

Krantiguru Shyamji Krishna Verma Kachhh University
Master of Science (Information Technology)
Semester: III

Paper Code: CECS305		Total Credit : 4 Total Marks : 70 Time : 3 Hrs
Title of Paper: Research Methodology		
Unit		
	Description	Weighting
I	Meaning, Objectives and Motivation in Research, types of Research, Research Approaches, Research Process, Validity and Reliability in Research, Obstacles in accepting research. Problem Formulation, Hypothesis Formulation, types of Hypothesis, characteristics of Good Hypothesis	20%
II	Meaning and Significance of Research Designs, Features of a good research design, types of research design, contents of research design Census Vs. Sample. Steps in Sample Design. Determining the size of Sample. Sampling methods - Simple Random Sampling, Stratified Sampling, Systematic Sampling, Cluster Sampling, Selective Sampling	20%
III	Types of Data, Sources of Data – Primary and Secondary Data. Methods of collecting the data. Testing the validity of the data. Measurement and scaling techniques, errors in measurement, tests of sound measurement, scaling and scale construction techniques	20%
IV	Steps in Questionnaire design, characteristics of a good questionnaire Presentation, Processing & Analysis and Interpretation of Data. Report Writing – layout of a Research Report, Characteristics of a good research report.	20%
V	Overview of Statistical Techniques Testing of Hypothesis, Large Sample Tests, Small Sample Tests – t, F tests. χ^2 tests.	20%
Basic Text & Reference Books :-		
1.	Research Methodology Methods & Techniques - C.R.Kothari, New Age International	
2.	Introduction to Quantitative Research Methods - Mark Balnaves and Peter Caputi, Sage Publications	
3.	Business Research Methods - William G.Zikmund, Thomson South-Western	

Krantiguru Shyamji Krishna Verma Kachchh University
Master of Science (Information Technology)
Semester: III

Paper Code: CECS305			Total Credit : 4 Total Marks : 70 Time : 3 Hrs
Title of Paper: Research Methodology			
Unit	Description	Total Marks	
I	Q.1 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.1 (B) Medium / Long Questions. (With Internal Option)	08	
II	Q.2 (A) Answer the Following. (Definitions, Blanks, Full Forms, True/False, Match the Following)	06	14
	Q.2 (B) Medium / Long Questions. (With Internal Option)	08	
III	Q.3 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.3 (B) Medium / Long Questions. (With Internal Option)	08	
IV	Q.4 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.4 (B) Medium / Long Questions. (With Internal Option)	08	
V	Q.5 (A) Short / Medium Questions (With Internal Option)	06	14
	Q.5 (B) Medium / Long Questions. (With Internal Option)	08	