

Kadi Sarva Vishwavidyalaya, Gandhinagar

PART-1 (BASIC AWARENESS AND APTITUDE ON RESEARCH) – 50 Marks

PART-2 Syllabus for Ph.D Entrance Test: Computer Science **(Marks-50)**

Content:

Mathematics: Set Theory, Matrices, Permutation and Combinations, Functions, Probability Theory, Probability distributions, Numerical errors, Numerical solutions of non-linear equations, Correlations and Regressions, Graph Theory, Trees, Logic, relations, Mathematical Induction, Relation and Graph Theory, Boolean Algebra.

Statistical Measures: Frequency Distributions, Measures of Central Tendency, Measures of Dispersion, Data Collection Methods, Curve Fittings, Hypothesis Testing, Type-I and Type-II errors.

Computer: Fundamentals of computers, Open Office, Web Technology, Data Structure, Searching and Sorting, Database Management, Operating system.

Programming Language: c and C++, Object Oriented Programming Concepts, Static and Dynamic memory allocation, Structure and Union

Computer Network: Hardware and Software requirements. Functions of different parts like connectors, cables, Router, Switch etc. used in networking

Current Trends and Technology: