(Master of Science –Home Science) (General Home Science)
(M.Sc.-H.Sc.) (General Home Science) Semester (II)

Course Code	PH02CGEN51	Title of the Course	Statistics
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	1. To understand the role of statistics in research 2. To apply different statistical methods to analyze and interpret the data.

Course Content		
Unit	Description	Weightage* (%)
1.	(a) Introduction and scope of Statistics (b) Types of data : qualitative and quantitative (c) Frequency distribution and graphical presentation of data (Histogram, Frequency polygon, Frequency curve, cumulative frequency curves)	25
2.	(a) Measures of central tendency, Mean (Arithmetic, Harmonic and Geometric means), Median and Mode (b) Measures of dispersion-standard deviation, coefficient of variation and standard errors.	25
3.	(a) Bivariate Data: Correlation coefficient, Product and rank correlation coefficients and its application in the field of home science (b) Regression : simple linear regression and its application in the field of Home Science	25
4.	(a) Basic idea of significance test, Statistical Hypothesis, levels of significance, Student's t-test, paired t-test, chi- square and F tests, large sample tests. (b) General awareness of popular software packages for word processing SPSS, Spread sheet, openepi etc. Sample size calculation and analysis of data using these softwares.	25

Teaching-Learning Methodology	Classroom lectures (Blackboard/Power Point Presentations), Discussion on recent application in research with suitable examples

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify different types of data
2.	Describe application of basic statistical treatment for different types of data

Suggested References:	
Sr. No.	References
1.	Gupta, S. C. (2001). *Fundamentals of statistics*. Himalaya Pub House
2.	Rao, K. V. (2007). *Biostatistics: A manual of statistical methods for use in health, nutrition and anthropology* (2nd ed.). Jaypee Brothers Medical Publishers (P) Ltd.
3.	Pal, N. & Sarkar, S. (2005) Statistics: Concepts and applications. Prentice-Hall of India Pvt. Ltd.
On-line resources to be used if available as reference material	
On-line Resources	
https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827	

*****