

## **SYLLABUS**

2014-2015



PT. RAVISHANKAR SHUKLA UNIVERSITY
RAIPUR
CHHATTISGARH

# COURSE WORK FOR Ph.D. - HOME SCIENCE

PAPER- I

Max marks- 100

Research methodology quantative methods and computer application.

#### PAPER- II

 Review of the subject- Home Science literature in
 Seminar - Based on the review of literature Project Report

Max marks- 50 Max marks- 20

Max marks- 30

Total - 200

### PAPER-I

### RESEARCH METHODOLOGY, QUANTATIVE METHODS AND COMPUTER APPLICATION

Max marks-100

### Research Methodology UNIT-I

- Science, scientific methods,
- » Role of statistics and research in Home Science discipline. Objective of research explanation, control and prediction.
- Types of research: Historical, descriptive, experimental, case study, social research.
- Definition and identification of a research problem:
  - Selection of research problem.
  - 2. Hypothesis, basic assumptions, limitation and delimitations of the problem.
- Types of variables.
- Theory of probability:
  - Population and sample.
  - 2. Probability sampling: simple random, systematic random sampling, two stages and multi stage sampling, cluster sampling.
  - Non-Probability sampling: quota and purposive. sampling/snowball sampling.
- Research Ethics
- IPR
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UNIT-II - Research Design

- · Skewness and Kurtosis
- · Basic principles of research design:
  - Purposes of research design: fundamental, applied and action, explanatory and descriptive, experimental, survey and case study.
  - 2. Longitudinal and cross sectional, co-relational.
- · Data gathering instrument.
- Observation, questionnaire, interview, scaling methods, case study home visits, reliability and validity of measuring instruments.
- · Writing a research proposal.
- · Analysis of data and research report.

# UNIT-III - Quanti tatuic Analysis of Dala

- Conceptual understanding of statistical measures. Classification and tabulation of data measurement of central tendency, measures of variation.
- · Frequency distribution, histogram, frequency polygons and ogive.
- · Binomial distribution.
- · Normal distribution- use of normal probability tables.
- · Parametric and non- parametric tests.
- Testing of hypothesis, type 1 and type 2 errors, levels of significance.
- Chi square test Goodness of fit, independence of altributes 2\*2 and r\*o contingency tables.

## UNIT-IV - Slatistical Analycis

- Application of student 't' test for small samples. Difference in proportion for means and difference in means.
- Correlations, coefficient of correlation, rank correlation.
- · Regression and prediction.
- Analysis of variance-one way and two-way classification.
- Experimental Designs
  - 1. Completely randomized design
  - 2. Randomized block design
  - Latin square design
  - Factorial design
  - 5. Trend analysis

# UNIT-V - Compuler Fundamentals

- Introduction
  - The computer and computer technology
  - 2. The computer system
  - 3. Important characteristics

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- 4 The binary number system
- 5. Computer applications
- Windows-98/XP/2000
  - Window- concepts features structure desktop, taskbar, start menu, my computer, recycle bin.
  - 2. Accessories- calculator, notepad, paint, word pad, character map.
  - Explorer- creating folder and other explorer facilities.
  - Object linking and embedding understanding OLE embedded/ ling using cut and paste object manage embedded/ linked using object.
  - Communication- dialup networking phone dialer office s/w word processing spread sheet, power point and out look express.
- M.S. office
  - Ms word- creating, editing and previewing documents, formatting advanced features using thesaurus mail merge table and charts handling graphics. Converting word documents in to other formats.
  - Ms excel- data finding and statistical. Calculation-S.D., mean, median, mode, average, sum, ANOVA, 't' value, correlation. Work sheet basics, creating opening and moving in worksheet working with formula and cell referencing. Absolute and relative addressing working with ranges. Formatting of work sheet, graphs and charts making.
  - Power point- creating, presenting and modifying visual elements, adding objects, applying transitions, animations and linking. Preparing handouts, presenting slide shows with different slide layouts, colour schemes.
- Introduction of internet- searching of documents and pictures and references.
   Researching, saving of PDF files, conversion of PDF into HTML files.
  - · SP.S.S.

### Paper-II

### REVIEW OF THE SUBJECT- HOME SCIENCE

Max marks-50

Writing and Submission of review of literature -UNIT-I In area of proposed Ph.D. Work, under the supervision of supervisor

- Importance of food and nutrition and its inter-relation to health; dimensions of
- Food guide, basic five food groups, food exchange list.
- · Methods of improving nutritional quality of foods.

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Current nutrition and health status of women and children in India, changing concepts and controversies in maternal and child nutrition.

Malnutrition in mothers and children (etiology and management in brief) Nutritional problems of community and schemes and programs to combat these

problems in India.

Current methodologies of assessment of nutritional status, their interpretation and comparative application of the following food consumption. Anthropometry, clinical and laboratory (Biochemical).

- Definition components and assessment criteria of age specific fitness and health status, energy calculations for various physical activities, resting energy expenditure.
- Alternative systems for health and fitness life- Ayurveda, yoga, meditation, vegetarianism and traditional diets.
- Qualitative research in food and nutrition- types of qualitative research, tool techniques and methodologies, PRA; PLA.
- Policies and programs of the govt. and NGO sector pertaining to elderly.

Contamination, adulteration and preservation of food.

### UNIT-II

Meaning concepts and principles of growth and development.

Methods of studying human development.

Aspects of development in different stages of life.

- Foundation of the developmental patterns, heredity and environment, maturation and learning, motivation, individual differences, impact pf play as means of development and learning.
- Importance of early childhood care and education. Current policies and programs in E.C.C.E.
- Psychology of exceptional children and problem children.

Theories and principles of guidance and counseling.

- Mental health definition, concept and importance of mental health, need sense of identity.
- · Fundamentals of psychometric tests, personality assessment tests, interest test, aptitude test and other tests.

### UNIT-III

Resources- its classification, management and basic characteristics.

· Housing- interior decoration principles of design, study of colour and colour schemes.

Ergonomics- scope of ergonomics in home and other occupations.

Concept of work simplification- its importance in home; simple pen and pencil techniques.

Decision Making-types and models.

(B)

 Consumer education- laws protecting consumer, role of consumer society in protecting consumer.

 Entrepreneurship- conceptual framework, types and govt. policies and schemes for enterprise development.

#### UNIT-IV

 Origin of clothing- religious influence, clothing symbols; socialization and development of the self.

 Blends and mixtures, non-wover fibres, chemistry of blends, mixtures and nonwovers; their types, properties, development.

Eco- friendly natural fibers.

· Colour.

Eco friendly natural dyes.

Dyeing of blends.

· Chemistry of cellulosic fibres, scientific basis of dyeing and printing of textiles.

Design variation- combination of traditional and modern.

Textured yarn.

Social and psychological aspects of glothing.

Designing dresses for physically challenged people.

· Changes in fashion trends.

Technical textiles, fibres used in Medical sciences.

### UNIT-V

 Management and administration of formal/non-formal and extension education monitoring, supervision and evaluation of formal, non-formal and extension education.

Vocationalization of home Science in India.

Concept and classification of communication.

Classroom communications in Home Science trends

Seminar-Will be given by the student in her subject of specilisation /in the proposed subject of her ph.D

20marks

Project report- will be prepared and submitted by the student in the field of her subject of research

30marks

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