatu, mala, swasthavruta, chikitsa, ahar, etc. use and spread in India and abroad. Latest research in the field, its relevance in the life of people (great and little tradition).
- Siddha: Basic principles of the system, concept of health, use and spread in India and abroad.
 Latest research in the field
- Unani: Basic principles of the system, concept of health, use and spread in India and abroad.
 Latest research in the field
- 5. Naturopathy: Basic principles of the system, concept of health, use and spread in India and abroad. Latest research in the field
- 6. Tibetan: Basic principles of the system, concept of health, use and spread in India and abroad. Latest research in the field
- 7. Chinese: Basic principles of the system, concept of health, use and spread in India and abroad. Latest research in the field
- 8. Homeopathy: Basic principles of the system, concept of health, use and spread in India and abroad. Latest research in the field

Paper 3: Research Methods in Health

Research methods in anthropology are credited with qualitative methods which answer the question Why? In preference to How much? Which is projected in survey methods. The judicious mix of the two is ideal to address to the health issues in the holistic perspective. In the section on Epidemiology, the anthropological perspective of 'Host' and 'Environment' in preference to that of 'Agent' has to be highlighted.

Section A. Anthropological Research Methods

- Research Methodology Method and Technique distinguished; research design; formulation of hypothesis.
- Data collection methods: Nature, purpose and methods used in the field investigation, use
 of genealogies, observation, case study, extended case study, key informants, schedulequestionnaire, interview, focused group discussion, projective techniques.
- 3. Review of literature and secondary sources of data; its importance and appropriate use in research and planning.
- 4. Sampling and sampling techniques: random, stratified, cluster sampling.
- 5. Rapid rural appraisal and participatory rural appraisal in the field of health
- 6. Quantitative and Qualitative Data Analysis techniques: elementary statistics classification, tabulation, measures of central tendencies and variation, qualitative techniques like content analysis, vignette analysis, thematic analysis, domain analysis, etc.

Section B. Epidemiology

- 1. Epidemiology: basic principles, epidemiological triad,
- Epidemiology of common communicable and non-communicable diseases Malaria, TB, Leprosy, STD, AIDS, Diabetes, Cancer and Cardiovascular Diseases History of major epidemics and strategies to combat etc.

3. Study designs in Epidemiology: prospective and retrospective studies, case-control study, cohort study, experimental designs; clinical trials, randomized controlled trials, etc.

- 4. Risk measurements / Medical statistics: Measurement of morbidity and mortality rates, incidence and prevalence rates, age adjusted and survival analysis, case fatality rate,
- Field applications of epidemiological methods: investigation of an outbreak, evaluation of screening programs, use of analytical epidemiology and other issues in epidemiological investigation
- 6. Anthropological approach to health systems research: use research methods
- 7. Demography: use of demographic theories like biological, social and cultural; population structures and population dynamics; demographic rates and ratios; its utility. Measurement of rates and other vital statistics; birth and death rate, fertility rates, migration rate, etc.

Paper 4: Health and Human Development

The aim of this course is to expedite the understanding of the realities of health planning and development on the continuum from village to International level. Discussion on alternative strategies to health development and efforts of government can help in understanding the current paradigms of development. A role of voluntary sector in the field of health is incredible, which can be divulged in the way of presentation of number of case studies, models initiated and advantages and disadvantages associated with them. This knowledge will not only differentiate roles of government, and voluntary sector but also reveal the extent of community participation in their own development or in the maintenance of health.

Section B will highlight the current status of National Health Programmes on the background of its essential components and implementation strategy. Discussion on advantages and shortfalls, evaluation criteria are also part of the course. The drawbacks in terms of designing of the program, national priority vs. peoples felt needs, overbearing on techno-managerial aspect etc. are integrated part of the evaluation of each programme. At the end of the course, students will gain wisdom about how Anthropological knowledge (theory and methodology) can be applied to modify the current programme or suggest more people friendly alternative model.

Section A: Health Planning and Development

 Health Planning: Introduction, basic concept of planning and planning for health, for development, spiral models, linear models, micro and macro level planning, inter-sectoral coordination in planning

- Health Development: Meaning and perspectives of development, discussion on models of development Agencies of development: Governmental and Non-governmental, Indices and measures of development planning, impact of development of science and technology in non-health sector on community health (solar energy, biogas, green and white revolution, etc.)
- 3. Community development programmes:
 - a. Brief history of welfare movements in 19th and 20th century; anti-caste, anti-untouchability, women's emancipation, education and health. Role of social reform leaders. Mahatma Gandhi's constructive programmes. Contributions of religious and spiritual leaders/reformers,
 - b. Government programmes and their impact on community health,
- 4. Non-government Organizations: Emergence of Voluntary initiatives, NGOs and their agenda and impact on tribal, rural, urban community, their work in the field of health and education
- 5. Role of anthropology in voluntary and government sectors and in rural and tribal development.
- 6. Assignment on micro planning
- 7. Case studies presentation on community health development initiatives; SEWA, JAMKHED, KEM, FRCH, Anubhav series of Ford Foundation.

Section B: National Health Programmes:

 National Health Programmes: Discussion on major National programs to control or eradicate communicable disease, RNTCP, NMEP, DDCP, LEP, NACP, discussion on its components, working pattern, evaluation criteria, budget allocation etc. reports on evaluation and community response.

2. Discussion on programs aimed at improving health of women and children: Important issues concerning women in rural and urban areas, concept of gender and gender relation in various parts of the country and world, impact of gender role formation on health. Discussion of RCH programme in the context of gender and various issues pertaining to reproductive health of women.

Child health: philosophy behind programmes, programmes to prevent childhood diseases and mortality, (UIP, Pulse polio,etc.)

- Nutritional programmes: Nutritional scenario in India, components, working pattern, evaluation criteria, budget allocation of various Nutritional programmes in India. (ICDS, Mid-day meal, Goiter control programme, Vit. .A deficiency, Anaemia etc. related efforts, Blindness control programme.)
- National Programmes on Non-communicable diseases: Cancers, Coronary Heart Diseases,
 Diabetes-Mellitus, Mental Health, and other diseases, highlight the relationship between life style and these diseases.
- 5. Information, Education and Communication: contents and evaluation of IEC component of each National Health programme, alternative strategy, Community participation

Paper 5: Medical Genetics

This course would introduce the students to the basics of inherited diseases and their epidemiological dimensions. It would deal with the ecological demographic and socio-cultural beliefs and practices (consanguinity, inbreeding) their positive and negative implications in the causation of genetic as well as congenital defects. The students would be further oriented to traditional view points on the inheritance of normal and abnormal traits. Various methods to track down and identify the mode of inheritance of genetic diseases would be discussed. Subsequently, the students are provided with the methods of genetic counselling perspectives.

At the end of the course the students are expected to:

- a. recongnise the socio-cultural dimensions of medical genetics
- b. identify the effect of consanguinity and inbreeding on inherited diseases
- c. explain the basic principles of human genetics and of inherited diseases
- d. differentiate between genetic diseases and congenital defects
- e. identify the causes leading to congenital and birth defects
- f. assess the incidence of genetic anomalies among populations in India
- g. employ methods to track down genetic disease in families and populations
- h. predict their occurrence/incidence in populations with or without inbreeding practices
- i. provide basic genetic counselling to individuals/families/populations

Medical Genetics

Syllabus

This course centres around the anthropological components of medical genetics, as opposed to the treatment orientation advocated by medical scientists. While the course would introduce the preliminaries of those diseases and their patterns of inheritance and their varying manifestations in different population/racial groups, it would also prepare the students to probe the cause and work out the relative occurrence/incidence of such genetic diseases among different populations. Importance of pedigree method, twin method and population genetics methods would be highlighted to get a better perspective of these diseases. The ecological demographic and socio-cultural implications in the causation of perpetuation of various genetic diseases would be discussed besides training the students in the basics of genetics counselling with reference to various genetic diseases.

