

# **Implementation of CBCS / ECS**

Department: Anthropology and Tribal Development

Program Name: Ph. D. Coursework

Academic Year :2020-21

Implementation of CBCS / ECS

| Sr. No. | Course Code | Name of the Course   |  |
|---------|-------------|--|--|
| 01.     | 101         | Research Methodology and Computational Statistics                        |  |
| 02.     | 102         | Bio-Social problems of Indian Population                                 |  |
| 03.     | 103 (A)     | Theoretical Perspective in Socio-Cultural and Developmental Anthropology |  |
| 04.     | 103 (B)     | Applied Biological Anthropology and Human Genetics                       |  |

विभागाध्यक्ष/H.O.D.
मानव विज्ञान एवं जनजातीय विकास विभाग
Department of Anthropology & T.D.
सुख धारीसार विज्ञातिय स्थानित्य (ध.म.)
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

Signature & Seal of HoD







### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

## Minutes of Meetings (MoM) of Board of Studies (BoS)

Academic Year: 2018-19

: School of Studies in Life Sciences School

**Department:** Anthropology and Tribal Development Date and Time: June 26, 2018-10.30.00PM to 4:00 PM

Venue :E-Class Room

## Department of Anthropology and Tribal Development Guru Ghasidas Vishwavidyalya

Proceeding of the BoS

The Board of Studies (BoS) of the Dept. of Anthropology and Tribal Development is organized on 26/06/2018 at HRDC, GGV from 10.30 AM to 4.00 PM. The following members were present in the meeting.

Dr. Nilakantha Panigrahi, HoD and Chairman of BoS

- 2. Prof. Gopal Krishna Chakrabarti, External Expert Member of the Subject, Nominated by HVC as Member
- 3. Dr. Subal Das, Member, Assistant Professor, Dept. of Anthropology and TD

The following resolutions are taken after through deliberation and discussion.

- The syllabus prepared for BA/B.Sc. UG 3 years courses in anthropology under CBCS pattern was discussed with respect to guidelines like the provision of Core subject, Generic Elective (GE), Ability Enhancement Compulsory Courses, ECA, practical provision and Field study exposure. The prepared course was scrutinized and modified according to the valuable feedback of the External Member/of the subject.
- A model course in Anthropology for VRET Entrance Test was developed by the ii. department. The course was discussed in detail. The External Expert Member gave valuable feedback and based on that, the course was finalized for use of VRET examination in anthropology.
- The syllabus which was used in the department for the pre-Ph. D course work is iii. revised as per the guidance of the External Expert Member by taking into account the market and subject importance.

The meeting ended with thanks to the Chair.

GRCampahon A.

Prof. G.K Chakrabarti External Expert Member Nominated by HVC

Dr. Subal Das Member

ali) akaul Dr. N. Panigrahi Chairman, BoS

Implementation of CNCS/ECS

Criteria - I (1.2.2)





#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

# Minutes of Meetings (MoM) of Board of Studies (BoS)

Academic Year: 2020-21

: School of Studies in Life Sciences School

**Department:** Anthropology and Tribal Development

Date and Time: MAY 04, 2021-12.00PM to 1:00 PM

Venue :E-Class Room

#### Proceeding of the BoS Meeting Department of Anthropology and Tribal Development Dt.04.05.2021, Time 12.00 am to 1:00 pm

The BoS meeting of the Department of Anthropology and Tribal Development was organized today i.e. on 04.05.2021 from 12 am to 1:00 pm through Telephonic interaction. The meeting was approved by the competent authority. All the members including Prof Jagannath Das, HVC nominee to the BoS of the department and Mr.Balaram Oraon, Assistant Professor of the department were present in the presentation. The meeting was initiated by Dr.Panigrahi, HoD of the department and the Chairman of the BoS who welcomed the HVC nominee and the member. The discussion was carried out in detail. Valuable feedbacks in different papers are incorporated in the final version. The Chairman expressed his intellectual obligation to the HVC nominee for the valuable feedbacks which helped in enriching the Pre-Ph.D syllabus of the department. He expressed his thanks to the competent authority, Registrar, Dean SoLS, AR Academic for giving support in the form of dministrative and financial approval to organise the BoS in the department. . The meeting ended with thanks to the chair.

