

# Ph.D. Entrance Exam Syllabus 2026-27

## Part-A

### Research Methodology

#### Module 1: Foundations of Research

**Meaning and Nature of Research-** Definition, objectives, and characteristics of research, Types of research, Qualitative vs Quantitative research, Interdisciplinary research.

**Research Problem and Design-** Identification and formulation of research problem, Criteria of a good research problem, Variables- Types and measurement, Hypothesis: Meaning, types, and formulation of hypothesis, Research design.

**Review of Literature-** Importance and objectives, Sources Primary, secondary, and tertiary, Literature review process and writing techniques, Identifying research gaps

**Ethics in Research-** Research integrity and ethical principles, Plagiarism and its prevention, Informed consent and confidentiality, Role of Committee on Publication Ethics (COPE) guidelines.

#### Module 2: Research Methods and Data Analysis

**Data Collection Methods** -Primary data - Observation, Interview, Questionnaire, Schedule, Secondary data - Sources and evaluation, Scaling techniques, Measurement and instrument design.

**Sampling Techniques-** Census vs Sample, Probability sampling, non-probability sampling: Sample size determination, Sampling frame and sampling Unit.

**Data Processing and Analysis** -Data editing, coding, classification, tabulation, Descriptive statistics: Mean, median, mode, standard deviation, Inferential statistics: Hypothesis testing, t-test, chi-square, ANOVA, Correlation and regression analysis.

**Use of Software in Research-** Statistical tools: SPSS, R, Microsoft Excel, Reference management tools: Mendeley, Zotero, Basics of data visualization

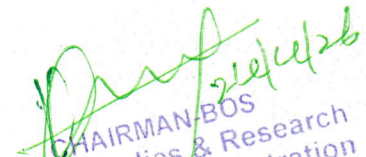
#### Module 3: Research Reporting and Advanced Techniques

**Research Report Writing-** Structure of research report/thesis, Abstract, introduction, methodology, results, discussion, conclusion, Citation styles: APA, MLA, Chicago, Bibliography and referencing

**Advanced Research Techniques-** Multivariate analysis, Factor analysis, cluster analysis, Structural Equation Modelling (SEM), Content analysis and case study method, Mixed-method research.

**Thesis and Publication Process** -Thesis submission and evaluation process, Writing research papers for journals, Impact factor and indexing, Role of Scopus and Web of Science.

**Viva Voce and Presentation Skills-** Preparation for viva voce, Research presentation techniques, Use of visual aids (PowerPoint, graphs, charts, Handling questions and defense strategies.

  
CHAIRMAN BOS  
Dept. of Studies & Research  
in Business Administration  
TUMKUR UNIVERSITY  
TUMKUR.

## **Part -B**

### **Cognate Subject (Management)**

#### **Module 4: Management, Organizational Behaviour & strategic Management -**

**Management** -Nature, scope, and significance of management, Functions Evolution of management thought (Classical, Neo-classical, Modern), planning, decision-making, Organizing & Staffing- Organizational structures, delegation, coordination, Contemporary Issues, Change management, ethics, globalization, and digital transformation.

**Organizational Behaviour** -Models of OB, Individual behaviour Personality, perception, attitudes, learning, Motivation theories (Maslow, Herzberg, McClelland), Leadership theories and styles of leadership. Group behaviour and team effectiveness, Conflict management and negotiation, Organizational culture, climate, and change management.

**Strategic Management**- Vision, mission, and objectives, Environmental analysis (SWOT, PESTLE), Value Chain Analysis, Competitive strategies (Porter's Five Forces, Generic Strategies), Strategy formulation and Implementation, BCG Matrix, GE Matrix, McKinsey 7s Strategic control and evaluation, Mergers, acquisitions, and alliances.

#### **Module 5: Human Resource Management & Organizational Development**

**HRM Functions:** Workforce planning, job analysis, recruitment, onboarding, training, and employee lifecycle management.

**Performance & Compensation:** Modern appraisal systems (KPI, OKR, 360°), compensation structures, incentives, and employee engagement & retention.

**HR Analytics:** Data-driven HR using descriptive to predictive analytics, HR metrics, dashboards, application of tools like SPSS, R, and Microsoft Excel.

