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Ph.D. Course Work Syllabus

HOME SCIENCE

Session 2018-19

COURSE WORK FOR Ph.D

SUBJECT HOME SCIENCE

PAPER –I

Max marks-100

Research methodology quantative methods and computers application.

PAPER-II

- Review of the literature in relevant subject   Max marks- 50
- Seminar-Board on the review of literature   Max marks- 20
- Project Report- Board on the review of literature   Max marks- 30

Total –   200

Paper-I

RESERCH METHODOLOGY QUANTIATIVE METHODS AND COMPUTERS APPLICATION

Unit –I Research Methodology

Max marks -100

- 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:
  1. Selection of research problem.
  2. Hypothesis, basic assumptions, limitation and delimitations of the problems.
- Types of variables.
- Theory of probability:
  1. Population and sample.
  2. Probability sampling random, systematic random sampling, two stages and multi stage sampling, cluster sampling.
  3. Non-Probability sampling; purposive quota and volunteer sampling snowball sampling.
- Research Ethics
- IPR
- Cyber Law
- Copy Right

Unit- II Research Design

- Skewers and kurtosis
- Basic principal research design:
  1. Purpose 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   Quantitative Analysis of Data

- Conceptual understanding of statistical measures of variation.
- Frequency distribution- use of normal probability tables.
- Binomial distribution.
- Normal distribution- use of normal probability tables.
- Parametric and non-parametric tests.
- Testing of hypothesis, type 1 and 2 errors, levels of significance.
- Chi square test Goodness of fit, independence of altributes 2*2 and r*o contingency tables.

Unit-IV   Statistical Analysis

- Application of students '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
    3. Latin square design
    4. Factorial design
    5. Trend analysis

Unit-VI   Computer Fundamentals

- Introduction
    1. The computer and computer technology

2. The computer system
3. Important characteristic
4. The binary numbers system
5. Computer applications

- **Windos-98/XP/2000**
  1. **Window-**concepts features structure desktop, stat menu, my computer, recycle bin.
  2. **Accessories-**calculator, notepad, paint, word pad, character map.
  3. **Explorer-** creating folder and other explorer facilities.
  4. Object linking and embedded/linked using object.
  5. **Communication-** dialup networking phone dialer office s/w word processing spread sheet, power point and outlook express.

- **M.S. Office**
  1. **MS Word-** creating, editing and previewing documents, formatting advanced features using thesaurus mail merge table and charts handing graphics. Converting word documents in to other formats.
  2. **MS Excel –** Data finding and statistical. Calculation-S.D., mean, median, mode, average sum, ANOVA, 't' value correlation. Worksheet basics, crating opening and moving in worksheet working with formula and cell referencing. Absolute and relative addressing working with ranges. Formatting of work sheet, graphs and chart marks.
  3. **Power point-** creating, presenting and modifying visual elements., adding objects, applying transitions, linking, Preparing handing, presenting slide shows with different slide layouts, color schemes.

- **Introduction of internet-** searching of documents and pictures and references. Researching, saving of PDF files, conversion of PDF into HTML files.
- S.P.S.S

Paper-II

REVIEW OF THE SUBJECT-HOME SCIENCE

Max arks – 50

Writing and submission of review of literature in area of proposed Ph. D work; under the supervision of supervision.

Seminar-will be given by the student in her subject of specialization/in the proposed subject of her Ph.D

20 marks

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

30 marks

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