1. Medical genetics vis-à-vis Medical sciences and genetics. Anthropology and genetics,

Anthropology and medicine (diseases) overlapping areas and their relevance.

2. Formal genetics and medical genetics: to be distinguished and their boundaries identified.

3. Timing and possible causation of genetic diseases/syndrome defects/disorders/and the

congenital deformities having adverse bearing on community level

4. Methods in identification of genetic diseases: Pedigree method, twin method, cytogenetic,

biochemical and molecular gene, prenatal diagnosis

5. Genetic classification (Autosomal, sex-linked etc) of the disease and their variations with

reference to syndrome; racial/population variations - Epidemiology.

6. Demographic, Socio-cultural and ecological dimensions of genetic diseases, perception

knowledge and attitude towards such diseases. Ethno-medical aspects of diagnosis: Control

and treatment.

7. Society and genetic diseases: KAP and curing practices

8. Genetic counselling approaches.

Paper 6: Dissertation

Recommended Readings

1. D.Banerjee: Health and Family Planning services in India

2. D.Banerjee: Poverty Class and Health culture in India

3. Raj and Mable Arole: Jamkhed

4. C.Leslie: Asian Medical Systems

5.	McElroy and Townsend:	Medical Anthropology in Ecological Perspective
6.	Spicer (edt):	Ethnic medicine in the South West
7.	Gittleson, Bentley, and others:	Listening to women talk about their health
8.	Antia, N.H.:	People's Health in People's Hands
9.	Antia, N.H.:	Health and Medical Care: A People's Movement
10.	Nichter M. :	Anthropology and International Health: Asian Case Studies
11.	Kutumbiah:	Ancient Indian Medicine
12.	Helman, Cecil. G. 2000. (4th edition).	Culture, Health and Illness. An Introduction for Health Professionals.Oxford: Butterworth/Heinemann.
13.	Kleinman, Arthur. 1988.	The Illness Narratives: Suffering, Healing and the Human Condition. New York: Basic Book.
14.	Turner, Victor W. 1968.	The Drums of Affliction. A Study of Religious Processes among the Ndembu of Zambia.London: Hutchinson and Coy.
15.	Brown:	Chapter 1. Medical anthropology: An introduction to the field. Brown et al. (Pp 10-19).
16.	Kleinman, Arthur. 1980.	Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry. University of California Press: Berkeley. [Chapter 2 & 3.]
17.	Foster, George M. 1978.	Medical anthropology. New York: John Wiley & Sons. [Chapter 1: The new field of medical anthropology, pp. 1-10.]
18.	Polgar, Steven. 1963.	Health action in cross-cultural perspective. In Handbook of medical sociology, eds., H. E. Freeman, S. Levine and L. G. Reeder, Prentice-Hall: Englewood Cliffs, NJ, pp. 397-419

Essential Medical Genetics 19. Connor, J.M.: 20. Emery, A.E.H.: Elements of Medical Genetics 21. Thompson, J.S. and Genetics in Medicine Thompson, M.W.: 22. British Medical Human Genetics: Choices and Responsibility Association: 23. Harper, P.S.: Practical Genetic Counselling Kourilsky: Genetics: The Thread of Life 25. Morton, N.E.: Outline of Genetic Epidemiology 26. Verma, I.C.: Medical Genetics in India, Vol 1 & 2 27. McKusick, V: **Human Genetics** 28. Landy, D.: Culture, Disease and Healing 29. Foster, G.M. et.al.: Medical Anthropology 30. Monica Das Gupta. Health, Poverty and Development in India Lincoln c. Chen, T.N. Krishnan (Eds.)

Non-Governmental Approaches to Community Health

31. Saroj Pachauri

Diploma in Medical Laboratory Technology

The course structure is as follows:

Paper 1: Biochemistry

Paper 2: Microbiology - Bacteriology, Virology and Parasitology

Paper 3: Haemotology including clinical pathology and blood banking

Paper 4: Histopathology

Paper 1: Biochemistry

- 1. Care and requirements in clinical biochemistry laboratory
- 2. Laboratory manipulations
- 3. Chemical examination of urine
- 4. Estimation of urinary sugar (other equal sugars also)
- 5. Estimation of urinary urea
- 6. Estimation of urinary chlorides
- 7. Fractional test meal
- 8. Estimation of blood sugar
- 9. Glucose tolerance test and insulin tolerance
- 10. Estimation of blood urea
- 11. Estimation of blood proteins
- 12. Estimation of blood Na, K
- 13. Estimation of blood Ca

14. Estimation of blood phospate and phosphatess

- 15. Liver functiontests
- 16. Kidney functiontests
- 17. C.S.F. examination
- 18. Stool examination
- 19. Sputum examination
- 20. Normal and abnormal Hb and Hp through electrophoresis. Serum proteins and transferrins
- 21. Protein bound lodine
- 22. Gastric juices analysis
- 23. Analysis of calculi (stone)
- 24. Detection of growth anomalies in children
- 25. Computer analysis of various biochemical tests

Paper 2: Microbiology - Bacteriology, Virology and Parasitology

- 1. Introduction, laboratory discipline, short history, morphology and biological character of bacteria
- Classification of bacteria
- 3. Methods of sterilization, general principles, effect of physical and chemical agents, bacterial filters
- 4. Microscope parts: optical principles
- 5. Methods of cultivation types of media employed and methods of Aerobia and ananerobic culture
- 6. Collection of samples swabs-pus-body fluids, blood-urine-stool
- 7. Growth requirements and techniques in isolation and identification of the organisms

- 8. Capsule-flagellar-Gram staining, acid fast staining
- 9. Serological identificatino of organisms and animal pathologenecity tests
- 10. Testing of disinfectant and determination of sensitivity to antibiotics
- 11. Maintenance of stock strains, bacterial counts toal and viable
- 12. Preparation of sera and vaccines, preservation of antigens and sera strains
- 13. Definitions of Antigen, Antibody, complement etc
- 14. Instruments used in serology, their maintenance
- 15. Methods of agglutination and precipitation tests widal test, woil, felex reaction, VDRL, Kahn test
- 16. Complement fixation test and their interpretation
- 17. Viral infections and general characters of viruses
- 18. Laboratory diagnosis of common bacterial and fungal infections
- 19. ELISA tests

Paper 3: Haemotology including clinical pathology and blood banking

- 1. Use and care of glassware and instruments in haemotology
- 2. Preparation of solutions, stains and use of staining techniques in haemotology
- 3. Reception and collection of specimens for haemotology investigation
- 4. Development of Red cell, leucocytes and blood plates
- 5. Methods of counting red cells, leucocytes, reticulacytes
- 6. Estimation of haemoglobin, packed cell volume and calculation of corpuecular constants
- 7. Classification of disorders of blood and disorders, enumeration of methods used in study of various bloods

- 8. Methods of investigating haemolytic anaemias
- 9. Methods of investigating nutritional anaemias
- 10. Determination of E.S.R., A.B.O. blood groping Rh typing and cross matching
- 11. Investigation of disorders of coagulation and use of anticoagulants
- 12. Sex chromatin- Barr body, leucocyte drum sticks and chromosomal techniques
- 13. Detection of complete and incomplete antibodies
- 14. Reticulocyte count
- 15. Anaemias Haemolytic, iron deficiency, myoblasic, aplastic, etc.
- 16. Leukaemia
- 17. Cyto-chemical stains
- 18. B.T., C.T. and clotting disorder
- 19. Prothrombin, time index
- 20. PTTK (partial thrombmplastim time kaolin)
- 21. G6 PD

Paper 4: Histopathology

- 1. Elementary lecture and evolution of histopathological techniques and their use in pathology
- 2. Selection and testing of glasswares, laboratory equipments
- Receiption, recording and preservation and registration of specimens, methods of recording experiments
- 4. Laboratory planning benches, instruments, glassware, paraffine, etc

5. Care and use of microtomes, knives, mechanical tissues proceesing instruments

- 6. Fixation of tissues
- 7. Secondary fixation of post mordanting, declacification embedding paraffin methods
- 8. Microtomes and knives: types, use, care
- 9. Sectioning staining and impregnation
- 10. Exfollative cytology
- 11. Preservation of museum specimens
- 12. Care and handling of animals
- 13. Handling of fresh histological specimens (tissues)
- 14. Lipid, identification and demonstration
- 15. Hormonal assessment with cytologic techniques and pregnancy tests
- 16. Cytology including cervical cytology
- 17. Aspiration cytology principles, indications and utility of the technique with special emphasis on role of cytotechnician in FNAC clinics

Diploma in Genetic Counselling

The course structure is as follows:

Paper 1: Fundamentals of Anthropology and Human Genetics

Paper 2: Principles of Medical Genetics

Paper 3: Genetic Counselling

Paper 4: Laboratory Methods

Paper 5: Dissertation/ Field Work

Approach

Genetic counselling has greater relevance in India a we have a large number of endogamous

caste and tribal groups besides quite a few religious as well as geographical isolates.

Consanguineous marriages resulting higher levels of inbreeding in small groups increase the

chances for the deleterious genes to converge and express through individuals and families. The

prevalence of inherited diseases like Thalasemia, Sickle cell anaemia, Hemophilia etc. in many

tribal areas calls for urgent attention by genetic counsellors. This diploma course aims to provide

both theoretical as well as practical training in genetic counselling.

At the end of the course the students are expected to:

a. understand the anthropological dimensions of genetic counselling

b. learn the basics of human genetics and the methods to explore the nature of

inheritance of normal and abnormal traits

c. comprehend the principles of medical genetics and to assess the mode of inheritance

of genetic diseases

d. associate and assess the implications of consanguineous marriages and the

inheritance of such diseases as well as identify the individuals at risk

e. adopt appropriate strategies in genetic counselling for individuals, families and communities

f. learn the laboratory and field methods to identify the genetic diseases.

Genetic Counselling

Syllabus

Fundamentals of anthropology, human genetics, medical genetics

Marriage rules - exogamy, endogamy, consanguinity and inbreeding their implications on individuals, families and the community health care.

Normal and abnormal traits: genetical and non genetical; genetic etiology; environmental effect.

Tracing of family history for these traits (Pedigree analysis)

Rules of inheritance of the traits: Autosomal, Recesive and sex linked

Anthropological significance of cytogenetical studies.

Relationship of cytogenetical study. probability of transmission of trait, disease. Diagnosis for biochemical disorders; metabolic disorders.

Normal and abnormal chromosomes

Chromosomal aberrations (structural and numerical) and its consequences in individuals and populations

Different techniques of preparation and identification of chromosomes

Chromosome nomenelature and chromosome mapping and chromosomal syndromes

Diagnostic approach and its importance

Prenatal detection and its importance: cytogenetics of fetal wastage, repeated abortions, primary and secondary amenorrhoea

Haemoglobinopathies and allied disorders in India; their genetic importance in Health care. Association of genetic markers (Blood groups, HLA antigens etc.) with diseases. Medical genetic problems among tribals.

Genetic counselling: introduction - genetical, medical and social concept

Essential qualities of a genetic counsellor

Ethical aspects of genetic counselling

Note: The detailed syllabi have to be developed by the respective departments.

Recommended Readings

1. Anders J.M., Moores E.C., Chromosome preparation from lecocyte culture. A simplified Emancuel, R.: method for collecting samples by post, J. Med. Genetics, 3, 74,

Arakaki D.T., Microtechnique for culturing leucocytes from whole blood.
 Sparkes R.S.: Cytogenetics, 2, 57

3. Bloom A.D. Induced chromosal aberrations in man, Advances in Human Genetics, 3, 99-172, H.Harris and K. Hirschhorn, (Eds.),

New York-London: Plenum Press

Bloom A.d., Lida Sh.: Two-day leukocyte cultures for human chromosome studies, Jap.
 Jr. Human Genetics, 12, 38 (1967)

Capersson T., Zech L.,: Fluorescent labeling and identification of human chromosomes,
 Perspectives in cytogenetics, p. 163-185, s.W. Wright, B.F.
 Crandall, L. Boyer, eds., Springfield: Charles C Thomas

6. Capersson T., Chromosome identification-technique and applications in Zech L., (Eds.) biology and medicine. Nobel symposium 23. New York and London, Academic Press

7.	Capersson T., Zech L., Johansson C., Modest E.J.:	Identification of human chromosomes by DNA-binding fluorescent agents. Chromosoma (Berl.) 30, 215-277
8.	Kinlough M.A., Robson H.N., Hayman D.L.:	A simplified method for the study of chromosomes in man Nature (London) 189, 420
9.	Manolov G., Manolova Y., Levan A.:	The fluorescent pattern of the human karyotype. Hereditas (London) 69, 272-286
10.	Mckusick V.A.:	Mendelian inheritance in man. Baltimore: The John Hopkins Press
11.	Motulsky A.G. (Ed):	Genetic prognosis and counselling, New York: Harper U. Brothers
12.	Seabright M.A.:	Rapid banding technique for human chromosomes, Lancet, 11, 971-972
13.	Wittinghill M.:	Human genetics and its foundation. New York: Reinhold Publi. Corp.
14.	Young I.D.	Introduction in Genetic Counseling, Oxford University Press, A clearly explained and valuable guide to practical situations and to their underlying principals
15.	Harper, P.S.	Practical Genetic Counselling
16.	Morton, N.E.	Outline of Genetic Epidemiology
17.	Malhotra, K.C. (Ed.)	Statistical Methods in Human Population Genetics
18.	Paul, B.d.:	Health, Culture and Community
19.	Read, M.: Culture,	Health and Disease
20.	British Medical Association.	Human Genetics - Choices and Responsibility

Genetics

21. Winchester:

Diploma in Visual Anthropology

The course structure is as follows:

Paper 1: Concepts and Theories of Communication

Paper 2: Principles of Visual Anthropology

Paper 3: Methods and Techniques in Visual Anthropology - Practicals

Paper 4: Dissertation/Film/Video production

Approach:

Anthropology, being a field science has always been documenting, comparing and interpreting cultures, in their multidimensional facets. Methods of documentation have undergone drastic changes from writing to digital photography today. The subject matter of anthropology too has to take advantage of this situation keeping pace with these technological advancements.

This one year Diploma course aims to introduce the students to the basics of anthropology and of visual anthropology, their theoretical foundations along with an orientation to the methods and techniques involved in visual anthropology. Further, the students would be provided with practical training in producing visual anthropological films/video production, editing etc.

