

**SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**  
**Ph D ENTRANCE TEST**

**The Syllabus of Systems**

**ERP**

ERP Systems – Introduction - Role of Information System - Understanding Enterprise Resource Planning Systems. ERP Implementation - Implementation, Package Selection, Project Management Role. BPR & ERP - BPR, Role of IT in BPR, Gap Analysis, ERP Security, Change Management. Trends - ERP Deployment Model and Cloud. TCO and Cost Benefit Analysis. ERP Project Failure and Risk Assessment.

**MIS**

MIS in the Internet Era, Managing Information Systems in Organisation – IT interaction model - Data and information- measuring data, information as a resource, information in organisational functions. Decision Models - Tactical decisions - operational decisions - strategic decisions, communication in organisations. MIS landscape and current trends. TPS, DSS, ES and AI relevance to Organizations.

**e-Business Models**

Business - to - Business (B2B) - Business - to - Consumer (B2C) - Consumer - to - Consumer (C2C) - Consumer - to - Business (C2B) - Business - to - Government (B2G) - Government - to - Business (G2B) - Government - to - Citizen (G2C)

**SCM Systems**

Introduction - Evolution of Supply Chain, Classification of Logistics Applications, Traditional and Contemporary Approaches (Supply Chain Operations Reference (SCOR) Model, Performance Benchmarking, Balance Scorecard etc.) - The role of Information Technology in SCM - Overview of SCM systems – Relationship of SCM with ERP and Business Intelligence. The Role of Big Data in Supply Chain Management – Current Trends in SCM Systems – Digitization and IoT in SCM.

**CRM Systems**

Introduction to CRM, Building relationships, Customer Loyalty and Satisfaction. Strategy and Organization of CRM - Conceptualizing CRM Implementation, CRM - tactics vs. Strategy, How can CRM create strategic competitive advantage? - Performance Metrics for CRM. The role of Information Technology in CRM - CRM Systems, implementation and Technical aspects of CRM - CRM and Business Intelligence. Big Data Analytics in CRM. Relevance of Digitization in CRM, IoT in CRM.

**Systems Thinking**

Introduction: Definitions & Concepts – What and Whys of Systems Thinking – Systems Principles and Concepts – Theories relating to Systems Thinking – Process and Methods – Applications – System Implementation - Research Needs Regarding Future Systems Thinking and Next Steps