

**LM THAPAR SCHOOL OF MANAGEMENT**  
**Thapar Institute of Engineering & Technology University, Dera Bassi**  
**Campus**

Syllabus for Research Aptitude Test (RAT) - 2016

The detailed syllabus of Research Aptitude Test (RAT) for admission in Ph.D. program of LMTSM, is described below:

**Part-I: Assessment of Research Skills/Aptitude of the Candidate**

**Logical Reasoning:** Arguments, deductive and inductive reasoning; logical and Venn diagram; Information and inferences; analogies; reading and comprehension.

**Research Methodology:** Definition, characteristics, and ethical issues in research; types of research; research methods and process, quantitative and qualitative research; analysis and Interpretation of data; mapping and tool s for data analysis.

**Basic Statistics:** Measures of central tendency- mean, mode median, standard deviation; quartile and percentile; correlation and regression.

**Part-II: Assessment of knowledge of the candidate in management domain:**

**Fundamentals of Management:** Principles and theories of management; management functions, elements of strategy, SWOT analysis, strategy formulation and execution, core competence and competitive advantage, market structures and pricing methods.

**Organizational Behavior:** Skills and roles in an organization, contemporary organizational structures, understanding and managing individual and group behaviour, personality, perception, values and attitudes, learning, motivation, interpersonal and group dynamics, managing conflicts.

**Marketing Management:** STP strategies, product mix, product life cycle, new product development, pricing strategies, promotion mix, marketing of services.

**Financial Management:** Valuation concepts, capital budgeting decisions, capital structure and cost of capital, dividend policy, long term and short term financing instruments, mergers and acquisitions.

**Human Resource Management:** Human resource planning, recruitment, selection, induction, training and development, performance management, leadership theories.

**Operations Management:** Definition, need and scope; product-process matrix; production function, cost output relations, TQM and Six Sigma; supply chain and logistics management.

**Information Systems:** Technological issues and data processing in organizations, MIS and decision making, emerging trends in Information technology.