At the end of the course the students would be in a position to:

a. comprehend the concepts and theories of communication in general and assess the scope of visual communication in relation to other forms of communication

- b. recall the historical development of visual communication methods employed by anthropologists
- c. highlight the salient feature of visual anthropology as a method
- d. assess the relevance of visual anthropology in diachronic and synchronic contexts in analysing cultures

- e. survey the importance of visual anthropology in the Indian context
- f. evaluate the role of visual anthropology in comparison to computer, I.T., documentary and new wave films
- g. discuss the role of visual anthropology in relation to archaeology, museology, tourism, biological and cultural anthropology
- h. demonstrate their skills in using appropriate methods and techniques
- i. produce video/film/dissertation on a topic assigned to them

Diploma in Visual Anthropology

Syllabus

- Anthropology, concept, theories, scope its relation with other disciplines. Anthropology as a holistic subject. Its contributions in understanding human evolution and human variation. Areas of application. Indian Anthropology
- Anthropology and communication, relation. Visual communication: concept, forms and scope.
 Folk art to modern mass media. Visual anthropology as a method.
- 3. Anthropological films: approaches, realistic, documentary, commercial and new wave. Visual anthropology and analysis of cultural style. Visual anthropology as a mode to preserve culture and for cultural enrichment. Visual anthropology as an aid to literacy and cultural development
- 4. Television and visual anthropology. New techniques in film/video production, film review, appreciation and criticism, film as an art, language. Development of visual anthropology and ethnographic films in India; scope, future possibilities and challenges.

Practicals:

Screening visual anthropological films/videos and their critical review. Production of anthropological films, script writing, shooting, editing, sound mixing, commentary etc.

Note: The detailed coursewise syllabi have to be developed by the respective departments.

Diploma in Forensic Anthropology

The Course structure is as follows:

Paper 1: Introduction to Forensic Anthropology and Criminalistics

Paper 2: Principles of Personal Identification

Paper 3: Practical I

Paper 4: Practical II

Paper 5: Practical III

(The course details may be adopted from the syllabus given under Forensic Anthropology in the

curriculum.)

Approach

India with its heterogeneous population, but clearly discernible caste, tribe and religious groups

pose many challenges and opportunities for forensic experts. Today, Man is chasing a fast moving

world, especially in cosmopolitan cities where anonymity rules personal identity. Natural calamities

accidens and crimes are on the increase. However, the sped of detection of crimes and criminals,

as well as the personal identity of many accident victims, has taken backseat. Lack of adequate

and qualified experts on the subject, extreme work pressure on police personnels and forensic

experts make it further difficult to render proper justice to people and their cases, grievances and

claims.

While anthropologists with their extensive training in anthropometry, scopy, blood groups,

determatoglyphics, population genetics etc. are always in demand as forensic experts and private

detectives in other parts of the world, in India, this branch of science is still under the domain of

state, police and doctors. Most of the criminal lawyers are not conversant with the intricacies of forensic science. There exist only a few training centres in the country in forensic sciences which do not cater the growing need.

This postgraduate diploma course aims to equip the students in all the major areas of forensic science imparting both theory and practicals.

Starting with the perspectives in crime and crime detection the first two theory papers would provide the basics and the anthropological perspectives of crime and crime detection. Establishing personal identity is the core theme in forensic anthropology, besides probing the causes and circumstances of death which would be dealt there. Two practical courses would impart the methods, techniques and procedures essentially required for personal identification. Each student would also prepare a dissertation based on assigned topic related to personal identification.

Diploma in Disaster Management and Rehabilitation

The course structure is as follows:

Paper 1: Anthropological perspectives of Disaster and Rehabilitation

Paper 2: Preparations and training requirements

Paper 3: Disaster and Rehabilitation: Indian Scenario

Paper 4: Practicals in Disaster and Rehabilitation Management

Paper 5: Dissertation

Approach

Unexpected, unprepared and sudden natural disasters viz. earth quakes, cyclones and floods are

but part and parcel of earth's own life activities. It is true that all the life forms do get affected

adversely during such events. Man made structures perish in a flash, trapping many lives within,

leaving the survivors in acute physiological trauma and confusion. Physical disabilities and outbreak

of epidemics add further miseries to the living.

How do we combat such disasters? How could we console the living? How do we count and

identify the dead ones? How much is the human error which aggravate the sufferings and loss of

life? What precautions and care to be taken to reduce the impact of such calamities. How do the

survivors cope up with the realities?

There are also man made potential disasters like construction of big dams, factories, roads etc. by

which families lose their land, houses, and also often forced to separate from their close relatives

in the nare of rehabilitation and re-location and development.

Do we really take precautions to face the drought conditions which force many villages to migrate

enmass, often leaving behind their cattle and pet animals; at times even old people to the mercy of

nature?

What are the avenues available to face these challenges and mitigate the sufferings of the people?

In short, the disaster management is a specialised are where quick nerves, leadership and coordination capabilities are to be developed to face these situations. While the cyclone prone areas would require a specific kind of disaster management strategy, the earthquake hit areas would need a different kind of skill to tackle the situation.

This one your diploma course would provide the requisite skills for the students not only through the theoretical background but also through intensive practical training in all the areas of disaster management.

At the end of the course the students should be in a position to:

- a. comprehend the disasters as sudden destruction and disorganisation of family
 network
- b. assess the intensity of mental agonies/psychological trauma caused by disasters
- c. probe the causes of disasters as perceived by people belonging to various faiths or religions
- d. spread appropriate awareness programmes among the common people about the natural calamities and the precautions the people should take in the event of disasters
- e. appreciate and understand peoples coping mechanism due to loss of life and rehabilitation procedures
- f. organise and coordinate specific and proper disaster management strategies
- g. establish good laison between/with various rehabilitation agencies and guide them
 for speedy and proper mitigation procedures
- h. counsel the surviving family members and help them restore their family ties with their relatives who got separated due to disaster

i. help the government authorities, NGOs, doctors, insurance companies, banks, industries etc. in establishing personal identify of the dead as well as of the living

- j. help the families who lost children to adopt orphan children whose parents and relatives perished in such disasters
- k. inculcate a common and strong bondage of love and care among all the sufferers, cutting across caste, cread, ethnic and other man made barriers.

Disaster Management and Rehabilitation

Syllabus

- Definition and nature of disasters. Natural disasters: causes, classification. Prediction possibilities, precautions/measures stipulated by the government.
- Anthropological perspectives on disasters: natural and man made disasters. Peoples
 perception of disasters, belief system, past experiences, folklore, stories, proverbs etc. on
 disasters. People religion, caste, ethnic variations, ideas about precautions and preparatinos.
 Theoretical perspectives.
- Disaster and after: Physical trauma during and after. Dead ones, critically wounded, seriously and casually wounded. Lost ones; miraculously escaped ones. Women, children and elderly survivors.
- 4. Role of personal identification during and after disasters. Problems and solutions. Identification through bone remains, fragmentary bones, teeth, etc. Role of Anthropometry and somatoscopy in personal identification. Physiological traits viz. blood and body fluids. DNA fingerprinting.
- Managing disaster survivors and their families. Identifying close relations. Restoration of their family ties and organising help for shelter, food and medical treatments. Organising funds for resettlement; work opportunities for survivors.

6. Group coordination for relocating/reorganisation of religious places, hospitals, schools, communication facilities, food medicine, water supply and drainage.

7. Disposal of the dead after identification/photographing/collecting blood samples, finger/palmar prints and scopic observations.

