Ph.D. COURSE WORK SYLLABUS

PAPER III - RECENT TRENDS IN

COMPUTER SCIENCE AND COMPUTER ENGINEERING

Time Duration: 3hrs 80 Marks

UNIT-I DATA MINING AND DATA WAREHOUSING

Advanced Database Technologies

Fundamentals of data warehousing and data mining

Data Warehousing Architectures

Data mining Techniques

UNIT-II WEB TECHNOLOGIES AND SERVICES

Web Application Architectures

E-Payments Gateways and Mechanism

E-Governance Systems

E-Learning Systems

UNIT-I II SOFTWARE TECHNOLOGIES

Programming Paradigms and Platforms

Service Oriented Architectures

Software Quality Assurance

Software Testing

Knowledge Management and Intelligent Systems

Enterprise Application Integration: ERP Applications

UNIT-I V HARDWARE AND NETWORKING TECHNOLOGIES

Processor Architectures

Operating Systems Embedded

Systems Networking

Technologies

Next Generation Heterogeneous Networks

UNIT-V COMPUTATION THEORY

Regular languages and finite automata, Context free languages and Push-down automata,
Recursively enumerable sets and Turing machines, Undecidability. Compiler Design: Lexical
analysis, Parsing, Syntax directed translation, Runtime environments, Intermediate and target
code generation, Basics of code optimization.