Dr.N.Panigrahi, HoD and Chairman of the DRC, Department of Anthropology and Tribal Development, GGV.

**Prof Jagannath Das** HVC Nominee to BoS Former Prof of Anthropology **Utkal University** Odisha, Bhuibaneswar.

online approval

Mr.Balaram Oraon Assistant Professor. Dept of Anthropology and Tribal Development, GGV, Bilaspur.

HoD

Dept. of Anthropology & Tribal Development Guru Ghasidas Vishwavidyalaya, Bilaspur C.G. - 495003

Signature & Seal of HoD

# **Scheme and Syllabus**

# Pre -Ph.D. Syllabus in Anthropology With University Regulation Dept of Anthropology and Tribal Development GGU, Koni

The syllabus of Pre- Ph.D. course work in Anthropology, Dept of Anthropology and Tribal Development of Guru Ghasidas Vishwavidyalaya shall consists of three theoretical papers and one seminar presentation. The first two papers shall be compulsory while the third paper shall be an optional paper. The optional papers shall have two alternatives: 1. Theoretical Perspectives in Socio-cultural and Development Anthropology and 2. The Applied Biological Anthropology and Human Genetics. The students are to choose any one of the optional papers out of two. The duration of the course will be of six months. There shall be no internal assessment but the examination will be conducted at the end of semester and evaluation after completion of six months course work with minimum of 75 % attendance (Compulsory). The minimum passing marks for individual paper is 40 % and however, in an aggregate it should not be less than 60 % (As per university Ph.D. regulation). The seminar will be mandatory but qualifying on recommendation of DRC and the approval of chairmen of DRC as per rule of university issued from time to time. The evaluation process of seminar will be as follows"-

| 1. Valuation of Subject content      | 40 % |
|--------------------------------------|------|
| 2. Presentation skill                | 20 % |
| 3. Students attendance and behaviour | 10 % |
| 4. Viva-voce                         | 20 % |
| 5. Applicability of the subject      | 10 % |

#### Pre-Ph.D. Course Work -

|              |   | End      | <b>Passing Marks</b> |
|--------------|---|----------|----------------------|
| Paper Code   | Paper                                     | Semester | (%)                  |
|              |   | (Marks)  | (As amended)         |
| Paper-101    | Research Methodology and Computational    | 100      | 40                   |
| (Compulsory) | Statistics                                |          |                      |
| Paper-102    | Bio-Social Problems of Indian Population  | 100      | 40                   |
| (Compulsory) |   |          |                      |
|              | Theoretical Perspective in Socio-Cultural |          |                      |
| Paper-103    | and Developmental Anthropology            | 100      | 40                   |
| (Optional)   | Or  |          |                      |
|              | Applied Biological Anthropology and       |          |                      |
|              | Human Genetics                            |          |                      |
|              | Total                                     | 300      | 60 (Aggregate)       |





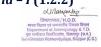
# Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

| Seminar | Qualifying | As per     |
|---------|------------|------------|
|         |            | Regulation |

# DEPARTMENT OF ANTHROPOLOGY & TRIBAL DEVELOPMENT GURU GHASIDAS UNIVERSITY, BILASPUR Chhattisgarh

#### **OUTCOME OF THE PRE-PHD COURSE WORK SYLLABUS**

- (i) The scholar will have a fundamental and systematic or coherent understanding of the academic field of Anthropology.
- (ii) The scholar will have knowledge that creates different types of professionals related to the disciplinary/subject area of Anthropology, including professionals engaged in research and development, teaching and government/public services;
- (iii) A skilful group of Scholars with different specializations and emerging developments in the field of Anthropology will be available in the market.
- Scholars will demonstrate the ability to use the knowledge of Anthropology in formulating and tackling Anthropology-related problems and identifying and applying appropriate anthropological principles and methodologies to solve a wide range of problems associated with human society.
- All the stakeholders including the scholar will recognise the importance of qualitative as well as quantitative data and approaches/methods in comprehending the human society.
- Scholars will plan and execute Anthropology-related experiments or field investigations, analyse and interpret data/information collected using appropriate methods, including the use of appropriate software such as programming languages and report accurately the findings of the experiment/field investigations while relating to the conclusions/findings to relevant theories of Anthropology.
- The scholars will demonstrate relevant generic skills and global competencies such as:
- (i) Scholars will posses problem solving skills that are required to solve different types of Anthropology-related problems with well-defined solutions, and tackle open-ended problems that may cross disciplinary-area boundaries;
- (ii) Scholars will be competent enough in investigating skills, related to Anthropology-related issues and problems;
- (iii) Scholars will be equipped with communication skills involving the ability to listen carefully, to read text and research papers analytically and to present complex information in a concise manner to different groups/audiences;
- (iv) Analytical skills of the students will be increased and ability to construct logical arguments using correct technical language related to Anthropology;



# गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्नीय विश्वविद्यालय कोनी, बिलासपुर - 495009 (छ.ग.)



- (vi) Personal skills ability of the students will be increased to work both independently and in a group.
  - The Scholars will demonstrate professional behaviour such as:
  - (i) Being objective, unbiased and truthful in all aspects of work and avoiding unethical behaviour such as fabricating, falsifying or misrepresenting data or to committing plagiarism;
  - (ii) With the ability to identify the potential ethical issues in work-related situations;
  - (iii) And will appreciate the intellectual, environmental and sustainability issues; and
  - (iv) In promoting safe learning and working environment.

#### Paper-101 (Compulsory)

100Marks

#### **Research Methodology and Computational Statistics**

**Unit-I.** Basic concept of fact, Concept, Proposition, Theory, Hypothesis and Law. Basic concept of scientific method: Logic, Ontology and Epistemology. Philosophy of Science, Biological Science, Social Science, Paradigm in Science and Social Science and Research Ethics

**Unit-II.** Objective and purpose of Research; Research Design: Types of Research Design: Exploratory, Descriptive and Experimental; Sampling Design and types of Sampling. Preparation of Research Proposal and Review article.

**Unit-IV.** Basic statistical concepts- Measures of Central Tendency, Measures of Dispersion and Statistical Tests; Co-relation, Regression and Multivariate Analysis, Multiple Regression and Factor analysis, Multi-dimensional scaling. (SPSS Package operation)

**Unit-V.** Field work and Fieldwork Tradition in Anthropology, Qualitative and Quantitative Research; Emit and Etic approaches; Synchronic and diachronic dimensions of anthropological research; comparison of ethnographic data techniques of data collection: observation method, questionnaire method, schedule method, case study method, interview method, scaling technique, analysis of quality Ethnography and New Ethnography; Ethno-Methodologies; Analysis of Qualitative data; and Classification of data. Ethics of doing fieldwork.

**Unit-VI.** Research and publication ethics; publication of ethics, conflict of interest, publication misconduct, open access publication: SHERPA/ROMEO; online resources; software tools by SPPU; journal suggestion tool like JANE, ELSEVIER PUBLISHER, SRINGER, use of plagiarism software, like turntin, Urkund; Indexing data base; citation data base, web of science and Scopus,; research metrics: impact factor journal, SNIP STR, IPP, Cite score, metric: high index, g-index, i10-index, alt metrics.

Writing of Thesis, Report, Scientific Paper in Journal and Book chapter; Preparation of scientific research proposal and review article

#### **Suggested Readings**

- 1. Agar, M. The professional stranger: An informal introduction to Ethnography. New York: Academic Press, 1980.
- 2. Bernard, H.R., Research Methods in Anthropology, London; Sage, 1994.



# गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्नीय विश्वविद्यालय कोनी, बिलासपुर - 495009 (छ.ग.)



- 3. Bernard, H.R. Research Methods in Anthropology: Qualitative and Quantitative Approaches (4<sup>th</sup> edition). Rawat Publication. 2008.
- 4. Brewar, J.D., Ethnography. Buckingham: OUP, 2000.
- 5. Bryman .A. and Liao .T.F ( Ed ). The Sage Encyclopaedia of Social Science, Research Methods; 3 volumes; Thousand Oaks, Calif; Sage 2004.
- 6. Bryman, A. Social Research Methods. 3rd edition Oxford: OUP. 2008
- 7. Bryman, A. Doing Research in organisation. Routledge 1988.
- 8. Bryman, A. Research Methods and organisational Studies. London: Rout ledge, 1989.
- 9. Bryman, A. and Burgess, R. G (Ed) Qualitative Research, London: Sage .1999.
- 10. Bryman, A. Qualitative Data Analysis with SPSS 15: A Guide for Social Science,
- 11. Boulmer, M (Eds) Social Research Methods. Macmillan. 1984.
- 12. Coffey, A. The Ethnographic Self: Field Work and the Representation of Identity. London: Sage.
- 13. Dey, I., Qualitative Data Analysis, London: Routledge, 1993.
- 14. Eller, R (ed). Ethnographic Research: A Guide to General Conduct. London: Academic Press. 1984.
- 15. Fetterman, M.D., Ethnography: Step by Step. London: Sage, 1989.
- 16. Goode, W.J. and Hatt, P.K. Methods of Social Research. New York: McGraw Hill. 1952.
- 17. Hammersley, M. And Alkinson, P., Ethnography: Principles in Practice. London: Tavistock, 1983
- 18. Hamersley, M. What's wrong with Ethnography. London: Routledge, 1992.
- 19. Hammersley, M. Reading Ethnographic Research: A Critical Guide. London: Longman. 1991.
- 20. Hardy, M. And Bryman. A (eds). Handbook of Data Analysis. London: Sage, 2004.
- 21. Jahoda, M., Deutsch, M, and Cook, S.W., Research Methods in Social Relations. New York: Dryde 1951.
- 22. Junker, B. Field Work, Chicago: University of Chicago Press. 1960.
- 23. Krishnaswami, O. R. and Ranganatham, M. Methodology of Research in Social Sciences. Himalaya Publishing House, Mumbai, 2009.
- 24. Kothari, C.R. Research methodology: methods and techniques. 2 ed., New Delhi: Vishwaprakashan, 1990.
- 25. Mc cracker, G., The long Interview. London: Sage, 1989.
- 26. Moser, C.A. and Kalton, G. Survey Methods in Social Investigation. London: Heinemann, 1971.
- 27. Merton, R.K. On Theoretical Sociology. New York: Free Press. 1967.
- 28. Patton, M.Q., Qualitative Research and Evaluation Methods. London: Sage, 2002.
- 29. Pelto, P.J. and Pelto, G.H. Anthropological Research: The Structure of Inquiry. New York. Cambridge University Press. 1978



# गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्नीय विश्वविद्यालय कोनी, बिलासपुर - 495009 (छ.ग.)



- 30. Silverman, D., Interpreting Qualitative Data. London: Sage, 1993. 31. Stewart. A., The Ethnographer's Method. London: Sage, 1998.
- 32. Singha, K. "Participant Observation and In-depth Interviewing" in B.Y. Attig, et al. (eds), Qualitative Methods for Population and Health Research. Bangkok: Mahidol Univeristy, pp 120-128, 1993.
- 33. Silverman, D. (Eds). Qualitative Research: The Methods and Practice. 2<sup>nd</sup> Edition; London: Sage
- 34. Srivastava, V (Ed.). Methodology and Fieldwork. Oxford India Paperbacks, New
- a. Delhi.2005.
- 35. Srinivas, M. N. (Ed.), Methods in Social Anthropology. Hindustan Publishing
- a. Corporation, New Delhi, 1995.

Full Marks: 100

Paper Code: 102 (Compulsory)

#### **Bio-Social Problems of Indian Population**

**Unit I.** Problem of Population Growth in India, Population Policy in India, Family Welfare programme in India: Review of Infant Mortality Rate and Maternal Mortality Rate, Occupational Health Hazards; Problems of urban slums. Sarva Siksha Abhiyan, National Rural Health Mission and National Urban Health Mission: Structure, organization and function.

**Unit II**. Problems of Poverty and Unemployment in India; Problems of Social Discrimination and Inequality in India (Caste & Class), Problems of Universalization of Primary Education, Livelihood and Food Security and Health For All Programmes; Millennium Development Goals, Social Development Goals, and India's position,; National development Programmes for STs, SCs and the Minorities in India in successive Five Plan Periods.

