

M.Sc.(Home Science)
Semester-I Examination - Winter-2010,
Semester-II Examination - Summer-2011

Prospectus No. 2011196

संत गाडगे बाबा अमरावती विद्यापीठ
SANT GADGE BABA AMRAVATI UNIVERSITY

गृहविज्ञान विद्याशाखा
(FACULTY OF HOME SCIENCE)

PROSPECTUS

OF

M.Sc. (Home Science) (Human Development)
Semester-I, Winter-2010
Semester-II, Summer-2011



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I N D E X

M.Sc. (Home Science) (Human Development)

(Semester-I & II)

(Prospectus No.2011196)

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SANT GADGE BABA AMRAVATI UNIVERSITY

SPECIAL NOTE FOR INFORMATION OF THE STUDENTS

- (1) Notwithstanding anything to the contrary, it is notified for general information and guidance of all concerned that a person, who has passed the qualifying examination and is eligible for admission only to the corresponding next higher examination as an ex-student or an external candidate, shall be examined in accordance with the syllabus of such next higher examination in force at the time of such examination in such subjects, papers or combination of papers in which students from University Departments or Colleges are to be examined by the University.
- (2) Be it known to all the students desirous to take examination/s for which this prospectus has been prescribed should, if found necessary for any other information regarding examinations etc. refer the University Ordinance Booklet the various conditions/provisions pertaining to examinations as prescribed in the following Ordinances-

Ordinance No. 1	:	Enrolment of Students.
Ordinance No.2	:	Admission of Students
Ordinance No. 4	:	National Cadet Corps
Ordinance No. 6	:	Examination in General (relevant extracts)
Ordinance No. 18/2001	:	An Ordinance to provide grace marks for passing in a Head of passing and Improvement of Division (Higher Class) and getting Distinction in the subject and condonation of deficiency of marks in a subject in all the faculties prescribed by the Statute NO.18, Ordinance 2001.
Ordinance No.9	:	Conduct of Examinations (Relevant extracts)
Ordinance No.10	:	Providing for Exemptions and Compartments
Ordinance No. 19	:	Admission Candidates to Degrees
Ordinance No.109	:	Recording of a change of name of a University Student in the records of the University
Ordinance No.6 of 2008:	:	For improvement of Division/Grade.
Ordinance No.19/2001	:	An Ordinance for Central Assessment Programme, Scheme of Evaluation and Moderation of answerbooks and preparation of results of the examinations, conducted by the University, Ordinance 2001.

Dineshkumar Joshi
Registrar
Sant Gadge Baba Amravati University

PATTERN OF QUESTION PAPER ON THE UNIT SYSTEM

The pattern of question paper as per unit system will be broadly based on the following pattern.

- (1) Syllabus has been divided into units equal to the number of question to be answered in the paper. On each unit there will be a question either a long answer type or a short answer type.
- (2) Number of question will be in accordance with the unit prescribed in the syllabi for each paper i.e. there will be one question on each unit.
- (3) For every question long answer type or short answer type there will be an alternative choice from the same unit. However, there will be no internal choice in a question.
- (4) Division of marks between long answer and short answer type question will be in the ratio of 40 and 60.
- (5) Each short answer type question shall Contain 4 to 8 short sub question with no internal choice.

**Syllabus Prescribed for M.Sc. (Home Science) (Human Development)
Semester – I**

**Subject Code : 113TH47
Theories of Human Development**

Theory : 4 Periods/Wk (4 Credits)

Theory Paper : 60
Theory Internal : 40
Total Marks : 100

Learning objectives : After completion of the course students will be able to

- understand the need of theory in human development for practical application
- critically evaluate the cross cultural applicability of theory

Theory

Unit 1 : Human Development

- Introduction of theories of behaviour and development
- Theoretical perspective of human development
- Role and nature of behaviour theories
- History of child development
- Importance and characteristics of development

Unit 2 : 2.1 Early theories and ethological theories

- Darwin's theory
- Bowlby's theory

2.2 Development theories

- Gesells theory
- Baldwin's theory
- Bronfenbrenner's Ecological theory

Unit 3 : 3.1 Personality theories

- Psychoanalytical theory (Freud and Erikson's)
- Jung's and Adler's theory of personality

3.2 Theories of Self

- Field theory of Lewin
- Self actualization theory of Abraham Maslow

Unit 4 : 4.1 Theories of Learning

- Pavlov and Watson's classical conditioning
- Skinner's operant conditioning
- Thorndike's S-R theory

4.2 Social learning and social cognitive theories

- Bandura's social cognitive theory
- Selman's theory of Peer relations

Unit 5 : 5.1 Cognitive Development theories

- Piaget's theory of cognitive development
- Vygotsky's socialcultural theory

5.2 Theories of Moral Development

- Kohlberg's theory
- Social cognitive theory of morality

References

- 1) Crain W. (1992) Theories of Development, Concepts and Application. New Jersey, Prentice Hall
- 2) James A. and Pront J. (Ed) (1990) Constructing and Reconstructing Childhood. London Falmer Press
- 3) Kanker S. (1992) Culture and Psycho-selected essays. Delhi Oxford University Press
- 4) Ronald A. (1996) Cultural Pluralism and Psycho analysis. New York, Ron Hedge
- 5) Ronald A. (1989) In search of self in Indian and Japan. Princeton N.J. Princeton University Press
- 6) Smith J.A. et al. (1992) Six Theories of Child Development: Revised formulation and current issues. London Sesstea, Kingsley publishers Ltd.

Subject Code : 113HN48
Problems of Human Nutrition

Theory : 4 Hrs/wk / Credits 4
Practical : 4 Hrs/wk / Credits 2

Theory Paper : 60
Th. Int.Asst.Mks. : 40
Practical Marks – 35
Pra.Int.Ass.Mks. – 15
Total Marks- 150

Learning Objectives :- After completion of the course students will be able to-

- understand nutritional problems of India, their causes, treatment, prevention and control measures.
- know various approaches in nutrition and health interventions, prevention and control measures.

Theory

Unit-1 : Nutritional Status.

Assessment of nutritional status through

- Diet survey
- Anthropometry.

Role of nutrition in national development, concept of health care, levels of health care and health care delivery.

Unit-2 : Common nutritional problems.

Prevalence, causes, treatment and control measures for the following.

- Chronic Energy Malnutrition in adults.
- Protein Energy Malnutrition.
- Vitamin A deficiency.
- Iron deficiency anaemia.
- Iodine deficiency.

Unit-3 : Strategies to combat nutritional problems.

- Diet or food based strategies.
- Dietary diversification / modification.
- Food fortification.
- Nutrition and Health Education.
- Nutrient based approach – The medicinal approach to combat nutritional problems.
- Supplementation.

Unit-4 : Nutrition Policy and Programmes.

- National Nutrition Policy
- Nutrition
- Programmes
- Integrated Child Development Services Scheme
- Nutrient Deficiency Control Programmes
- Supplementary feeding programmes
- Food Security Programmes
- Self Employment and Wage Employment Schemes.

Unit-5 : Chronic and Non-communicable Diseases

Epidemiological factors, assessment, prevention and control programmes to overcome the following diseases.

- Cardiovascular diseases
- Hypertension
- Cancer
- Diabetes mellitus
- Obesity.

Practicals :-

- (1) Formulation and preparation of weaning and supplementary foods.
- (2) Formulation and preparation of a days two meals :- Lunch and snacks for ICDS supplementary feeding programme, providing 12-15 gm proteins and 300-500 kcal out of low cost and locally available foods.
- (3) Assessment of nutritional status of pre-school children through anthropometry.
- (4) Study of ongoing nutrition programmes of children, pregnant women and lactating mother.
- (5) Celebration of days – World Breast Feeding Week, National Nutrition Week, Heart Day, Diabetes day, World Health Day etc.

References :-

- (1) Park K (2000), Preventive and Social Medicine M/s Banarsidas Bhanot, Jabalpur.
- (2) Bamji, M.S.; Rao, P.N. (1996), Textbook of Human Nutrition, Oxford and IBH Publishing Co. Pvt.Ltd., New Delhi.
- (3) Gopalan C., Kaur S. (1993), Towards Better Nutrition Problems and Policies, Nutrition Foundation of India.
- (4) Jelliffe D.B., Jelliffe E.F.P. (1989), "Community Nutritional Assessment, Oxford University Press.
- (5) Gopaldas T., Seshadri S. (1987), Nutrition Monitoring and Assessment, Oxford University Press.

- (6) World Health Organization (1998), World Health Report : Life in the 21st Century. Report of the Director General, WHO, Geneva, Switzerland.
- (7) National Plan and Action on Nutrition (1995), Food and Nutrition Board, Deptt. of WCD, Govt. of India.
- (8) IGNOU Literature, MFN-006 – Public Nutrition.