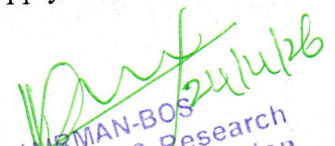
**Strategic HRM & OD:** Talent management, succession planning, organizational development, and aligning HR with business strategy.

**Emerging Trends:** DEI, remote work, HRTech, AI in HR, and future of work.

#### **Module 6: Marketing Management & Analytics-**

**Marketing Fundamentals-** Marketing concepts, environment, and ethics, Consumer behaviour and decision-making, Segmentation, targeting, and positioning.

**Marketing Mix Strategies,** Product and Brand management, Pricing strategies and methods Promotion and integrated marketing communication (IMC), Distribution and supply channels

  
CHAIRMAN-BOS  
Dept. of Studies & Research  
in Business Administration  
TUMKUR UNIVERSITY  
TUMKUR

**Contemporary Marketing Trends-** Digital marketing, SEO, and social media analytics, Influencer and content marketing, Services and relationship marketing, Marketing analytics and customer insights.

### **Module 7: Financial Management & Financial Analytics –**

**Core Financial Concepts:** Time value of money, valuation techniques, risk–return analysis, and overview of financial markets and instruments. Capital budgeting decisions (NPV, IRR, Payback), cost of capital, capital structure theories, and dividend policies.

**Financial Analysis:** Ratio analysis, financial statement analysis, and working capital management for efficient financial control.

**Financial Analytics:** Application of data-driven techniques in financial decision-making, forecasting, and performance evaluation.

**Emerging Trends:** Behavioural finance, ESG (Environmental, Social, Governance) investing, and sustainable finance practices.

**FinTech Innovations:** Digital payments, blockchain technology, cryptocurrencies, and transformation of financial services.

### **Module 8: Operations & Supply Chain Management**

**Operations Management -** Production planning and process design, Capacity planning and facility location, Quality management (TQM, Six Sigma, Lean)

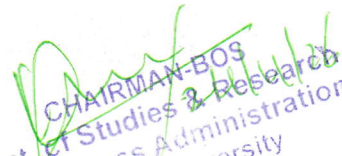
**Supply Chain Management-** Logistics and distribution management, Inventory control techniques (EOQ, JIT), Procurement and vendor management.

**Emerging Trends in Operations –** Industry 4.0, 5.0 and 6.0 and smart manufacturing, Digital supply chains and blockchain, Sustainable operations and green logistics.

### **Module 9: Entrepreneurship & Innovation**

**Entrepreneurship:** Concept, types of entrepreneurs, entrepreneurial mindset and role in economic development. Entrepreneurial Process, Opportunity identification, feasibility analysis, business planning, and startup lifecycle. Funding options, financial planning and entrepreneurial challenges.

**Innovation and Startup eco system:** Types of innovation, design thinking, open innovation, and innovation lifecycle, Incubators, accelerators, funding sources, Venture Capital, angel investors, and government support. Business Models & Strategy, Lean startup, scaling strategies, and competitive positioning, global startups, Gig economy, emerging technologies,

  
CHAIRMAN-BOS  
Dept. of Studies & Research  
in Business Administration  
TUMKUR UNIVERSITY  
TUMKUR.

**Digital & Technology Entrepreneurship:** E-commerce, AI-driven startups, and emerging sectors like FinTech and EdTech.

**Social & Sustainable Entrepreneurship:** Social innovation, green business models, and inclusive growth.

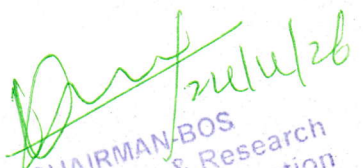
**Module 10: Business Analytics and Contemporary issues**

**Business Analytics:** Use of data for decision-making through descriptive, predictive, and prescriptive analytics using tools like SPSS, R, and Microsoft Excel, Introduction to Python for business analytics, Data mining techniques.

**Artificial Intelligence:** Approaches of AI, Role of AI in Business Transformation, Application of AI in Business - Marketing, HR, and finance, ethical concerns.

**ESG & Sustainability:** Focus on environmental, social, and governance practices, CSR, sustainable finance, and responsible corporate behavior.

\*\*\*\*\*

  
CHAIRMAN-BOS  
Dept. of Studies & Research  
in Business Administration  
Tumkur University  
TUMKUR.