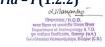
**Unit III.** Problems of Hunger and Malnutrition in India, Obesity and Nutritional Deficiency, Problems of Communicable and Non-Communicable diseases.

**Unit IV**. Bio-Social Problems of Ageing and Aged, HIV/ AIDS, Human Rights; Implementation of socially Progressive Acts like PESA, RTI Act, MGNREG Act . FRA Act and RTE Act.

**Unit V**. Global Warming, Climate Change and its impact on India; Environment Pollution: Air, Water and Land; Problems of Involuntary Displacement and Rehabilitation, Social and Environmental Impact Assessment; Social and ethical issues involved in genetic engineering, cloning, human genomics.

#### **Suggested Readings:**

- 1. AN Bharadwaj. Problems of Scheduled Castes and Scheduled Tribes in India.
- 2. Asha A. Bhende and Tara Kanitkar- Principles of Demography in India
- 3. Das, N.K.- Industrialization and Tribal Society
- 4. David G. Mandelbaum- Society in India
- 5. Gaya Pandey Bio-Cultural Evolution
- 6. GK Ghosh. Disaster Management. (Vol. 1-5)



# गुरू घासीदास विश्वविद्यालय (केन्रीय विस्तविद्याल अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्रीय विस्तविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



- 7. Helen R. Sekar- Child Labour Legislation in India
- 8. Indrani Basu Roy Anthropology: The Study of Man
- 9. K Srinivasan, PC Saxena and Tara Kanitkar. Demographic and Socio-Economic Aspects of The Child in
- 10. KR Sharma. Educational Life Style of Tribal Students (A Study of Secondary Schools in Madhya
- 11. P. Sudhakar Reddy, V Gangadhar. Indian Society (Continuity Change and Development)
- 12. PR Trivedi. Encyclopaedia of World Environment (Vol. 1-5) Pradesh)
- 13. Renuka Pamecha. Elite in a Tribal Society.
- 14. Sophie Baker. Caste At Home in Hindu India.
- 15. Sushama Sahay Prasad. Tribal Woman Labourers: Aspects of Economic and Physical Exploitation.
- 16. VLS Prakasa Rao. Urbanization in India (Spatial Dimensions)
- 17. Y M Verma, Problems of Tribal India
- 18. Yogesh Atal. Understanding Indian Society



### Social Anthropology (Optional Paper) Paper Code: 103

# Theoretical Perspective in Socio-Cultural and Developmental Anthropology Full Marks: 100

**Unit I**: Positivistic and non Positivistic Paradigms in Anthropology; Marxism, Structuralism, Phenomenology and Hermeneutics; Post- Modernism and Feminism; Ecological Anthropology and Anthropological ecology.

**Unit II**: Evolutionary Approach in Anthropology: E.B.Tylor, Sir J Frazer, L H Morgan, V Gordon Childe, L A White, J H Steward.

**Unit III**: Structural and Functional approach in anthropology: Contribution of Malinowski, Radcliffe Brown, Evans-Pritchard, Raymond Firth and Levi-Strauss.

**Unit IV**: Contributions of Indian Anthropologists: S.C. Roy N.K.Bose, D.N.Majumdar, T.N.Madan, G.S.Ghurye and S.C.Dube.

**Unit V**: Anthropology of Development and Development Anthropology: Gender and development, Culture and Development, Environment and Development, Globalization and Development, Poverty and Development.

#### **Suggested Readings:**

- 1. Barth, Frederic. Models of Social Organization, (Royal Anthropological Institute, Occasional Paper-23
- 2. Behura, N. K. Anthropological thought and Theories.
- 3. Bidney, D. Theoretical Anthropology.
- 4. Childe, V. Gordon. Social Evolution.
- 5. Durkheim, E. Rules of Sociological Method.
- 6. Geertz, G. Structure to Meaning.
- 7. Gluckman, M. Closed Systems and Open Minds.
- 8. Harris, M. The Rise of Anthropological Theory.
- 9. Honnigman, J. J. A Hand Book of Cultural Anthropology.
- 10. Kroeber, A. L. Anthropology Today.
- 11. Kroeber, A. L. Anthropologist Looks at History.
- 12. Kuper, Adam. Anthropology of Anthropologists.
- 13. Layton R An introduction to theory in Anthropology
- 14. Leach, E. R. Rethinking Anthropology.
- 15. Leach, E. R. Claude Levi-Strauss.
- 16. Lewis, I. M. History and Social Anthropology.
- 17. Levi-Strauss, C. Structural Anthropology.