Subject Code : 113PH49
Psychology of Human Behaviour

Theory : 2 Periods/wk (Credits 2)
Practical : 2 Periods/wk (Credits 1)

Theory Paper : 35
Th. Int.Asst.Mks. : 15
Practical Marks – 20
Pra.Int.Ass.Mks. – 05
Total Mks. : 75

Learning Objectives :- After completion of the course students enable to-

- sensitize with importance of psychology of human behaviour.
- understand personality traits.
- develop skill of measurement of IQ, EQ and Personality.

Theory

Unit-1 :

- 1.1 Psychology
 - Meaning, scope and importance.
 - Psychology of human behaviour.
- 1.2 Perception
 - Nature
 - Laws and selectivity in Perception
 - Sensory factors in Perception
 - Importance of Perception.
- 1.3 Attitude
 - Meaning and characteristics
 - Formation of stereo types and prejudices.
 - Factors in attitude change.

Unit-2 :

- 2.1 Motivation
 - Nature, characteristics.
 - Theories and types of motives.
- 2.2 Learning
 - Definition, principles, indicators.
 - Theories of learning.
 - Experimental learning.

Unit-3 :

- 3.1 Emotion
 - Nature, types of emotional responses.
 - Theories and role of emotion in regular human behaviour.
- 3.2 Intelligence
 - Meaning, types
 - Measurement of intelligence.
 - Constancy of IQ
 - Mental age.

Unit-4 :

- 4.1 Defence Mechanism
 - Types and importance.
- 4.2 Personality
 - Personality and individual differences
 - Personality as a set of traits
 - Personality as a self
 - Roger's self theory
 - Maslow's self actualisation theory

Unit-5 :

- 5.1 Emotional Intelligence :
 - Meaning
 - Types of Emotional Intelligence
 - Essential ingredients for Emotional Intelligence.

Practical :-

- (1) Study and development of knowledge and attitude scales.
- (2) Preparation of resource file.
- (3) Measurement of IQ, EQ and personality with the help of standard scale.

References :-

- (1) Alex K., Soft Skills, S.Chand.
- (2) Atwater F. (1995), Psychology for leaving, adjustment, growth and behaviour.
- (3) Back C., Robert (1986), Apply Psychology understanding People, Prentice Hall.
- (4) Baron, R.D. (1995), Psychology, Prentice Hall.
- (5) Chattopadhyaya, Aparna (2001), What's Your Emotion IQ, PUstal Mahal, New Delhi.
- (6) Morgan, C.T. et al (1979), Introduction to Psychology, Tata M Graw Hill Publishing Co., New Delhi.
- (7) Raymond B. Cattell (1950), Personality- A Systematic Theory and Factual Study, Mac Graw Hill.
- (8) Quilford J.A. (1959), Personality, Mac Graw Hill.
- (9) Robert S., Woodsworth and Donald G. Marquis, Psychology, Mathew Co. Ltd., London.
- (10) Garden Murphy, Personality – A Biosocial approach to Origins and structure.
- (11) Aaran Q.S. et al (1958) understanding Human Behaviour, Mc Graw Hill.

Subject Code : 114HD50
Human Development Programme Design and Evaluation

Theory : 2 Periods/wk (Credits 2)
Practical : 4 Periods/wk Credits 2)

Theory Paper : 35
Th. Int.Asst.Mks. : 15
Pra.Int.Ass.Mks. – 50
Total Mks. : 100

Learning Objectives :- After completion of this course students will be able to-

- understand use of computer in statistical analysis in Human Development.
- develop skill of drafting text, tables, figure, etc.

Theory

Unit-1 : Programme, Planning and Implementation

- 1.1 Planning :-
 - Meaning, and importance.
 - Pre-requisite for developing plan.
 - Programme planning process.
- 1.2 Implementation :-
 - Aspects of Execution.
 - Factors responsible for the successful conduction of a programme.

Unit-2 : Evaluation, Follow up and Documentation

- 2.1 Evaluation
 - Meaning and purpose of Evaluation.
 - Types and tools of Evaluation.
- 2.2 Follow up
 - Need for follow up.
 - Methods of follow up
- 2.3 Documentation
 - Need for reporting and recording.
 - Aspects to be covered.

