New Syllabus of Gujarat University for M.Com. Semester 1

COM 404 – BUSINESS RESEARCH METHODS

Unit 1: Introduction to Research

(25 %)

Meaning and types of research: Basic Research, Pure Research, Applied Research, Qualitative v/s. Quantitative Research. Modern scientific approach to research, research in business, research process, Structuring a research proposal, Designing a research study, Characteristics of a good research, Salient features of research project, Scope of a research study, Criteria for evaluation of a research study.

Research Design: Sampling design, survey design, statistical design and operational design.

Unit 2: Data Collection and Description

(25 %)

Data v/s. Information, Types of data: Primary data v/s secondary data, Time Series v/s. Cross Sectional Data, Penal data. Sources of secondary data, Methods of Primary data collection, editing, coding, identifying missing observations and outliers, classification and tabulation of data, Concept of frequency distributions for a discrete and continuous random variable, Data representation, Bar Charts, Pie Charts, Histograms and Ojives, Observational studies, Survey Method, Data Mining Process, Population v/s. Sample Study, Features of a good sample, Determination of a sample size, Sampling and Non-sampling errors, Lipstein's Nine rules for minimizing non-sampling errors, Sampling frame, Sampling fraction. Probability Sampling Methods: SRSWR, SRSWOR, Systematic Sampling, Proportionate and disproportionate Stratified Sampling, Cluster Sampling, Area Sampling, Two-stage Sampling, Multi-stage Sampling, PPS Sampling, Sequential Sampling. Non-Pobability Sampling Methods: Convenience Sampling, Purposive Sampling, Judgemental Sampling, Quota Sampling, Snow-ball Sampling (Only theoretical discussion of the methods and their application to practical situations), Pilot Survey, Stages in large scale sampling surveys.

Unit 3: Techniques of Analysis of Univariate and Bivariate Data

(25%)

Basic concept and applications of the measures of Central Tendency, Dispersion and Skewness, Measures of Association for variables and attributes, Bivariate Correlation Analysis by Karl Pearson's Product Moment Method and Spearman's Rank Correlation Method, Probable error, Simple Linear Regression, Nonlinear Regression, Coefficient of determination and its interpretation, Multiple Regression model, Standard error for Multiple Regression, Multiple Coefficient of Determination and its interpretation.

Unit 4: Statistical Inference and Tests of Hypothesis

(25 %)

Meaning of statistical inference, Parameter and Statistic, Concept of Point estimation and Interval estimation, Standard error of a statistic, Testing of Hypothesis, Null and Alternative hypothesis, Confidence level and level of significance, Critical Region, Type-I and Type-II errors, One tailed and two tailed tests, Properties of Normal distribution and their applications in hypothesis testing, Large sample Tests and Small sample tests for a single mean, single proportion, difference of two means and proportions (including paired t-test for small samples), Chi square $\binom{2}{\chi}$ Test, F- Test, ANOVA for one way and two way analysis.

Note: Case studies on all of the above units indicating practical applications of the topics concerned must be included as a teaching pedagogy.

References:

- 1. Donald Cooper & Pamela Schindler: "Business Research Methods" Tata McGraw Hill (9th Edition)
- 2. Sharon Lohr: "Sampling: Design and Analysis" Duxbury Press
- 3. Cochran W.G.: "Sampling Techniques" Wiley Eastern
- 4. Pulak Chakravarty: "Quantitative Techniques for Management and Economics" Himalaya Publishing House
- 5. Levin & Rubin: "Statistics for Management" Pearson Education
- 6. Hankey, Wichern & Reitsch: "Business Forecasting" Pearson Education
- 7. Moshe Ben-horin and Levy: "Statistics- Decision and Applications" Addison Wesley
- 8. Srivastav, Shenoy and Sharma: "Quantitative Techniques for Managerial Decisions" Wiley Eastern
- 9. Bernard Ostle and Mensing R. W.: "Statistics in Research" Ith IOWA State University Press
- 10. Sachadeva J.K.: "Business Research Methodology" Himalaya Publication