Recommended Readings

1.	Bose, B.P.C.	Disaster Policies and Administration: A Study of Three Andhra
		Disasters
2.	Cohen, Stephen P. and	The Andhra Cyclone of 1977. Individual and Instituional
	C.V. Raghavulu	Responses to Mass Death
3.	Fernandes, Walter and	Development, Displacement and Rehabilitation
	Enakshi Ganduli	
	Thakrai (Eds.)	
4.	Gangopadhyay, T and	The Ecological and Economic Costs
	K.A. Mankodi	
	Rehabilitation:	
_		

- 5. Goldsmith and Hildyad, N. The Social and Environmental Effects of Large Dams
- 6. Keller, Stephen L. Uprooting and Social Change
- 7. Saklani, Girija The Uprooted Tibetans
- 8. Schdder, T. The Human Ecology and Big Projects: River Basin Development and Resettlement in Annual Review of Anthropology

Diploma in Ecological Management

The Course Structure is as follows:

Paper 1: Elements of Ecology

Paper 2: Ecology and Development

Paper 3: Ecology and Local Communities

Paper 4: Research Methodology

Paper 5: Dissertation: based on field work

M.PHIL. COURSE IN ANTHROPOLOGY

M.Phil. Course in Anthropology

The duration of the course would be an year and a half.

Approach

Anthropology being an interdisciplinary subject, there are several scholars with masters degree in their respective discipline who want to enroll for Ph.D. in Anthropology. The discussions at the three regional meetings pointed out not to close the door of Anthropology to other disciplines but to ensure that a candidate getting a Ph.D. in Anthropology has the basic knowledge and holistic perspectives in Anthropology. It is an experience that pre-doctoral courses don't reach the level of formal training and formal acquisition of knowledge of the discipline. Hence a candidate not possessing a Masters degree in Anthropology and wishing to get admission to Ph.D. course, need to undergo the following M.Phil. course. A candidate is advised to familiarise with NET syllabus in Anthropology.

Paper 1 is aimed at getting to know the fundamentals of anthropological theory of all branches of anthropology. One is expected to know about India and its people from anthropological perspective.

Paper 2 could be designed for an individual scholar in terms of theory and methodology, most appropriate to the area of specialisation, offered by a candidate.

Paper 3 has to be the same as on Research Methodology at the masters level with addition according to specialisation offered.

Paper 4 would be a practical course preferably a combination of field based data collection and analysis in the laboratory.

Paper 5 has to be research dissertation, based on field work depending upon the area of specialisation.

Following the track in some universities, a candidate for M.Phil. may be directly inducted into Ph.D. programme if he/she gets certain number of credits in the course on theory and methodology. In that case, a candidate may go directly for Ph.D. dissertation work.

Paper I: Anthropological theories

- a. Theories of culture, culture change
- b. Process of biological and cultural evolution
- c. Concepts of human and population genetics
- d. Process of human growth and development
- e. Origin and development of social institutions such as family, marriage, kinship, religion, law, economy and aesthetics
- f. Archaeology and Linguistic
- g. India and its people
 - i) Prehistoric sites in India
 - ii) Ethnic and linguistic elements
 - iii) Tribe, caste, village, city
 - iv) Problems in contemporary Indian society
- Paper II: To be designed by the Department in view of the area of specialisation offered by the candidate, depending upon the facilities available.
- Paper III: Research methodology as applicable at the M.A./M.Sc. Part I
- Paper IV: Laboratory based or community based Practical
- Paper V: Dissertation based on field work

Department may combine Paper IV and V in cultural and archaeological anthropology.

ANNEXURE I

Annexure I

Comments on

Curriculum of Anthropology in India

By Gopala Sarana, Ph.d. (Harvard) Retired Professor of Anthropology at Lucknow University

Annexure I

The Undergraduate curriculum:

It is true that at the undergraduate level diverse patterns prevail in the universities of our country. But one thing is common to all of them, i.e. throughout the whole of India 3-year degree course is in operation.

There is need for modification in the course design suggested in the Curriculum. It is my considered view that there should be at least two theory and one practical courses at each of the 3-year undergraduate curriculum. There should be few optional papers, if any, at this stage because in most cases the teaching of anthropology does not commence prior to the undergraduate stage in our country. It is necessary, therefore, that the basics of the discipline must be made known to undergraduate students as it is likely that some of them may not pursue the study of anthropology at the postgraduate stage. The course pattern should be as follows:

B.A./B.Sc. Part I

- 1. Introductory Social-Cultural Anthropology
- 2. Introduction to Physical/Biological Anthropology
- 3. Practical (Craniometry, Anthropometry and Somatoscopy)

B.A./B.Sc. Part II

- 4. Introductory Archaeological Anthropology
- 5. Theoretical Social-Cultural Anthropology
- 6. Practical:
 - i. Palaeolithic tools: sketching, description, etc
 - ii. Bones of lower and upper limbs: identification, sketching, etc
 - iii. ABO blood group typing
 - iv. Dermatoglyphic study of finger ball and palm prints

B.A./B.Sc. Part III

- 7. Introduction to Human Biology
- 8. Indian Anthropology or Peoples and Cultures of India
- 9. Practical:
 - Technology: identification and technological description of primitive implements of food-gathering, hunting and fishing
 - ii. Construction of interview schedules, quantionnaires and genealogies. Case studies/ case histories
 - iii. Project report based on empirical investigation under the supervision of a teacher.

If a university's rules require the prescription of more courses the department concerned may design additional courses as per the competence and expertise of tis faculty members.

The Postgraduate Curriculum:

It is entirely true that in may universities there is no facility of teaching anthropology at the undergraduate level. The post-graduate curriculum in the discipline has to be designed in such a way so that those students who have had no exposure to anthropology beforehand will not be handicapped vis-à-vis those who have studies the subject earlier.

Those who have prepared the curriculum have rightly laid emphasis on providing knowledge of all the branches of anthropology irrespective of the area of specialization he chooses at the later stage. That the post-graduate students should be acquainted with the field work method and the tools/techniques of anthropological research is well taken. Though the designers of the Curriculum have emphasized the importance of Linguistic Anthropology, they have not prescribed even half a course which all the students will have to learn compulsorily.

In order to disseminate a wide-ranging understanding of the basics of all the brances of anthropology to students the following course pattern is suggested for M.A/M.Sc. Previous/Part I stage. Additional courses may be prescribed if there is need for them:

CO1: Social-Cultural Anthropology

CO2: Physical/Biological Anthropology

CO3: Archaeological Anthropology

CO4: Tools of Research and Introductory Linguistics

CO5: Practical (All the four branches, but with major emphasis on Physical Anthropology)

Note: The half-course in Linguistics is elementary. It should be possible for a Social-Cultural anthropologist to learn the basics of Linguistics and teach the course as is being done currently at Karnatak University and Lucknow University.

The details of the course CO4 is given below:

CO4: Tools of Research and Introductory Linguistics

Section A

Getting ready for anthropological research. Definition, limitation and formulation of the research problem. Meaning and formulation of the hypothesis. Research design. Types of social research: exploratory, descriptive, diagnostic and experimental.

Basic techniques of data-collection: 1. Observation; 2. Interview: structured and unstructured; 3. Schedule, 4. Questionnaire; 5. Case Study; 6. Extended case method; 7. Genealogical method; 8. Use of documents in anthropological research; 9. Simple statistical techniques. 18

Distinction between survey method and the anthropological field work method. Preparation for field work including getting acquainted with the field. establishment of rapport and the use of the local language. Use of informants and the role of key-informant(s) in anthropological research.