Unit-3 : Human Development Programme Design

- 3.1 Formulate objectives and target group.
- 3.2 Map Resources
- 3.3 Administrative Structures
- 3.4 Implementation process.
- 3.5 Monitoring and evaluation of designed programme.

Unit-4 : Study the components of programme design and evaluation of ongoing human development programmes.

- 4.1 NGO
- 4.2 GO

Unit-5 : Management Information System (MIS)

Practical :-

- (1) Design awareness/skill development/counselling/guidance/assessment programme for children, adolescent, exceptional, aged, etc.
Implement at least two programmes.
- (2) Visit ongoing Human Development programmes.

References :-

- (1) Sandhu,A.S. (1994), Extension Programme Planning, Oxford & IBH Publishing, New Delhi.
- (2) Chaube B.K. (1979), A Handbook of Extension Education, Jyoti Prakashan, Allahabad.
- (3) Dhama O.P. and Bhatnagar O.P. (1987), Education and Communication for Development, Oxford & IBH Publishing Co., New Delhi
- (4) Ray, G.L. (1999), Extension Communication and Management. Naya Prakashan, Calcutta.

Subject Code : 111CA51
Computer Application in Human Statistics

Practical : 4 Periods/wk (Credits 2)

Practical Mks. : 35
Pra.Int.Ass.Mks. – 15
Total Mks. : 50

Learning Objectives :- After completing course students will be able to-

- Understand use of computer in distributional and statistical analysis in Human Development.
- Develop skill of drafting text, tables, figure, etc. with the help of computer.

Practical :

- (1) Computer Basics
 - 1.1 Computer Hardware and software.
 - 1.2 Input and out put devices.
 - 1.3 Basic Operations in data handling (copy, paste, prepare file / folder, burn CD's etc.)
- (2) MS Word
 - 2.1 Introducton to MS Word.
 - 2.2 Use in drafting letters and reports.
 - 2.3 Drafting tables.
- (3) MS Excel
 - 3.1 Introduction to MS Excel.
 - 3.2 Use for analysis of data in human development.
Descriptive Statistics – Mean, Standard Deviation.
Correlation – Pearson correlation between two or more variables.
Parametric test – t test, z test, analysis of variance.
Non-parametric text – chi test.
 - 3.3 Graphical Presentation – Graphs and bar diagrammes.
 - 3.4 Introduction to applicable statistical analysis softwares.

References :-

- (1) Literature of MSCIT.
- (2) Garrett, Henry E. (1971), Statistics in Psychology and Education, David Hanley and Co.
- (3) Edward, Experimental Design in Psychological Research.
- (4) Kerlinger, Foundation of Educational Research.

Syllabus Prescribed for M.Sc. Home Science (Human Development)
Semester – II

Subject code : 123PT52
Psychological Testing

Theory : 3 Periods/Wk (3 Credits)
Practical : 4 Periods/Wk (2 Credits)

Theory Paper : 45
Theory Internal : 30
Practical Marks : 20
Practical Internal : 05
Total Marks : 100

Objectives : After completion of course students will be able to become aware of psychological tests suitable for assessing human development

Theory

Unit 1 : Methods of Studying Human Development

- 1.1 Observation method : Theoretical perspectives, use of checklists, establishing reliability in observations, maintaining an observation record, report writing and evaluation.
- 1.2 Interview method : Theoretical perspectives, development of different types of interview protocol, analysis and coding of interview data
- 1.3 Observation method : Theoretical perspectives, development of different types of questionnaire protocols, analysis and coding of questionnaire data
- 1.4 Case study method : Theoretical perspectives, development of different types of case study protocols, analysis and coding of data

Unit 2 : Psychological Testing

- 2.1 Nature, objectives
- 2.2 Types of tests
- 2.3 Basic characteristics of psychological tests
- 2.4 Standardization – Concept and estimation of reliability, validity
- 2.5 Administration of tests – Environmental conditions and raport-scoring tests-expression of performance norms profile

Unit 3 : Intelligence and Personality

- 3.1 Measurement of intelligence
- 3.2 Potential and functional intelligence
- 3.3 Mental growth and constancy of IQ

