

SARDAR PATEL UNIVERSITY
Programme: M.Sc (Home Science)
Subject: Food Biotechnology
Semester: III
Syllabus with Effect from: June - 2013

Paper Code: PH03CHSC01	Total Credit: 4
Title Of Paper: Research Methodology & Scientific Writing	

Unit	Description in detail	Weightage (%)
I	<p>Research Methodology. Introduction, meaning of research, definition, characteristics and function, objectives, classification and kinds of research.</p> <p>Research Problem Introduction, selecting the problem, defining the problem, sources of problem, Criteria for selection of the problem, delimiting a problem, assumptions about a problem, evaluating the problem.</p>	
II	<p>Foundation of Hypothesis- Meaning, definitions; assumption, postulate and hypothesis; nature of hypothesis Functions, importance, kinds, characteristics of a good hypothesis, variables in a hypothesis, sources of hypothesis, testing of hypothesis</p> <p>Research Plan/Design & Sampling. Meaning and definition of plan/design, design format Meaning and definition of sampling, functions of population and sampling, types of Sampling designs, characteristics of a good sample, application of sampling technique in various types of researches.</p>	
III	<p>Types of Researches Survey, historical, philosophical, experimental, case study, genetic</p> <p>Design of Experiments. Need and purpose, importance, characteristics of good experimental design, basic principles, types of basic experimental design</p>	
IV	<p>Tools of Research Questionnaire, schedule, rating scale, tests</p> <p>Collection of Data Need, meaning, nature; constants, variables, variate; characteristics of quantitative data, types of data, data collection, organization of data.</p>	
V	<p>Research Report & Proposal Writing- Need of research report, format of research report (preliminary section, main section & reference section), mechanics of report writing Writing Research Abstract Writing research Paper Need of research proposal for dissertation of Ph.D. , to get funds from various sources</p>	

Basic Text & Reference Books:-

- Kothari R.C. (2005) : Reseach Methodology, 2nd Edition, New Age International Publisher Ltd. , New Delhi.