Recommended Readings

1. Bartlett, F.C.: The Study of Society (Selected Chapters)

2. Casagrande, J.: In the Company of Man (Selected Chapters)

3. Epistein, A.L.: The Craft of Social Anthropology

4. Firth, R.: Man and Culture (Selected Chapters)

5. Gottschalk, L. and others: Use of Personal Documents in History, Anthropology and

Sociology

6. Kalton, G: Introduction to Statistical Ideas for Social Scientists

7. Krober, A.L. (Edited): Anthropology Today (Selected Chapters)

8. Murdock, G.P. and others: Outlines of Cultural Materials

9. Pelto Perti J.: Anthropological Research: Structure of Inquiry

10. Royal Anthropological Notes and Queries on Anthropology

Institute:

Section B

Distinction between human and non-human communication. Definition of language. Language universals.

Structuralism in Linguistics: synchronic and diachronic studies; syntagmatic and paradigmatic relations; langue and parole. Ferdinand de Saussure and Prague Linguistic Circle.

Phonetics and phonology (phonemics). Articulatory, phonetics. Phonemes and their identification. Phonemic analysis

Morphology: phonemes and morphemes distinguished. Classifying allomorphs into morphemes. Morphemic analysis.

Dialectology and language geography. The nature and scope of sociolinguistics. Ethnography of communication: the anthropological contribution.

Recommended readings

1. Ardner, Edwin: Social Anthropology and Language

2. Burling, R: Man's Many Voices

3. Chambers, J.K and P Tradgil: Dialectology

4. Gleason, H.A.: An Introduction to descriptive Linguistics

5. Gumperz, J and D. Hymes: Directions in Sociolinguitics

6. Hockett, C.F.: A Course in Modern Linguistics

7. Lyons, John: An Introduction to Theoretical Linguistics

8. Lyons, J. (Editor): New Horizons in Linguistics

9. Robbins, R.H.: General Linguistics

Group SA: Specialization in Social-Cultural Anthropology

CO6: Theoretical Principles of Social-Cultural Anthropology

CO7: Indian Anthropology

CO8: Anthropology of Development or Applied and Action Anthropology

CO9: Anthropology of Complex Societies

OR

Dissertation

OR

A course from Physical Anthropology or Archaeological Anthropology group

CO10: Field Work and Field Report

CO6: Theoretical Principles of Social-Cultural Anthropology

Evolution defined. Biological and cultural evolution, contrasted. 19th century (classical) evolutionism: its basic assumptions and its main advocates. 'The' comparative method. Neo-evolutionism and contemporary trends in evolutions.

Diffusion and diffusionism. British and German-Austrian diffusionism and their basic assumptions. American distributionism and historical particularism. Attack on 'the' comparative method by Boas and others.

Technique, method and methodology distinguished. The nature, purpose and methods of comparison in Social-Cultural Anthropology: Radcliffe-Brown, Eggan, Oscar Lewis and Sarana.

Relevance of psychological categories and approaches for anthropological studies of personality in culture: patterns of culture, basic personality structure and modal personality. National character and other studies of culture at a distance: debate on the relevance of traditional anthropological approach for such studies contemporary trends in psychological anthropology: John Whiting and Others.

Functionalism in Social-Cultural Anthropology: Malinowski's theory of needs and Radcliffe-Brown's attempt to link function with structure. Relevance of terms like latent function/manifest function and eufunction/dysfunction. Function and cause. Role, social structure and social organization: Radcliffe-Brown, Firth, Fortes, Nadel.

Relationship and cross-fertilisation of linguistics and anthropology: structuralism in the two disciplines. Social structure as a model: views of Leach and Levi-Strauss. The structuralist method in the study of myth and alliance. New ethnography and formal semantic (componential) analysis. Etic/emic distinction and its relevance for Social-Cultural anthropology.

Distinction between scientific and humanistic perspectives. Ethnography and historiography. Social anthropology and history. Societies and cultures viewed as natural systems: Kroeber, Evans-Pritchard, Redfield.

Norms and values. Value as a category of anthropological description, values of the anthropologist and anthropology as a source of value. Cultural relativism versus universal values.

Humanistic perspective on culture. Concept of culture in anthropology: critical evaluation of Tylor, Kroeber, Malinowski and Leslie White. Cultural Materialism.

Post modernism. 3

Recommended Readings

1. Evans-Pritchard, EE: Social Anthropology and other Essays

2. Firth, R: Elements of Social Organisation

3. Harris, M.: Rise of Anthropological Theory

4. Harris, M.: Cultural Materialism

5. Kroeber, A.L.: Anthropology

6. Kroeber, A.L. (Editor): Anthropology Today

7. Kroeber, A.L.: The Nature of Culture

8. Leach, E.R.: Political systems of Highland Burma

9. Leach, E.R.: Levi-Strauss

10. Levi-Strauss, Claude: Structural Anthropology (Vols. I & II)

11. Malinowski, B.: A Scientific Theory of Culture and other Essays

12. Merton, R.K.: Social Theory and Social Structure (Selected Chapters)

13. Manners, R and Theory in Anthropology

D. Kaplan (Editors):

14. Nadel, S.F.: The Theory of Social Structure

15. Radciffe-Brown, A.R.: Structure and Function in Primitive Society

16. Redfield, R: Human Nature and the Study of Society

17. Sarana, Gopala: The Methodology of Anthropological Comparisons

18. Sarana, Gopala: Sociology and Anthropology and other Essays

19. Spence, R.F. (Editor): Method and Perspective in Anthropology

20. Stocking, Jr, G.W: Evolution, Race and Culture (Selected Chapters)

21. Tyler, Stephen (Editor): Cognitive Anthropology

22. White, Leslie A.: Science of Culture

23. White, Leslie A.: Evolution of Culture

Note: The need to give a detailed syllabus for the course for Theoretical Principles of Social-Cultural Anthropology was very strongly felt by the reviewer. In the curriculum the course no. SA1: Theory and Methods in Social-Cultural Anthropology does not lay sufficient emphasis on the core of anthropological theory. 20 hours have been allotted for item no. 1 while 16 hours have been allotted to item no. 28 which should not be included in a course on anthropological theory. Further item no. 2.10 should not find a place in this course. Most of the names of scholars mentioned there have been already included under 4.13 of the course on Indian Anthropology (vide page number 80 of the curriculum).

Group SB: Specialisation Physical/Biological Anthropology

CO6: Human Origins and the Evolution of Man

Evolutionary biology: formation of new populations and species. Terminological, taxonomic and chronological problems of fossils. Process of homonisation.

Mechanisms of evolution and evolutionary process: irreversibility, parallelism, and convergence. Adaptive radiation in Primates, orthogenesis and cladogenesis, punctuated evolution. Differential rates of somatic evolution.

Evolutionary trends of the order Primate. Cladistic relationships and molecular evolution of Primates: serological, immunological, protein, chromosome, DNA, etc. 20

Recent advances in our understanding of Hominid evolution and distribution. Multi-disciplinary approach to understanding fossil types. Survey of human fossil fluids (from South-East Asia and Africa). The origin of races and their fossil connection.