- 3.4 Development of personality
3.5 Concept of personality
- Unit 4 :** **Psychometric Methods**
4.1 Scale for infant assessment
4.2 The Wechsler battery of tests
4.3 Children's apperception test
4.4 Draw a Man test
4.5 House-Tree-Person
4.6 Self Esteem Inventory
4.7 Sex-Role Inventory
- Unit 5 :** **Psychological Tests**
5.1 Intelligence tests : Bhatia battery of intelligence test, Kamat's test
5.2 Personality assessment : Rosenzweig's PF Study, Thematic Appreciation test, 16 PF tests
5.3 Aptitude tests : Different Aptitude Tests
5.4 Family relationship test
5.5 Husband wife relationship test

Practicals

- 1) Standardize any one psychological scale
- 2) Study techniques of administering the tests
- 3) Work on psychological test and prepare report

References

- 1) Kuppaswamy B. Child Behaviour and Development
- 2) Aylward G. (1994) Practitioner's Guide to Development and Psychological Testing. Plenum Press, New York
- 3) Hayes N. (1997) Doing Qualitative Analysis in Psychology, Hove : Psychology Press
- 4) Smith J.A., Harre R. and Van Langenhove L. (1996) Rethinking Psychology. London Sage
- 5) Yin R. (1994) Case Study Research Design and Methods (2nd edi) Beverly Hills, CA : Sage Publishing

Subject code : 123CA53
Communication Approaches in Human Development

Theory : 3 Periods/Wk (3 Credits)
Practical : 2 Periods/Wk (1 Credit)

Theory Paper : 45
Theory Internal : 30
Practical Internal : 50
Total Marks : 125

Objectives : After completion of course students will be able to

- understand use of communication approaches in human development
- develop skill of preparing tools of communication

Theory

- Unit 1 :** **Approaches of Communication in Human Development**
1.1 Traditional Approach – Folk media, Songs, Story, Shows, Drama
1.2 Modern Approach – Participatory, Analytical, Dialogue, Persuasive and Educational games.
Use of modern approach for communication and extension
1.3 Modified Approach – Combination of traditional and modern approaches
1.4 Presentation of above said approaches
- Unit 2 :** **Methods of Communication**
2.1 Individual communication
2.2 Group communication
2.3 Mass communication
2.4 Planning and preparation of communication methods
- Unit 3 :** **Projected tools of communication**
3.1 Transparencies for OHP
3.2 Soft copies of presentation (CD and Pen drive) for computer and computer aided projectors
3.3 Other E. learning material. Script for radio and TV
3.4 Preparation and presentation of projected tools
- Unit 4 :** **Non projected tools of Communication.**
4.1 Models – Working, Non working
4.2 Print material – Leaflets, folders, poster, charts, flash cards, news letter, circular letter, bulletin
4.3 Preparation of non projected tools
- Unit 5 :**
5.1 Themes and Messages
- Themes in Human Development
- Messages in Human Development
5.2 Strategies in Human Development
- Individual
- Community
- Presentation of the operation of strategies

Practicals

Identify themes in human development through literature research, experiences, pilot study or survey and prepare, present and evaluate following projected and non projected tools for effective communication.

Posters, banners, slogans, charts, flash cards, folder, leaflets, games, transparencies, CD, scripts.

Note : Any two out of projected and two out of non projected tools.

References

- 1) Maan, Gurmeet Singh (1987) The Story of Mass Communication : An Indian Perspective. New Delhi, Harnam Publishers.
- 2) Tiwari I.P. (1987) Communication Technology and Development. New Delhi, Ministry of Information and Broadcasting.
- 3) Sharma S.C. (1987) Media Communication and Development. Jaipur, Rawat Publishers.
- 4) Gamble M.W. and Gamble T.K. (1989) Introducing Mass Communication. II Ed. New York, McGraw Hill Book.
- 5) Day P.R. (1977) Methods of Learning Communication Skills. Oxford, Peragamon.
- 6) Hartman, Paul and others (1986) The Mass Media and the Village Life : An Indian Study. New Delhi, Sage Publication.
- 7) Melkote S.R. (1991) Communication for Development in Third World : Theory and Practice. New Delhi, Sage.
- 8) Bhatnagar S. and Satyapal A. (eds.) (1988) education and Communication Technology : Perspective, Planning and Implementation. New Delhi.
- 9) Scott B. (1986) The Skills of Communication. Aldershot Gower Press.
- 10) Joshi P.C. (1989) Culture Communication and Social Change. New Delhi, Vikas Publications.
- 11) Mahajan K. (1990) Communication and Society. New Delhi, Classical Publications.

