

## SUBJECTS AND SYLLABUS FOR COMPREHENSIVE VIVA

**Karthicanand M. S. (MS18D202)**

Department of Management Studies – Indian Institute of Technology Madras

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### **MS6031 – Data Analysis for Research**

**Course Instructor: Dr. R.K. Amit**

**Introduction to statistics** – Mean, median, mode, variance, probability mass functions, probability density functions, cumulative density function, correlation, independent events

**Probability distributions** – Binomial distribution, Poisson distribution, Normal distribution, Chi-squared distribution, t-distribution, F-distribution

**Inferential Statistics** – Population and Sample, Confidence intervals, Central Limit Theorem

**Hypothesis Testing** – single sample z test, single sample t test, chi squared test of variance, proportion z test, two sample z test, two sample t test, paired t test, two sample proportion z test, chi squared test of independence

Type 1 and type 2 errors

### **MS7080 – Research Methodology in Business & Management**

**Course Instructor: Prof. Saji K. Mathew**

**Approach to research** – What is research? Researcher Bias, Fundamental vs Applied research, Science of social science, Research paradigms in management research.

**Foundations of theory** – Theory in management research, Hypotheses and Propositions, Theory building, Epistemology and Ontology, Quantitative vs. Qualitative Research.

**Qualitative research** – Qualitative research in management, Different qualitative approaches, interpretivism and positivism in qualitative research.

**Quantitative research** – Concepts, constructs and measurement, Scales of measurement, Survey-based research, and Experimental design.

**Research design** – Level of analysis and measurement, Experimental approach, Cross sectional design, Longitudinal design, Case study design, Methodological fit in research.

### **MS6210 – Business Models**

**Course Instructor: Prof. L. Prakash Sai**

**Corporate Lifecycles:** Growing Vs Ageing Companies – Corporate Lifecycle Stages (Infancy – Go-Go – Adolescence – Prime – Stable – Aristocracy – Recrimination – Bureaucracy – Death) – Tools for organizational analysis.

**Business Excellence Models:** Core values and concepts – Business Excellence frameworks of USA (MBNQA), Europe (EFQM) and India (CII-EXIM).

**Components of a Business Model:** Relationship between strategy and structure – Product vs Service Businesses – Firm boundaries – Architectural components of business models – Business model canvas – Evaluation of business models.

**Planning and Execution of Business Models:** Profit Models – VRISA analysis – Sources of competitive advantage – Critical success factors for planning and executing business models.

**Business Innovation:** Industrial perspectives on growth and innovation – Types of innovations – Managing product and process innovations – Managing disruptive innovations – Principles of value based management

**MS5050 – Marketing Management I**  
**Course Instructor: Dr. Varisha Rehman**

- **Module 1:** Introduction to marketing –marketing and selling – relationship; Market Offerings – Products, Services, and Experiences; Customer Needs, Wants, and Demands
- **Module 2:** Delivering customer value and satisfaction – concept of total cost, total benefit, value delivery process and Michael Porter value chain
- **Module 3:** Marketing Environment; Marketing Mix; Strategic market planning – vision, mission and strategies, SWOT analysis; BCG matrix
- **Module 4:** Consumer markets and buyer behaviour – impact of cultural factors, social factors, Personal factors and Psychological factors on consumer behaviour; Business markets and buying behaviour
- **Module 5:** Market segmentation- levels of segment; criteria for segmentation; Targeting – types of targeting strategies; Positioning – points of parity and points of difference; positioning strategies.

**MS5120 – Organizational Structure and Design**  
**Course Instructor: Dr. Lata Dyaram**

**Introduction:** Organization, Organization Structure, Organization Design, Organization Theory, Organization Culture; Contrasting Organization Theory and Organizational Behaviour

**Organizational Effectiveness:** Characteristics of Effective Organizations, Approaches in Measuring Effectiveness – Goal Attainment Approach, Systems Approach, Strategic Constituency Approach, Competing Values Approach

**Organizational Structure:** Determinants – Strategy, Organization Size, Technology, Environment, Power-Control; Dimensions – Complexity, Formalization, Centralization

**Organizational Design:** Basic Elements, Basic Configurations – Simple Structure, Machine Bureaucracy, Professional Bureaucracy, Divisional Structure, Adhocracy

**Contemporary Issues:** Managing Organizational Change, Managing Organizational Conflict, Managing Organizational Culture