Social behaviour among non-human Primates. Evolution of Human behaviour. 15

Recommend Readings

1. Boule, H. and M. Vallosi: Fossil Man

2. Buettner-Janusch. J: Origin of Man

3. Clark, Le Gros, W.E.: Fossil Evidence fror Human Evolution

4. Clark, Le Gros, W.E.: The Antecedents of Man

5. Comas, Juan: Manual of Physical Anthropology

6. Deison, Eric (Editor): Ancestors: The Hard Evidence

7. Dobzhansky, T: Mankind Evolving

- 8. Hooton, E.A.: Up from Ape
- 9. Huxley, Julian: Evolution: The Modern Synthesis
- 10. Montagu, M.F. Ashley: An Introduction to Physical Anthropology
- 11. Simons, E.L.: Primate Evolution: An Introduction to Man's Place in Nature
- 12. Simpson, G.G.: The Major Features of Evolution
- 13. Spuhler, J.N.: Genetic Diversity and Human Behaviour
- 14. Stebbins, G.L.: Process of Organic Evolution
- 15. Washburn, S.L.: Social Life of Early Man

CO7: Human Population Genetics

Definition, Scope and aim of population genetics and its role in anthropology 10 Genetic structure of human population. Various approaches: social, geographical, demographical and genetical. Principle of genetic equilibrium. Hardy-Weinberg law. Random mating, inbreeding and out-breeding. Biological consequences of mating systems. 30 Changes in gene frequencies: Mutation, Hybridization, Genetic-dift and selection. 15 Genetic polymorphisms: balanced, transient and natural. 10 Genetics distance: Concept and approaches of study. 10 Genetics and variability of blood groups. Blood groups and diseases. 10 Biometry and its applications to anthropology. Measures of central tendency and measures of variation. Tests of significance. 15

Recommended Readings

1.	Baker, P.T. and J.S. Weiner (editors):	The Biology of Human Adaptibility
2.	Bogue, Donald I.:	Principles of Demography
3.	Burdett, W.J.:	Methodology in Human Genetics
4.	Cavelli-Sforza, L.L and W.F. Bodmer:	The Genetics of Human Population
5.	Crow, F.G. and M. Kimura:	An Introduction to Population Genetics Theory
6.	Hayser, P.M. and O.D. Duncan:	The Study of Population
7.	Harrison, G.A. and J. Boyce:	The Structure of Human Populations
8.	Li, C.C.:	Population Genetics
10.	Stern, Curt:	Principles of Human Genetics
11.	Vogel, F. and A.G. Motulsky:	Human Genetics: Problems and Approaches
12.	Weiss, Kenneth M. and P.A. Ballonoff:	Demographic Genetics

13. Wright, S.: Evolution and Genetics of Population

CO 8: Human Biology

CO 9: Field Work-based Dissertation

CO 10: Laboratory-based Practical

Group SC: Specialization in Archaeological Anthropology

CO 6: Method and Theory in Archaeological Anthropology

Debate on the nature of archaeology as a discipline. Kinds of archaeology: classical archaeology, historical archaeology, prehistoric archaeology, protohistoric archaeology. Text-free and text-aided archaeology. Old World and New World archaeological traditions and their implications for anthropology.

Relation of archaeology to history and anthropology. Archaeology as anthropology.

Dating methods: dendrochronology, radio-carbon dating, potassium-organ dating, thermoluminiscence dating and archaeomagnetic dating.

13

The hierarchies of entities and patterns displayed by type assemblage, culture, culture group and technocomplex.

Specification of the connection of archaeological entities in human, i.e. racial, linguistic and cultural terms. Alternative perspectives:

- (i) Culture-historical with interest in sequences
- (ii) Culture-ecological with interest in system relationship

Ethno-archaeology: parallels, survivals, analogies. The role of ethnography in general and group ethnography.

The role of models and analogies in archaeological interpretation. The perspective of traditional archaeological interpretation represented by V.G. Childe and others to be contrasted with the interpretations in the context of 'new archaeology', particularly in the Americas - Binford, Deetz, Longacre, etc. Critical evaluation of attempts to infer social relations and social structure and cultural processes from material archaeological remains.

The logic of scientific explanation and the nature of archaeological explanation.

Recommended Readings

1. Binford, L.R.: An Archaeological Perspective

2. Binford, Sally and New Perspectives in Archaeology

Lewis (Editors):

3. Butzer, K.W.: Environment and Archaeology

4. Chang, K.C.: Rethinking Archaeology

5. Childe, V.G.: Piecing Together the Past and Social Evolution

6. Clark, David L.: Analytical Archaeology

7. Clark, J.G.D.: Archaeology and Society

8. Daniel, G.: The Origin and Growth of Archaeology

9. Deetz, J.: Invitation to Archaeology

10. Dunnel, R.C.: Systematics in Prehistory

11. Gabel, C.: Analysis of Prehistoric Economic Patterns

12. Heizer, K.F. (Editor): The Archaeologist at Work

13. Higgs, E.S. and Science in Archaeology

F.S. Cook:

14. Renfrew, C. (Editor): The Explanation of Culture Change: Methods in Prehistory

15. Sankalia, H.D.: Its Scope and Applications to India

New Archaeology:

16. Trigger, B.G.: Beyond History: The Methods of Prehistory

17. Watson, P.J. and others: Explanation in Archaeology

18. Willey G.R. and Method and Theory in American Archaeology

P. Phillips:

CO 7: Old World Prehistory

(Western Europe and West Asia, Africa and India)

CO 8: Neolithic and Protoshistory

OR

Human Origins and Evolution of Man

(The same as for physical/Biological Anthropology Group)

CO 9: New World Archaeology

CO 10: Field Report based on Field Work

ANNEXURE II

Annexure II

Departments of Anthropology in India

Department of Anthropology
Andhra University
College of Arts
Waltair, Visakhapatnam 530 003

Department of Anthropology S.V. University Tirupati 517 002 (AP)

Department of Anthropology School of Social Sciences University of Hyderabad PO: Central University Gachibowli, Hyderabad 500 046 (AP)

Department of Anthropology University of Madras Chepauk, Triplicane Chennai

Department of Anthropology Karnatak University Pavatenagar

Dharwad 580 003 (Karanataka)

Department of Anthropology Kannur University Palayad, Tellicherry 670 661 (Kerala)

Department of Anthropology Utkal University Bhubaneswar 751 004 (Orissa)

PG. Department of Anthropology Sambalpur University Jyothi Vihar, Burla, Sambalpur 768 019 (Orissa) Department of Anthropology Khallikota College (Autonomous) Berhampur 760 001 (Orissa)

Department of Anthropology University of Calcutta 35, Ballygunze Circular Road Calcutta 700 019 (W.B.)

Department of Anthropology North Bengal University PO: North Bengal University Raja Ram Mohumpur Dist: Darjeeling PIN 734 430 (WB)

Palli Charcha Kendra (Dept of Social Studies and Rural Development) Visva-Bharati Sriniketan 731 236 (WB)

Department of Anthropology Gauhati University Gopinath, Bardoloinagar Guwahati 781 014 (Assam)

Department of Anthropology Dibrugarh University Dibrugarh 786 004 (Assam)

Nabakrushna Choudhury Centre for Development Studies Plot A, Chandrasekharapur Bhubaneswar 751 013 (Orissa)

Department of Anthropology North-Eastern Hill University Shillong

Department of Anthropology Guru Ghasidas University Bilaspur 495 009 (MP) Chhatisgarh

Department of Anthropology Dr. H.S. Gour Viswa Vidyalaya Sagar 470 003 (MP)

Department of Anthropology Ravishankar University Raipur, Chattisgarh (MP)

P.G. Department of Anthropology Ranchi University Ranchi 834 012 (Bihar)

Department of Anthropology Vidyasagar University Midnapur (WB)

Jharkhand

Department of Anthropology Purvanchal University Jaunpur 222 002 (UP)

Department of Anthropology Vinoba Bhave University Hazaribagh, Lucknow PIN 825 001

Department of Anthropology Hemwanti Nandan Bahaguna (HNB) Garhwal University

Srinagar (Garhwal) 246 174

Department of Anthropology University of Delhi Delhi 110 007 Department of Anthropology University of Pune Ganeshkhind Pune 411 007 (Maharashtra)

Department of Social Anthropology Gujarat Vidyapeeth Ahmedabad 380 014 (Gujrat)

Department of Anthropology University of Allahabad Allahabad

Department of Anthropology Rajasthan University Jaipur

Department of Anthropology Lucknow University Lucknow 226 007 (UP)

Department of Human Biology Punjabi University Patiala 147 002

Department of Anthropology Punjab University Chandigarh 160 014

Department of Anthropology Manipur University Imphal 795 003

Department of Anthropology
Pondicherry University
Pondicherry

ANNEXURE III

Annexure III

Status of Teaching and Research in Anthropology: Survey Report

In February 1998, University Grants Commission constituted a panel on anthropology to give advice on the state of discipline, desired changes in the anthropology curriculum and the methods of teaching in the Indian universities. The review aimed to improve the effectiveness of the anthropology courses.

The panel decided to carry out a survey on the status of teaching and research of anthropology at the national level. Accordingly, Dr. O.P. Gupta, Secretary of the Panel, sent a questionnaire to all the anthropology departments in the country. By April 99, 24 universities responded to the questionnaire. These responses differed both in content and approach of responses, and both descriptive and quantitative data were provided by various universities. Out of 31 university departments 24 universities or 77.4 percent responses were received. The data thus received were coded analysed for purpose of presentation in this report.

Establishment of Anthropology Departments in India

In the country anthropology as an independent discipline of teaching and research emerged in colonial India. Prior to 1960, not more than nine anthropology departments existed in the country. More than 60 percent of anthropology departments were created in post-60's especially in those states where there was higher concentration of tribal population. It included Eastern and North Eastern regions. The process of opening new departments of anthropology continues even today. In more than 90 percent of the universities anthropology departments are having an integrated course outline where all subdisciplines of anthropology are taught expect two places - one anthopology and tribal development and the other social anthropology department.

The analysis reflects that over a period of time anthropology teaching in India continued to follow the conventional and classical approach to the study of humankind inspite of continuous effort to blur the boundary of the discipline especially from sociology and medical sciences. Anthropology

as a discipline continues to be dominantly taught at postgraduate level in more than 60 percent of the universities of the country. About one out of five universities also teach anthropology at undergraduate level. The popularity of the discipline as undergraduate subject remains limited thereby reflecting low popularity of anthropology in India. The concept of affiliated colleges offering anthropology programmes remains limited.

Anthropology continues to be taught in English all across the country. Not more than four out of the 24 universities reported teaching anthropology in regional languages including Hindi. While a large number of other social science subjects are being taught in Indian languages, anthropology continues to be taught in English which might be one of the major reasons for limited acceptance, popularity and expansion.

Faculty and Student

In total, 195 teaching staff were reported in 24 anthropology departments. It works out to be on an average 8.1 teaching faculty per university in which 6.4 are men and 1.7 are women. While all across the country the student sex ratio shows more female students in anthropology, the teaching staff continues to be dominated by males. It is possible that females do not find it attractive to choose a career in anthropology as it would demand extensive field work even as a teacher.

The drop out rate between M.A.M.Sc. first year to second year is about 16.6 percent which compared to drop out rate of other disciplines is not high. The drop out rate reflects relatively higher retention of students. The average post graduate students' classroom size remain small and below 30 except in three universities where their number were reported to be between 32 to 40 in part I classes. Due to drop out or failure of the students in part I the student size further reduces in part II. The average number of students in last five years remains between 20-30 in all the universities covering 79 percent of the total number of universities.

Anthropology fraternity continues to be small both due to limited number of departments, small faculty and students body at post graduate level.

Research, Ph.D. and M.Phil. Programmes

Exceptions apart almost all departments have active Ph.D. programmes all across the country. However, M.Phil. degree is awarded by only 10 universities that too in small numbers. There are two departments where they do not have any male scholar and five departments any female scholar. Further, eleven departments have no male NET scholars and 15 departments have no female NET scholars registered for Ph.D. Out of the 24 departments, in 13 departments there are NET scholars registered for Ph.D. On an average about 1.42 are males whereas 1.46 are females thereby indicating more female scholars registered than male.

In last five years at national level, on an average, about 8 Ph.D. and 10 M.Phil. degrees were awarded each year in the country. For a country like the size of India having over 90 million tribal population, it is sad that the universities are not able to provide trained human power to cater to the needs of tribal population apart from teaching and research.

Publication and Library Facility

On an average, about eight books have been published during the review period by university faculty. While there are eight out of 24 universities without any books or libraries, the remaining 16 have on an average 2182 books in their library and they subscribe to about 10 journals. Given the international and interdisciplinary nature of the discipline it is sad that these departments are not adequately equipped with books and journals and publications are meagre.

Classroom and Laboratory Facility and Department Museum

Laboratories for anthropology students' use exist in 21 out of the 24 departments, but are inadequately equipped and have limited facilities. On an average in a given university there are about 2.6 laboratories for post graduate and undergraduate students' use. These laboratories have equipment worth rupees one lakh to five lakhs. However, almost 38 percent of them have not reported their value which is expected to be less than a lakh of rupees. Analysis shows low investment in laboratory facilities.

Out of 24 departments 20 have museums in the department having both ethnographic, pre-historic and physical specimens, artifacts and other museum specimens. Most of these are field collections and a few also have models. In most cases museums are organised within the department. For example, University of Pune department has a variety of artifacts exhibited for students as well as visitors. It is sad that in majority of the cases, 15 out of 24 do not have any museum keeper to look after the department museum. Four out of five departments reported having insufficient space for faculty, laboratories and classrooms. It reflects the poor and inadequate infrastructure facilities for the discipline and the importance attached to anthropology in the university system.

This observation is further highlighted by the fact that the mean average vacancy of the faculty is almost 3.5 per department, highest being in Professor's rank where mean average vacancy is 1.5 in the 24 universities. This vacancy exists in about 50 percent of the anthropology departments. There is a need to evolve special effort to fill the vacant positions in order to improve teaching and research activities in anthropology.

Research and Consultancy

The most promising part indicated in the survey is that of research and consulting activities carried out by the anthropology teaching faculty across the country. Almost 66 percent of the departments are involved in outside research for which four out of five faculty go beyond their State boundaries. It is strongly felt (91.7%) that their research outputs were relevant and useful. Those universities who are carrying out research outside the State are involved in variety of collaborating projects and programmes with national and international universities, different State and Central government departments, Indian Council of Medical Research, non-government organisations, and other research institutions. Most of these researches have been supported by various funding agencies, the most important being University Grants Commission.

Paper Published, Seminar Attended and Organised in Last Five years

On the research front, anthropology departments have shown remarkable achievements and seem to have made significant contributions. This view is amply supported by the publications made by anthropology teachers and research scholars all across the country and the number of seminars and meetings organised by them. Almost 31 papers have been published every year by the anthropology teachers and a modest number of seminars at state, national and international levels have been attended by the faculty and research scholars in the last five years. There is a need to encourage them for higher participation in these activities. There is also a felt need to encourage anthropology departments to organise seminars to increase interaction with other scholars which is low at the moment (nine out of 24 have not organised any meeting during the last 5 years).

New Courses Introduced

Almost all anthropology departments, keeping in view the local needs, areas of faculty interest and changing international trends have introduced a variety of new courses. While some of these courses are "teacher specific" others are in response to the changing national needs. Courses in communication, development, sports and medical anthropology reflect these trends.