Subject code : 123ED54

Entrepreneurship in Human Development

Theory : 3 Periods/Wk (3 Credits)

Practical : 4 Periods/Wk (2 Credits)

Theory Paper : 45

Theory Internal : 30

Practical Marks : 35

Practical Internal : 15

Total Marks : 125

Objectives : After completion of course students will be able to

- provide conceptual inputs regarding entrepreneurship development in human development
- sensitise and motivate towards entrepreneurship development
- orient and impart knowledge towards identifying and implementing entrepreneurship opportunities

Theory

Unit 1 :

Conceptual Framework

- 1.1 Concept, need and process in entrepreneurship development
- 1.2 Types of enterprise – merits and demerits
- 1.3 Role of enterprise in national and global economy

Unit 2 :

The Entrepreneur

- 2.1 Entrepreneurial motivation – dynamics of motivation
- 2.2 Entrepreneurial competency – concepts
- 2.3 Developing entrepreneurial competencies – requirements and understanding the process of entrepreneurship development, self awareness, interpersonal skills, creativity, assertiveness, achievement, factors affecting entrepreneur's role

Unit 3 :

Launching and Organising an Enterprise

- 3.1 Environment scanning – information, sources, schemes of assistance, problems
- 3.2 Enterprise selection, enterprise, feasibility study, SWOT analysis
- 3.3 Resource mobilization – finance technology, raw material, site and man power
- 3.4 Market assessment, costing and quality control

Unit 4 :

Areas of Entrepreneurship

- 4.1 Production of teaching aids, toys and literature
- 4.2 Consultancy areas – Child guidance clinics, rehabilitation centres, child development centres, home for aged persons
- 4.3 Services : Testing IQ, EQ, SQ

Unit 5 :

Agencies for Development of Entrepreneurship

- 5.1 Government of India's policy towards promotion of entrepreneurship reservations and sanctions for small scale sector
- 5.2 Role of SSI, Procedures and formalities for setting up SSI
- 5.3 Role of banks and other agencies for development of entrepreneurship

Practicals

- 1) Enlist entrepreneurial opportunities in human development.
- 2) Select any enterprise and prepare a report of SWOT analysis.
- 3) Visit to funding agencies offices for understanding the formalities for registrations and the licences for enterprise.
- 4) Prepare and use the business games for development of entrepreneurial qualities.
- 5) Case study of an Entrepreneur and prepare a report.

References

- 1) Hisrich R.D. and Peters M.P. (1995) Entrepreneurship – starting, developing and managing a new enterprise. Richard D. Irwin INC, USA.
- 2) Meredith C.G. et al (1982) Practice of Entrepreneurship. ILO , Geneva.
- 3) Deshpande M.V. (1984) Entrepreneurship of small scale industries, concept, growth and management. Deep and Deep Publication D-1/24, R-Garden, New Delhi.
- 4) Parekh U. and Rao T.V. (1978) Personal Efficacy in Development Entrepreneurship, Learning system. New Delhi.
- 5) Vasant Desai (1991) Entrepreneurship and Entrepreneur Development, Vol. I, II, III, Himalaya Publishing House.
- 6) Maratha Chamber of Commerce, Industrial Development of Maharashtra, Latest edition.

Subject code : 123HA55
Human Anatomy and Physiology

Theory : 3 Periods/Wk (3 Credits)
Practical : 2 Periods/Wk (1 Credit)

Theory Paper : 45
Theory Internal : 30
Practical Marks : 20
Practical Internal : 05
Total Marks : 100

Learning objectives : After completion of course students will be able to

- understand the integrated function of all systems
- advance their understanding of some of the relevant issues and topics of human physiology

Theory

- Unit 1 : Introduction to Physiology**
- Meaning
 - Physiology of body systems
 - Physiology of growth and development
 - Physiology of ageing
- Unit 2 : Cell and Blood**
- Structure of cell, cell cycle
 - Tissue and their functions
 - Blood : composition
 - Haemostasis
- Unit 3 : The Reproductive System**
- Female
 - Male
 - Growth and development during pregnancy
 - Physiology of lactation
 - Role of hormones in reproduction
 - Contraception
 - Tests during pregnancy
- Unit 4 : Nervous System**
- Nervous cell
 - Structural organization of nervous system
 - Peripheral nervous system
 - Electroencephalogram
- Unit 5 : Physiology of the Endocrine Glands**
- Hormones
 - Endocrine gland
 - Thyroid gland
 - Para thyroid gland
 - Pancreas
 - Adrenal glands
 - The pineal gland
 - Kidney as an endocrine gland