# गुरू घासीदास विश्वविद्यालय (कंद्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्थापित कंद्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



- 18. Lowie, R. H. History of Ethnological Theory.
- 19. Malinowski, B. Scientific Theory of Culture and Other Essays.
- 20. Manners and Kaplan (ed). Theory in Anthropology-A course book.
- 21. Marsh, R. M. Comparative Sociology.
- 22. Martindale, Don. The Nature and Types of Sociological Theory.
- 23. Martindale, Don. Functionalism in social Sciences.
- 24. Morgan, L. H. Ancient Society.

#### Paper Code: 103

#### **Biological Anthropology (Optional Paper)**

#### Applied Biological Anthropology and Human Genetics Full Marks: 100

**Unit I:** Recent trends in Biological Anthropology and Human Genetics; Application of Biological Anthropology, Human Genetics and Forensic Anthropology for the service of the Mankind.

**Unit II:** The role of Genetics in Medicine, Hemoglobinopathy, Multifactorial Inheritance, Molecular genetics of human diseases.

**Unit III:** Human Genome Diversity with reference to mt-DNA &Y chromosome and autosomes, Social and Ethical issues on Human Genome study, Culture and Genomics.

**Unit IV:** Importance of Human Growth and Nutrition studies in Anthropology. Physiological anthropology with reference to human adaptation to Cold, Heat &High Altitude. Secular trends in human biological growth, impact of genetic and environmental factors on human growth; The role of Anthropometry in Occupational Health.

**Unit V:** Nutritional anthropology: Estimation of various nutrition related problems with respect to various National and International references.

#### **Suggested Readings:**

- 1. Alan R. Templeton Population Genetics & Micro Evolutionary Theory
- 2. Ashley Montague, M.F. --- An Introduction to Physical Anthropology
- 3. Balsubrahmanian & Others Nutritive Value of Indian Foods
- 4. Bhasin, M.K. Biology of the Peoples of Indian Regions
- 5. Cummings K -Genetics
- 6. Emilio F. Morgen.--Human Adaptability: An Introduction to Ecological Anthropology, 2000, Westview Press.
- 7. Gelehrter, T.D.& Others Principles of Medical Genetics.
- 8. Gopalan. Nutritional Values of Indian Foods.
- 9. Halt D- Human Genetics
- 10. Harrison, GA; Tanner, JM; Pilbeam, DR; Baker PT., Human Biology: An Introduction to Human Evolution, Variation, Growth & Adaptability, 1988, Oxford, England, Oxford University Press.
- 11. Heyward, VH; Wagner DR. Human. Applied Body Composition Assessment, 2009.
- 12. Jensen, B Nutritional Anthropology
- 13. Jhonston, F.E. Nutritional Anthropology
- 14. Jobling, M.A., M.E.Hurles & C.Tyler Smith Human Evolutionary Genetics
- 15. John H. Relethford Human Population Genetics
- 16. John Relethford. The Human Species: An Introduction to Biological Anthropology, 2007, MC Graw Hill.
- 17. Johnson, FE, Roche, AF, Susanne, C, (Ed). Proceeding on Human Physical Growth and Maturation, 1980, Plenum Publishing Corporation.
- 18. Kleinman, David S.--Human Adaptation & Population Growth, 1980, New Jersey: Osman & Co.
- 19. Larsen C.S. (Ed). A Companion to Biological Anthropology. Ed: Wiley-Blackwell.







- 20. Michael C. Howard and Janet Dunaif-Hattis. Anthropology: Understanding Human Adaptation, 1992. Harper Collins Publishers, New York.
- 21. Michael Crawford Anthropological Genetics
- 22. Motulsky & Vogel Human Genetics.
- 23. Steve Jones, Robert Martin and David Pilbeam The Cambridge Encyclopaedia of Human Evolution
- 24. Strachan, T. & Read, A. Human Molecular Genetics Vidyarthi, L.P. -- Applied Anthropology in India. Field