Practicals

- 1) To study Total Leucocyte Count (TLC)
 - Different Leucocyte Count (DLC)
 - Red Blood Cell Count (RBC count)
- 2) Haemoglobin estimation by Sahli's method
- 3) Determination of blood groups
- 4) Measurement of blood pressure

References

- 1) Applied Physiology, MFM 001 Course, Indira Gandhi National Open University
- 2) Vander A.J., Sherman J.H., Luciono D.S. (2000) Human Physiology. 7th edition, New York, McGraw Hill
- 3) Jain A.K. Textbook of Physiology. Vol. I and II, Avichal publishing co., New Delhi
- 4) Guyton A.C. and Hall J.B. (1996) Textbook of Medical Physiology. 9th edition, W.B. Sanders Company, Prism Books (Pvt.) Ltd., Bangalore.

Subject code : 123RM56 **Research Methods in Human Development**

Theory : 3 Periods/Wk (3 Credits)
Practical : 2 Periods/Wk (2 Credits)

Theory Paper : 45
Theory Internal : 30
Practical Internal : 25
Total Marks : 100

Objectives : After completion of course students will be able to-

- know importance of research in human development
- understand the types, tools applicable to research problem
- develop skills of preparing out line of research work

Theory

- Unit 1 :** **Foundation of Scientific Research**
- 1.1 Research – meaning and definition
 - 1.2 Need of research in communication and extension
 - 1.3 Research process
 - Selection and formulation of research problem
 - Specifying objectives
 - Formulating hypothesis
 - Deciding variables
- Unit 2 :** **Design Strategies in Research**
- 2.1 Descriptive studies
 - Correlation studies
 - Case studies
 - Cross sectional/Survey
 - 2.2 Analytical studies
 - Observational studies
 - Cohort studies
 - Cross sectional studies/Survey
- Unit 3 :** **Methods of Sampling**
- 3.1 Characteristics of good sampling
 - 3.2 Probability or random sampling
 - 3.3 Non probability sampling
- Unit 4 :** **Research Tools**
- 4.1 Levels of data measurements and characteristics of good measurement
 - 4.2 Types of tools and their uses
 - Questionnaire
 - Schedule
 - Rating scale
 - Attitude scale
 - Interview – structured and unstructured
 - Observation – participant and non participant
 - 4.3 Concept of data
 - Types of Data – Qualitative and Quantitative data
 - Analysis of Data – Qualitative and Quantitative data analysis
- Unit 5 :** **Statistical Testing of Hypothesis**
- 5.1 Application of parametric tests
 - r test
 - t tests
 - Z test
 - F test
 - ANOVA

5.2 Application of non parametric tests

- Chi square test
- Spearman's Rank correlation

Practicals

- 1) List research areas in human development
- 2) Prepare synopsis/outline of dissertation work
 - Select problem for dissertation from literature research, experiences of guide & teachers, and experiment/pilot study/survey.
 - Find out key words, their meaning and definition from dictionary and encyclopedias.
 - Design conceptual model of the study.
 - Collect review on selected variables from national and international journals and prepare note cards and reference cards (follow the rules of scientific writing)
 - Decide and prepare tools of measurement of variables
 - Specify objectives
 - Frame hypothesis
 - Select locale of the study
 - Decide sample size and sampling techniques
 - Decide applicable statistical tests
- 3) Conduct pilot study for calculating validity, reliability and usability of the tools.
- 4) Prepare master table for analysis
- 5) Prepare time schedule and facilities required for dissertation work.

References

- 1) Van Maanen (1983) Qualitative Methodology. Sage Publication
- 2) Sumati Mulay and Sabarathanam V.E. (1980) Research Methods in Extension Education. New Delhi, Sole Selling Agents, MANASHYAN, 32.
- 3) Bryman A. and Cramer D. (1994) Quantitative Data Analysis for Social Scientist
- 4) Aravindra Chandra and Saxena T.P. Style Manual for Writing : Thesis, Dissertations and Papers in Social Sciences. New Delhi, Metropolitan Book Co. Pvt. Ltd.
- 5) Kerlinger, Foundation of Educational Research
- 6) Ingle P.O. Scientific Report Writing. Nagpur, Sarla P. Ingle.

(Note : The syllabi for General Interest Course shall be as per Science faculty.)
